Camp Bonneville
Expanded Site Inspection

Vancouver, Washington

Technical Direction Document Number: 11-02-0010

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Table of Contents

Section **Page**

1 Introduction 1-1

2 Site Background 2-1

2.1 Site Location 2-1
2.2 Site Description 2-2
2.3 Site Ownership History 2-4
2.4 Site Operations and Source Characteristics 2-4
2.5 Previous Investigations 2-5
2.5.1 U. S. Army Corps of Engineers Environmental Baseline Survey 2-5
2.5.2 Base Realignment and Closure Cleanup Plan 2-6
2.5.3 U. S. Army Corps of Engineers Endangered Species Survey 2-8
2.5.4 U. S. Army Corps of Engineers Archives Search Report 2-8
2.5.4.1 Ranges and Training Areas 2-9
2.5.4.2 Ammunition and Storage Facilities 2-10
2.5.4.3 Chemical Warfare Service Activities 2-10
2.5.4.4 Potential and Confirmed Ordnance Presence 2-10
2.5.4.5 Archives Search Report Recommendations 2-11
2.5.5 U. S. Army Corps of Engineers Surface Water Investigation of Lacamas Creek and Tributaries 2-11
2.5.6 Camp Bonneville Reuse Plan 2-12
2.5.6.1 Regional Park 2-12
2.5.6.2 Law Enforcement Training Center 2-13
2.5.6.3 Rustic Retreat Center/Outdoor School 2-13
2.5.6.4 Native American Cultural Center 2-13
2.5.6.5 Clark College Environmental Field Station 2-14
2.5.6.6 Trails and Nature Area 2-14
2.5.6.7 Federal Bureau of Investigation Firing Range 2-14
2.5.6.8 Timber Resource Management Area 2-14
2.5.6.9 Wetland/Riparian Area Restoration/Enhancement and Habitat Restoration 2-15
2.5.7 U. S. Army Corps of Engineers Multi-Sites Investigation 2-15
2.5.7.1 Landfill 2 2-16
2.5.7.2 Landfill 3 2-17
2.5.7.3 Burn Area 2-18
2.5.7.4 Former Buildings 1962 and 1983 2-19
2.5.7.5 Drum Disposal Area 2-19

Table of Contents (cont.)

Section **Page**

2.5.7.6 Paint and Solvent Disposal Area 2-20
2.5.7.7 Maintenance Pit 2-20
2.5.7.8 Wash Rack Number 1 2-22
2.5.7.9 Grease Pits 2-22
2.5.7.10 Pesticide Mixing/Storage Building 2-23
2.5.7.11 Aboveground Storage Tanks 2-23
2.5.7.12 Former Sewage Pond 2-24
2.5.7.13 Ammunition Storage Magazines 2-24
2.5.7.14 Hazardous Materials Accumulation Point 2-25
2.5.7.15 Former CS Training Building 2-25
2.5.7.16 Wash Rack Number 2 2-26
2.5.7.17 Investigation Recommendations 2-26
2.5.8 U. S. Army Corps of Engineers Demolition Area 1/Landfill 4 Investigation 2-27
2.5.9 Base Realignment and Closure Hazardous, Toxic, and Radioactive Waste Site Closure Report 2-28
2.5.10 Environmental Restoration – Multi-Sites 2-30
2.5.10.1 Drum Disposal Area 2-31
2.5.10.2 Paint and Solvent Disposal Areas 2-31
2.5.10.3 Wash Rack Number 1 2-32
2.5.10.4 Maintenance Pit 2-32
2.5.10.5 Former CS Training Building Area 2-32
2.5.10.6 Pesticide Mixing/Storage Building 2-33
2.5.10.7 Selected Aboveground Storage Tank Locations 2-33
2.5.10.8 Summary and Recommendations 2-34
2.5.11 U. S. Army Corps of Engineers Supplemental Site Investigation 2-34
2.5.11.1 Pesticide Storage Area 2-35
2.5.11.2 Ammunition Storage Magazines 2-35
2.5.12 Geophysical Survey 2-36
2.5.13 Ordnance and Explosive Removal Action 2-36
2.5.14 Environmental Restoration – Pesticide Storage Area and Ammunition Storage Magazines 2-36
2.5.14.1 Pesticide Storage Area 2-36
2.5.14.2 Ammunition Storage Magazines 2-37
2.5.15 Environmental Restoration – Drum Burial Area 2-37
2.5.16 Small Arms Range Reconnaissance 2-37
2.5.16.1 Rifle Ranges 1 and 2 2-37
2.5.16.2 Field Fire Rifle Ranges 1 and 2 2-38
2.5.16.3 Field Firing Ranges 1 and 2 and Pistol Range 2-38
2.5.16.4 1000-Foot Range, 1000-Foot Machine Gun Range, and Moving Target Range 2-38
2.5.16.5 25-Meter Record Fire Field Range and Field Firing Range 2-38
2.5.16.6 Close Combat Range 2-39
2.5.16.7 Submachine Gun Range 2-39
2.5.16.8 TF Range 2-39

Table of Contents (cont.)

Section **Page**

2.5.16.9 25-Meter M60 Range and Pistol Range 2-39
2.5.16.10 Combat Pistol Range 2-39
2.5.16.11 25-Meter Machine Gun Range 2-40
2.5.16.12 South and North Machine Gun Ranges 2-40
2.5.6.13 North and South Infiltration Courses 2-40
2.5.16.14 M31 Sub-Caliber Ranges 1 and 2 2-40
2.5.16.15 500-Inch Anti-Aircraft Range and Anti-Aircraft Range 2-41
2.5.16.16 1952-TEC-22 2-41
2.5.16.17 Conclusions 2-41
2.5.17 U. S. Army Corps of Engineers Record of Decision – Multi-Sites 2-41
2.5.18 Washington Department of Ecology Enforcement Order 2-42
2.5.19 U. S. Army Corps of Engineers Expanded Site Inspection – Demolition Area 1/Landfill 4 2-42
2.5.20 Small Arms Ranges Site Inspection 2-44
2.5.21 U. S. Department of the Army Interim Removal Action – Demolition Area 1/Landfill 4 2-45
2.5.22 U. S. Army Corps of Engineers Remedial Investigation/Feasibility Study of Remedial Action Unit 3 2-47
2.5.22.1 Target Areas 2-48
2.5.22.2 Central Impact Target Area 2-49
2.5.22.3 Demolition Areas 2-49
2.5.22.4 Firing Points 2-50
2.5.22.5 Training Areas 2-50
2.5.22.6 Range Safety Fans 2-50
2.5.22.7 Storage Magazines/Transfer Points 2-50
2.5.22.8 Maneuver Areas 2-51
2.5.22.9 Central Impact Target Area 2-51
2.5.22.10 Roads and Trails 2-51
2.5.22.11 High Intensity Reuse Areas 2-51
2.5.22.12 High Accessible Medium Intensity Reuse Areas 2-51
2.5.22.13 Remaining Medium Reuse Intensity Areas 2-52
2.5.22.14 Wildlife Management Area 2-52
2.5.23 Cultural and Historical Resources Protection Plan 2-52
2.5.24 BCRRT Remedial Investigation Demolition Areas 2 and 3 2-52
2.5.24.1 Demolition Area 2 2-53
2.5.24.2 Demolition Area 3 2-53
2.5.24.3 BCRRT Remedial Investigation Conclusions and Recommendations 2-54
2.5.25 BCRRT Remedial Investigation/Feasibility Study – Small Arms Ranges 2-54
2.5.26 BCRRT Soil and Sediment Investigation – Artillery/Mortar Firing Points, Artillery/Mortar Impact Areas, and “Pop-up” Pond.... 2-55
2.5.27 Environmental Study Area Interim Action 2-56
2.5.28 ATSDR Public Health Assessment 2-56

Table of Contents (cont.)

Section **Page**

2.5.29 BCRRT Remedial Investigation/Feasibility Study for Remedial Action Unit 3 2-59
2.5.30 BCRRT Remedial Action Unit 3 Supplemental Remedial Investigation/Feasibility Study 2-60
2.5.31 Environmental Protection Agency Preliminary Assessment 2-61
2.6 Summary of EPA Expanded Site Inspection Locations Investigated 2-61

3 EPA ESI Field Activities and Analytical Protocol 3-1
3.1 Anomaly Avoidance 3-2
3.2 Sampling Methodology 3-2
3.2.1 Subsurface Soil Sampling 3-2
3.2.2 Ground Water Sampling 3-3
3.2.3 Surface Soil Sampling 3-4
3.2.4 Surface Water Sampling 3-4
3.2.5 Sediment Sampling 3-4
3.3 Analytical Protocol 3-5
3.4 Global Positioning System 3-6
3.5 Investigation-Derived Waste 3-7

4 Quality Assurance/ Quality Control 4-1
4.1 Satisfaction of Data Quality Objectives 4-1
4.2 Quality Assurance/Quality Control Samples 4-2
4.3 Project-Specific Data Quality Objectives 4-2
4.3.1 Precision 4-2
4.3.2 Accuracy 4-2
4.3.3 Completeness 4-2
4.3.4 Representativeness 4-3
4.3.5 Comparability 4-3
4.4 Laboratory Quality Assurance/Quality Control Parameters 4-3
4.4.1 Holding Times/Temperatures/Samples Containers/Percent Moisture 4-3
4.4.2 Laboratory Blanks 4-3
4.4.3 Serial Dilution Analyses 4-3
4.4.4 Rinsate Blanks 4-3
4.4.5 Trip Blanks 4-4
4.5 Field and Fixed Laboratory Correlation 4-4

5 EPA ESI Analytical Results Reporting and Background Samples 5-1
5.1 Analytical Results Evaluation Criteria 5-1
5.1.1 Sample Results Reporting 5-2
5.2 Background Samples 5-2
5.2.1 Background Surface Soil 5-2
5.2.1.1 Sample Location 5-2
5.2.1.2 Sample Results 5-2

Table of Contents (cont.)

Section **Page**

5.2.2 Background Subsurface Soil 5-2
5.2.2.1 Sample Location 5-2
5.2.2.2 Sample Results 5-3
5.2.3 Background Ground Water 5-3
5.2.3.1 Sample Location 5-3
5.2.3.2 Sample Results 5-3
5.2.4 Background Surface Water 5-4
5.2.4.1 Sample Location 5-4
5.2.4.2 Sample Results 5-4
5.2.5 Background Sediment 5-4
5.2.5.1 Sample Locations 5-4
5.2.5.2 Sample Results 5-4

6 Potential Sources 6-1
6.1 Demolition Area 1/Landfill 4 6-1
6.1.1 Sample Locations 6-1
6.1.2 Sample Results 6-2
6.2 Central Impact Target Area 6-2
6.2.1 Sample Locations 6-2
6.2.2 Sample Results 6-3
6.3 Demolition Areas 6-3
6.3.1 Sample Locations 6-3
6.3.2 Sample Results 6-3
6.4 Firing Ranges and Firing Points 6-4
6.4.1 Firing Range Sample Locations 6-4
6.4.2 Firing Range Sample Results 6-5
6.4.3 Firing Point Sample Locations 6-5
6.4.4 Firing Point Sample Results 6-5
6.5 Firing Bank 6-6
6.5.1 Sample Locations 6-6
6.5.2 Sample Results 6-6
6.6 Pop-Up Pond and Targets 6-6
6.6.1 Pop-Up Pond Sample Locations 6-6
6.6.2 Pop-Up Pond Sample Results 6-7
6.6.3 Pop-Up Targets Sample Locations 6-7
6.6.4 Pop-Up Targets Sample Results 6-8

7 Migration/Exposure Pathways and Targets/Receptors 7-1
7.1 Ground Water Migration Pathway 7-1
7.1.1 Geologic Setting 7-1
7.1.2 Aquifer System 7-2
7.1.2.1 Troutdale and Unconsolidated Alluvium Aquifer System Sole Source Aquifer Designation 7-3
7.1.2.2 On-Site Ground Water Monitoring 7-4
7.1.3 Drinking Water Targets/Receptors 7-6

Table of Contents (cont.)

Section **Page**

7.1.4 Ground Water Sample Locations and Results 7-7
7.1.5 Monitoring Well Sample Locations and Results 7-7
7.2 Surface Water Migration Pathway 7-8
7.2.1 Overland Pathway 7-9
7.2.1.1 Sample Locations and Results 7-9
7.2.2 Drinking Water Targets/Receptors 7-10
7.2.3 Human Food Chain Targets/Receptors 7-10
7.2.4 Environmental Targets/Receptors 7-10
7.2.5 Sample Locations and Results 7-11
7.2.5.1 North Fork Lacamas Creek 7-11
7.2.5.2 East Fork Lacamas Creek 7-12
7.2.5.3 David Creek 7-13
7.2.5.4 Buck Creek 7-13
7.2.5.5 Lacamas Creek 7-13
7.3 Soil Exposure Pathway 7-15
7.3.1 Site Setting and Exposed Sources 7-15
7.3.2 Targets/Receptors 7-15
7.3.2.1 Sample Locations and Results 7-15
7.4 Air Migration Pathway 7-15
7.4.1 Human Targets 7-15
7.4.2 Environmental Targets 7-15

8 Summary and Conclusions 8-1
8.1 Sources 8-1
8.1.1 Demolition Area 1/Landfill 4 8-2
8.1.2 Central Impact Target Area 8-2
8.1.3 Demolition Areas 2 and 3 8-2
8.1.3.1 Demolition Area 2 8-2
8.1.3.2 Demolition Area 3 8-2
8.1.4 Firing Ranges 8-2
8.1.4.1 1,000-Inch Range 8-2
8.1.4.2 M203 HE Grenade Range 8-2
8.1.5 Artillery Positions 8-3
8.1.5.1 Artillery Position 5 8-3
8.1.5.2 Artillery Position 6 8-3
8.1.5.3 Artillery Position 7 8-3
8.1.6 Firing Bank 8-3
8.1.7 Pop-up Pond 8-3
8.1.8 Pop-up Targets 8-3
8.2 Targets/Receptors 8-4
8.3 Conclusions 8-4

9 References 9-1

Table of Contents (cont.)

Section Page

LIST OF APPENDICES

A Preliminary Assessment Petition

B Washington State Department of Ecology Camp Bonneville Military Reservation Fact Sheet

C Field Sampling Forms and Logs

D Photographic Documentation

E TechLaw, Inc. Trip Reports

F Chain-of-Custody Documentation

G Sample Plan Alteration Forms

H Global Positioning System Coordinates

I Data Validation Memoranda and Laboratory Data Sheets

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List of Tables

2-1 1997 BRAC Parcel Descriptions

2-2 1999 Multi-Sites Investigation – Analytical Procedures

3-1 Sample Collection and Analytical Summary

3-2 Sample Coding

4-1 Camp Bonneville Perchlorate Analytical Results

6-1 Demolition Area 1/Landfill 4 Subsurface Soil Samples Analytical Results Summary

6-2 Central Impact Target Area Surface Soil Samples Analytical Results Summary

6-3 Demolition Areas 2 and 3 Surface Soil Samples Analytical Results Summary

6-4 Firing Range Surface Soil Samples Analytical Results Summary

6-5 Artillery Position Surface Soil Samples Analytical Results Summary

6-6 Firing Banks Surface Soil Samples Analytical Results Summary

6-7 Pop-Up Pond Sediment Samples Analytical Results Summary

6-8 Pop-Up Targets and 1,000-Yard Range Surface Soil Samples Analytical Results Summary

7-1 Ground Water Drinking Water Population by Distance Ring

7-2 Demolition Area 1/Landfill 4 Ground Water Samples Analytical Results Summary

7-3 Shallow Monitoring Wells Ground Water Samples Analytical Results Summary

7-4 Deep Monitoring Well Ground Water Samples Analytical Results Summary

7-5 Overland Pathway Surface Soil Sample Analytical Results Summary

7-6 Sport Catch Data

List of Tables (cont.)

7-7 Threatened and Endangered Species by Distance Ring

7-8 Demolition Area 1/Landfill 4 Sediment Samples Analytical Results Summary

7-9 Surface Water Samples Analytical Results Summary

7-10 North Fork Lacamas Creek Sediment Samples Analytical Results Summary

7-11 East Fork Lacamas Creek Sediment Samples Analytical Results Summary

7-12 David Creek Sediment Samples Analytical Results Summary

7-13 Buck Creek Sediment Samples Analytical Results Summary

7-14 Lacamas Creek Sediment Samples Analytical Results Summary

7-15 Population and Wetlands by Distance Ring

List of Figures

2-1 Site Vicinity Map

2-2 Overall Site Map

2-3 Bonneville Cantonment Site Map

2-4 Killpack Cantonment Site Map

2-5 Base Realignment and Closure Parcel Designation Map

2-6 Areas Recommended for Further Action

2-7 1998 Corps Surface Water Investigation Sample Location

2-8 Preferred Reuse Plan

2-9 Landfills 2 and 3 and Burn Area Exploration Plan

2-10 Bonneville Cantonment Area Exploration Plan

2-11 Drum Disposal Area Exploration Plan

2-12 Paint and Solvent Disposal Area Exploration Plan

2-13 Killpack Cantonment Area Exploration Plan

2-14 Former Sewage Pond Exploration Plan

2-15 Ammunition Storage Magazines Exploration Plan

2-16 CS Training Building Area Exploration Plan

2-17 Demolition Area 1/Landfill 4 Exploration Plan

2-18 Drum Disposal Area Test Pit Locations

2-19 Wash Rack and Maintenance Pit Sample Locations

2-20 Former CS Training Building Area Sample Locations

List of Figures (cont.)

2-21 Pesticide Mixing/Storage Area Sample Locations

2-22 Pesticide Storage Area Sample Locations

2-23 Ammunition Storage Magazines Sample Locations

2-24 Geophysical Survey Suspected Drum Burial Area

2-25 TA8 and TA9 UXBI Investigation Areas

2-26 Small Arms Range Reconnaissance Group 1

2-27 Small Arms Range Reconnaissance Group 2

2-28 Small Arms Range Reconnaissance Group 3

2-29 Small Arms Range Reconnaissance Group 4

2-30 Small Arms Range Reconnaissance Group 5

2-31 Remedial Action Unit 1

2-32 Remedial Action Unit 2A

2-33 Remedial Action Unit 2B

2-34 Remedial Action Unit 2C

2-35 Remedial Action Unit 3

2-36 Demolition Area 1/Landfill 4 – Soil Borings and Monitoring Well Locations

2-37 Small Arms Ranges and Demolition Areas 2 and 3

2-38 Locations of Disposal Pits and Trenches at Demolition Area 1/Landfill 4

2-39 Perchlorate Sample Results Exceeding Criteria After Additional Excavation

2-40 Target Area Location Map

2-41 Central Impact Target Area Location Map

2-42 Demolition Area Location Map

2-43 Firing Point Location Map

2-44 Storage Magazine/Transfer Point Location Map

2-45 Roads and Trails

2-46 Demolition Areas 2 and 3 Location Map

List of Figures (cont.)

2-47	Demolition Area 2 Monitoring Well Locations
2-48	Demolition Area 3 Monitoring Well Locations
2-49	Boundary Well Locations
2-50	2007 Pop-Up Pond Sediment Sample Locations
2-51	Newly Discovered Remedial Work Areas
6-1	Demolition Area 1/Landfill 4 Sample Locations
6-2	Demolition Area 1/Landfill 4 Significant Concentrations
6-3	Central Impact Target Area, Demolition Area 2, and David Creek Sample Locations
6-4	Central Impact Target Area, Demolition Area 2, and David Creek Significant Concentrations
6-5	Demolition Area 3 and Artillery Positions 6 and 7 Sample Locations
6-6	Demolition Area 3 and Artillery Positions 6 and 7 Significant Concentrations
6-7	1,000-Inch Range and Firing Bank Sample Locations
6-8	1,000-Inch Range and Firing Bank Significant Concentrations
6-9	Firing Position 5 and M203 HE Grenade Range Sample Locations
6-10	Artillery Position 5 and M203 HE Grenade Range Significant Concentrations
6-11	Pop-Up Pond, Pop-Up Targets and 1,000-Yard Range Sample Locations
6-12	Pop-Up Pond, Pop-Up Targets and 1,000-Yard Range Significant Concentrations
7-1	4-Mile Target Distance Limit
7-2	15-Mile Surface Water Target Distance Limit
7-3	Potential Sources
7-4	Troutdale and Unconsolidated Alluvium Sole Source Aquifer Boundary
7-5	Existing Monitoring Well Sample Locations
7-6	Existing Monitoring Well Elevated Concentrations
7-7	Lacamas Creek Wetlands
7-8	North Fork Lacamas Creek Sample Locations

List of Figures (cont.)

7-9 North Fork Lacamas Creek Elevated Concentrations

7-10 East Fork Lacamas Creek Sample Locations

7-11 Buck Creek Sample Locations

7-12 Upper Lacamas Creek Sample Locations

7-13 Upper Lacamas Creek Elevated Concentrations

7-14 Lower Lacamas Creek Sample Locations

7-15 Lower Lacamas Creek Elevated Concentrations

List of Abbreviations and Acronyms

Acronym	Definition
%R	Percent Recovery
1,1,1-TCA	1,1,1-trichloroethane
1,1-DCE	1,1-Dichloroethene
AEM	Atlanta Environmental Management, Inc.
amsl	Above mean sea level
AST	Aboveground Storage Tank
ATSDR	Agency for Toxic Substances and Disease Registry
Baker	Michael Baker Jr. Inc.
BCRRT	Bonneville Conservation Restoration and Renewal Team
bgs	below ground surface
BRAC	Base Realignment and Closure
BS	Blank Spike
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
CAP	Cleanup Action Plan
CCC	Civilian Conservation Corps
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
cfs	Cubic feet per second
CITA	Central Impact Target Area
CLP	Contract Laboratory Program
CMTC	Citizens Military Training Camps
COCs	Contaminants of Concern
COPCs	Chemicals of Potential Concern
Corps	United Stated Army Corps of Engineers
CRQL	Contract Required Quantitation Limit
CVF	Central Valley Floor
DA	Decision Area
DOC	Dissolved Organic Carbon
DOD	United States Department of Defense
DQOs	Data Quality Objectives
E & E	Ecology and Environment, Inc.
EBS	Environmental Baseline Survey
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ESI	Expanded Site Inspection
ESU	Evolutionarily Significant Unit
FBI	United States Federal Bureau of Investigation

List of Abbreviations and Acronyms (cont.)

Acronym	Definition
GPS	Global Positioning System
GSAI	Gary Struthers Associates, Inc.
HE	High Explosive
ICs	Institutional Controls
ID	Identification
IDW	Investigation-Derived Waste
LRA	Local Redevelopment Authority
MC	Munitions Constituents
MCL	Maximum Contaminant Level
MD	Munitions Debris
MEC	munitions and explosives of concern
MEL	Manchester Environmental Laboratory
mg/kg	milligrams per kilogram
mm	millimeters
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MTCA	Model Toxics Control Act
ng	nanograms
NPL	National Priorities List
OB/OD	Open Burn/Open Detonation
OE	Ordnance and Explosives
PA	Preliminary Assessment
PAHs	Polyaromatic hydrocarbons
Parsons	Parsons Engineering Science, Inc.
PCBs	Polychlorinated biphenyls
Pentec	Pentec Environmental, Inc.
PETN	pentaerthritol tetranitrate
PID	Photoionization Detector
POLs	Petroleum, oils and lubricants
PPE	Probable Point of Entry
ppm	parts per million
PRGs	Preliminary Remediation Goals
QA/QC	Quality Assurance/Quality Control
RAUs	Remedial Action Units
RBCs	Risk Based Concentrations
RCRA	Resource Conservation and Recovery Act
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
ROTC	Reserve Officer Training Corps
RPC	Reuse Planning Committee
RPD	Relative Percent Difference
RSF	Range Safety Fans
RWAs	Remedial Work Areas
SOW	Statement of Work
SPAF	Sample Plan Alteration Form

List of Abbreviations and Acronyms (cont.)

Acronym	Definition
SQAP	Sampling and Quality Assurance Plan
SQL	Sample Quantitation Limit
SSI	Supplemental Site Investigation
START	Superfund Technical Assessment and Response Team
SVOCs	Semivolatile Organic Compounds
SWI	Shannon and Wilson Inc.
TDL	Target Distance Limit
TLPE	Teflon-lined polyethylene
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
UST	Underground Storage Tank
UXBI	UXB International, Inc.
UXO	Unexploded Ordnance
VOCs	Volatile Organic Compounds
WAC	Washington Administrative Code
WDNR	Washington Department of Natural Resources

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1 Introduction

Ecology and Environment, Inc., (E & E) was tasked by the United States Environmental Protection Agency (EPA) to provide technical support for completion of an Expanded Site Inspection (ESI) at the Camp Bonneville site in Vancouver, Washington. E & E completed ESI activities under Technical Direction Document Numbers 10-03-0010 and 11-02-0010, issued under EPA, Region 10, Superfund Technical Assessment and Response Team (START)-3 Contract Number EP-S7-06-02.

The specific goals for the Camp Bonneville ESI, identified by the EPA, are to:

- Determine the potential threat to public health or the environment posed by the site;
- Determine the potential for a release of hazardous constituents into the environment; and
- Determine the potential for placement of the site on the National Priorities List (NPL).

The ESI is not intended to include extensive or complete site characterization, contaminant fate determination, or quantitative risk assessment.

Completion of the ESI included reviewing existing site information, determining regional characteristics, collecting and analyzing environmental media samples to determine whether hazardous substances are present at the site and are migrating to the surrounding environment, executing a sampling plan, and producing this report. The report is organized as follows:

- Section 1, Introduction – Authority for performance of this work, goals for the project, and summary of the report contents;
- Section 2, Background – Site description, site operations and waste characteristics, a summary of previous investigations, and a summary of investigation locations;

- Section 3, Field Activities and Analytical Protocol – Summary of the field effort;
- Section 4, Quality Assurance/Quality Control (QA/QC) – Summary of the laboratory data;
- Section 5, Analytical Results Reporting and Background Samples – Discussion of results reporting criteria, background sample locations, and analytical results;
- Section 6, Potential Sources – Discussion of site sources, sample locations, and analytical results;
- Section 7, Migration/Exposure Pathways and Targets – Discussion of the migration/exposure pathways, sample locations, and analytical results;
- Section 8, Summary and Conclusions – Summary of the investigation and recommendations for the site based on the information gathered during the investigation; and
- Section 9, References – Alphabetical listing of the references cited throughout the text.

The ESI was conducted in conjunction with EPA's response to a formal Preliminary Assessment (PA) Petition submitted by the Rosemere Neighborhood Association and Columbia Riverkeeper under Section 105(d) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9605(d). A copy of the PA Petition dated February 3, 2009, is provided in Appendix A.

2 Site Background

This section describes the background of the site including location, description, ownership history, operations and source characteristics, previous investigations, and a summary of the site investigation locations.

2.1 Site Location

Site Name:	Camp Bonneville
EPA Site ID Number:	WAN001002030
Site Address:	23201 NE Pluss Road Vancouver, Washington 98682
Latitude:	45° 41’ 29.338” North (at center of site)
Longitude:	122° 24’ 0.144” West (at center of site)
Legal Description:	Township 3 North, Range 3 East, Sections 34 and 35 Township 2 North, Range 3 East, Sections 1, 2, 3, and 10
County:	Clark
Congressional District:	3
Site Owner:	Clark County, Washington
Site Contact:	Jerry Barnett Clark County Department of Public Works Camp Bonneville 23201 NE Pluss Road Vancouver, Washington 98682 (360) 566-6992

2.2 Site Description

Camp Bonneville is located in Clark County, approximately 5 miles northeast of Vancouver, Washington (Figure 2-1). Generally, Lacamas Creek flows through the middle of the site with a number of tributaries that feed it. The general topography of the site is flat in the Lacamas Creek Valley; the remainder of the site consists of gently rolling hills. Camp Bonneville is a sub-installation of the Vancouver Barracks (located approximately 12 miles southwest of Camp Bonneville in Vancouver, Washington), which is a sub-installation of Fort Lewis (located approximately 100 miles north of Camp Bonneville in Tacoma, Washington). Camp Bonneville consists of approximately 3,840 acres of land that historically was used by the United States Department of Defense (DOD) to provide training for active Army, Army Reserve, National Guard, Marine Corps Reserve, Navy Reserve, Coast Guard Reserve units, and other DOD personnel. The installation consists of two cantonment areas, Bonneville cantonment and Killpack cantonment, 25 firing ranges, former sewage lagoons, and four historic landfills (Figures 2-2 through 2-4; WC 1997).

Camp Bonneville is located on the western slope of the Cascade Mountains in the Lacamas Creek Valley. The terrain is generally rolling. Elevations range from 289 feet above mean sea level (amsl) in Lacamas Creek at the southwest corner of the site to 1,000 feet amsl at the northwest corner, 1,350 feet amsl at the southeast corner, and 1,452 feet amsl at the south central boundary (WC 1997).

In 1910, the federal government entered into a lease with a purchase option on approximately 3,000 acres of land to use for military training. The lease expired in 1915, and the War Department acquired the land in 1918 by purchase and condemnation. The site was briefly declared surplus in the mid-1940s, but in May 1947, Camp Bonneville was removed from surplus status. In the early 1950s, the Defense Department leased an additional 840 acres from the State of Washington Department of Natural Resources (WDNR), and in 1957, the federal government returned 20 acres of the overall property to the State of Washington. From 1957 until placement on the Base Realignment and Closure (BRAC) list in 1995, the remaining 3,839 acres remained under the military's jurisdiction (Parsons 2004). Following is a more detailed time-line of uses at Camp Bonneville.

- **Pre-World War II Era:** Troops from Vancouver Barracks began to use the land for a target range in 1910 due to the near-level range floor that was protected from wind by the foothills of the Cascade Mountains. The plateau-valley (350 yards wide by 2,000 yards long) contained the Army's 14 short-range and 7 long-range small arms ranges. The federal government did not own the land at this time but had an option on the property. In 1912, the government obtained another option, but after it expired in 1915, the army began conducting its target practice at an Oregon National Guard range near Clackamas, Oregon. The acquisition of the original reservation (consisting of approximately 3,000 acres)

occurred in 1918 by purchase and condemnation. When the Army resumed activities at Camp Bonneville in 1918, the valley contained 24 targets. The installation was officially named Camp Bonneville in 1926. At some point prior to 1929, a machine gun range was added to the training facilities. The Camp Bonneville cantonment area was built in the late 1920s and in 1935 the Civilian Conservation Corps (CCC) built and occupied the Camp Killpack cantonment area. These facilities included barracks, kitchens and mess halls, an infirmary, latrines, administration and recreation buildings, and a library. Several organizations other than the garrison at Vancouver Barracks used the facilities at Camp Bonneville. Citizens Military Training Camps (CMTC) and the Reserve Officer Training Corps (ROTC) used the camp. The ROTC program prepared college students for a commission in the army and CMTC exposed high-school-aged males to military discipline and training. (Parsons 2004)

- **World War II Era:** Camp Bonneville continued to be used as a training area for the Vancouver Barracks during World War II. In 1946, the War Department declared the property excess. In May 1947, the military withdrew the camp from surplus citing a continued need for its training facilities. The ranges activated during the World War II era were the 0.22-caliber, 0.30-caliber, and 0.45-caliber small arms ranges.

- **Post World War II (1950s Era):** The army refurbished many of the buildings and systems at the cantonment areas along with the ranges on the installation in 1950. This project was performed in preparation for training by the US Army Reserve units in southern Washington and northern Oregon. During this time, the National Guard and the Marine Corps also expressed an interest in training at Camp Bonneville. In the early 1950s, the DOD arranged to lease an additional 840 acres from the WDNR to expand the training facilities at Camp Bonneville. The Army returned 20 acres of the leased land to WDNR in 1957. In 1959, Vancouver Barracks became a sub-installation of US Army, Fort Lewis. As a result, Fort Lewis assumed responsibility for Camp Bonneville. By 1959, the property inventory included a known distance range, a pistol range (20 targets), a submachine gun range (21 targets), a live hand grenade range, and a mortar training range. Targets and target storage buildings for machine gun and anti-aircraft ranges were inventoried; however, the actual ranges could not be located (the purpose of the inventory is not known). Two demolition areas of unknown chronology were also mentioned. These demolition areas were approximately located in the southwest quadrant of the site along Lacamas Creek and in the northwest quadrant of the site near Little Elkhorn Mountain. These demolition areas had been used for destruction of unserviceable munitions since the late 1950s. Since 1993, the destruction of unserviceable munitions by any method (burning or detonation) has not been permitted.

- **Late 1960s through 1995:** Camp Bonneville provided training areas for a variety of military units as well as federal, state, and local law enforcement agencies until selection for closure under the BRAC process in 1995. From 1969 to 1985, artillery units had conducted live firing exercises about twice a year with each training session resulting in the firing of approximately 50 rounds. During the 1970s, the military switched to sub-caliber rounds for training purposes. Additional training maneuvers, bivouacking, and tactics were practiced on the many preexisting training areas at Camp Bonneville, and occasionally vehicles would support this training with the use of smoke or riot control agents. These training areas utilized land from previously established ranges. No new range installation occurred during this time. During the period from 1987 to 1991, three new ranges were introduced at Camp Bonneville. The ranges included an M16 rifle range and two M203 ranges. The M203 ranges were used for troop training in the use of 40-mm rifle grenades. One range was reportedly used solely for inert, practice 40-mm training, while the second range was used for High Explosive (HE) 40-mm training. (Parsons 2004)

In 1996, following the selection of Camp Bonneville for closure (in 1995) under the BRAC authorization, all active military training units ceased operations at the camp. All out-grants for use of the facilities were cancelled with the exception of the Federal Bureau of Investigation (FBI) firing range. (SWI 1999a)

2.3 Site Ownership History

In 1910, the federal government entered into a lease for approximately 3,000 acres of land. In 1912, the government obtained another option which expired in 1915. The land was obtained in 1918 through purchase and condemnation. An additional 840 acres was added through a lease with WDNR and approximately 20 of these acres were returned to WDNR in 1957. In October 2006, the Army transferred ownership of the property to Clark County in an “early transfer,” under which the DOD continued to provide funding for cleanup of the site. Clark County then transferred ownership of the land to the Bonneville Conservation Restoration and Renewal Team LLC (BCRRT), an organization managing a team of contractors in the cleanup and removal of hazardous wastes and unexploded ordnance (UXO). From 2006 to July 2010, the property was owned and operated by BCRRT. From July 2010 to November 2011, Clark County operated the site under lease with BCRRT. From November 3, 2011 to present, Clark County has been both owner and operator.

2.4 Site Operations and Source Characteristics

Historical operations at the site have included the storage of pesticides, maintenance of vehicles, storage of diesel fuel for building heating, sewage lagoons, at least four landfills (one landfill, Landfill 1 has been reported and identified on maps; however, it has not been visually located), various caliber

firing ranges, and troop maneuvers. All of these historical operations are discussed in detail in the "Previous Investigations" section below.

Current operations include continuing evaluation of contamination in one landfill (Demolition Area 1/Landfill 4; discussed below), and clearing of UXO. The status of cleanup is described in the October 2011 Ecology Fact Sheet contained in Appendix B. Ecology has provided oversight for investigations and cleanup activities since 2003.

2.5 Previous Investigations

This section discusses previous investigations that concern the discovery, classification, or sampling of areas or features which may have involved the use, storage, disposal, or spilling of hazardous substances. A complete administrative record of all reports relating to the site is available at the Washington State University – Vancouver library.

2.5.1 U. S. Army Corps of Engineers Environmental Baseline Survey

In 1997, Woodward Clyde completed an Environmental Baseline Survey (EBS) report for the United States Army Corps of Engineers (Corps). The purpose of the survey report was to classify discrete areas of property associated with Camp Bonneville subject to transfer or lease into one of the standard environmental condition types as defined in the Community Environmental Response Facilitation Act (CERFA) guidance and the DOD BRAC Cleanup Plan Guidebook. The standard environmental condition of property types are presented below (WC 1997):

- **Category 1:** Areas where no storage of hazardous substances or petroleum products has occurred for 1 year or longer and no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). Additionally, Category 1 includes areas where no evidence exists for the release, disposal, or migration of hazardous substances or petroleum products; however, the area has been used to store less than reportable quantities of hazardous substances (40 CFR 302.4) or 600 or fewer gallons of petroleum products.

- **Category 2:** Areas where only storage of hazardous substances in amounts exceeding their reportable quantity or petroleum products exceeding 600 gallons has occurred, but no release, disposal, or migration has occurred.

- **Category 3:** Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.

- **Category 4:** Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

- **Category 5:** Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, and removal or remedial actions are under way, but all required actions have not yet been implemented.

- **Category 6:** Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, but required removal or remedial actions have not yet been initiated.

- **Category 7:** Areas that are not evaluated or require additional evaluation.

Areas that are designated Category 1 through 4 are suitable for property transfer or lease, subject to consideration of the qualifiers. Areas that are designated Category 5 through 7 are not suitable for transfer, but may be suitable for lease (WC 1997). The designation of site areas identified under the BRAC Cleanup Plan and the basis for their designation is presented in Table 2-1. The reference map for this survey is provided on Figure 2-5. No samples were collected as part of the Corps' environmental baseline survey.

2.5.2 Base Realignment and Closure Cleanup Plan

In 1996, Woodward Clyde prepared a BRAC Cleanup Plan for the Corps. The BRAC Cleanup Plan included a brief history of site operations and outlined the areas of concern with regard to environmental cleanup and disposal, and reuse of the site. The objectives of the cleanup plan were to: summarize the current status of Camp Bonneville environmental restoration programs; present a comprehensive strategy for implementing response actions necessary to protect human health and the environment; and present schedules for restoration and compliance activities. (WC 1995)

Twenty areas of concern for restoration or assessment were identified in the Corps' BRAC Cleanup Plan; of these 20 areas, 10 consisted of known or suspected disposal areas (Figure 2-6). A summary of these areas is provided below:

- **Landfill 1:** A cultural resources survey performed in 1980 located a landfill east of the Bonneville cantonment and north of the sewage lagoon (Figure 2-2). The cultural resources survey described the disposal area as a 4-meter by 5-meter shallow depression and stated that bottle fragments contained in the landfill date its use to the early 1900s. Neither the length of use nor a comprehensive list of the quantities and types of trash disposed of in this landfill is known (WC 1995).

- **Landfill 2:** This landfill, located northeast of the Bonneville cantonment, was reported to have been partially excavated during the construction of the sewage lagoon in approximately 1978 (Figure 2-2). According to an interview conducted for the EBS, fill material was unearthed at the eastern and northern borders of the sewage lagoon. Neither the type nor quantity of material disposed of in this landfill is known. The period of use is estimated at 1940 to 1950 (WC 1995).

- **Landfill 3:** This landfill, which is suspected to have been used as a trash burial area, is located south of Landfill 2 and the sewage lagoon (Figure 2-2). According to an interview conducted for the EBS, this area contains a refrigerator and a locker. Neither the length of use nor a comprehensive list of the quantities and types of trash is known. The period of disposal is estimated to have been in the 1970s (WC 1995).

- **Three Grease Pits:** Two grease pits are located at the Bonneville cantonment north of Building 1828 (Figure 2-3), and one is located at the Killpack cantonment east of Building 4389 (Figure 2-4). The pits are composed of corrugated metal tubes, approximately 2 feet in diameter, that extend into gravel-filled pits to an unknown depth. The pits reportedly received cooking grease and oils from the mess halls. An interview conducted for the EBS indicated there was a potential for the uncontrolled disposal of potentially hazardous substances in these pits. The period of disposal is estimated to have been from 1935 to shortly before base closure (WC 1995).

- **Drum Disposal Area:** A suspected drum disposal site was identified in May 1996 by an anonymous telephone caller, identifying himself as a former Camp Bonneville facility employee. The suspected drum disposal area was located southeast of the Killpack cantonment and east of the gravel road (Figure 2-2). Metal anomalies have been confirmed at this location (WC 1995).

- **Paint/Solvent Disposal Area:** A suspected paint/solvent disposal area was identified in May 1996 by an anonymous telephone caller, identifying himself as a former Camp Bonneville facility employee. The suspected paint/solvent disposal area was located southeast of the Killpack cantonment and west of the gravel road (Figure 2-2). It was reported by the caller that paint, pesticides, and solvents were disposed of in this area (WC 1995).

- **Two Wash Racks:** The first wash rack, associated with Building 4475 at the Killpack cantonment, was identified in one of the previous environmental compliance inspections performed at Camp Bonneville. The wash rack does not have an oil/water separator. The second wash rack, associated with Building 4476, is an open gravel-covered area that

gently slopes toward the road (Figure 2-4). The wash racks may have received waste oil and antifreeze during their period of use (WC 1995).

- **Maintenance Pit:** Building 4475 at the Killpack cantonment reportedly had a maintenance pit located west of the building that is now covered with concrete (Figure 2-4). The pit was an unlined excavation in the ground that potentially received vehicle fluids such as oil or antifreeze for an unknown period of time. Additionally, the ground south of the building in an area measuring approximately 4 feet by 85 feet was noted during the EBS to have stressed vegetation and red staining. This area received runoff from the galvanized steel roof of Building 4475 (WC 1995).

- **Chemical Warfare Burial Area:** The Department of the Army informed the BRAC Cleanup Team that chemical warfare burial sites had been identified at training facilities with similar utilizations and construction dates as Camp Bonneville. There had been no documentation at the time of this report that chemical warfare material was buried on the property; however, the potential was recognized and noted (WC 1995).

- **Burn Area:** The burn area is located north of Landfill 3 (Figure 2-2). The area had been repeatedly used on an infrequent basis to burn wood and debris. Wood debris was observed to have been disposed of in this area (WC 1995).

2.5.3 U. S. Army Corps of Engineers Endangered Species Survey

In 1994, Pentec Environmental, Inc. (Pentec) conducted an endangered species survey for the Corps. The objective of the survey was to determine the presence of plant and animal species that were Federally- or State-listed as endangered or threatened, or were candidates for such listing, and to estimate the relative abundance of these species within the boundaries of the site. Five target species were identified within the Camp Bonneville boundaries. None of the species were Federally-listed threatened or endangered. Among the animals, two were State candidate species and one was a Federal candidate species. Among the plants, one was a State endangered species and one was a State sensitive species. The survey report recommended monitoring of invasive species and implementation of control measures. The hairy-stemmed checker-mallow population was deemed at risk because of its roadside location. It was recommended to install permanent markers around the plants to ensure that the area is not mowed or sprayed with herbicides. (Pentec 1995)

2.5.4 U. S. Army Corps of Engineers Archives Search Report

In July 1997, the Corps conducted an archives search to determine the types, quantities, and probable locations of ordnance items abandoned by DOD prior to relinquishing ownership of Camp Bonneville. Information in the report was based on a review of existing historical documents and maps, interviews, a site inspection, and descriptions of known or suspected contamination. The

conclusions and recommendations from the archives search report are discussed below in the following subsections. (Corps 1997)

2.5.4.1 Ranges and Training Areas

The Army started target practice on a rifle range at Camp Bonneville in 1910. The Army placed 14 short-range and seven long-range targets in the valley, which was 350 yards wide and 2,000 yards long. In 1918, the range contained 24 targets. At some time prior to 1929, a machine gun and howitzer range was added to the training facilities. The 1959 property inventory includes the following ranges: a known distance range, a pistol range (20 targets), a submachine gun range (21 targets), a live hand grenade range, and a mortar training shell range. Artillery units conducted firing exercises about twice a year from 1969 to 1985, resulting in approximately 50 rounds being fired into the impact area during each training session. Sometime in the 1970s, however, the military switched to sub-caliber rounds for training purposes. Historical maps dated between 1926 and 1994 identified many additional ranges and firing points throughout Camp Bonneville. These included the following:

- Rifle Range;
- Machine Gun Range;
- Anti-Aircraft Range – 500 inches miniature;
- Pistol Range;
- 1,000 inches Rifle and Light Machine Gun Range;
- Infiltration Course;
- Sub-machine Gun Range;
- Artillery Impact Area;
- Field Firing Area;
- Record Firing Range;
- 1,000 inches and Moving Target Range;
- Artillery Firing Points;
- Mortar Training Shell Course;
- Practice Grenade Range;
- Live Grenade Range;
- Rifle Grenade;
- Rocket Launcher;
- TF-1 25M;
- Free Firing .30-caliber Machine Gun Range Mortar Positions;
- Close Combat Course;
- Night Fire, KD Range;
- M60 and 25M Range;
- 14.5 Range;
- LAW, Sub-caliber, and M203 Practice Range 25-Meter Range;
- M16 Qualification Range;
- FBI Range;
- ARF Range;
- Combat Pistol Range;

- M203 Grenade Launcher (HE) Range M-31 Field Artillery Range; and
- Known Distance and Training Fire Range 25-Meter and Machine Gun Range.

Additional training in maneuvers, bivouacking, and tactics were accomplished on the many training areas at Camp Bonneville. Occasionally, vehicles would support this training, and the use of smoke or riot control agents would be authorized.

The Corps concluded in its archives search report that it was possible that unserviceable munitions may have been burned in the demolition areas. A 1971 agreement between the Army and Air Force stated that all munitions had to be destroyed by burning or detonation. A 1986 amendment allowed unserviceable munitions to be destroyed by a high order detonation only, and later in 1993, the destruction of unserviceable munitions by any method was not permitted.

2.5.4.2 Ammunition and Storage Facilities

A building list from 1946 listed two ammunition magazines buildings, 2950 and 3754. The property inventory produced in 1959 when Camp Bonneville became a sub-installation of Fort Lewis shows that building 2950 was still used as an ammunition storage facility, but it does not show a building 3754. The archives search report indicated that the EBS building list noted three ammunition bunkers, buildings 2950-52, and it listed their construction date as 1976.

2.5.4.3 Chemical Warfare Service Activities

The Corps' archives search report referenced several documents from the 1930s that discussed the expenditure of detonating gas identification (ID) sets from the Vancouver Barracks' supply. The gas ID sets consisted of a chemical agent placed in glass ampoules, vials, or bottles to train soldiers in the safe handling, identification, and decontamination of chemical warfare agents (CMA 2007). These documents all referred to the use of one set per instance, but they did not specify the location or extent of the training involved. The Corps' archives search report indicated it was known; however, that Camp Bonneville could have been the location of this activity. Camp Bonneville had two gas chambers, and it also had a 100-yard by 100-yard mustard training area. An undated map from the Real Estate Office at Fort Lewis was reviewed. It had a hand-written note in the mustard training area which read, "Gas ID." Other historical Chemical Warfare Service items mentioned in the archives search report included gas masks, smoke pots, demustardizing agents and apparatuses, tear gas capsules, and land mines. It was reported that the old gas chamber was burned in the 1970s. The two possible locations for the second gas chamber are Buildings 1834 and 1864, both of which are located in the Bonneville cantonment.

2.5.4.4 Potential and Confirmed Ordnance Presence

The Corps' archives search report concluded that the potential for ordnance existed throughout most of the installation. Figure 2-6 identifies the areas

recommended for further action with respect to ordnance. The types of UXO determined to possibly be present at the site ranged from small arms ammunition to 155-millimeter (mm) artillery rounds, up to 4.2-inch mortars, 2.36-inch and 3.5-inch rockets, and grenades (hand and rifle). Training devices were also expected to be found throughout the site.

Ordnance confirmed to be present throughout the site included one 2.36-inch rocket, which was found near the sewage treatment facility, 3.5-inch rockets, 40-mm grenades (HE), 3-inch Trench Mortar (sandfilled), 10-mm and 155-mm phosphorous grenades, and several pieces of small arms ammunition. Based on interviews with people knowledgeable about Camp Bonneville, it was determined that ordnance items also have been found off post near the post's eastern boundary and north of the Bonneville cantonment area.

2.5.4.5 Archives Search Report Recommendations

The Corps' archives search report recommended that statistical sampling for UXO be conducted to delineate the areas containing UXO. The areas with the greatest potential for UXO were depicted on an Areas Recommended for Further Action figure (Figure 2-6).

2.5.5 U. S. Army Corps of Engineers Surface Water Investigation of Lacamas Creek and Tributaries

In 1998, Hart Crowser performed a limited surface water investigation of Lacamas Creek and its tributaries for the Corps. The objectives of the investigation were to determine where constituents of concern (COCs) were entering Camp Bonneville via tributaries of Lacamas Creek; and whether COCs were exiting Camp Bonneville via Lacamas Creek and potentially impacting Lacamas Lake (HC 1998). The sample locations for this investigation are provided on Figure 2-7.

A total of six surface water samples (HC-H1 through HC-H5 and HC-D1) and one blind duplicate sample (HC-D10) were collected during the investigation. Five samples were collected from near the headwaters of various tributaries to Lacamas Creek near their entry points to the post to determine concentrations upstream of the post: sample HC-H1 was collected from East Fork Lacamas Creek, sample HC-H2 was collected from an unnamed tributary to David Creek, sample HC-H3 was collected from David Creek, sample HC-H4 was collected from North Fork Lacamas Creek, and sample HC-H5 was collected from an unnamed tributary to the North Fork Lacamas Creek (Figure 2-7). Samples HC-H1 through HC-H5 were composited at the laboratory into one sample. One sample was collected from Lacamas Creek downstream of the post (HC-D1) just before the creek exits the post.

The samples were analyzed for hardness (EPA Method 6010), total suspended solids (EPA Method 160.2), cyanide (EPA Method 9012), nitrate (EPA Method 300.0), nitrate/nitrite (EPA Method 353.2), total phosphorus (EPA Method

365.4), orthophosphate (EPA Method 365.2), fecal coliform (SM 9331E), fecal streptococcus (SM 9330C), total and dissolved priority pollutant metals and barium (EPA Method 6020/7470), total petroleum hydrocarbons (TPH; Methods NWTPH-Gx and NWTPH-Dx), semivolatile organic compounds (SVOCs; EPA Method 8270C), pesticides/polychlorinated biphenyls (PCBs; EPA Method 8081A/8082), organophosphorous pesticides (EPA Method 8141A), pentaerthritol tetranitrate (PETN; EPA Method 8330), and ammonium picrate/picric acid (AP/PA, LTL 8303).

The report concluded that site activities had not impacted the water quality of Lacamas Creek. (HC 1998)

2.5.6 Camp Bonneville Reuse Plan

In September 1998, a Reuse Plan was published for future possible uses of the site. The plan was prepared by the Camp Bonneville Local Redevelopment Authority (LRA) with the assistance of Otak, Inc. The plan was subsequently updated in February 20, 2003 and November 15, 2005. When the military closes a base, it asks the local community to form an LRA to prepare a reuse plan for the property. The LRA typically includes any jurisdictions, such as cities and counties, in which the military base is located. Since Camp Bonneville is in Clark County and is not within any city boundaries, Clark County formed the officially recognized Camp Bonneville LRA in November 1995. (LRA 1998)

Figure 2-8 illustrates the future possible uses of the site as outlined in the Preferred Reuse Plan.

To assist with the community-based planning effort, the Clark County Board of County Commissioners appointed a five-member Reuse Planning Committee (RPC) to oversee the reuse planning process. The RPC established six subcommittees made up of community representatives to assist in preparing planning options. The LRA RPC established seven guiding principles for planning, which required the reuse plan to be self-sustaining, locally focused and directed, an open process, considerate of impacts to the surrounding neighborhoods, addressed to overall community need, based on cooperation and consensus building, and environmentally conservative (LRA 1998). The preferred reuse plan components are discussed in the following subsections.

2.5.6.1 Regional Park

A regional park was proposed that would comprise approximately 1,000 acres along the western portion of the property. The public park would provide opportunities for the local community to enjoy both active and passive recreational activities. The park would be managed and maintained by Clark County and would provide the following recreational opportunities:

- Recreation trails (for hiking, mountain biking, and equestrian use);
- Group picnic areas and picnic shelters;

- Amphitheater and stage (for outdoor school and small local events);
- Restroom facilities;
- Tent camping facilities;
- Recreational vehicle camping facilities;
- Public firing range;
- Archery practice range;
- Park watch person's residences;
- Vehicle access road;
- Designated parking area;
- Ponds for recreational use and environmental education;
- Native American cultural center in the Bonneville cantonment area;
- Environmental study area; and
- Orienteering.

2.5.6.2 Law Enforcement Training Center

A law enforcement training center was proposed at the property to serve the regional needs of law enforcement agencies of southwest Washington. At this facility, police officers would receive basic training, learn new skills, and learn firearms techniques. The training center would be located in the Killpack cantonment. A new training building would be constructed to provide three to six classrooms for use by Clark College and county law enforcement for environmental and law enforcement training. Additionally, local law enforcement firing ranges were proposed east of Lacamas Creek in the southwest corner of the property. An equestrian riding ring was proposed in the general vicinity of the Killpack cantonment, and would be open to the general public when not being used for local law enforcement training. A physical fitness course and canine training areas were also proposed in the area. Proposed firing ranges would include a handgun range, a rifle range, and an area for the future construction of an indoor firing range.

2.5.6.3 Rustic Retreat Center/Outdoor School

A Rustic Retreat Center/Outdoor School was proposed at the property as the primary reuse of the barracks areas. The retreat center/outdoor school would reuse many of the existing structures after upgrades were completed for compliance with applicable building codes, and structural and utility service improvements. New buildings such as a meeting hall would be located within the existing Bonneville cantonment area.

2.5.6.4 Native American Cultural Center

Rattling Thunder, a non-profit Native American cultural group representing area tribes, provides training (drums, art, Native American culture) to Native American youth in the region and assists in coordinating tribal activities such as regional powwows. Rattling Thunder requested use of a barracks building and access to kitchen and meadow areas at Camp Bonneville for a Native American Cultural Center. The center would also be open to the general public visiting the regional park and outdoor school. The Cowlitz Indian Tribe and the Confederated

Tribes of Grand Ronde were also involved in the planning process and were supportive of the development of a Native American Cultural Center at Camp Bonneville.

2.5.6.5 Clark College Environmental Field Station

Approximately 50 to 60 acres of the property were proposed to be designated for environmental studies in the southwest corner of the property. This area was selected due to the various ecosystems in this creek watershed area and its suitability for water quality research, wildlife habitat studies, and native plant community preservation and restoration programs. A new classroom building at the Killpack cantonment would also be constructed to provide three to six classrooms for use by Clark College and county law enforcement for environmental and law enforcement training.

2.5.6.6 Trails and Nature Area

Approximately 2,000 acres of the property were proposed to be maintained for trails and nature areas in the central and eastern portions of the property. The public would access this area through hiking trails, mountain bike trails, and equestrian riding trails. Environmental learning areas would be developed for use by all age groups. Most of these recreational trails would utilize gravel and unpaved roads and cart tracks that already exist throughout the property; however, additional trails would be created as funding became available. Trails in these natural areas would also be utilized by trail maintenance staff, timber management crews, and emergency response personnel such as firefighters.

2.5.6.7 Federal Bureau of Investigation Firing Range

An area immediately adjacent to the law enforcement firing ranges was identified for lease by the FBI. Noise studies indicate that firing ranges must be located no closer than 2,000 feet from neighborhoods and public use areas. Because of this, the FBI had been asked (and had agreed) to move its range to an area that would meet this criterion. Due to safety issues, the FBI was supportive of the LRA's requirement that the relocated FBI range be baffled. The FBI estimated past usage to be 60 to 80 days per year, with usage (except for emergency training) usually able to be scheduled in advance. It was determined to be essential for the viability of the regional park that FBI use of the firing range be limited to solely meeting the FBI's needs, particularly during the peak months for park and outdoor school usage at the nearby meadow areas. The FBI was willing to share range usage with law enforcement agencies when FBI agents are available to oversee the usage.

2.5.6.8 Timber Resource Management Area

The property has significant forested areas that provide valuable wildlife habitat, stream water quality and watershed protection, and open space. Timber thinning was recommended as part of the management plan to maintain the health of this forest environment, reduce potential fire hazards, and provide a revenue product from timber sales. Forest management goals would include, but not be limited to:

simulating an old growth timber stand structure by generating an older age class of Douglas fir; and optimizing growth, yield, and forest health. The county forestry staff planned to use several silvicultural techniques to accomplish this, which would be addressed in detail in a forest management plan that would span a 50-year period. The Timber Resource Management Area was divided into two phases. Phase 1 would consist of the western portion of the property, most of which is proposed as a county regional park. Phase 2 would include the balance of the property, the majority of which would be designated as open space greenway.

2.5.6.9 Wetland/Riparian Area Restoration/Enhancement and Habitat Restoration

The plan proposed the restoration and enhancement of existing wetland and riparian areas. Additionally, it was intended that the reuse development process would enhance the entire site for wildlife, fish, and native plants. Clark County would work with the Washington State Department of Fish and Wildlife and the United States Fish and Wildlife Service to explore opportunities on the site to enhance fish population and reintroduce native species.

2.5.7 U. S. Army Corps of Engineers Multi-Sites Investigation

In 1999, Shannon and Wilson, Inc. (SWI) conducted a Multi-Sites Investigation for the Seattle District Corps. The overall objective was to identify contaminated areas and determine the next appropriate step toward restoration of those areas. The areas that were investigated included the three landfills, two suspected disposal areas, the former burn area, the former vehicle maintenance pit, the two former vehicle wash racks, and two hazardous material storage buildings. During the investigation, each of the areas was characterized and samples were collected, with the exception of Landfill 1, which could not be located by SWI. The analyses and methods applied are presented in Table 2-2.

Ground water sample results were compared to federal maximum contaminant levels (MCLs), EPA Region 3 tap water standards, and Model Toxics Control Act (MTCA) Method B standards for ground water protection. Soil sample results were compared to EPA Region 3 risk-based concentrations for residential soil exposure levels, MTCA Method A and Method B cleanup levels, and statewide background concentrations for metals. Additionally, a number of background soil samples were collected to determine background metals concentrations for the site (SWI 1999a). Each of the areas assessed is discussed below in the following subsections. Figures 2-9 through 2-16 provide illustrations of the exploration plan areas.

2.5.7.1 Landfill 2

This former landfill was discovered in about 1978 during excavation for construction of the sewage lagoon. According to an interview conducted during the Environmental Baseline Survey performed by Woodward Clyde in 1997, landfill material was unearthed at the eastern and northern borders of the sewage lagoon. No description was found of the materials encountered during construction of the sewage lagoon. There is no record of the type or quantity of material that was placed in this landfill, and the dates of use are not known.

The general landfill area is bounded by the existing sewage lagoon to the northwest and wooded areas to the south and east (Figure 2-9). The landfill area slopes gently southward toward Lacamas Creek. Although most of the site area is relatively flat, portions of the area are bumpy and uneven. The area between the sewage lagoon and the gravel road to the south is covered with native grasses.

During the Corps' investigation, sixty-four soil gas samples were collected in the Landfill 2 area. The soil gas sample locations were not depicted on the report map. The samples were submitted for off-site fixed laboratory analysis for halogenated hydrocarbons and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds by EPA Methods SW8010 and SW8020. These data were used as a screening tool to determine whether volatile constituents were present in and escaping from the landfill, rather than to provide a reliable quantitation of concentrations. Analytical results from this sampling event were below the method detection limits for all soil gas samples with the exception of chloroform. Trace concentrations of chloroform were detected in two samples at 4 nanograms (ng) in sample L2-SG-40 and 6 ng in sample L2-SG-58. The report states that these trace concentrations of chloroform may be due to contamination from sampling or analytical procedures.

Three soil borings (L2-SB01, L2-SB02, and L2-SB03) were drilled in the Landfill 2 area during July 1998 (Figure 2-9). Monitoring wells were installed in all three borings (L2-MW01, L2-MW02, and L2-MW03). The monitoring wells were installed at locations assumed to be upgradient (one well) and downgradient (two wells) of the landfill. The locations were determined based on area topography and surface drainage. For safety purposes, each soil boring was initially advanced by the UXO specialists to a depth of approximately 5 to 7 feet below ground surface (bgs), which is also below the water table. The drilling rig was then moved over the hole (or immediately adjacent to it), and drilling continued by the hollow-stem auger method. One soil sample was collected for chemical analysis at or immediately above the water table in each of the downgradient soil borings. No ground water was encountered in the upgradient boring. Because the UXO specialists were required to advance the holes to depths below the water table, soil samples for chemical analysis were collected from the hand auger barrel in the two downgradient borings. A soil sample was collected from the anticipated wet season water table zone at the upgradient boring (L2-SB03) using a split-spoon sampler.

The samples were submitted for off-site fixed laboratory analysis for TPH, volatile organic compounds (VOCs), SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, cyanide, total organic carbon (TOC), and priority pollutant metals. In the soil samples, arsenic, barium, beryllium, chromium, copper, and thallium were detected at concentrations that exceeded one or more of the regulatory criteria. Of these, copper was detected at a concentration that exceeded the background concentration in one of the soil samples. PETN was detected above the instrument detection limit in one of the samples; however, there are no regulatory criteria for this constituent and the background sample was not analyzed for PETN.

Due to the suspect landfill material that was found to extend to and slightly within a dense stand of trees south of the gravel road, the two downgradient monitoring wells (L2-MW01 and L2-MW02) were installed to the south of the trees, as close to the landfill as possible (Figure 2-9). These two wells were installed to depths of 13.3 feet and 12.7 feet bgs, respectively. The upgradient well (L2-MW03) was installed to a depth of 10.4 feet bgs, near the northwest corner of the sewage lagoon, to allow for potential seasonal monitoring of ground water. This depth corresponded with the top of the bedrock, which is expected to perch shallow ground water during the rainy season.

Ground water samples were collected from both downgradient monitoring wells and were submitted for off-site fixed laboratory analysis for TPH, VOCs, SVOCs, PETN, picric acid, explosives, pesticides/PCBs, total metals, dissolved metals, and cyanide. Sample results indicate that both total and dissolved arsenic were detected at concentrations that exceeded one or more of the regulatory criteria in both ground water samples.

2.5.7.2 Landfill 3

This former landfill was located southeast of the existing sewage lagoon, near Lacamas Creek, and approximately 300 feet southeast of Landfill 2 (Figure 2-9). The site was described by the previous Camp Bonneville Facility Manager as having been used as a trash burial area from the mid- to late 1970s to the early mid-1980s. The landfill reportedly was approximately 40 feet long by 12 feet wide by 8 feet deep, and trended north-south. Objects such as a refrigerator, a locker, wallboard, and paint cans were reportedly buried here. Soil had been scraped from nearby and pushed onto the landfill, creating a broad mound that marked the location of the landfill in an otherwise fairly flat area on the Lacamas Creek floodplain. Lacamas Creek flows along the eastern and southern sides of the area. At its closest point, Lacamas Creek was approximately 20 feet east of the landfill area.

During the Corps' investigation, eleven soil gas samples were installed in and around the perimeter of the Landfill 3 area to screen for halogenated hydrocarbons and BTEX compounds. The analyses were performed by EPA

Methods SW8010 and SW8020. Analytical results for the soil gas samples were below the detection limits for all analytes in every sample.

Five soil borings (L3-SB01 through L3-SB05) were drilled in the Landfill 3 area during July 1998. The borings were drilled to characterize the shallow subsurface conditions and to evaluate potential pathways for contaminant migration from the landfill. For safety purposes, each soil boring was initially advanced by the UXO specialists to a depth of approximately 5 feet bgs. The drilling rig was then moved over the hole, and drilling continued by the hollow-stem auger method. One soil sample was collected at or immediately above the water table in each soil boring to characterize the shallow ground water pathway. Because the water table was shallow and safety provisions required the UXO specialists to advance the holes to depths of approximately 5 feet bgs using hand augers, soil samples for chemical analysis were collected from the hand auger rather than from split-spoon samplers advanced by the drilling rig. The samples were submitted for off-site fixed laboratory analysis for TPH, VOCs, SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, cyanide, TOC, and priority pollutant metals. Sample results indicate that arsenic, barium, beryllium, chromium, copper, and thallium were detected at concentrations that exceeded at least one of the regulatory criteria.

Four ground water samples (L3-MW01 through L3-MW04) were collected from the monitoring wells installed in Landfill 3. All samples were submitted for off-site fixed laboratory analysis for TPH, VOCs, SVOCs, nitroaromatic and nitramine explosives, PETN, picric acid, pesticides/PCBs, cyanide, and priority pollutant metals (total and dissolved). Sample results indicate that arsenic was detected at concentrations that exceeded at least one of the regulatory criteria and the background concentration in all of the ground water samples.

2.5.7.3 Burn Area

The former Burn Area was located immediately north of Landfill 3, to the southeast of the sewage lagoon (Figure 2-9). A pile of wooden debris approximately 20 feet long by 15 feet wide marked the area. The use of the area to burn wood and debris was reportedly infrequent and there is no record of the period of use or list of materials burned. This area has not been used for burning material since the mid-1980s.

During the Corps' investigation, surface and near-surface soil samples were collected from five locations in and adjacent to the former Burn Area (Figure 2-9). The samples were collected to evaluate the potential for contamination resulting from past disposal and burning activities. Three locations (BA-SS-03, BA-SS-04, and BA-SS-05) were sampled within the former Burn Area. The other two locations (BA-SS-01 and BA-SS-02) were upslope (background) and downslope of the Burn Area, respectively. Two samples were collected from each location to assess the vertical extent of contamination: one from the 0 to 1-foot bgs interval, and one from the 1- to 2-foot bgs interval. Each sample was

submitted for off-site fixed laboratory analysis for TPH, VOCs, SVOCs, pesticides/ PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals. Sample results indicate that arsenic, beryllium, chromium, copper, and thallium were detected at concentrations that exceeded at least one regulatory criterion. Of these, thallium was also detected at a concentration slightly above the background concentration.

2.5.7.4 Former Buildings 1962 and 1983

Buildings 1962 and 1983 were located near the southeastern corner of the Bonneville cantonment (Figure 2-10). They were burned in place, and the burn debris was removed to an unknown location. The report does not indicate when the buildings were burned, only that they had been burned in the past. Both buildings were constructed in the 1930s with wooden frames, walls, floors, and wooden post/concrete pillar foundations and rolled composition roofs. Based on the age and type of construction, it was assumed that lead-based paint may have been used in the buildings. Lead from the paint may have been released to soil when the buildings were burned. Additionally, asbestos and SVOCs may have been present in the composition roofing materials and, therefore, released to the soils when the buildings were burned.

During the Corps' investigation fifteen soil samples (BD-SS01-01, BD-SS02-01, BD-SS03-01, BD-SS04-03, BD-SS05-01, BD-SS06-01, BD-SS06-02, BD-SS07-01, BD-SS07-02, BD-SS08-01, BD-SS08-02, BD-SS09-01, BD-SS09-02, BD-SS10-01, and BD-SS10-02) were collected from 10 locations at the Former Buildings 1962 and 1983 areas. The samples were submitted for off-site fixed laboratory analysis for SVOCs, asbestos, and lead. No SVOCs or asbestos was detected in any of the samples. Lead was not detected at concentrations that exceeded the regulatory criteria.

2.5.7.5 Drum Disposal Area

A suspected drum burial area was identified in May 1996 by an anonymous caller to the Camp Bonneville Facility Manager. The caller, who claimed to be a former employee at the camp, reported that pesticides, paints, and solvents were disposed of in this area (and in the Paint and Solvent Disposal Area, described in Section 2.5.7.6). The Drum Disposal Area reportedly was located south of the Killpack cantonment, east of the gravel road leading south from the main east-west roadway through the facility (Figure 2-11). Following the anonymous call, the Facility Manager located suspected buried metal in this area using a metal detector.

Borings DB-SB01 and DB-SB02 were advanced immediately north and south of the disposal area, respectively (Figure 2-11). The UXO contractors advanced the borings to a total depth of 5 feet bgs. Downhole magnetometer readings were obtained every 2 feet. Refusal of the hand auger was encountered at shallow depth because cobbles were present. Therefore, a shovel was used to excavate a large hole to a depth of approximately 4 feet bgs at each location. A hand auger was then used to collect the samples from the 4- to 5-foot bgs interval

(approximately 1 foot below the estimated depth of the buried drums). Soil samples from various depths were screened using a photoionization detector (PID) during excavation of the borings/holes. The soil sample was submitted for off-site fixed laboratory analysis for TPH, VOCs, SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals.

Sample results indicate that antimony, arsenic, beryllium, chromium, and copper were detected at concentrations that exceeded at least one of the regulatory criteria, and antimony, barium, and copper also exceeded the background concentration.

2.5.7.6 Paint and Solvent Disposal Area

The suspected Paint and Solvent Disposal Area was identified in May 1996 by an anonymous caller to the Camp Bonneville Facility Manager. The caller, who claimed to be a former employee at the camp, reported that pesticides, paints, and solvents were disposed of in this area and in another nearby location (the Drum Disposal Area, discussed in Section 2.5.7.5). The Paint and Solvent Disposal Area was reportedly located south of the Killpack cantonment, in an open area where a (covered) tractor shed currently exists (Figure 2-12). Following the anonymous call, the Facility Manager used a metal detector in this area to locate suspected buried metal.

During the Corps' investigation, two soil borings were advanced adjacent to each of the two identified disposal locations. The UXO contractors advanced the borings to their total depths with a hand auger. Refusal of the hand auger was encountered at shallow depths in all boring locations because of cobbles; therefore, a shovel was used to excavate a large hole to the top of the sampling interval. A hand auger was then used to collect the samples from the desired interval. One soil sample was collected from each of the four soil borings (PD-SB01 through PD-SB04). The samples were collected from depths estimated to be just below the base of the debris. Soil samples were screened using a PID during excavation of the borings/holes. All soil samples collected at the Paint and Solvent Disposal Area were submitted for off-site fixed laboratory analysis for TPH, VOCs, SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals. Sample results indicate that an unknown hydrocarbon, arsenic, barium, beryllium, chromium, and copper were detected at concentrations that exceeded at least one of the regulatory criteria. None of these analytes, however, were detected at concentrations that exceeded the background concentration (the background sample was analyzed only for metals).

2.5.7.7 Maintenance Pit

The Maintenance Pit was located beneath the concrete floor slab under the west end of Building 4475, in the Killpack cantonment (Figure 2-13). Building 4475 was used as the Camp Bonneville shop office. The Maintenance Pit reportedly was an unlined excavation; the exact size, depth, and location are not known. The

pit may have received vehicle fluids, such as gasoline, waste oil, lubricants, and antifreeze, as well as solvents, for an unknown period of time. In addition, pesticides may have been handled in front of the building. Building 4475 and the Maintenance Pit were bounded by Wash Rack No. 1 and a small stream to the west, a gravel drive and storage buildings to the north, and a ditch and the main road to the south. The building extends east of the Maintenance Pit area over a former underground storage tank (UST) location, which was remediated. A heating oil aboveground storage tank (AST) was located along the front (north) wall of the building. A chain link fence surrounds the entire shop office area, including the wash rack, a Hazardous Material Accumulation Point associated with the building, and a number of smaller buildings. The fence runs between Building 4475 and the ditch to the south. Numerous underground and aboveground utilities run through the area immediately west of the building. The surrounding ground surface is a mix of gravel (to the north and south) and soil (to the west). Much of this area appeared to have been filled to provide a level work area. Stressed vegetation was noted around this area. Potential causes of the vegetative stress include metals contamination from roof runoff, or other unknown factors.

During the Corps' investigation, six soil samples were collected from two soil borings at the Maintenance Pit area. An attempt was made to advance soil borings at three locations in the Maintenance Pit area. One soil boring (MP-SB01) was drilled on the northeast side of the building, near the front door. Boring MP-SB01 was drilled and sampled to 11.5 feet bgs, using a hollow-stem auger drilling rig and split-spoon sampler. Three soil samples were collected from boring MP-SB01 at depths of 0, 2.5, and 10 feet bgs for laboratory analysis. Samples from boring MP-SB01 were not analyzed for pesticides/PCBs as originally planned. Therefore, a second boring (MP-SB01A) was drilled and sampled adjacent to the original boring. Boring MP-SB01A was advanced and sampled using a Geoprobe™ sampling system. Samples were collected from this boring for PCB/pesticide analyses only. Boring MP-SB02 was attempted inside of the shop office building at the Maintenance Pit location. A hole was cut in the concrete floor, and a hand auger was used to attempt to dig down to the bottom of the pit. No samples were collected from boring MP-SB02 because rubble that had apparently been placed in the pit when it was abandoned prohibited drilling and sampling. Boring MP-SB03 was drilled and sampled behind (south of) the building. Because access was limited, a Geoprobe™ sampling system was used. Three soil samples were collected from this boring for laboratory analyses: at the ground surface, starting at 1.5 feet bgs, and starting at 3.5 feet bgs. All samples were submitted for off-site fixed laboratory analysis for TPH, SVOCs, pesticides/PCBs, and priority pollutant metals. Subsurface samples were also analyzed for VOCs. Sample results indicate that an unknown hydrocarbon, one VOC (vinyl chloride), five pesticides (4,4,-DDE, 4,4-DDD, 4,4-DDT, alpha chlordane, and gamma chlordane), and six metals (arsenic, barium, beryllium, chromium, copper, and lead) were detected at concentrations that exceeded at least one of the regulatory criteria. Of the metals, copper and lead were detected

at concentrations above the background concentration (the background sample was analyzed only for metals).

2.5.7.8 Wash Rack Number 1

The Wash Rack No. 1 area is located immediately west of the shop office building (Building 4475) in the Killpack cantonment (Figure 2-13). The wash rack was used for vehicle washing, reportedly between approximately 1978 and 1994. The wooden wash rack structure consisted of a two-track vehicle ramp. This area was initially identified as a concern during an environmental compliance inspection because it did not drain to an oil-water separator. Instead, wash water was discharged via uncontrolled overland flow to a nearby ditch. Potential contaminants at the Wash Rack No. 1 site include vehicle fluids, such as gasoline, waste oil, lubricants, and antifreeze; as well as solvents that may have been used during cleaning activities.

Except for a 1-inch thickness of asphalt at the extreme north end of the wash rack, the area was not paved and was covered with grass. The wash rack area is bounded by gravel (with minor asphalt) driving surfaces to the north and west. To the east of the area were a culvert and small stream, and Building 4475 (which includes the former Maintenance Pit). The wash rack structure abuts the chain-link fence that surrounds the shop office area. Most of the wash water discharge from the site would have flowed to the unnamed stream that crosses the site. The stream emerges from a culvert located below the gravel fill pad, between the shop office building and the wooden ramps of the wash rack. It flows aboveground for about 15 feet before entering another culvert running southward under the main road. A ditch that runs along the north side of the road also joins the stream and runs under the road through the same culvert. The wash rack area slopes downward to the east and south, toward the stream and ditch, respectively.

During the Corps' investigation, surface soil samples (WR-SS-01-01 and WR-SS-02-01) were collected from two locations at the wash rack to evaluate potential contamination from the wash rack area. One soil boring (WR-SB01) was drilled between the two ramps of the wash rack. The boring was drilled to a depth of 11.5 feet bgs using a hollow-stem auger. Three soil samples were collected from this boring using a split-spoon sampler. All samples were submitted for off-site fixed laboratory analysis for TPH, SVOCs, and priority pollutant metals. In addition, the two subsurface soil samples were analyzed for VOCs, and the two surface soil samples were analyzed for pesticides/PCBs. Sample results indicate that an unknown hydrocarbon, arsenic, barium, beryllium, cadmium, chromium, copper, and lead were detected at concentrations that exceeded at least one of the regulatory criteria. Of the metals, cadmium, copper, and lead also exceeded the background concentration.

2.5.7.9 Grease Pits

Three grease pits were identified: two located in the Bonneville cantonment north of Buildings 1828 and 1920 (Figure 2-10), and one located in the Killpack

cantonment northeast of Building 4389 (Figure 2-13). Each of the grease pits consisted of a gravel-filled excavation with a corrugated metal pipe extending vertically down into the gravel. The grease pits were used for disposal of waste cooking greases and oils from nearby mess halls. Use of the pits reportedly began around 1935.

During the Corps' investigation, four soil samples (GP-SB02-01, GP-SB02-02, GP-SB03-01, and GP-SB03-02) were collected from the grease pits at depths ranging from 3 to 9 feet bgs. The samples were submitted for off-site fixed laboratory analysis for TPH, SVOCs, pesticides/PCBs, VOCs, and priority pollutant metals. Sample results indicate the presence of arsenic, barium, copper, and thallium in at least one of the four samples at concentrations that exceeded the regulatory cleanup criteria.

2.5.7.10 Pesticide Mixing/Storage Building

The pesticide mixing/storage building (number 1864) is located in the Bonneville cantonment (Figure 2-10). The building was reportedly built in 1955 and was used for pesticide mixing and storage from 1977 to 1980. A small unnamed creek, located approximately 130 feet east of the building, flows south towards Lacamas Creek. A sink inside the building was located during the investigation and found to discharge to a dry well along the eastern side of the building.

During the Corps' investigation, two surface soil samples (PM-SS01 and PM-SS02) were collected from the south side of the building. Additionally, four boring locations (PM-SB01 through PM-SB04) were drilled around the building. Boring PM-SB03 was advanced using a hand auger due to the presence of overhead power lines. Samples were collected from three intervals in each of the borings. Monitoring wells were installed in these borings and ground water samples were collected. Samples were submitted for off-site fixed laboratory analysis for TPH, VOCs (only on subsurface samples), SVOCs, Pesticides/PCBs, organophosphorus pesticides, chlorinated herbicides, and priority pollutants metals. Sample results for the soil samples indicate an unknown hydrocarbon, one SVOC (hexachlorobenzene), two pesticides (4,4-DDE and 4,4-DDT), and eight metals (arsenic, barium, beryllium, cadmium, chromium, copper, lead, and thallium) were detected at concentrations that exceeded at least one of the regulatory criteria. Of the metals, arsenic, cadmium, copper, and lead were detected at concentrations that also exceeded the background concentration. Sample results for the ground water samples did not indicate the presence of analytes above the regulatory criteria.

2.5.7.11 Aboveground Storage Tanks

A total of 26 ASTs were present at Camp Bonneville. Three were located in the Killpack cantonment and 23 were located in the Bonneville cantonment. During the investigation, no evidence of releases from the tanks was discovered; however, incidental spillage was reported to have occurred during tank filling. Each of the AST locations was inspected for evidence of leaks or spills. Stained

soils and/or elevated PID readings were discovered at eight ASTs. During the Corps' investigation, one soil sample was collected from each of the eight areas and submitted for off-site fixed laboratory analysis of TPH. Sample results indicate the presence of diesel or hydrocarbons in all eight samples at concentrations that exceeded the regulatory criteria.

2.5.7.12 Former Sewage Pond

The sewage pond was located south of the Bonneville cantonment area (Figure 2-14). The exact location and dimensions of the pond were not documented. Anecdotal information indicates that the pond was an unlined lagoon that was pumped out and filled with clean soil from a local source when the lagoon was abandoned in 1978. The general area of the former sewage pond is on the Lacamas Creek floodplain and within approximately 200 feet of the creek.

During the Corps' investigation, five soil borings were advanced in the former sewage pond area. Borings SP-SB01, SP-SB02, and SP-SB03 were drilled within the apparent former pond area. Additionally, borings SP-SB04 and SP-SB05 were advanced for the installation of monitoring wells: one at an upgradient location (SP-SB04) and one at a downgradient location (SP-SB05). Ground water was encountered at a depth of 4 to 5.5 feet bgs. A total of 15 subsurface soil samples were collected from these boring locations. All samples were submitted for off-site fixed laboratory analysis for TPH, SVOCs, VOCs, pesticide/PCBs, and priority pollutant metals; however, the water samples were not analyzed for pesticides/PCBs. In the soil samples, arsenic, beryllium, chromium, copper, and thallium were detected at concentrations above one or more of the regulatory criteria. Arsenic, copper, and thallium were detected at concentrations that also exceeded the background concentration. In the ground water samples, arsenic was detected at a concentration that exceeded at least one of the regulatory criteria. This detection was in the upgradient well.

2.5.7.13 Ammunition Storage Magazines

The Ammunition Storage Magazines are located east of the Bonneville cantonment and southwest of the sewage treatment lagoon (Figure 2-15). The three magazines are designated as Buildings 2950, 2951, and 2953. These small structures were constructed of concrete with heavy metal doors, and each was covered with a mound of soil. The buildings are reported to have been constructed in 1976. The magazines were used to store munitions of various types that were brought to Camp Bonneville for training. The area was surrounded by a chain-link barbed wire-topped fence. Lacamas Creek is located immediately south of the fence.

During the Corps' investigation, 15 surface soil samples (AS-SS01 through AS-SS15) were collected from areas around the magazines. Additionally, one soil boring (AS-SB01) was advanced in the area to a total depth of 6 feet bgs. Samples were submitted for off-site fixed laboratory analysis for priority pollutant

metals, nitroaromatic and nitramine explosives, PETN, and picric acid. Sample results indicate that arsenic, barium, beryllium, cadmium, chromium, copper, nickel, thallium, and zinc were detected at concentrations that exceeded at least one of the regulatory criteria.

2.5.7.14 Hazardous Materials Accumulation Point

The Hazardous Material Accumulation Point, Building 4476, is located in the northeast corner of the Camp Bonneville shop area, in the Killpack cantonment (Figure 2-13). The building is a three-walled structure, built in 1990, with cement masonry block walls and a concrete slab floor. The open front of the structure is secured with locking metal gates. The structure, also referred to as the Covered Vehicle Maintenance Storage, has been used for the storage of drums containing liquids such as antifreeze and waste oil. It may have been used for temporary storage of drums of other hazardous materials. The concrete floor of the building is sloped toward a sump in the middle of the floor. The sump measures approximately 2 feet square and is approximately 2 feet deep. No drains are present in the sump. No evidence or reports of spills at this location were found. The building is bounded by a gravel driving surface to the south and east, small storage buildings and equipment to the west, and woods to the north. A vehicle fuel AST, covered and within a concrete containment structure, is located immediately west of the building. The chain-link fence that surrounds the shop office area runs along the north and east sides of the building. The area is fairly flat. Drainage from the area likely flows to the ditch running parallel to the main access road, south of the fenced shop area.

During the Corps' investigation, two surface soil samples (HM-SS-01 and HM-SS-02) were collected from the area. Additionally, one liquid sample (HM-SU01-01) was collected from the sump. The samples were submitted for off-site fixed laboratory analysis for TPH, SVOCs, Pesticides/PCBs, and priority pollutant metals. Soil sample results indicate that arsenic and beryllium were detected at concentrations above one of the regulatory criteria but not above the background concentration. For the liquid sample, an unknown hydrocarbon, one SVOC [bis(2-ethylhexyl)phthalate], and five metals (antimony, arsenic, beryllium, lead, and zinc) were detected at concentrations that exceeded at least one regulatory criterion and, in the case of metals, also exceeded the background concentration.

2.5.7.15 Former CS Training Building

The former CS training building was located south of the Bonneville cantonment and north of Lacamas Creek (Figure 2-16). The building burned to the ground sometime in the 1970s. CS gas (aka tear gas) is the common name for 2-chlorobenzalmalononitrile.

During the Corps' investigation, five soil borings were drilled at the CS training building area and 10 samples were collected. All samples were submitted for off-site fixed laboratory analysis for tear gas and cyanide; additionally, one sample from each boring was submitted for SVOC and lead analysis. Sample results

indicate that one SVOC [benzo(b)fluoranthene] and lead were detected above the regulatory criteria in at least one of the samples.

2.5.7.16 Wash Rack Number 2

The former Wash Rack Number 2 (or former maintenance rack site) is located in the Killpack cantonment at the northeast corner of the shop office area, near Building 4476 (Figure 2-13). No visible signs of contamination were noted. The wash rack was demolished in the 1980s.

During the Corps' investigation, four subsurface soil samples (W2-SB01-01, W2-SB01-2, WS-SB02-01, and W2-SB02-02) were collected from the Wash Rack Number 2 area. The samples were submitted for off-site fixed laboratory analysis for TPH, SVOCs, and priority pollutant metals. Sample results indicate the presence of an unknown hydrocarbon, arsenic, barium, beryllium, chromium, and copper at concentrations that exceeded at least one of the regulatory criteria. None of the metals were detected at concentrations that exceeded the background concentrations.

2.5.7.17 Investigation Recommendations

The Multi-Sites Investigation report prepared by Shannon and Wilson, Inc. for the Seattle District Corps of Engineers recommended no further action for various locations because either no evidence of contamination was detected or constituents of concern were detected at concentrations below the project screening level. The locations where no further action was recommended are:

- Landfill Number 1 (existence could not be substantiated by the Army Corps);
- Landfill Number 2;
- Landfill Number 3;
- Burn area;
- Paint and Solvent Disposal Area;
- Hazardous Materials Accumulation Point; and
- Wash Rack Number 2.

Locations where remedial action was recommended are:

- Drum disposal area; and
- Wash Rack Number 1.

One area, the Maintenance Pit, was recommended for additional investigation (SWI 1999a). The Multi-Sites Investigation report did not provide the recommendations for the former CS training building, ammunition storage magazines building, sewage pond, ASTs, pesticide mixing/storage building (1862), grease pits, and Buildings 1962 and 1983.

2.5.8 U. S. Army Corps of Engineers Demolition Area 1/Landfill 4 Investigation

In December 1998, Shannon and Wilson Inc. conducted an investigation of Demolition Area 1/Landfill 4 as part of the Corps' Multi-Sites Investigation. A demolition area is an area used to destroy unserviceable, excess, or obsolete munitions and/or energetic (i.e., explosive) materials by methods such as open burning and/or open detonation. A delay in the investigation of Demolition Area 1/Landfill 4 was necessary to complete UXO clearance at the landfill. The investigation of Demolition Area 1/Landfill 4 included UXO avoidance, geophysical surveying, collection of surface and subsurface soil samples, installation of monitoring wells, and collection of ground water samples from the monitoring wells. It was reported that building demolition debris was deposited in the landfill during the mid-1960s. The facility manager (at the time of the SWI report) indicated that firearms were also disposed at the landfill; however, the time frame of this disposal was not reported. (SWI 1999b)

During the Corps' investigation, two surface soil samples (L4-SS01 and L4-SS02) were collected in an area of discolored soil. The samples were submitted for analysis of SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals. Sample locations are depicted on Figure 2-17. No background samples were collected during the investigation; however, the surface soil samples were compared to the background samples collected during the Multi-Sites Investigation. Soil samples were compared to background, EPA Region 3 risk-based concentrations for residential exposure to soil, and MTCA Method A, Method B, and Method B protection of ground water criteria. The report does not specify if these are unrestricted land use or industrial use. Arsenic, barium, beryllium, chromium, and copper were detected at concentrations that exceeded one or more cleanup criteria but were below the site background concentrations. No other analytes were detected above the instrument detection limit in the surface soil samples. Five soil borings (L4-MW01, L4-MW02, L4-SB03, L4-SB04, and L4-SB05) were drilled and monitoring wells (L4-MW01 and L4-MW02) were installed in two of the borings. Boring locations are depicted on Figure 2-17.

Three soil samples were collected from each of the borings and were submitted for off-site fixed laboratory analysis of TPH, SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals. Additionally, the two deep samples were submitted for VOC analysis. Barium, chromium, and copper were detected at concentrations that exceeded one or more of the cleanup criteria and background concentrations. No other analytes were detected at concentrations that exceeded cleanup criteria. Finally, two ground water samples were collected from the monitoring wells and were submitted for off-site fixed laboratory analysis of TPH, VOCs, SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals (total and dissolved). No background ground water samples were collected during the investigation. Sample results were compared

to EPA MCLs, EPA Region 3 risk-based concentrations for tap water, and MTCA Method A and Method B cleanup criteria. Sample results indicated the presence of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) at concentrations that exceeded at least one cleanup criteria. No other analytes were detected at concentrations that exceeded cleanup criteria. (SWI 1999b)

Based on the sample results, it was recommended that additional monitoring well installation occur at the landfill in order to further characterize potential contamination associated with it. It was also recommended that surface water and sediment samples from North Fork Lacamas Creek be collected to determine if contamination was migrating from the landfill to the creek. (SWI 1999b)

2.5.9 Base Realignment and Closure Hazardous, Toxic, and Radioactive Waste Site Closure Report

In September 2000, URS completed a site closure report for the United States Army Corps of Engineers. The objectives of the site closure report were to document that past work at eight locations within Camp Bonneville met cleanup requirements of the Camp Bonneville BRAC cleanup team, and to prepare closeout documentation for the eight separate locations within Camp Bonneville that require no further action to meet CERCLA requirements. The closure report pertained only to the hazardous, toxic, and radioactive waste components of the locations and did not include UXO (URS 2000b).

In order to achieve the objectives of the closure report, previous investigations that had been performed at the facility were reviewed, existing data was compared to cleanup levels, and potential exposure pathways and receptors were evaluated in conceptual site models.

The eight locations evaluated and recommended for closure in the report include:

- Landfill 1;
- Landfill 2;
- Landfill 3;
- Former Burn Area;
- Buildings 1962 and 1983;
- Grease Pits at the Camp Bonneville and Killpack cantonments;
- Former Sewage Pond; and
- Hazardous Materials Accumulation Point.

The site closure report prepared by URS presents the rationale for no further action at these eight locations. The rationale stated in the report is provided below.

- **Landfill Number 1:** The landfill was not located by reconnaissance and geophysical methods. Previously collected information is interpreted to be

consistent with the presence of a small debris pile associated with a former residence (URS 2000b).

- **Landfill Number 2:** The soil gas survey indicated no impact to air and no evidence of VOCs in the landfill materials. Metals were the only constituents detected in downgradient borings, and none were detected at concentrations above the screening criteria and background. Both total and dissolved arsenic were detected in both ground water wells sampled at concentrations exceeding risk-based criteria but below the MCL. Arsenic concentrations in area wells are typically slightly elevated, which may be related to background conditions (URS 2000b).

- **Landfill Number 3:** The soil gas survey indicated no impact to air and no evidence of volatile organics in the landfill materials. Metals were the only constituents detected in downgradient borings, and none were detected at concentrations above the screening criteria and background. Total and dissolved arsenic were detected in the downgradient ground water wells at concentrations exceeding risk-based criteria but below the MCL. Total and dissolved arsenic concentrations in area wells are typically slightly elevated, which may be related to background conditions (URS 2000b).

- **Burn Area:** Metals were the only constituents detected in soil in downgradient borings, and only thallium was found at a concentration above the screening criteria and background. Thallium was detected in one surface soil sample at a concentration slightly above background and the MTCA Method B ground water protection criterion, but less than two times background. Slightly elevated thallium levels, detected in one surface soil sample, may not exceed the actual natural concentration in site soils. Arsenic was detected in one nearby downgradient landfill ground water well at a concentration exceeding risk-based criteria, but below the MCL. The burn area does not appear to pose a threat to ground water. Arsenic concentrations in area wells are typically slightly elevated, which may be related to background conditions (URS 2000b).

- **Former Buildings 1962 and 1983:** Only lead was detected in the surface and near-surface soil samples. Concentrations detected did not exceed the screening criteria (URS 2000b).

- **Camp Bonneville Grease Pits:** No organics in soil were detected at concentrations above the screening criteria. Barium and copper were detected in soil above the MTCA Method B ground water protection level and slightly above background levels in soil, but less than two times background. Ground water was not encountered in the boring, which extends to volcanic rock (URS 2000b).

- **Camp Killpack Grease Pit:** No organics were detected at concentrations above the screening criteria in soil. Arsenic was detected in one soil sample at a concentration above the screening criteria and slightly above background, but less than two times background. Thallium was detected at a concentration above the MTCA Method B ground water criterion and slightly above background in one soil sample, but less than two times background. Ground water was not encountered in the boring (URS 2000b).

- **Former Sewage Pond:** Thallium was detected in one soil sample at a concentration above the MTCA Method B ground water protection level and slightly above background, but less than two times background. Arsenic was detected in one soil sample at a concentration above the screening levels and slightly above background, but less than two times background. Copper was detected above the MTCA Method B ground water protection criterion and slightly above background in one subsurface soil sample from the upgradient boring, but less than two times background. Arsenic, copper, and thallium, detected in only one soil sample each at concentrations only slightly above background, may be representative of natural conditions. No organic compounds were detected in ground water samples. The only metal detected in ground water above screening criteria was arsenic in the upgradient well. The ground water arsenic concentration exceeded both MTCA and EPA Region 3 risk-based criteria but was well below the MCL. Arsenic was not detected in the downgradient ground water well. Arsenic concentrations in ground water at Camp Bonneville typically appear to be slightly elevated and may be related to background conditions (URS 2000b).

- **Hazardous Materials Accumulation Point**: The only organics detected in surface soil samples were low concentrations of TPH and bis(2-ethylhexyl)phthalate (below screening levels). No metals were detected at concentrations above the screening levels or background (URS 2000b).

2.5.10 Environmental Restoration – Multi-Sites

In 2000, Gary Struthers Associates, Inc. (GSAI) conducted remedial environmental restoration in areas that had been recommended for remedial work during the 1991 SWI Multi-Sites Investigation and prepared the areas for closure. The scope of the work conducted included the remediation of identified hazards at each of seven designated sites to meet regulatory cleanup standards and allow for unrestricted use of the property. The closure for each location included the excavation and stockpiling of suspected contaminated soil; screening of the in-place soil for the analytes of concern, followed by additional excavation (as needed); and concluded with confirmation sampling and fixed laboratory analysis (GSAI 2000). The soil samples were compared to MTCA Method B, when no established criteria was available in MTCA Method B, then Method A values were used. The seven areas remediated during this investigation are described

below. The remedial environmental restoration report prepared by GSAI does not address the recommendations/disposition of the ASTs, ammunitions building, or Wash Rack 2.

2.5.10.1 Drum Disposal Area

Initial concerns with contamination in this area were raised prior to conducting excavation activities due to the discovery of surficial drum debris not previously documented. Upon commencement of the backhoe excavation activities, numerous pieces of metallic debris were found and removed, including a locker, a large sink, an apparent bookshelf, numerous rusted-through buckets, and a bumper. These items and other debris were excavated and stockpiled. Upon further excavation, a solvent-like odor was noted. Excavation immediately ceased, and field screening was conducted with a PID on the freshly exposed soil. The PID readings from the exposed area were as high as 150 parts per million (ppm).

A total of 26 test pits were excavated from the area (Figure 2-18). The test pits were numbered 1 to 26 in the approximate sequence in which they were dug. Each of these test pits had an approximate footprint of 4 feet by 6 feet and was advanced to approximately 4 feet. Water was observed in several of the test pits. While digging in Test Pit #25, the backhoe bucket pulled up a relatively intact paint bucket (approximately 5-gallon size) containing fresh paint. The paint bucket was damaged by the time it was brought to the surface, and paint was dripping from it. The bucket of paint was placed upon a separate visqueen staging area. Another item of concern, which was discovered during the test pit activities, was an apparent clay tile drain line running through the area from the general direction of the Killpack cantonment. Two soil samples and three ground water samples were collected from the 26 test pits. The samples were submitted for off-site fixed laboratory analysis of VOCs, SVOCs, pesticides/ PCBs, herbicides, and metals (not all samples were analyzed for all constituents). Sample results indicated that concentrations for all analytes detected were below the site-specific cleanup criteria. Restoration at this site included placement of plastic sheeting into each of the exposed test pits prior to backfilling the test pits with the excavated soil.

2.5.10.2 Paint and Solvent Disposal Areas

The remediation activities for this area began with a geophysical survey to attempt to identify and delineate the extent of buried drums or metal debris. The geophysical survey uncovered two disposal areas each to a limited extent. Based on the survey, two soil borings were drilled at each location (Figure 2-12). Samples were analyzed for TPH, VOCs, SVOCs, pesticides/PCBs, nitroaromatic and nitramine explosives, PETN, picric acid, and priority pollutant metals. Sample results indicated the presence of arsenic, barium, beryllium, chromium, and copper at concentrations that exceeded the regulatory criteria; however, all results were below the background concentrations. Restoration of this area

consisted of returning the excavated soil, less the debris, to the excavations and regrading of the area.

2.5.10.3 Wash Rack Number 1

The remediation activities for this area began with the dismantling of the timbers that formed the wash rack. Once the wash rack was removed, a backhoe was used to excavate the footprint of the area (Figure 2-19). The area was excavated to a depth of 3 feet bgs, and a soil sample (H1) was collected from the floor of the excavation for Hanby field analysis (which detected TPH). An additional field sample (H2) was collected from the 3.6-foot bgs depth of the excavation floor. A third field sample (H3) was collected from the 3.5-foot depth interval of the west sidewall of the excavation. These three field Hanby analyses revealed screening level concentrations of 0 ppm, 10 ppm, and 0 ppm, respectively.

Confirmation samples were collected and analyzed for diesel- and heavy oil-range TPH, cadmium, and lead. The results from the initial confirmation samples indicated that additional excavation of the northern and western sidewalls was needed due to the presence of elevated levels of diesel-range TPH. Additional excavation of 3 feet was conducted in the area. A total of eight soil samples (including one duplicate sample) were collected and submitted for off-site fixed laboratory analysis of TPH, VOCs, SVOCs, pesticides/PCBs, and metals (not all samples were submitted for all analyses). Sample results indicated that concentrations for all analytes detected were below the screening criteria. Restoration of this area included hauling in imported backfill material to match the native material, and regrading of the area.

2.5.10.4 Maintenance Pit

Remediation of the area included excavation of the footprint of the maintenance pit to a depth of 0.8 feet bgs and collection of soil samples H4 and H5 from the eastern portion of the excavation floor, and sample H6 from the western portion of the floor (Figure 2-19). The samples were submitted for off-site fixed laboratory analysis for diesel- and heavy oil-range TPH, vinyl chloride, PCBs, DDD, DDE, DDT, and lead. Sample results indicated that additional excavation was required due to the presence of TPH and lead. The excavation was advanced to approximately 2.7 feet bgs and expanded in the northern, eastern, southern, and western sidewalls by approximately 2, 4.3, 0.5, and 5.6 feet, respectively. A total of 12 soil samples were collected and submitted for off-site fixed laboratory analysis of TPH, VOCs, SVOCs, pesticides/PCBs, and metals (not all samples were submitted for all analyses). Sample results indicated that concentrations for all analytes detected were below the established cleanup levels. Restoration of this area included hauling in imported backfill material to match the native material, and regrading the area.

2.5.10.5 Former CS Training Building Area

During the investigation by GSAI, five soil samples were collected from the former CS training building area (Figure 2-20). Samples were submitted for off-

site fixed laboratory analysis for VOCs, SVOCs, and metals. Sample results indicated that lead was detected at concentrations that exceeded the regulatory criteria in two of the samples. Restoration of this area included hauling in imported backfill material to match the native material, and regrading the area.

2.5.10.6 Pesticide Mixing/Storage Building

Excavation was conducted south of the entry of the building (number 1864) and continued to a depth of 2.5 feet bgs (Figure 2-21). A total of eight soil samples (including one duplicate) were collected and submitted for off-site fixed laboratory analysis of TPH, VOCs, SVOCs, pesticides/PCBs, chlorinated herbicides, and metals (not all samples were submitted for all analyses). Sample results indicated that concentrations for all analytes detected were below the established cleanup levels. No remediation was conducted at this location.

2.5.10.7 Selected Aboveground Storage Tank Locations

A total of eight AST locations were selected for remedial action. Soil around the ASTs was excavated until visual observation and field screening by Hanby analysis indicated that residual contamination above regulatory criteria had likely been removed. Confirmation samples were collected and submitted for off-site fixed laboratory analysis of TPH. Upon confirmation that no more contamination was present above regulatory criteria, the excavations were restored by hauling in imported backfill material to match the native material and regarding the area. The AST support blocks were reset at the original location and the ASTs were placed on them. The excavations are described for each of the ASTs below.

- **AST #1 – Building T-1833:** The excavation in this area reached approximately 2 feet bgs. The confirmation sample from this area indicated additional contamination. Based on these results, further excavation was conducted to 4 feet bgs. Again, confirmation samples were collected and submitted for analysis. Sample results indicated no TPH above regulatory criteria.

- **AST #2 – Building T-1837:** The excavation in this area reached approximately 5 feet bgs. Confirmation sample results indicated no TPH above regulatory criteria.

- **AST #3 – Building T-1828:** The excavation in this area reached approximately 5 feet bgs. Confirmation sample results indicated no TPH above regulatory criteria.

- **AST #4 – Building T-1940 (Day Room):** The excavation in this area reached approximately 2.5 feet bgs. Confirmation sample results indicated no TPH above regulatory criteria.

- **AST #5 – Building T-1922:** The excavation in this area reached approximately 2.3 feet bgs. Confirmation sample results indicated no TPH above regulatory criteria.

- **AST #6 – Building T-1922:** The excavation in this area reached approximately 4.5 feet bgs. Confirmation sample results indicated no TPH above regulatory criteria.

- **AST #7 – Building T-1942:** The excavation in this area reached approximately 4.5 feet bgs. Confirmation sample results indicated no TPH above regulatory criteria.

- **AST #8 – Building T-1980:** The excavation in this area reached approximately 2.5 feet bgs. The confirmation sample from this area indicated additional contamination. Based on these results; further excavation was conducted to 5 feet bgs. Again, confirmation samples were collected and submitted for analysis. Sample results indicated no TPH above regulatory criteria.

2.5.10.8 Summary and Recommendations

The GSAI study results from the confirmation sampling data indicated that the paint and solvent disposal area, Wash Rack Number 1 area, the maintenance pit area, the former CS training building, the pesticide mixing/storage building, and the eight AST locations were in compliance with the site clean-closure levels. Additionally, results of this remedial activity indicated that further investigation of the drum disposal area and surrounding fields was necessary prior to continuing remedial actions in that area.

2.5.11 U. S. Army Corps of Engineers Supplemental Site Investigation

In 2000, URS completed a supplemental site investigation (SSI) for the Corps at two locations near the Killpack cantonment. The objectives of the SSI were to: evaluate chemicals of potential concern (COPCs) in surface soil and in flooring material of Building 4126 at the Pesticide Storage Area that had not previously been investigated; evaluate COPCs in surface and subsurface soil and ground water at the largest Ammunition Storage Magazine (Building 2953); and evaluate potential exposure to human and ecological receptors based on a conceptual site model (URS 2000a).

Sample results were compared to MTCA Method A and B cleanup levels, natural background soil metals concentrations in Washington State, and the background soil metals concentrations that were calculated in the 1999 SWI investigation. The following subsections provide a discussion of the specific areas included in the supplemental site investigation performed by URS.

2.5.11.1 Pesticide Storage Area

The Pesticide Storage Area (Building 4126) is located on the edge of a small, flat, grassy field approximately 75 feet south of the gravel road in front of the Killpack cantonment (Figure 2-22). Overall, the ground surface in this area slopes very gently to the south, away from the road. The building is approximately 4 feet west of an approximately 8-foot by 8-foot concrete pad. A surface soil sample (SS04) was collected from an exposed strip of soil between the building entrance and the building, and a surface soil sample (SS05) was collected from the south side of the building. Additionally, a flooring material sample (FS01) was collected.

The soil samples were submitted to an off-site fixed laboratory for analysis of petroleum hydrocarbons, organochlorine pesticides/PCBs, metals, and herbicides. Sample results indicated that 4,4-DDT and 2,4,5-T were detected at concentrations that exceeded the screening criteria. Based on these results, it was recommended that the building be demolished and that surface soil to approximately 1 foot bgs beneath the footprint of the building and to a distance of approximately 4 feet outside the footprint of the building be excavated and disposed.

2.5.11.2 Ammunition Storage Magazines

The Ammunition Storage Magazines (Buildings 2950, 2951, and 2953 as previously discussed in Section 2.5.7.13) are located approximately 2,000 feet northeast of the Pesticide Storage Area on the south side of the road leading into the facility from the Killpack cantonment (Figure 2-15). They are positioned on a flat, graded terrace approximately 10 feet below the elevation of the road. The SSI investigated soil near the largest magazine, Building 2953 (Figure 2-23). An approximately 10-foot-wide by 50-foot-long access road descends from the main gravel road on the west side of Building 2953 and ends in front of the magazine entrance on the south side. Overall, the ground surface in this area slopes away from the road and continues to descend toward the south away from the terrace.

Three surface soil samples (SS01, SS02, and SS03) were collected in three locations in front of the magazine door. Subsurface soil samples were collected from soil boring SB-0l approximately 15 feet south of the bunker. Ground water was not encountered in the boring location. The samples were submitted to an off-site fixed laboratory for analysis of priority pollutant metals, SVOCs, ordnance, and propellants. Sample results indicated that antimony, cadmium, lead, and 2,4-dinitrotoluene were detected at concentrations that exceeded the screening criteria.

Based on these sample results, it was recommended to dispose of soil (0 to 1-foot bgs) along the short footpath leading to the door of Building 2953. This included an approximately 4-foot-wide area along the approximately 6-foot-long path. In addition, it was recommended that soil (0 to 1-foot bgs) at Buildings 2950 and

2951 be excavated and disposed of in areas where metals concentrations exceeded screening values during the 1999 SWI investigation.

2.5.12 Geophysical Survey

In October 2000, Parsons Engineering Science, Inc. (Parsons) conducted a geophysical survey of a suspected drum burial area(Figure 2-24). The survey was conducted using a G-858 portable cesium magnetometer/gradiometer. Eleven anomalies were encountered during the investigation that indicated the possibility of buried drums. These anomalies were mostly encountered in the suspect drum burial area, which was estimated to be approximately 10 to 15 feet across. The total depth was not determined. (Parsons 2001)

2.5.13 Ordnance and Explosive Removal Action

In October 2000, UXB International, Inc. (UXBI) completed a Removal Report for Ordnance and Explosives Removal at Camp Bonneville (UXBI 2000). The objectives of the removal were to safely locate, identify, and dispose of all surface and subsurface live and inert ordnance related scrap to a depth of 2 feet in two former M203 and 40mm grenade launcher ranges (Figure 2-25). Additionally, geophysical mapping of the two ranges was performed before and after the removal activities. The ranges were further subdivided into grids that measured no larger than 100 feet by 100 feet. The material encountered was further categorized as UXO (ordnance items, complete or partial, containing an explosive filler or propellant), ordnance and explosive related scrap (non-explosive ordnance material), and non-ordnance related scrap (miscellaneous material not related to ordnance). During the anomaly investigation, UXBI acquired and excavated anomalies, identified them, and determined their appropriate disposition. When UXO was encountered, it was blown in-place. Nine UXO items were encountered and disposed during the investigation. Ordnance and explosives related scrap was inspected, explosively demilitarized (if necessary), and certified as free of explosive. A total of 3,888.25 pounds of ordnance and explosives related scrap was removed. Finally, 683.85 pounds of non-ordnance related scrap was recovered from the ranges. Based on this work, UXBI recommended that the area's investigation be "opened to unlimited use/activities to a depth of 4 feet." (UXBI 2000)

2.5.14 Environmental Restoration – Pesticide Storage Area and Ammunition Storage Magazines

Based on the results and recommendations of the SSI in 2001 (discussed in Subsection 2.5.10), GSAI performed a remediation environmental restoration for the Pesticide Storage Area (Building 4126) and the Ammunition Storage Magazines (Buildings 2950, 2951, and 2953; GSA 2001).

2.5.14.1 Pesticide Storage Area

Work on the Pesticide Storage Area (Building 4126) began with characterization and sampling of the physical structure. Following sampling, the structure was dismantled. After demolition was completed, a backhoe was used to excavate the

footprint of the building and its drip-line to a depth of 1 foot bgs. Samples were collected from each side wall of the excavation as well as the floor. The results from the samples indicated that no additional excavation was required. Clean backfill was imported and the excavation area filled and graded.

2.5.14.2 Ammunition Storage Magazines

A backhoe was used to excavate the footprint of three magazines (2950, 2951, and 2953) to a depth of 1 foot bgs. Confirmation samples were collected from the four side walls as well as the floor in each of the magazines. Results from the samples indicated that no additional excavation was required. Clean fill material was imported and the areas were filled and graded.

2.5.15 Environmental Restoration – Drum Burial Area

Based on information contained in previous reports, an environmental restoration was performed at the drum burial area in 2002, by GSAI for the Corps. During the investigation, soil from the drum burial area (as discussed in Subsections 2.5.9.1 and 2.5.11) was excavated and stockpiled. Confirmation soil samples were collected for fixed laboratory analysis of Resource Conservation and Recovery Act (RCRA) metals plus copper, VOCs, SVOCs, polyaromatic hydrocarbons (PAHs), pesticides/PCBs, and TPH. Following receipt of sample results that were below the cleanup criteria established under previous investigations, the area was backfilled and was no longer considered an environmental concern. The environmental restoration report does not indicate the depth of the excavation (GSAI 2002).

2.5.16 Small Arms Range Reconnaissance

In 2002, Parsons conducted a reconnaissance of 24 small arms ranges for the Corps. The objectives of the reconnaissance activities were to confirm the existence of each range, document the location of the ranges, and record information and characteristics of any remaining features associated with the ranges. If no discernible features were present to indicate the existence of a range, only general terrain data were collected. Information collected included: type of firing point; type and height of berm structure (if present); type of munitions used; type of targets used; and general terrain information. The locations of the ranges are presented on Figure 2-31. Many of the ranges overlap one another and, therefore, some of the information collected from one range may apply to another range located in the same area. (Parsons 2002)

2.5.16.1 Rifle Ranges 1 and 2

Rifle Ranges 1 and 2 are located east of the Bonneville Cantonment (Figure 2-26). These ranges are described as two distinct ranges in the Corps' archives search report: Rifle Range 1 is the main range, and Rifle Range 2 is the safety fan. Both were first used in the 1920s for live fire training using M1 Rifles (.30-caliber). A pond adjacent to the target area was created when soil was removed to build an Automated Record Fire Range in the late 1980s. Features noted during the reconnaissance by Parsons included: pop-up targets on berms; six concrete firing

positions/foxholes; firing line post markers; a control tower; and down-range boundary pole markers. It is unclear if these features are part of the Automated Record Fire Range or the historic Rifle Ranges. (Parsons 2002)

2.5.16.2 Field Fire Rifle Ranges 1 and 2

Field Fire Ranges 1 and 2 are located east of the Bonneville Cantonment (Figure 2-26). The Corps' archives search report describes two Field Fire Rifle Ranges: Range 1 is the Field Fire Rifle Range, and Range 2 is the safety fan. The ranges were first used in the late 1950s for .30- and .50-caliber weapons. Pop-up targets at varying distances were used and are the same targets as identified in Rifle Range 1. The features noted for these ranges are the same as Rifle Ranges 1 and 2. (Parsons 2002)

2.5.16.3 Field Firing Ranges 1 and 2 and Pistol Range

Field Firing Ranges 1 and 2 and the Pistol Range are located southeast of the Bonneville Cantonment (Figure 2-26). The Corps' archives search report describes these ranges as two distinct areas: Field Firing Range 1 is the main firing range and Field Firing Range 2 is the safety fan for Range 1. Field Firing Ranges 1 and 2 were first used in the late 1950s for live fire training using the M1 Rifle (.30-caliber). The Pistol Range was first used in the mid-1980s for live fire training using the M1911A1 Pistol (.45-caliber). The firing point for the Pistol Range is located in the same area as the Field Firing Ranges. The areas encompassing the noted features were surrounded by berms to the north and east. Features noted include: berms; a firing point area with multiple concrete firing positions; an observation tower; boundary poles; and fixed paper type target stands. (Parsons 2002)

2.5.16.4 1000-Foot Range, 1000-Foot Machine Gun Range, and Moving Target Range

The 1000-Foot Range, 1000-Foot Machine Gun Range and Moving Target Range are located south of the Bonneville Cantonment (Figure 2-27). The 1000-Foot Range began operation in 1943, and the machine gun and moving target ranges were added in 1958. The ranges used the M1 rifle and the M1919 machine gun, both .30-caliber. The features noted during the reconnaissance by Parsons included: two berms; two trenches; and a possible moving target. (Parsons 2002)

2.5.16.5 25-Meter Record Fire Field Range and Field Firing Range

The 25-Meter Record Fire Field Range and Field Firing Range are located to the south of the Bonneville Cantonment (Figure 2-27). The 25-Meter Record Fire Field Range was first used in 1958 for measuring accuracy with .30- and .50-caliber weapons. The Field Firing Range, which extends beyond the 25-Meter Range, was added in 1950 and also was used for both .30- and .50-caliber weapons; however, this range was not intended for accuracy testing. Features associated with these ranges noted during the reconnaissance by Parsons included: multiple 3-foot high berms; an area suspect of being a firing point; and one

concrete bunker with a turning cable wheel system (the purpose of the cable wheel system was not noted). Parsons 2002

2.5.16.6 Close Combat Range

The Close Combat Range is located in the northern portion of the site near Demolition Area 1/Landfill 4 (Figure 2-28). The Close Combat Range was first used sometime in the early 1970s for live fire training with .30- and .50-caliber weapons in an automated pop-up target course. The features noted during the reconnaissance by Parsons included: a collapsed observation stand; a safety lane sign nailed to a tree near the tower; concertina wire on the upper line near the safety sign electrical post with lines running underground; 4-foot by 12-foot wooden boxes containing the pop-up silhouette targets, with some containing three electrical outlets; and a circular exit sign nailed to a tree at the end of the range. (Parsons 2002)

2.5.16.7 Submachine Gun Range

The Submachine Gun Range is located just south of Demolition Area 1/Landfill 4 and northeast of the Bonneville Cantonment (Figure 2-28). The Submachine Gun Range was first used sometime in the late 1950s for M3 submachine gun (.45-caliber) training. Features noted during the reconnaissance by Parsons included: two mortar positions; one mock satellite dish; two BRDM mock armored vehicles; concertina wire; multiple silhouette small arms targets, and a bunker with mock guided anti-aircraft missiles. (Parsons 2002)

2.5.16.8 TF Range

The TF Range is located due east of the Bonneville Cantonment along the south edge of the Lagoon Ponds (Figure 2-26). The TF Range was used in the 1950s for record firing of small arms (.22-, .30-, and .50-caliber, and 7.62-mm) and machine gun firing. No range related features were observed during the reconnaissance by Parsons. (Parsons 2002)

2.5.16.9 25-Meter M60 Range and Pistol Range

The 25-Meter M60 Range and Pistol Range are located northeast of the Bonneville Cantonment, due north of the Lagoon Ponds (Figure 2-28). The Pistol Range was first used in the late 1950s as a non-record fire range using the M1911A1 (.45-caliber) pistol. The 25-Meter M60 Range was added in the early 1970s and was used for firing the .30-caliber carbine, the M16 rifle, the M14 rifle, and the .50-caliber machine gun. Features identified during the reconnaissance included: a 10-foot berm; two small target areas; .45-caliber bullet casings; a concrete wall, and a firing line. (Parsons 2002)

2.5.16.10 Combat Pistol Range

The Combat Pistol Range is located south of the Bonneville Cantonment and south of Buck Creek (Figure 2-28). The Combat Pistol Range was first used in the late 1980s and included the use of the M1911 (.45-caliber), M9 (9-mm), and .38 Special handguns. It is not known if the range was a free fire or record fire

range. Features noted during the reconnaissance by Parsons included: a control tower; firing point positions; and range boundary poles. (Parsons 2002)

2.5.16.11 25-Meter Machine Gun Range

The 25-Meter Machine Gun Range is located south of the Bonneville Cantonment near the southern installation boundary (Figure 2-29). The 25-Meter Machine Gun Range was first used in the 1960s for live fire exercises with weapons such as the M1 Rifle (.30-caliber) and the M14 Rifle (7.62-mm). According to the Corps' archives search report, this range was also used for live fire training using .30-caliber machine guns. Features noted during the reconnaissance by Parsons included: the firing point; an observation tower; one short berm; one tall berm; and a covered firing line. (Parsons 2002)

2.5.16.12 South and North Machine Gun Ranges

The South Machine Gun Range is located in the southwest corner of the installation and the North Machine Gun Range is located southeast of the Killpack Cantonment north of the former Commanding Officer's residence (Figure 2-30). The South Machine Gun Range was first used in the mid-1920s for free firing training using the M1919 Machine Gun (.30-caliber). The North Machine Gun Range was first used in the mid-1950s for free firing training using.30-caliber machine guns. No features indicating the presence of former machine gun ranges were noted during the reconnaissance. (Parsons 2002)

2.5.6.13 North and South Infiltration Courses

The North Infiltration Course is located southeast of the Bonneville Cantonment in the vicinity of Field Firing Ranges 1 and 2 and the Pistol Range (Figure 2-26). The South Infiltration Course is located directly south of the 3.5-Inch Rocket Range near the southern installation boundary (Figure 2-29). The North Infiltration Course was first used in the early 1940s for live fire training using the M1919 Machine Gun (.30-caliber). The South Infiltration Course was first used in the early 1970s where the use of .30-caliber carbines, M16 Rifles (5.56-mm), M14 Rifles (7.62-mm), and .50-caliber machine guns were used for live fire training. No evidence of the North Infiltration Course was noted during the reconnaissance by Parsons. Features identified with the South Infiltration Course included a berm along the northwest edge of the range and a nose cone to a 3.5-inch rocket (M29 practice version); however, these features were later attributed to the 25-Meter Range and the 3.5-Inch Rocket Range located adjacent to the eastern portion of the South Infiltration Course. No evidence of the South Infiltration Course was identified during the reconnaissance. (Parsons 2002)

2.5.16.14 M31 Sub-Caliber Ranges 1 and 2

The M31 Sub-Caliber Ranges are located in the southwestern portion of the site (Figure 2-30). These ranges are described as two distinct ranges in the Corps' archives search report: Range 1 is the main range, and Range 2 is the safety fan. The M31 Sub-Caliber Ranges were first used in the 1970s. Features identified during the reconnaissance by Parsons included: multiple vehicle tires with the

outer edges painted; multiple concrete walls; multiple earth mounds; two large holes or pits; an observation tower; and four firing point concrete pads at the north end of the range. (Parsons 2002)

2.5.16.15 500-Inch Anti-Aircraft Range and Anti-Aircraft Range

The Anti-Aircraft Ranges cover a large area of the central and southwestern portions of the site. The firing point for both ranges is located in a flat area between the Rifle Ranges and Lacamas Creek (Figure 2-27). The Anti-Aircraft and 500-inch Anti-Aircraft Ranges were first used in the early 1940s for pedestal mounted machine gun (.22-caliber) fire training on overhead targets, parachute targets, climbing and diving targets, and horizontal targets. No features associated with these ranges were noted during the reconnaissance by Parsons. (Parsons 2002)

2.5.16.16 1952-TEC-22

An area identified from a 1952 aerial photograph labeled as 1952-TEC-22 was investigated as part of the reconnaissance. It is believed to be an undocumented small arms range. The area is located on the western edge of the Bonneville Cantonment. Features identified that are associated with the undocumented range included: multiple flat silhouette small arms targets nailed to trees or lying on the ground surface; and a possible berm oriented east to west. (Parsons 2002)

2.5.16.17 Conclusions

Twenty-four individual documented ranges were investigated as part of the reconnaissance by Parsons. Features documented as part of the ranges generally included berms, firing points, control towers, targets, boundary poles, and training equipment. No recommendations were included in the reconnaissance results report prepared by Parsons. (Parsons 2002)

2.5.17 U. S. Army Corps of Engineers Record of Decision – Multi-Sites

In August 2002, URS completed a Record of Decision (ROD) for multiple sites for the Corps. The sites included in the ROD were Landfill 1, 2, and 3; the former Burn Area; Buildings 1962 and 1983; the Grease Pits; the former Sewage Pond; the Hazardous Materials Accumulation Point; the Drum Disposal Area; the Paint and Solvent Disposal Area; Wash Rack 1; the Maintenance Pit, Wash Rack 2; the Pesticide Mixing/Storage Building 1864; the ASTs; the CS Gas Training Building; the Pesticide Storage Area Building 4126; and the Ammunition Storage Magazines 2950, 2951, and 2953. Based on analysis from previous investigations, COPCs either were not detected or were detected below the regulatory cleanup levels at some of the areas. The remaining areas contained contaminants above regulatory cleanup levels. At these areas, remediation had been conducted and contaminants had been removed. Subsequent confirmation sampling at these areas determined that contaminants were below established cleanup levels. Because contaminants were either not present or had been removed, it was determined that no risk to human health or the environment was

posed at these areas. The EPA, Washington State Department of Ecology (Ecology), and the Army determined that no further action would be required at these locations (URS 2002).

2.5.18 Washington Department of Ecology Enforcement Order

On February 4, 2003, an Enforcement Order 03TCPHQ-5286 was issued by Ecology under the state's cleanup law to the Army for Camp Bonneville cleanup. The enforcement order divided the site into three remedial action units (RAUs). The RAUs are described below (Ecology 2003).

- **RAU 1:** This RAU consists of the 20 acres where hazardous substances other than military munitions had been located (Figure 2-31). This RAU contained the majority of the areas previously discussed in this ESI report.

- **RAU 2:** This RAU consists of the areas where hazardous substances have been located, but not addressed through remedial actions. This RAU has been further divided into three subunits.

  - **RAU2A:** This RAU consists of the 21 small arms range areas (Figure 2-31).
  - **RAU2B:** This RAU consists of Demolition Areas (DA) 2 and 3 (Figure 2-33).
  - **RAU2C:** This RAU consists of the Demolition Area 1/Landfill 4 area (Figure 2-34).

- **RAU 3:** This RAU consists of any area where military munitions may have come to be located (Figure 2-35).

The status of cleanup at these RAUs, as of October 2011, is discussed in the Ecology Fact Sheet contained in Appendix B.

The Ecology enforcement order dictated the work and work schedule to be performed in each of the RAUs. Ecology has provided oversight for investigations and cleanup activities since 2003.

2.5.19 U. S. Army Corps of Engineers Expanded Site Inspection – Demolition Area 1/Landfill 4

In 2003, URS Corporation (URS) completed an ESI of Demolition Area 1/Landfill 4 for the Corps. The ESI was conducted in response to the discovery of RDX above screening criteria in two monitoring wells that were installed during the 1999 SWI Multi-Sites investigation. During the ESI, a total of eight new monitoring wells (L4-MW01B, L4-MW02B, L4-MW03A, L4-MW03B, L4-MW04A, L4-MW05A, L4-MW06A, and L4-MW07B) were installed at the landfill (Figure 2-36). One of these wells (L4-MW06A) was not developed due to lack of water. Other activities associated with the ESI included: well slug tests, a topographic survey from the landfill to North Fork Lacamas Creek, and ground

water sampling from the new monitoring wells as well as two previously existing monitoring wells. Ground water sampling of the new wells was conducted approximately 2 weeks after installation and in July 2001, October 2001, January 2002, and April 2002. Additionally, monitoring wells L4-MW01A and L4-MW02A, previously installed in 1999, also were sampled in these months (URS 2003).

Ground water data from this investigation was compared to MTCA Method A (for TPH only) and Method B cleanup levels for ground water, National Ambient Water Quality Criteria, EPA Region 9 Preliminary Remediation Goals (PRGs), and EPA Region 10 risk-based concentrations (RBCs). The ground water samples were analyzed for VOCs (EPA SW-846 Method 8260B), SVOCs (EPA SW-846 Method 8270C), herbicides (EPA SW-846 Method 8151A), total and dissolved metals (EPA SW-846 Method 6010B), TPH-Gx (Method NWTPH-Gx), TPH-Dx (Method NTWPH-Dx), water quality (alkalinity – SM 2320; sulfate, chloride, nitrite and nitrate – EPA Method 300.0; total cyanide – EPA Method 335.2; total suspended solids – EPA Method 160.2; and total and dissolved TOC – EPA Method 415.1), explosives (EPA SW-846 Method 8330A), nitroguanidine (EPA SW-846 Method 8330A modified), and ammonium perchlorate (Method 314.0) (URS 2003).

Analytical results for water samples from monitoring well MW-01A indicated the presence of perchlorate above regulatory criteria in January 2002; and total arsenic, total copper, and total lead above regulatory criteria in October 2001. Although there were detections above the method detection limits, there were no other results above regulatory criteria. Analytical results for water samples from monitoring well MW-01B did not indicate concentrations above the regulatory criteria during any of the sampling events (URS 2003).

Analytical results for water samples from monitoring well MW-02A indicated RDX and perchlorate above regulatory criteria in all sampling rounds. No other analytes were detected above the regulatory criteria. Analytical results for water samples from monitoring well MW-02B indicated the presence of 2,4-Dinitrotoluene, RDX, perchlorate, 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE) and dichlorofluoromethane, above regulatory criteria for all sampling rounds. Additionally the following analytes were detected above the regulatory criteria on the specified sample dates: benzene in July 2001; tetrachloroethene in July 2001, October 2001, and April 2002; total arsenic, total copper, and total lead in July 2001 and April 2002; and dissolved arsenic in October 2001 (URS 2003).

Analytical results for water samples from monitoring well MW-03A indicated RDX and perchlorate were detected above the regulatory criteria in all sampling rounds. Total iron was detected above the regulatory criteria in the sample collected in January 2002; and dissolved lead was detected above the regulatory criteria in the sample collected in October 2001. Analytical results for water

samples from monitoring well MW-03B indicate that perchlorate was detected above regulatory criteria in all sampling rounds; RDX was detected above the regulatory criteria in all but the sample collected in July 2001; total arsenic was detected above the regulatory criteria in the samples collected in October 2001 and January 2002; total copper was detected above the regulatory criteria in all the samples collected except for July 2001; total iron was detected above the regulatory criteria in the samples collected in January and April 2002; and total lead was detected above the regulatory criteria in the sample collected in April 2002 (URS 2003).

Analytical results for water samples from monitoring well MW-04A indicated RDX, perchlorate, total iron, and total copper were detected above the regulatory criteria in all sampling rounds. Total arsenic was detected above the regulatory criteria in the samples collected in July and October 2001; and total lead was detected above the regulatory criteria in the sample collected in April 2002.

Analytical results for water from monitoring well MW-05A indicated RDX and perchlorate were detected above the regulatory criteria in all sampling rounds. Also, total copper was detected above the regulatory criteria in the sample collected in October 2001.

Analytical results for water samples from monitoring well MW-07B indicated the presence of total and dissolved arsenic above the regulatory criteria in the sample collected in January 2003 (URS 2003).

2.5.20 Small Arms Ranges Site Inspection

In September 2003, Atlanta Environmental Management, Inc. (AEM) conducted a site inspection of the small arms ranges for the Corps. The locations of the small arms ranges that were part of this investigation are presented on Figure 2-37. The purpose of the investigation was to (AEM 2003):

- Determine the concentration of lead residues in the top 0–6 inches of soil at 307 one-half acre grids within the firing ranges;
- Determine the background concentrations of lead in the top 0–6 inches of soil at 20 undisturbed/unused locations within Camp Bonneville;
- Determine the concentrations of explosive residues, including picric acid and PETN, in soil in the muzzle blast area of the firing ranges where the firing location is known; and
- Determine the concentrations of explosive residues, perchlorate residues, and metals in soil samples from Demolition Areas 2 and 3.

The sample results were compared to MTCA cleanup levels (the report does not specify Method A or Method B) and EPA Region 9 PRGs. Additionally, a total of 20 background soil samples were collected. Sampling grids that measured

approximately 80 feet by 80 feet were created at each of the small arms ranges. Soil samples were collected from the center of the grid and one each from locations approximately 40 feet north, south, east, and west of the center. A total of 1,535 soil samples were collected from the grids and submitted to an off-site fixed laboratory for analysis of lead using EP Method 7420. Ten locations randomly selected from the range grids and from two randomly selected background locations from Demolition Area 2 and Demolition Area 3 were submitted for off-site fixed laboratory analysis of Priority Pollutant Metals by EPA Method 6010.

Arsenic and barium were detected at concentrations that exceeded at least one of the regulatory criteria. Additionally, samples were analyzed for explosive residues using EPA Method 8330 modified. The numbers of samples submitted for this analysis are not indicated in the report. Explosive residues were detected in the samples collected from the muzzle blast zone at the 25-meter and machine gun ranges but not above the regulatory criteria. Samples were collected from Demolition Area 2 and Demolition Area 3 (the number of samples is not specified in the report) and were submitted for off-site fixed laboratory analysis of perchlorate using EPA Method 314. Perchlorate was not detected above the method detection limit in any of the samples. No conclusions were included in the report prepared by AEM.

2.5.21 U. S. Department of the Army Interim Removal Action – Demolition Area 1/Landfill 4

In 2004, Tetra Tech, Inc. (Tetra Tech) conducted an interim removal action at Demolition Area 1/Landfill 4 for the U.S. Department of the Army. The primary purpose of the removal action was to remove source contamination (2.5-acre footprint) within the landfill that was impacting downgradient ground water. The secondary objective was the removal and disposal of open burn/open detonation (OB/OD) ordnance and landfill materials and associated contaminated soils to meet regulatory requirements to gain a declaration of “no further action” from Ecology for the landfill debris/soils. Cleanup action levels were established in accordance with MTCA Cleanup Regulations for the protection of ground water. Part of the removal action included a report that provided a compilation of ground water monitoring data and historical ground water information related to Demolition Area 1/Landfill 4. The report consisted of a review of ground water monitoring data at Demolition Area 1/Landfill 4 and established a baseline concentration for the primary ground water contaminants at the site. These contaminants included RDX, perchlorate, 1,1,1-TCA, 1,1-DCA, 1,1-DCE, total chromium, total copper, and total zinc. It was recommended that ground water monitoring continue at the landfill following the removal of the 2.5 acre foot-print (Tetra Tech 2006).

The removal action at Demolition Area 1/Landfill 4 was completed from May through December 2004. In designing the removal action, it was assumed that Demolition Area 1/Landfill 4 was constructed using normal landfill

characteristics which typically do not include excavation below the water table. For this reason, it was assumed that contaminated soil would not be present below the saturated zone. Likewise, it was assumed that demolition activities which were conducted after landfill operations ceased were unlikely to have included excavation through landfill debris to the water table for the purpose of destroying munitions. Based on these assumptions, the removal action was designed to terminate excavation activities once native soil was encountered. (Tetra Tech 2006)

Prior to the removal of contaminated soils, UXO avoidance was conducted. Munitions discovered during the avoidance were removed from the area and staged near the Camp Bonneville cantonment for off-site disposal. One phase of this removal included a "mag and dig" (the process of manually clearing smaller areas with the aid of shovels and handheld metal detectors) phase of munitions and explosives of concern (MEC) support work. During this work, a total of 21 pits/trenches were excavated. The locations of these pits/trenches are depicted on Figure 2-38. (Tetra Tech 2006)

It was discovered that four of the pits (pits 6, 11, 15, and 16) were used for open burn disposal of munitions constituents (MC). These pits contained remnants of burned military flares and rocket mortars along with practice ordnance, ammunition, casings, and other munitions debris (MD). Blackened soil and/or fuel-related odors were noted at each of these pits. Six additional pits (pits 7 through 10, 12, and 17) contained MC, MD, and scrap metal that had been disposed of by burial. These pits were classified as disposal pits rather than burn pits because there was no visual or olfactory signs of burning. These pits contained bomb casings, empty or inert material filled projectiles, rocket pods and tubes, missile sections, empty casings of various sizes, practice landmines, and practice rockets. These pits were generally located near the outer estimated boundary of the landfill. Finally, seven of the pits (pits 1, through 5, 13, and 14) were used for open burn disposal of civilian fireworks and other ordnance-like items. The fireworks disposal areas were generally clustered in the central portion of the landfill and sometimes overlapped. The areas used to burn fireworks were characterized by a black layer of waste containing items such as whole bottle rockets, star shells, and whirligigs, along with civilian flares, and tear gas/mace canisters. All of the fireworks burn pits/trenches exuded a diesel fuel odor indicating the use of an initiating fuel for the burn. The maximum depth of all of the trenches was between 13 feet bgs and 18 feet bgs. (Tetra Tech 2006)

Following completion of MEC/MC removal activities, excavation of contaminated soil and other debris was conducted. Soil was removed until confirmation samples indicated that perchlorate was at concentrations below MTCA Method B soil cleanup levels for protection of ground water of 0.5 milligrams per kilogram (or 500 micrograms per kilogram). In one area, on the western boundary of the landfill, excavation continued to approximately 27 feet bgs where saturated soils were encountered, and sample results indicated that

perchlorate levels continued to exceed the cleanup criteria. Excavation at this location was ceased due to safety concerns. Ecology determined that residual contamination remaining at this depth would be remediated during a ground water remediation phase of work. The areas where perchlorate contamination remained in soils are presented on Figure 2-39. It was estimated that 13,333 cubic yards of material were removed from the landfill. (Tetra Tech 2006)

2.5.22 U. S. Army Corps of Engineers Remedial Investigation/Feasibility Study of Remedial Action Unit 3

In 2004, Parsons Infrastructure and Technology Group (Parsons) conducted a remedial investigation/feasibility study (RI/FS) for the Corps of RAU3, which was any area where military munitions may have come to be located (Figure 2-35). The purpose of the RI/FS was to document and present MEC; site characterization processes and findings; development of appropriate MEC risk assessment methods and results; develop MEC remediation levels; identification and screening of various cleanup actions; and rationale for selection of proposed cleanup action(s) for the different areas investigated. A total of six alternatives for cleanup were developed during this investigation. The cleanup alternative, or remedy, recommended for each area investigated was based on the specific characteristics of the area. The alternatives were as follows (Parsons 2004):

- **Alternative 1 – No Further Action:** No cleanup action would be implemented to reduce the potential explosive safety risk posed by different areas located within Camp Bonneville. This alternative, if implemented, would involve the continued use of the areas in their current condition.

- **Alternative 2 – Institutional Controls:** Institutional Controls (ICs) are measures undertaken to limit public exposure to residual explosives materials at Camp Bonneville. These preventive measures may include educational awareness and training programs, legally enforceable restrictions on future land use, and physical access controls.

- **Alternative 3 - Surface Clearance with Institutional Controls:** Surface clearance would require clearance of MEC items located on the ground surface. Prior to performing any MEC clearance activities at the site, control points would be established by a land surveyor for the areas that would undergo surface clearance. UXO-qualified personnel would perform a magnetometer-assisted surface sweep to locate metallic objects. The sweep would be performed in fixed width intervals. During the surface sweep, metallic objects located on the ground surface would be identified as either benign metallic scrap or MEC items and removed.

- **Alternative 4 - Clearance to Frost Depth (14 inches) with Institutional Controls:** Clearance to frost depth would require clearance of MEC items located on the ground surface and within 14 inches bgs. Clearance to the published frost penetration depth of 14 inches was determined to be

necessary due to the potential for frost heave to push buried items at or above this depth to the surface. Based on the minimal amount of UXO recovered to date, all being less than 18 inches bgs, it was anticipated that the majority of remaining UXO at the site was within this frost depth interval. During MEC clearance activities at the site, control points would be established by a land surveyor for the areas that would undergo surface clearance. Brush clearing crews would clear sufficient undergrowth so that the MEC clearance crews could adequately perform their work. The brush clearance crews would be accompanied by UXO-qualified safety personnel.

- **Alternative 5 - Subsurface Clearance with Institutional Controls:** Subsurface clearance would require clearance of MEC items to a specified depth based on the projected end use of the site and the resulting potential for exposure to MEC. Under this alternative, each anomaly would be intrusively investigated until the anomaly was identified or until the site-specific risk-based specified depth was reached. Implementation of this alternative would involve land surveying and brush clearing operations. This alternative would also involve a magnetometer-assisted surface sweep to remove all surface clutter which includes benign metallic scrap items and MEC items. The surface sweep would be performed by experienced UXO-qualified personnel.

- **Alternative 6 – Subsurface Clearance and Restoration:** Subsurface clearance and restoration would require excavation of the complete area in order to remove all metallic and MEC items located at the area. Under this alternative, prior to excavating any site soils all existing vegetation, including tree cover, would be cleared. No geophysical survey would be performed for this alternative. All the soils located at the site would be excavated to a depth of 10 feet and would be sifted to identify MEC items for proper disposal (based on the reuse of the site as being recreational). The soils free of any MEC items would be reused at the site for backfilling the excavations. As a result of the process, this alternative would require extensive repair of all ecological damages during the MEC removal action.

The remedy (cleanup alternative) recommended for selection by Parsons for each area within RAU3 is discussed in the following subsections along with the rationale for making the selection.

2.5.22.1 Target Areas

The five Target Areas investigated included the 3.5-inch Rocket Range Target, the Rifle Grenade Range Target, the HE Range Target, the M203 HE Range Target, and the 2.36-inch Rocket Range Target (Figure 2-40). Of these areas, the 3.5-inch Rocket Range Target, the Rifle Grenade Range Target, the HE Range Target, and the 2.36-inch Rocket Range Target were deemed to have the highest relative explosive safety risk based on the type and likelihood of MEC

occurrence. For all areas except the M203 HE Target Area, alternative 4 (clearance to frost depth and institutional controls) was selected. For the M203 HE Target Area, alternative 2 (institutional controls) was selected. The clearance action was recommended to be conducted in the footprint of each of the target areas. The area and extent of the targets was based upon prior characterization and reconnaissance efforts. It was recommended to begin at the presumed center of the areas and proceed outward in a grid-based manner. The calculated total area for the removal action was approximately 10.6 acres and the total area of ICs was approximately 14.6 acres (Parsons 2004).

2.5.22.2 Central Impact Target Area

The Central Impact Target Area (CITA) Ordnance and Explosive Area is located in the central portion of Camp Bonneville (Figure 2-41) and is comprised of three adjacent target areas known as the West Impact Area Car Target 2, Combined Impact Area 1, and Combined Impact Area 2. This CITA was deemed to have a high relative explosive risk based on the type and likelihood of MEC occurrence. There are no future reuse activities planned for this area. Alternative 2 (institutional controls) was selected for this area and included the construction of signage to inform the public of previous uses, and land use controls in the form of restrictive covenants to prohibit any future development and/or forestry activities in the area. The implementation of this alternative was recommended for the footprint of the area for a total of 83 acres (Parsons 2004).

2.5.22.3 Demolition Areas

The demolition areas were used as OB/OD areas to destroy and/or dispose of unserviceable munitions and/or energetic (i.e., explosive) materials. The three areas are known as Demolition Area 1, Demolition Area 2, and Demolition Area 3 (Figure 2-42). A wide range of explosives and ordnance were reportedly disposed of in the demolition areas. Demolition Area 1 is a low future reuse area as it is located in the proposed Wildlife Management Area. Demolition Area 2 is a high future reuse area since Clark County is proposing a “Logging Camp” for this area. Intrusive activities may be conducted in the logging camp. Demolition Area 3 is a medium future reuse area as it is near to the planned Environmental Study Area.

No subsurface clearance cleanup was recommended for Demolition Area 1 since it is co-located with Landfill 4-Demolition Area 1 and the entire 2.5 acre footprint had been removed. Alternative 5 (subsurface clearance with institutional controls) was recommended for Demolition Areas 2 and 3 because it would eliminate substantially all of the explosive exposure risk. In addition, Alternative 3 was recommended as a “buffer area” surrounding all three demolition areas to address the potential from kick-out (which is the unintended dispersal of explosives during disposal activities and/or the inadvertent release of submunitions). The subsurface clearance was recommended to be performed in a 300-foot by 300-foot grid centered over the Demolition Areas 2 and 3. The removal was proposed to begin in the center and proceed outward in a grid-based

manner. The total area of subsurface clearance for Demolition Areas 2 and 3 was estimated to be two acres each for a total of four acres (Parsons 2004).

2.5.22.4 Firing Points

The Firing Points MEC source area consist of six mortar firing positions, seven artillery firing positions, one rifle grenade range firing point, one 3.5-inch rocket range firing point, and one M20340-mm HE range (Figure 2-43). These areas have a medium relative explosive safety risk based on the type and likelihood of MEC occurrence. The firing points are accessible based on their proximity to roads and trails. The activities proposed for future reuse are surficial and non-intrusive. Alternative 2 (institutional controls) was selected for these areas because it would substantially eliminate the explosive exposure risk. The implementation of institutional controls would also provide the necessary public awareness of the former military use of the site to park visitors. The clearance action would be conducted in the footprint of each of the firing points. Although Alternative 2 does not include clearance actions, they were recommended for the firing points in addition to Alternative 2. The total area for the removal would be approximately 19 acres (Parsons 2004).

2.5.22.5 Training Areas

One training area (the M203 Practice Range co-located with the Mortar Practice Range) was determined to pose a potential MEC risk. Alternative 2 (institutional controls) was determined to be appropriate for this area. No further information regarding the recommendations for the implementation of this alternative in this area is provided in the report (Parsons 2004).

2.5.22.6 Range Safety Fans

The Range Safety Fans (RSF) Ordnance and Explosive (OE) area consists of a total of 16 range safety fans associated with each of the 16 Firing Point Locations. The majority of Camp Bonneville is overlain by one or more RSFs. The RSFs are designed to contain those single event items that fall at some distance from their intended targets. The likelihood of encountering UXO in an RSF is negligible, because of the infrequency of historical artillery firing practices and the large size of the RSFs. The report indicates that most of the proposed future reuse of the areas is considered low, except those areas that overlie a High Reuse Intensity Area. For these areas, Alternative 5 (subsurface clearance with institutional controls) was selected (Parsons 2004).

2.5.22.7 Storage Magazines/Transfer Points

The solitary Storage Magazine/Transfer Point MEC source is Building 2950 (Figure 2-44), consisting of three bunkers located approximately 1,000 feet northeast of the Bonneville cantonment. The likelihood of any non-deployed military munitions in this area is remote; therefore, it has a low relative explosive safety risk. Alternative 2 (institutional controls) was selected for this area (Parsons 2004).

2.5.22.8 Maneuver Areas

The Maneuver Areas MEC sources are those areas that were not specifically identified as troop training areas. Maneuver Areas overlay the vast majority of the site and included the roads and trails, bivouac, and maneuver areas, including the Camp Killpack and Bonneville cantonments. These areas were determined to have a very low relative explosive safety risk. Alternative 2 (institutional controls) was selected to remediate these areas (Parsons 2004).

2.5.22.9 Central Impact Target Area

The Central Impact Target Area is approximately 458 acres and comprised of the 83 acre CITA and 375 acres of associated RSFs. The area is fenced with a three-strand barbed wire fence encircling the entire area. Additionally, signage warning of the potential danger to trespassers is in place. People are not expected to venture into this area due to the fencing, signage, and steep terrain; therefore, the number of potential human receptors was determined to be negligible. Alternative 2 (ICs) was determined appropriate for remediation in this area (Parsons 2004).

2.5.22.10 Roads and Trails

There are approximately 46 miles of roads and trails throughout the site, of which 25 miles are located within the proposed Regional Park (Figure 2-45). The roads and trails have the same munitions related historical use and characteristics as the Maneuver Areas. The roads and trails have a low relative explosive safety risk. Alternative 4 (clearance to frost depth and institutional controls) was determined to be the most appropriate remediation. The clearance was recommended to include geophysical mapping of roads and trails. Area-specific institutional controls that were recommended included signs along the roads and trails to inform the public about past military use of the site (Parsons 2004).

2.5.22.11 High Intensity Reuse Areas

Areas of the proposed Regional Park that are High Intensity Reuse Areas comprise approximately 210 acres. It was assumed that future visitors would conduct a wide range of recreational and educational activities within the footprint of the High Intensity Reuse Areas. Alternative 5 (subsurface clearance with institutional controls) was selected as the best remediation method for these areas, with some locations being cleared to 14 inches and some to 4 feet. The total area estimated for conducting the 14-inch clearance is approximately 160 acres. The area estimated for requiring the 4-foot clearance is approximately 50 acres and includes the following proposed future uses within the park: Rustic Retreat Future Expansion, Logging Camp, Tent and Yurt Camping sites, and an estimated additional 5 acres for other construction areas (Parsons 2004).

2.5.22.12 High Accessible Medium Intensity Reuse Areas

Areas of the proposed Regional Park that are High-Accessible Medium Intensity Reuse Areas comprise those areas that are located between the High Intensity Reuse Areas, have a gentle topographic slope and low vegetative cover, and

therefore provide the opportunity to draw people together for informal recreational activities. These areas cover approximately 180 acres along the Lacamas Creek valley floor. Alternative 4 (clearance to frost depth and institutional controls) was selected for remediation efforts in these locations. The clearance action was recommended to be conducted in the footprint of the High-Accessible Medium Intensity Reuse Areas. The total area for conducting the clearance is approximately 180 acres (Parsons 2004).

2.5.22.13 Remaining Medium Reuse Intensity Areas

The remaining Medium Reuse Intensity Areas of the proposed Regional Park consist of those areas that are located between specific designated reuse areas, and do not have the high accessibility characteristics of gentle slope and low vegetation. These remaining Medium Reuse Intensity Areas comprise approximately 770 acres. Alternative 2 (institutional controls) was selected for these areas, including signage that would serve to inform visitors of the past military history of the site (Parsons 2004).

2.5.22.14 Wildlife Management Area

The Wildlife Management Area is comprised of approximately 2,000 acres in the eastern portion of the site and includes the WDNR leased lands (Figure 2-51). The Wildlife Management Area does not include the Central Impact Target Area nor the roads and trails located in the Wildlife Management Area. The majority of the Wildlife Management Area was used as maneuver areas and, therefore, has a low relative explosive safety risk. Alternative 2 (ICs) was recommended for remediation in this area (Parsons 2004).

2.5.23 Cultural and Historical Resources Protection Plan

In November 2006, Michael Baker Jr. Inc. (Baker) prepared a cultural and historical resources protection plan for the BCRRT. The goals and objectives of the protection plan included protecting and preserving the cultural resources at the site; implementation of cultural resource preservation as a regular component of site planning; identification of procedures to follow in the event that conservation actions have the potential to adversely affect cultural resources; and ensure that the identification of previously unidentified cultural resources at the site is comprehensive and consistent with state and federal regulations. The Cowlitz Indian Tribe declared the presence of a series of historic and prehistoric Indian villages, burial ground, and trails on or near the site that are considered sacred ground. The Cultural and Historical Resources Protection Plan indicated that any actions in these areas would not be endorsed by the Cowlitz Indian Tribe to take place without consultation with the tribe. The plan also concluded that the buildings associated with the Camp Bonneville and Killpack cantonments were not eligible for listing in the National Register of Historical Places (Baker 2006c).

2.5.24 BCRRT Remedial Investigation Demolition Areas 2 and 3

In 2006, Baker conducted an RI at Demolition Areas 2 and 3 for the BCRRT. The purpose of the remedial investigation was to determine the presence or

absence of contamination in ground water discharging from Camp Bonneville at the base's boundary and at locations downgradient from Demolition Areas 2 and 3; to determine the presence or absence of contamination in ground water in the vicinity of Demolition Areas 2 and 3; to determine the presence or absence of soil contamination in Demolition Areas 2 and 3; and to determine the geologic/hydro-geologic conditions in the investigation areas (Figure 2-45). To meet these stated objectives, the investigation included the installation and sampling of 16 monitoring wells located in three areas and soil sampling in Demolition Areas 2 and 3. Three wells were installed in the shallow alluvium/weathered bedrock in a line normal to the direction of flow from Demolition Area 2 (Figure 2-47). One well pair (shallow and deep) and three shallow wells were installed at four compass points surrounding the Demolition Area 3 crater (Figure 2-48). In addition, four well pairs (shallow and deep) were installed in a transect across the Lacamas Creek valley near the boundary of Camp Bonneville and downgradient of Demolition Area 3 (Figure 2-49). Surface and subsurface soil samples were collected from Demolition Areas 2 and 3 (Baker 2006b).

2.5.24.1 Demolition Area 2

The ground water from three shallow wells in Demolition Area 2 were sampled and analyzed for explosives, perchlorate, total and dissolved metals, and water quality parameters [chloride sulfate, total alkalinity, dissolved organic carbon (DOC), nitrite/nitrates as nitrogen, TOC and total suspended solids (TSS)]. Additionally, five soil samples at the ground surface, two feet bgs, and five feet bgs were collected (one from the center of DA 2 and one each from approximately 100 feet north, south, east, and west of the center) and were submitted for analysis of explosives, perchlorate, and metals. Sample results were compared to MTCA Method A cleanup levels for residential land use, MCLs, and EPA PRGs (Baker 2006b).

No explosives, perchlorate, or total and dissolved metals were detected at concentrations at or above the regulatory criteria in the ground water samples. No explosives or perchlorate were present in the soil samples above the reporting limit. Arsenic was detected at concentrations that exceeded the regulatory criteria in all 15 of the soil samples; however, they were below the background concentration established for Clark County, Washington (Baker 2006b).

2.5.24.2 Demolition Area 3

Five wells were installed in this demolition area, four shallow and one deep. Ground water samples were analyzed for explosives, perchlorate, total and dissolved metals, and water quality parameters [chloride sulfate, total alkalinity, dissolved organic carbon (DOC), nitrite/nitrates as nitrogen, TOC and total suspended solids (TSS)]. Soil samples were collected during the drilling of wells in Demolition Area 3. The soil samples were collected at the ground surface and at depths of two feet, five feet, and 15 feet bgs; however, the 15-foot interval was not sampled in one of the monitoring wells. Soil samples were analyzed for explosives, perchlorate, and total metals. Sample results were compared to

MTCA Method A cleanup levels for residential land use, MCLs, and EPA PRGs (Baker 2006b).

No explosives or total metals were detected at concentrations at or above the regulatory criteria in the ground water samples. Perchlorate and nitrate were detected above the regulatory criteria in one of the wells. As perchlorate may produce a false negative, additional samples were collected and submitted to two different laboratories for reanalysis. These analyses did not indicate the presence of perchlorate or nitrate above the regulatory criteria. It was determined that the initial analysis had reported a "false positive". Results for the soil samples did not indicate the presence of explosives, perchlorate, or metals at concentrations above the regulatory criteria (Baker 2006b).

In addition, four well pairs (shallow and deep) were installed in a transect across the Lacamas Creek valley near the boundary of Camp Bonneville and downgradient of Demolition Area 3. Sample results did not indicate the presence of any metals or perchlorate at concentrations that exceeded the regulatory criteria.

During the RI, an area where corroded drums and shell debris had been encountered was excavated. Samples were collected from the sidewalls and bottom of the excavation area. The samples were analyzed for explosives, perchlorate, and picric acid. None of these constituents were detected in the excavation samples. (Baker 2006b)

2.5.24.3 BCRRT Remedial Investigation Conclusions and Recommendations

The constituents detected in ground water and soils in Demolition Areas 2 and 3 were deemed to be present at "relatively low concentrations that do not pose a threat to human health or the environment". It was recommended that Demolition Areas 2 and 3 be considered for no further action (Baker 2006b).

2.5.25 BCRRT Remedial Investigation/Feasibility Study – Small Arms Ranges

In 2006, Baker conducted a remedial investigation and feasibility study (RI/FS) for 17 small arms ranges at Camp Bonneville for the BCRRT. The RI was conducted to characterize soils at 17 Small Arms Ranges in order to provide data upon which to base decisions for further actions. Based on the results of the RI, the FS was conducted to identify and evaluate cleanup action alternatives and select a cleanup action for the Small Arms Ranges (Baker 2006a).

Surface soil samples were collected from half-acre grids across the Small Arms Ranges. All range samples were analyzed for lead by EPA Method 7420. A total of 307 half-acre plots were sampled. Each of the grids consisted of five grab soil sample collected from 0 to 6 inches bgs. Samples were collected from near the center of each grid and at 40 feet from the center of four compass points. A total

of 1,535 soil samples were collected from the grids. At ten of the Small Arms Range grid locations, ten samples were randomly selected from the range soils and analyzed for Priority Pollutant Metals by EPA Method 6010B (Baker 2006a).

For ranges where the firing line had been determined, a muzzle blast zone was designated as a strip in front of and parallel to the firing line. Samples were collected along the strip at approximately 30-foot intervals and within 10 feet of the firing line. These samples were analyzed for explosive residues including picric acid and PETN by EPA Method 8330 Modified. Twenty soil samples were collected and analyzed to identify the background levels of lead in the soil by EPA Method 6010. The soil samples collected from the Small Arms Ranges were compared to MTCA Method A cleanup criteria. Sample results indicated the presence of lead above the regulatory cleanup level at 14 of the 17 ranges. Approximately 12% of the samples collected had concentrations that exceeded the cleanup criteria. None of the samples collected from the muzzle blast zone contained concentrations of explosive residues at concentrations that exceeded the EPA Region 9 PRGs (there are no established MTCA criteria for explosive residues; Baker 2006a).

As part of the investigation, five remedial alternatives were developed. The alternatives included no further action (Alternative 1), implementation of institutional controls such as signage (Alternative 2), capping (Alternative 3), consolidation and capping (Alternative 4), and excavation and off-site disposal or recycling (Alternative 5). Alternative 5 was recommended as the most permanent solution for the contaminated soils at the Small Arms Ranges (Baker 2006a).

2.5.26 BCRRT Soil and Sediment Investigation – Artillery/Mortar Firing Points, Artillery/Mortar Impact Areas, and "Pop-up" Pond

In October 2007, Baker conducted a soil and sediment investigation of the artillery/mortar firing point, the artillery/mortar impact areas, and the "pop-up" pond for BCRRT. The report generated as an outcome of this work was reviewed by Ecology. The objectives of the artillery points and target areas were to determine the presence or absence of explosive constituents in surficial soil and to determine the likelihood that these contaminants are impacting site ground water. The objective of the "pop-up" pond investigation was to determine the presence or absence of lead in sediments within the pond for the purpose of determining if cleanup actions are necessary. The pop-up pond was used in the 1970s for live-fire training with 30- and 50-caliber weapons in an automated pop-up target course.

A total of 435 soil samples were collected from 15 firing points. The samples were analyzed for explosives by EPA Method SW-8330. Additionally, the samples from the 3.5-inch Rocket Range Firing Point were analyzed for perchlorate by EPA Method 314.0. The sample results were compared to MTCA Method A, and when no value for a constituent was available, the results were

compared to the EPA Region 3 RBCs. No analytes were detected at concentrations that exceeded the regulatory criteria for any of the soil samples. Based on the sample results, a determination of "No Further Action" was recommended for all of the artillery/mortar firing points and the artillery/mortar impact areas sampled.

A total of 10 sediment samples were collected from the pop-up pond (Figure 2-50). The samples were analyzed for lead by EPA Method SW-846 6010. The sample results were compared to the MTCA Screening Level for the Ecological Indicator Soil Concentrations for protection of Terrestrial Plants and Animals. Lead was detected above instrument detection limits in all 10 of the samples; however, only one sample's result exceeded the most conservative screening criteria. Based on the sample results, a determination of "No Further Action" was recommended for the pop-up pond.

2.5.27 Environmental Study Area Interim Action

In November 2007 and February 2008, an interim action was performed by BCRRT.in the Environmental Study Area. The objectives of the action were to locate and remove MEC and MD. During the action, a total of four MEC items (all 3-inch Stokes mortars, fired and unfuzed) were identified and demilitarized. The MEC were disposed of by detonation. A total of 32 MD findings were recorded and were relocated to on-site storage to be consolidated with other MD found at the site for future disposal. During the MEC surface clearance activities, several items were discovered that indicated the presence of a former homestead. These items were collected and submitted to the Clark County staff archeologist. (BCRRT 2009c)

2.5.28 ATSDR Public Health Assessment

In 2008, the Agency for Toxic Substances and Disease Registry (ATSDR) completed a public health assessment for the site as a result of a public petition. As part of the assessment, ATSDR met with the petitioner and community members. Based on these meetings, ten areas of concern were identified. These concerns are presented in the Public Health Assessment report for the Camp Bonneville Military Reservation prepared by ATSDR and are discussed below:

- **Concern 1 – Potential physical hazards from exposure to UXO**
  The Public Health Assessment states "UXO is present on Camp Bonneville. However, there are several factors that limit the public's access to the ordnance, including the location of the UXO, fences with warning signs, and UXO removal. Despite these efforts there is a small potential for people to encounter UXO. Therefore, it is very important to educate those who visit the future regional park about the dangers posed by UXO." (ATSDR 2008)

- **Concern 2 – Exposure to soil and ground water contamination for residents living within the Artillery Impact Fan and Range Safety Fan areas**
  The Public Health Assessment states "There was some discrepancy regarding the location of range safety fans at Camp Bonneville. Current maps do not show safety fan areas extending beyond Camp Bonneville's property line. However, older maps show safety fans extending offsite onto the property of residents living to the east of Camp Bonneville. Understandably, this has caused confusion and concern for the residents neighboring Camp Bonneville to the east. According to the WDOE, the historical maps showing range safety fans extending offsite contain cartographical errors and the safety fans never extended offsite. Therefore, there are no residents living within the Artillery Impact Fan and Range Safety Fan areas. In addition those residents to the east of Camp Bonneville are upgradient of any known ground water contamination." (ATSDR 2008)

- **Concern 3 – Exposure to ground water contamination (specifically, perchlorate and RDX plumes)**
  The Public Health Assessment states "Ground water was sampled from 18 sites at Camp Bonneville. The only area found to contain ground water contamination was Landfill 4-Demolition Area 1. The plume at Landfill 4-Demolition Area 1 contains RDX, perchlorate, and 1,1,-dichloroethene. However, no one is drinking water from this area. Therefore, exposure to ground water contamination is an incomplete pathway." (ATSDR 2008)

- **Concern 4 – Exposure to contaminated soil (specifically, at the sewage pond/lagoon areas and the small arms firing areas)**
  The Public Health Assessment states "Soil at the Former Sewage Pond and Landfill 2 was sampled in 1998. None of the contaminants were detected at levels of health concern. People are not being exposed to the soil at the CITA because the area is fenced. Further, remediation is being conducted to remove soil containing elevated levels of lead around the former targets at the small arms firing ranges." (ATSDR 2008)

- **Concern 5 – Exposure to surface water and sediment contamination in Lacamas Creek, Lacamas Lake, and the Columbia River**
  The Public Health Assessment states "In 1998, a surface water investigation was conducted on Lacamas Creek and its tributaries at Camp Bonneville. The investigation concluded that, in general, site activities have not impacted the water quality of Lacamas Creek. Due to limited use of the creek and the minimal contamination found, ATSDR does not expect harmful health effects to result from exposure to surface water and sediment in Lacamas Creek." (ATSDR 2008)

- **Concern 6 – Exposure to runoff water and standing rainwater, particularly near the Open Burn/Open Detonation sites**
  The Public Health Assessment states "Even though standing water is sometimes seen in and around the Open Burn/Open Detonation (OB/OD) sites, exposure to it would be short-term and infrequent. Further, soil, ground water, and surface water at the OB/OD sites have been sampled and no chemicals were detected at levels of health concern." (ATSDR 2008)

- **Concern 7 – Inhalation exposure to agents used during past chemical warfare testing and training activities**
  The Public Health Assessment states "CS gas was the only chemical warfare agent used during training. It decomposes quickly and has no persistent metabolites. Therefore, ATSDR does not expect that past inhalation exposure to CS gas occurred off site. Further, the building and soil surrounding the gas chambers were sampled and no residual hazardous substances were detected." (ATSDR 2008)

- **Concern 8 – Hunting and eating wildlife on Camp Bonneville**
  The Public Health Assessment states "Hunting may have occurred on Camp Bonneville in the past, but is not expected to occur currently or in the future. Because of the lack of site data, it is indeterminate whether eating wildlife from Camp Bonneville in the past is expected to have caused harmful health effects. However, based on studies conducted at Army ammunition plants, it is unlikely that the wildlife at Camp Bonneville would have accumulated harmful levels of contaminants." (ATSDR 2008)

- **Concern 9 – Early property transfer as a public regional camping facility and potential exposures to future site users**
  The Public Health Assessment states "Camp Bonneville was transferred from DOD to Clark County, Washington in October 2006, prior to the completion of environmental cleanup (i.e., early transfer). BCRRT is responsible for continuing the cleanup of Camp Bonneville, with oversight by Ecology. The redevelopment or reuse of the facility is not likely to contribute to any existing release or threatened release, interfere with any remedial actions, or increase health risks at or in the vicinity of the site." (ATSDR 2008)

- **Concern 10 – Fire response and suppression at Camp Bonneville**
  The Public Health Assessment states "Even though UXO is present on Camp Bonneville, the Washington State Department of Natural Resources will respond to wildfires at the property in close coordination with BCRRT. There may be some areas (e.g., the CITA) that are too dangerous for fire fighters to enter, however, in those cases, the fires will be carefully

monitored and other methods of fire suppression may be employed." (ATSDR 2008)

Based on the health evaluation of each of these concerns, the recommendations by ATSDR state:

- "ATSDR recommends that Clark County educate future visitors to the regional park about the appearance of UXO and what to do if they encounter it. It should be emphasized that UXO should never be handled."
- "ATSDR recommends that ground water in the vicinity of ground water contamination at Demolition Area 1/Landfill 4 not be used for drinking water in the future, and that ground water monitoring in the area continue. ATSDR also recommends continued monitoring of sentinel wells to prevent contamination of off-site drinking water wells."
- "Because hunting was not recommended as a future use of Camp Bonneville in the reuse plan, ATSDR recommends that "No Hunting" signs be posted on the Camp Bonneville property."
- "ATSDR does not recommend firing ranges as a future use in the regional park." (ATSDR 2008)

2.5.29 BCRRT Remedial Investigation/Feasibility Study for Remedial Action Unit 3

In 2008, BCRRT prepared an RI/FS for RAU 3 (Figure 2-35). The report deals exclusively with explosives safety of MEC resulting from prior actions at the site. As part of this investigation, a total of 207 MEC sampling grids, covering approximately 40 acres, were geophysically mapped and sampled. During previous investigations, over 2,400 acres of the site had been characterized for the presence of MEC-related activities including all of the known and suspected MEC source sites; all of the proposed regional park reuse areas; all of the existing trails and roads, and the entire 1,200-acre area of the proposed future regional park. (BCRRT 2008)

The RI/FS subdivided the MEC concerns into eight Remedial Work Areas (RWAs) requiring MEC surface and/or subsurface clearance cleanup. The RWAs are depicted on Figure 2-50 and include:

- Target Areas;
- CITA targets and Non-Target Zone;
- Demolition Areas;
- Firing Points;
- Roads and Trails;
- Central Valley Floor (CVF);

- Regional Park Western Slopes Area; and
- Wildlife Management Area.

Five cleanup action alternatives were evaluated for each of the MEC source types and proposed reuse areas:

- ICs;
- Surface clearance with ICs;
- Clearance to frost depth (14 inches) with ICs;
- Subsurface clearance (24 to 48 inches) with ICs; and
- Excavation and Restoration.

The recommended cleanup actions presented were based on the potential degree to which a MEC source and receptor interaction was likely to occur. A remediated MEC site generally means that a site is cleaned to a point that the likelihood for MEC source and receptor interaction is negligible. For each of the site types, a preferred alternative was selected as the most "practicable permanent solution" to reduce the explosive hazard. The cleanup actions recommended are as follows:

- Target Areas – Frost depth clearance;
- Firing Points – Subsurface clearance;
- Demolition Areas – Surface clearance (approximately 5 acres at each area);
- High Intensity Reuse Areas – Subsurface clearance and frost depth clearance depending on the proposed future reuse; and
- Medium Intensity Reuse Areas – Confirmatory investigation via surface clearance transects.

In addition to clearance activities, site-specific ICs consisting of signage and/or fencing were recommended.

2.5.30 BCRRT Remedial Action Unit 3 Supplemental Remedial Investigation/Feasibility Study

In May 2009, BCRRT prepared a supplemental RI/FS for RAU 3 (BCRRT 2009b). The Supplemental RI/FS addresses the additional MEC and MD findings since the RI/FS was finalized in 2008. During the MEC and MD removal, new remedial work areas were discovered. The discovery of these additional work areas resulted in either changing the area's classification and associated MEC cleanup requirements, or identifying additional areas requiring MEC cleanup. The cleanup actions for the newly discovered areas included:

- MEC subsurface clearance for the entire CVF and associated wetlands (previously designated as the Accessible High and Medium Intensity Reuse Area in the Final RI/FS). This decision was based on the determination that the CVF and associated wetlands are an extensively

used direct and indirect fire weapon target area, and an extensively used training area due to the number of subsurface anomalies and surface MEC and MD discovered. The MEC and MD discovered areas are depicted on Figure 2-51 and include:

- Stokes Mortar Target Area;
- Demolition Areas;
- 37-mm Artillery Stokes Mortar Target Area;
- Rifle Grenade Target Area;
- 2.36-Inch Rocket Target Area near the Former Sewage Lagoons; and
- MEC Disposal Area (burial pit; although identified in the report, it was not depicted on a figure).

- MEC surface clearance, access limitations based on steep slopes, and ICs are being required for the Regional Park Western Slopes Area. The Western Slopes had been designated as the Limited Access Medium Intensity Reuse in the Final RI/FS.

- Expansion of the CITA fence line northward to encompass an additional 107 acres believed to have been impacted by artillery and mortar firing.

- MEC surface clearance of Demolition Area 1/Landfill 4 kick-out area encompassing 104 acres.

This work has not been conducted as of this writing. A Cleanup Action Plan (CAP) has been prepared by BCRRT and submitted for public review. The final CAP describes details and next steps for cleanup within each of the RAU-3 RWAs and includes MEC and MD findings to date; accessibility, reuse, and hazard ranking considerations; cleanup action evaluation and selection; and the recommended cleanup action(s).

2.5.31 Environmental Protection Agency Preliminary Assessment

In 2009, EPA conducted a PA of the Camp Bonneville site. The PA was conducted under the authority of CERCLA as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). During the PA, historical documents were reviewed, a site visit was conducted, and a PA report was prepared. Based on the review of available information and an evaluation of migration pathways and receptors, further investigation of the site was recommended. (E & E 2010)

2.6 Summary of EPA Expanded Site Inspection Locations Investigated

Sampling by EPA and its authorized contractor, Ecology and Environment, Inc. (E & E) under the Camp Bonneville ESI was conducted at possible sources of CERCLA –regulated substances and at areas (i.e., targets/receptors) that may have been contaminated through the migration of hazardous substances from site sources. The features identified for investigation under the ESI were determined

based on multiple site visits, interviews with regulatory agencies, interviews with current site workers, and a review of background information. These features are discussed below:

Potential Sources:

- **Demolition Area 1/Landfill 4:** This potential source consists of approximately 2.5 acres (108,900 square feet). The 2.5 acres of Demolition Area 1/Landfill 4 have been removed; however, ground water contamination is still present at this source area. Historical sample results indicate the presence of perchlorate, 1,1,1-trichloroethane, 1,1-dichloroethane, chromium, copper, zinc, RDX, and HMX. A perchlorate and RDX plume is known to exist in the area of Demolition Area 1/Landfill 4. The EPA ESI will assist in determining if this plume is impacting adjacent North Fork Lacamas Creek. Potential contaminants of concern associated with this potential source include TAL metals, SVOCs, VOCs, perchlorate, and nitroaromatics/nitramines.

- **Pop-Up Pond:** This potential source measures approximately 175 feet across by 100 feet wide (17,500 square feet) and consists of contaminated sediments. Samples previously collected from the pond indicate the presence of lead contamination. It is not known if other contaminants are present in the Pop-Up Pond, as only lead was evaluated historically. The EPA ESI will assist in determining if other constituents are present in the Pop-Up pond. Potential contaminants of concern associated with this potential source include TAL metals, perchlorate, and nitroaromatics/nitramines.

- **Pop-Up Pond Targets:** One target area consists of the 1,000-Yard Range.

- **Demolition Areas:** In addition to Demolition Area 1/Landfill 4, there are two other demolition areas at the site. It is possible that residual contamination is present at these areas. The EPA ESI will assist in determining if contamination is present at Demolition Areas 2 and 3. Potential contaminants of concern associated with these potential sources include TAL metals, perchlorate, and nitroaromatics/nitramines.

- **Central Impact Target Area:** The CITA is a known source of deposited munitions. The EPA ESI will assist in determining if hazardous substances are present. Potential contaminants of concern associated with this potential source include TAL metals, perchlorate, and nitroaromatics/nitramines.

Targets/Receptors:

- **Ground Water:** Ground water in Demolition Area 1/Landfill 4 is historically known to be contaminated. The EPA ESI will assist in determining if contamination is still present in the ground water and if contaminated ground water has migrated to the adjacent North Fork Lacamas Creek.

- **Lacamas Creek and its Tributaries:** Contaminants from on-site sources may be impacting sediments and sensitive environments in Lacamas Creek and its tributaries. The EPA ESI will assist in determining whether surface water and sediments are being impacted by on-site contamination.

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3 EPA ESI Field Activities and Analytical Protocol

A sampling and quality assurance plan (SQAP) for the Camp Bonneville ESI was developed by Ecology and Environment, Inc (E & E), an authorized contractor for the EPA, prior to field sampling (E & E 2011a, 2011b). The SQAP describes the sampling strategy, sampling methodology, and analytical program used to investigate potential hazardous substance sources and potential targets/receptors. With few exceptions, the ESI field activities were conducted in accordance with the approved SQAP. Deviations from the SQAP are described, when applicable, in this section and in the sampling location discussions in Section 6 (source areas) and Section 7 (target/receptor areas). All deviations to this SQAP were pre-approved by the EPA Task Monitor during the field sampling event.

The ESI field sampling event was conducted in two phases. The first phase was conducted from May 16, 2011 through May 21, 2011. The second phase was conducted from August 22, 2011 through August 26, 2011. During Phase I, subsurface soil samples, sediment samples, and ground water samples were collected. During Phase II, surface soil, surface water, and sediment samples were collected. A total of 182 samples were collected during both sampling events for the ESI, including 23 ground water samples, 13 subsurface soil samples, 51 sediment samples, 78 surface soil samples, 11 surface water samples, and 6 QA (2 rinsate and 4 trip blank) samples. Sample types and methods of collection are described below. Sample collection activities were recorded in sample-specific field collection forms and summarized in the project management logbook. Additionally, a sample collection log was used to record all applicable sample collection methods and sample numbers. The field collection forms, sample collection log, and field logbook are presented in Appendix C. A list of all samples collected for laboratory analysis under the EPA ESI is contained in Table 3-1. Photographic documentation of ESI field activities is included as Appendix D.

Alphanumeric identification numbers applied to each sample location (e.g., LF01SB) by the START are used in the report as the sample location identifiers. The sample coding table is presented in Table 3-2.

This section describes anomaly avoidance, sampling methodology, analytical protocol, global positioning system (GPS), and investigation-derived waste (IDW).

3.1 Anomaly Avoidance

Anomaly avoidance was conducted by the EPA START-3 contractor, TechLaw, Inc. (TechLaw). The TechLaw UXO specialists used a Schondstedt fluxgate magnetometer to ensure no anomalies were present along the access paths to sample locations. Copies of the trip reports generated by TechLaw are provided in Appendix E.

During the Phase I field event, several foot trails were created using anomaly avoidance near Demolition Area 1/Landfill 4; the E & E field personnel were then safely escorted to the sampling locations. All support protocols were in compliance with Clark County requirements for UXO escorts. During the Phase I field event, approximately 12 anomalies were detected and clearly marked, and the field team was briefed regarding potential hazards associated with the anomalies.

During the Phase II field event, the UXO specialists used magnetometers to ensure no anomalies were present along access paths to the sampling locations. The access paths were screened following Clark County requirements for UXO escorts providing this type of support. During the Phase II field event, approximately 80 anomalies were encountered, and the field team was briefed regarding potential hazards associated with the anomalies.

3.2 Sampling Methodology

Grass, leaves, and other vegetative material, rocks, and other debris unsuitable for analysis were removed from samples before being placed into sample containers. Samples were stored on ice in coolers continuously maintained under the custody of START personnel. Chain-of-custody documentation is presented in Appendix F. Sampling methods used for each sample type are described below.

3.2.1 Subsurface Soil Sampling

A total of 13 subsurface soil samples were collected during the Phase I field event. All subsurface soil samples were collected using a decontaminated hand auger bucket. Subsurface soil sample depths ranged from 0.3 foot bgs to 2.3 feet bgs. Collected material was transferred to a dedicated stainless steel bowl or plastic bowl, thoroughly homogenized, and placed into pre-labeled sample containers. Rocks and other detritus were removed prior to homogenization. If the material was firm enough, the VOC aliquot was collected from the auger bucket. If the material was not firm enough, the aliquot was collected from the sample bowl prior to homogenization. Homogenization was conducted with dedicated stainless steel spoons. Chain-of-custody documentation is presented in Appendix F.

The hand auger was decontaminated after each use. Gross decontamination was conducted by dipping the auger into North Fork Lacamas Creek then spraying it with an alconox/deionized water mixture. The auger was then scrubbed with a brush and sprayed again with deionized water. A rinsate sample (RS02WT) was collected from the hand auger.

3.2.2 Ground Water Sampling

A total of 14 shallow ground water samples were collected during the Phase I field event. Shallow temporary ground water well points were planned to be collected using a Solinst™ sampling device from the subsurface soil locations. During use, the device was consistently becoming plugged with silt and water and could not be used to collect ground water samples [see approved Sample Plan Alteration Form (SPAF) in Appendix G]. A decontaminated stainless steel hand auger was used to bore a new hole adjacent to the corresponding subsurface soil sample location, then one of two methods were used to collect the ground water sample:

1. Dedicated Teflon-lined polyethylene (TLPE) tubing was placed directly into the open borehole. A peristaltic pump was used to pump water from the hole until turbidity lessened and water quality parameters had stabilized. If enough water was not present to allow for purging, then a sample was collected without purging the hole.

2. A 4-foot long 1-inch diameter Geoprobe™ well screen was placed into the open borehole. Dedicated TLPE tubing was placed in the hole, and a peristaltic pump was used to pump water from the hole until turbidity lessened and water quality parameters had stabilized. If enough water was not present to allow for purging, then a sample was collected without purging the hole.

The water was collected into pre-labeled sample containers. The VOC aliquot was preserved prior to sample collection. The TAL metals aliquot was preserved following sample collection. The perchlorate aliquot was filtered during sample collection using 0.45 micron filters. No other chemical preservation or filtering was required for the remaining aliquots.

The hand auger and Geoprobe™ well screens were decontaminated after each use. Non-dedicated equipment was decontaminated by dipping the equipment into North Fork Lacamas Creek and then spraying it with deionized water. Rinsate samples were collected from both pieces of equipment. Sample RS01WT was collected from the well screen and, as mentioned above, sample RS02WT was collected from the hand auger.

A total of nine existing permanent monitoring wells were sampled during the Phase I field event. The existing permanent monitoring wells were sampled using dedicated submersible bladder pumps. The wells were purged of three well

volumes of water in the casing. Parameters were allowed to stabilize. Then, the sample was collected into pre-labeled sample containers. The VOC aliquot was preserved prior to sample collection. The TAL metals aliquot was preserved following sample collection. The perchlorate aliquot was filtered during sample collection using 0.45 micron filters. No other chemical preservation or filtering was required for the remaining aliquots.

At some wells where large purge volumes were required, low flow sampling techniques were employed. For these samples, dedicated TLPE tubing was lowered to the center of the screened interval. The wells were pumped using a peristaltic pump until water quality parameters had stabilized. The samples were then collected as described above.

3.2.3 Surface Soil Sampling

A total of 78 surface soil samples were collected during the Phase II field event. All surface soil samples were collected with dedicated stainless steel spoons. Collected material was placed into dedicated stainless steel bowls. The material was thoroughly homogenized and placed into pre-labeled sample containers. Sample depths ranged from 0 to 6 inches bgs. In some areas of the site, where soil was extremely compact and hard, shovels and picks were used to loosen soil. A dedicated stainless steel spoon was then used to remove soil from the location to avoid cross-contamination. The sample was then collected with a dedicated stainless steel spoon.

3.2.4 Surface Water Sampling

A total of 11 surface water samples were collected during the Phase II field event. Surface water samples were collected by directly dipping the pre-labeled sample containers into the water. The VOC aliquot (when collected) was preserved prior to sample collection. The TAL metals aliquot was preserved following sample collection and the dissolved TAL metals aliquot was also field filtered using a 0.45 micron filter. The perchlorate aliquot was field filtered using a 0.45 micron filter following sample collection. No other chemical preservation or field filtering were required on other aliquots. In some instances, the co-located sediment samples were off-set by approximately 5 feet so that the surface water and sediment samples could be collected simultaneously without causing disturbed sediments to influence the surface water sample.

3.2.5 Sediment Sampling

A total of 51 sediment samples were collected (2 during the Phase I field event and 49 during the Phase II field event). The samples were collected using dedicated stainless steel or plastic scoops. Collected material was placed into dedicated stainless steel bowls. The material was thoroughly homogenized and placed into pre-labeled sample containers. The VOC aliquots were collected directly from the bowl into 5-gram Core-N-One™ samplers prior to sample homogenization. All sediment samples were collected from 0 to 6 inches bgs.

3.3 Analytical Protocol

Analytical protocols applied to the ESI samples included off-site fixed laboratory analysis of nitroaromatics/nitramines, TAL total metals, TAL dissolved metals, TOC, SVOCs, VOCs, perchlorate, and grain size. Additionally, field screening for the presence of perchlorate was used during Phase I, and field screening for the presence of metals using the XRF was conducted during Phase II. Some samples were not analyzed for all of the analytical methods listed above. Analyses applied to individual samples are presented in Table 3-1.

The following samples were submitted to the EPA laboratory, EPA Contract Laboratory Program (CLP), or subcontract laboratories for analysis:

- **Nitroaromatics/Nitramines (EPA SW-846 Method 8330B):** A total of 178 samples (78 surface soil samples; 13 subsurface soil samples; 51 sediment samples, 23 ground water samples, 11 surface water samples, and 2 QA/QC samples) were submitted for off-site fixed laboratory analysis to Manchester Environmental Laboratory (MEL), an EPA laboratory which is located in Port Orchard, Washington.

- **Perchlorate (EPA SW-846 Method 6860):** A total of 178 samples (78 surface soil samples; 13 subsurface soil samples; 51 sediment samples, 23 ground water samples, 11 surface water samples, and 2 QA/QC samples) were submitted for off-site fixed laboratory analysis to Test America Denver, a START subcontracted laboratory, which is located in Arvada, Colorado.

- **Perchlorate Field Screening (modified Corps field screening method for perchlorate):** A total of 14 samples (12 subsurface soil samples and 2 sediment samples) were field screened in the EPA mobile laboratory. The SQAP indicated ground water samples were also to be field screened; however, the method used could not achieve the desired detection limits with the desired level of accuracy. No water samples were field screened with this method. The SPAF documenting this change is presented in Appendix G.

- **TAL Metals [EPA SW-846 Method 6010, EPA CLP Statement of Work (SOW) ISM01.2, including lithium, molybdenum, strontium, tin, and titanium]:** A total of 178 samples (78 surface soil samples; 13 subsurface soil samples; 51 sediment samples, 23 ground water samples, 11 surface water samples, and 2 QA/QC samples) were collected during the Phase I and Phase II field event. The samples collected during the Phase I field event were submitted for off-site fixed laboratory analysis to MEL, an EPA laboratory, which is located in Manchester, Washington. The samples collected during the Phase II field event were submitted for off-site fixed laboratory analysis to A4 Scientific, an EPA CLP laboratory, which is located in The Woodlands, Texas.

- **XRF Field Screening (EPA SW-846 Method 6200):** A total of 32 surface soil samples were field screened for antimony, arsenic, and lead. A subset of these samples (18 samples) was submitted for off-site fixed laboratory sampling.

- **TAL Dissolved Metals (EPA CLP SOW ISM01.2, including lithium, molybdenum, strontium, tin, and titanium):** A total of 11 surface water samples were submitted for off-site fixed laboratory analysis to A4 Scientific, an EPA CLP laboratory, which is located in The Woodlands, Texas.

- **SVOCs (EPA CLP SOW SOM01.2):** A total of 57 samples (13 subsurface soil samples, 12 sediment samples, 23 ground water samples, 7 surface water samples, and 2 QA/QC samples) were submitted for off-site fixed laboratory analysis to KAP Laboratories, an EPA CLP laboratory, which is located in The Woodlands, Texas.

- **VOCs (EPA CLP SOW SOM01.2):** A total of 61 samples (13 subsurface soil samples, 12 sediment samples, 23 ground water samples, 7 surface water samples, and 6 QA/QC samples) were submitted for off-site fixed laboratory analysis to KAP Laboratories, an EPA CLP laboratory, which is located in The Woodlands, Texas.

- **Grain Size Distribution (ASTM D-422):** A total of 34 sediment samples were submitted for off-site fixed laboratory analysis to Test America Denver, a START subcontracted laboratory, which is located in Arvada, Colorado.

- **Total Organic Carbon (EPA SW-846 Method 9060):** A total of 34 sediment samples were submitted for off-site fixed laboratory analysis to Test America Denver, a START subcontracted laboratory, which is located in Arvada, Colorado.

3.4 Global Positioning System

Phase I GPS coordinates were collected utilizing a Trimble™ Geo XH handheld unit with a Zephyr™ external antenna. During Phase II, GPS coordinates were collecting using either a Trimble™ Geo XH handheld unit or a Trimble ProXR™ with a TDC1 data logger. During Phase II, some sample points had to be off-set or approximated due to dense canopy and lack of reception to the unit. The locations which were off-set and the distance and direction of correction are noted on the field sample collection forms. The field sample collection forms are presented in Appendix C. GPS locations for both Phase I and Phase II are presented in Appendix H.

3.5 Investigation-Derived Waste

The START field team members made every effort to minimize the generation of IDW during both phases of the field event. IDW generated during the ESI investigations included disposable personal protective equipment and sampling equipment. All IDW was rendered unusable by tearing (when appropriate), bagged in opaque plastic garbage bags, and disposed at a local municipal landfill.

Materials that could be recycled (plastic, cardboard, and paper) were segregated from trash and IDW and picked up by Waste Management from the EPA warehouse in Seattle, Washington.

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4 Quality Assurance/ Quality Control

QA/QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of sampling equipment, glassware, and reagents. Specific QC requirements for laboratory analyses are incorporated in the *Contract Laboratory Program Statement of Work for Organic Analyses* (EPA 2007) and the *Contract Laboratory Program Statement of Work for Inorganic Analyses* (EPA 2010a). These QC requirements or equivalent requirements found in the analytical methods were followed for analytical work on the EPA ESI project. This section describes the QA/QC measures taken for the project and provides an evaluation of the usability of data presented in this report.

Data from the START subcontracted commercial laboratory were reviewed and validated by a START chemist. Data qualifiers were applied as necessary according to the following guidance:

- EPA (2008) USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review.
- EPA (2010b) USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review.

In the absence of other QC guidance, method- and/or SOP-specific QC limits were also utilized to apply qualifiers to the data.

4.1 Satisfaction of Data Quality Objectives

The following EPA (EPA 2000) guidance document was used to establish data quality objectives (DQOs) for this project:

- Guidance for the Data Quality Objectives Process (EPA QA/G-4), EPA/600/R-96/055.

The EPA TM determined that definitive data without error and bias determination would be used for the sampling and analyses conducted during the field activities. The data quality achieved during the field work produced sufficient data that met

the DQOs stated in the SQAP/SSSP (E & E 2011). A detailed discussion of accomplished project objectives is presented in the following sections.

4.2 Quality Assurance/Quality Control Samples

Rinsate blank QA samples were collected for each of the 20 samples using non-dedicated sampling equipment. One trip blank QA sample was collected for each sample cooler that contained samples to be analyzed for VOCs. QC samples included matrix spike/matrix spike duplicate (MS/MSD) and/or blank spike (BS) samples at a rate of one MS/MSD and/or BS per 20 samples per matrix.

4.3 Project-Specific Data Quality Objectives

The laboratory data were reviewed to ensure that DQOs for the project were met. The following describes the laboratories' abilities to meet project DQOs for precision, accuracy, and completeness and the field team's ability to meet project DQOs for representativeness and comparability. The laboratories and the field team were able to meet DQOs for the project.

4.3.1 Precision

Precision measures the reproducibility of the sampling and analytical methodology. Laboratory and field precision is defined as the relative percent difference (RPD) between duplicate sample analyses. The laboratory duplicate samples or MS/MSD samples measure the precision of the analytical method. The RPD values were reviewed for all commercial laboratory samples. A total of 60 sample results (approximately 0.4% of the data) were qualified based on precision outliers; therefore, the project DQO for precision of 90% was met.

4.3.2 Accuracy

Accuracy indicates the conformity of the measurements to fact. Laboratory accuracy is defined as the surrogate spike percent recovery (%R) or the MS/MSD/BS %Rs for all laboratory analyses. A total of 76 sample results (approximately 0.6% of the data) were qualified as estimated quantities (J or UJ) based on surrogate outliers.

The %R values were reviewed for all MS/MSD/BS analyses. A total of 562 sample results (approximately 4.4% of the data) were qualified based on MS and/or BS outliers; therefore, the project DQO for accuracy of 90% was met.

4.3.3 Completeness

Data completeness is defined as the percentage of usable data (usable data divided by the total possible data). All laboratory data were reviewed for data validation and usability. A total of 17 results (approximately 0.1% of the data) were rejected; therefore, the project DQO for completeness of 90% was met.

4.3.4 Representativeness

Data representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or environmental condition. The number and selection of samples were determined in the field to accurately account for site variations and sample matrices. The DQO for representativeness was met.

4.3.5 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared to another. Data produced for this site followed applicable field sampling techniques and specific analytical methodology. The DQO for comparability was met.

4.4 Laboratory Quality Assurance/Quality Control Parameters

The laboratory data also were reviewed for holding times/temperatures/sample containers, laboratory blank samples, serial dilution analyses, rinsate blanks, and trip blanks. These QA/QC parameters are summarized below.

4.4.1 Holding Times/Temperatures/Samples Containers/Percent Moisture

All holding times, sample temperatures, containers, and percent moisture results were acceptable, except 121 results (approximately 0.9% of the results) that were qualified as based on percent moisture outliers and 39 results (approximately 0.3% of the results) based on holding time/temperature outliers.

4.4.2 Laboratory Blanks

All laboratory blanks met the frequency criteria. The following potential contaminants of concern were detected in the laboratory blanks:

- Inorganics: Sodium
- Miscellaneous: Total Organic Carbon
- VOCs: Bromomethane, chloromethane, methylene chloride, and toluene

See the data validation memoranda for results qualified based on blank contamination.

4.4.3 Serial Dilution Analyses

Serial dilution analyses met the frequency criteria. A total of 516 sample results (approximately 3.8% of the data) were qualified based on serial dilution outliers.

4.4.4 Rinsate Blanks

Rinsate blank analyses were performed at a frequency of one per 20 samples collected using non-dedicated sampling equipment. There were no detections in the rinsate blank analyses that affected sample results.

4.4.5 Trip Blanks

Trip blank analyses were performed at a frequency of one per cooler containing samples to be analyzed for VOCs. There were no detections in the trip blank samples.

4.5 Field and Fixed Laboratory Correlation

A START chemist performed a correlation study using field and fixed laboratory data for perchlorate and lead. For sample results less than the reporting limit, the value used for correlation was one-half of the reporting limit. The same sample aliquots used for perchlorate and XRF field analyses were submitted to the fixed laboratory for analysis. Field results were adjusted for percent moisture using values determined at the fixed laboratory.

A total of 16 samples were analyzed in the field for perchlorate, and 14 of the 16 samples were also analyzed for perchlorate at a fixed laboratory. The correlation coefficient for the 14 perchlorate sample pairs was determined to be -0.083 (Table 4-1), indicating a slightly negative correlation. All but one of the field results was below the detection limit; the fixed laboratory results for the 14 samples were also all below the field laboratory detection limit, indicating good agreement with the field analysis for low concentration samples.

A total of 50 samples were analyzed for lead in the field using the portable XRF instrument. Nine of the 50 samples were also analyzed at a fixed laboratory for lead. The correlation coefficient for the nine pairs of lead results was determined to be 0.506 (Table 4-1), indicating a moderate correlation.

Both of these correlation coefficients were below the value of 0.700 required for the field data to be considered screening level data. However, for a data set to be regarded as statistically significant, the sample population should include a minimum of 30 data points, so these correlations should not be considered valid, although useful information was obtained.

5 EPA ESI Analytical Results Reporting and Background Samples

This section describes the reporting and methods applied to analytical results presented in Sections 6 (sources) and 7 (targets/receptors) of this report, and discusses background locations and sample results. Table 3-1 lists all samples collected for laboratory analysis.

5.1 Analytical Results Evaluation Criteria

Analytical results presented in the summary tables of Sections 6 and 7 show all analytes detected above laboratory detection limits in bold type. Analytical results indicating significant/elevated concentrations of contaminants in source samples (Section 6) and target/receptor samples (Section 7), with respect to background concentrations, are shown underlined and in bold type. For the purposes of this investigation, significant/elevated concentrations are those concentrations that are:

- Equal to or greater than the sample's Contract Required Quantitation Limit (CRQL) or the Sample Quantitation Limit (SQL) when a non-CLP laboratory was used; and
- Equal to or greater than the background sample's CRQL or SQL when the background concentration was below detection limits; or
- At least three times greater than the background concentration when the background concentration equals or exceeds the detection limits.

The analytical summary tables present all detected compounds, but only those detected analytes at potential sources and targets/receptors meeting the significant/elevated concentration criteria are discussed in the report text. All detected concentrations are discussed for the background samples. When samples were diluted for re-analysis at a laboratory, the dilution results were considered for evaluation and are provided in the tables.

Sample concentration maps are provided in Sections 6 and 7 for significant/elevated concentrations of nitroaromatics/nitramine and perchlorate.

Additionally, lead and strontium are also depicted. Lead is depicted as it has historically been a hazardous substance of concern at the site and strontium is included because it is can be an indicator of pyrotechnic colorant.

5.1.1 Sample Results Reporting

The analytes aluminum, calcium, iron, magnesium, potassium, and sodium are common earth crust elements. Based on EPA Region 10 policy, these common earth crust elements will not be discussed in this report.

5.2 Background Samples

Background samples were collected for each of the naturally occurring media from which ESI samples were collected. These media are surface soil, subsurface soil, ground water, surface water, and sediment. Results for the appropriate background samples are shown in the first column of the analytical results summary tables in Sections 6 and 7 for comparison against source or target/receptor results. During the ESI investigation, attempts were made to collect background samples outside the influence of site sources; however, given the facility's widespread operations and the length of time that it operated, it is possible that background samples are somewhat impacted by site activities.

5.2.1 Background Surface Soil

5.2.1.1 Sample Location

One background surface soil sample (BG01SS) was collected during the Phase II field event. The background surface soil sample was collected from the northeast portion of the site (Figure 7-10). The sample was collected approximately 50 feet north of a 4-wheel drive access road. The sample consisted of dry, medium brown loam with no discernible odor or staining in the area. The sample was submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, TAL metals, and perchlorate.

5.2.1.2 Sample Results

Sample results are presented in Table 6-2. Sample results indicate the presence of twelve TAL metals including arsenic, barium, chromium, cobalt, copper, lead, lithium, manganese, strontium, titanium, vanadium, and zinc. No nitroaromatics/nitramines or perchlorate were detected in the background surface soil sample above the instrument detection limit.

5.2.2 Background Subsurface Soil

5.2.2.1 Sample Location

One background subsurface soil sample (BG01SB) was collected during the Phase I field event. The background subsurface soil sample was collected approximately 1,000 feet northeast of Demolition Area 1/Landfill 4 (Figure 6-1). The sample was collected from this area as it was assumed to be outside the influence of the contaminants associated with Demolition Area 1/Landfill 4. The sample was collected from 2.6 feet bgs. The sample was submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, TAL metals, perchlorate,

SVOCs, and VOCs. Additionally, the background sample was field analyzed for perchlorate.

5.2.2.2 Sample Results

Sample results are presented in Table 6-1. Sample results indicated the presence of 17 TAL metals (arsenic, barium, beryllium, chromium, cobalt, copper, lead, lithium, manganese, mercury, nickel, selenium, strontium, thallium, titanium, vanadium, and zinc) above the instrument detection limit. No VOCs, SVOCs, perchlorate, or nitroaromatics/nitramines were detected in the background subsurface soil sample.

5.2.3 Background Ground Water

5.2.3.1 Sample Location

Three background ground water samples were collected during the Phase I field event. One background ground water sample was collected from the background subsurface soil borehole (BG01GW) [Figure 6-1]. Two background monitoring well samples were collected during the Phase I field event from existing monitoring wells L4-MW01A (shallow well) and L4-MW01B (deep well) [Figure 7-5]. The background monitoring wells were chosen as they historically have been designated as the background wells and are assumed to be upgradient of ground water flow direction. The background ground water samples were submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, TAL metals, perchlorate, SVOCs, and VOCs.

5.2.3.2 Sample Results

Sample results for background ground water sample (BG01GW) are presented in Table 7-2. Analytical results indicate the presence of perchlorate, five TAL metals (barium, manganese, strontium, titanium, and zinc), and one SVOC (bis[2-ethylhexyl]phthalate) above the instrument detection limit. No VOCs or nitroaromatics/nitramines were detected in this background ground water sample.

Sample results for background shallow monitoring well sample (L4-MW01A) are presented in Table 7-3. Analytical results indicate the presence of perchlorate, four TAL metals (barium, manganese, strontium, and titanium), and one SVOC [bis2-ethylhexyl)phthalate] above the instrument detection limit. No VOCs or nitroaromatics/nitramines were detected in the background shallow monitoring well sample.

Sample results for background deep monitoring well sample (L4-MW01B) are presented in Table 7-4. Analytical results indicate the presence of perchlorate and one TAL metal (strontium) above the instrument detection limit. No VOCs, SVOCs, or nitroaromatics/nitramines were detected in the background deep monitoring well sample.

5.2.4 Background Surface Water

5.2.4.1 Sample Location

One background surface water sample was collected during the Phase II field event (BG04SW). The sample was co-located with the background sediment sample (Figure 7-7). The background location is upgradient of Demolition Area 1/Landfill 4. The sample was clear with no odor or sheen noted. The background surface water sample was submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, TAL total metals, TAL dissolved metals, perchlorate, SVOCs, and VOCs.

5.2.4.2 Sample Results

Surface water sample results are presented in Table 7-9. Sample results indicate the presence of total and dissolved strontium. No nitroaromatics/ nitramines, SVOCs, VOCs, or perchlorate were detected above the instrument detection limit.

5.2.5 Background Sediment

5.2.5.1 Sample Locations

A total of five background sediment samples were collected. One during Phase I (BG01SD) and four during Phase II. Background sediment sample BG01SD was collected and co-located with the background borehole previously discussed (Figure 6-1). Sample BG01SD-2 was collected from approximately 20 feet upstream of the CITA fence line on David Creek (Figure 6-3). Sample BG02SD was collected from Buck Creek (Figure 7-9). Upstream of the CITA on Buck Creek, but within the site boundary line, is a series of beaver ponds. Background sediment sample BG02SD was collected downgradient of the beaver ponds. Sample BG03SD was collected approximately 50 feet west of the site boundary fence from East Fork Lacamas Creek (Figure 7-8). Sample BG04SD was co-located with sample BG04SW and was in the same location as the background sediment sample collected during the Phase I field event (Figure 7-7). The background sediment samples were submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, TAL metals, perchlorate, grain size, and TOC. Additionally, two background sediment samples (BG01SD and BG04SD) were submitted for off-site fixed laboratory analysis for SVOCs and VOCs.

5.2.5.2 Sample Results

Sample results for the sediment samples are presented in Table 7-8 and Tables 7-10 through 7-14. Sample results for BG01SD collected during Phase I indicate the presence of 16 TAL metals including barium, beryllium, chromium, cobalt, copper, lead, lithium, manganese, mercury, nickel, selenium, strontium, thallium, titanium, vanadium, and zinc, and the VOC acetone. No nitroaromatics/nitramines, SVOCs, or perchlorate were detected in this sample above the instrument detection limit.

Sample results for all four background sediment samples collected during Phase II indicate the presence of 12 TAL metals including arsenic, barium, chromium, cobalt, copper, lead, lithium, manganese, strontium, titanium, vanadium and zinc.

In addition, nickel was detected in sample BG01SD-2 and BG03SD. Nitroaromatics/nitramines and perchlorate were not detected above the instrument detection limit in any of the background Phase II sediment samples. No SVOCs or VOCs were detected in sample BG04SD.

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6 Potential Sources

This section describes potential sources, sample locations, and analytical results of samples obtained from potential sources during the Phase I and Phase II EPA ESI field events. Field sampling forms and logs are presented in Appendix C. SPAFs are presented in Appendix G. Laboratory data sheets of analytical results for all samples are provided in Appendix I. Sample results are reported as significant with respect to background concentrations.

6.1 Demolition Area 1/Landfill 4

An historic perchlorate and RDX plume has been documented in the area of Demolition Area 1/Landfill 4. This area consists of the historic landfill and a demolition area. The demolition area has historically been referred to as either OB/OD Area 1 or Demolition Area 1. Demolition Area 1/Landfill 4 was an open burn/open detonation area used to destroy and/or dispose of unserviceable munitions and energetic (e.g., explosive) materials. As discussed in Section 2.5.21 of this report, a removal of the landfill material and buried fireworks was conducted by the Corps; however, all of the contamination could not be removed, as the excavation area began filling with water and the machinery began to sink. The removal operations were stopped and the area was backfilled with clean material. Numerous previous sampling events have been conducted at this source (see previous investigations sections).

This ESI was designed to determine if the ground water contamination plume at Demolition Area 1/Landfill 4 has migrated to North Fork Lacamas Creek.

This source consists of more than 2.5 acres (greater than 108,900 square feet). Approximately 2.5 acres of Demolition Area 1/Landfill 4 have been removed; however, ground water contamination is still present at the source area, indicating that additional soil contamination below the ground water table is still present. During the 2004 removal at Demolition Area 1/Landfill 4, the excavation area became unstable and began filling with water. Due to these factors all of the contamination associated with Demolition Area 1/Landfill 4 was not removed.

6.1.1 Sample Locations

A total of 12 discrete subsurface soil samples (LF01SB through LF09SB, and LF12SB through LF14SB) were collected from between Demolition Area

1/Landfill 4 and Lacamas Creek (Figure 6-1). Samples were not collected from locations LF10SB and LF11SB due to lack of soil recovery; therefore, these sample locations are not depicted on the sample location map. The soil samples were submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, perchlorate, TAL metals, SVOCs, and VOCs. Additionally, the soil samples were field screened for perchlorate. The samples were collected from varying depths (based on the depth to ground water) ranging from 0.3 to 2.3 feet bgs.

6.1.2 Sample Results

Subsurface soil analytical results are presented in Table 6-1. Sample results indicate the presence of RDX at a significant concentration in one sample (LF08SB). Perchlorate was detected at significant concentrations in 3 of the 12 subsurface soil samples (LF04SB, LF05SB, and LF06SB). Significant concentrations of nitroaromatics/nitramines and perchlorate are presented on Figure 6-2. One TAL metal (lead) was detected at significant concentrations in two of the samples (LF08SB and LF09SB). One SVOC [bis(2-ethylhexyl)phthalate] was detected at significant concentrations in four of the samples (LF02SB, LF04SB, LF05SB, and LF13SB). One VOC (acetone) was detected at significant concentrations in two of the samples (LF13SB and LF14SB).

6.2 Central Impact Target Area

The CITA is a known source of deposited munitions, some of which may be unexploded. The CITA consists of approximately 83 acres (equivalent to 3,615,480 square feet). The area has been fenced with a three-strand barbed wire fence encircling the area. EPA's investigation of this area was designed to determine if contamination is present within the CITA and if it may be migrating to David Creek, Buck Creek, East Fork Lacamas Creek, and Lacamas Creek. Portions of both Buck Creek and David Creek flow through the CITA. East Fork Lacamas and Lacamas Creek flow adjacent to the CITA.

6.2.1 Sample Locations

A total of 11 surface soil samples (CT01SS through CT011SS) were collected from the CITA (Figure 6-3). The SQAP provided for up to 10 surface soil samples. At the direction of the TM, an additional sample was collected (see the SPAF, Appendix G). Samples CT01SS through CT04SS were collected from a previous target area. The areas were noted to have little underbrush compared to nearby areas, indicating they had previously been cleared of UXO. Sample CT02SS was collected from below a pile of sandbags which are indicative of a detonation area (Figure 6-3). Sample CT05SS was collected from a drainage ditch that was a possible overland pathway to David Creek (Figure 6-3). Samples CT06SS through CT10SS were collected from a previous target area (Figure 6-3). Metal fragments and sandbags, indicative of a previous detonation point, were noted in the area of sample CT06SS. Sample CT07SS was collected from the center of a 6- to 7-foot impact crater. The area surrounding this sample point was noted to be lacking underbrush compared to the surrounding area. Sample

CT08SS was collected from the middle of metal and glass debris area. The EPA-contracted UXO specialist identified this material as a target that had been destroyed. Sample CT09SS was collected from the center of a 4-foot impact crater. A small metal fragment was unearthed at this location at approximately 3 feet bgs. Sample CT11SS was collected from an impact crater where a metal fragment was observed. No soil staining or odor was noted in any of these samples.

6.2.2 Sample Results

Sample results are presented in Table 6-2. Sample results indicate the presence of one nitroaromatic/nitramine (3,5-dinitrobenzenamine), two TAL metals (lead and nickel), and perchlorate at significant concentrations in at least one surface soil sample from the CITA. Significant concentrations of nitroaromatics/nitramines, perchlorate, and lead are presented on Figure 6-4. Of these analytes, nickel was detected at significant concentrations in all but two of the samples.

6.3 Demolition Areas

Three demolition areas are present at the site. Demolition Area 1 (also, in some historical reports, referred to as OB/OD Area 1) is associated with Landfill 4 and is therefore, not discussed in this section. Demolition Area 2 (referred to in historical reports as OB/OD Area 2) is located adjacent to the western portion of the CITA. Demolition Area 3 (referred to in historical reports as OB/OD Area 3) is located in the most southwestern portion of the site. When combined, Demolition Areas 2 and 3 are estimated at 110 acres (equivalent to 4,791,600 square feet). EPA's investigation of these areas was designed to determine if contamination was present at these areas and potentially impacting nearby Lacamas Creek. Demolition Area 3 was noted to be a 30-foot diameter 8-foot deep crater with standing water. There were no discernible craters or features associated with Demolition Area 2.

6.3.1 Sample Locations

A total of nine surface soil samples (OB01SS through OB09SS) were collected from Demolition Areas 2 and 3. Samples OB01SS through OB05SS were collected from Demolition Area 3 (Figure 6-5). Four monitoring wells were noted in the area of Demolition Area 3. These wells were part of historic ground water sampling events and are no longer sampled. Samples OB06SS through OB09SS were collected from Demolition Area 2 (Figure 6-3). No soil staining or odors were noted in these samples. It was planned that five surface soil samples would be collected from each demolition area; however, after a discussion with the TM, it was decided that four samples would be collected from Demolition Area 2 (see the SPAF, Appendix G).

6.3.2 Sample Results

Sample results are presented in Table 6-3. Sample results from Demolition Area 2 indicate the presence of four TAL metals (lead, nickel, strontium, and tin) and one nitroaromatic/nitramine (4-amino,2,6-dinitrotoluene) at significant

concentrations in at least one of the surface soil samples. Significant concentrations of lead, strontium, nitroaromatics/nitramines and are presented on Figure 6-4. Of these, nickel was detected at significant concentrations in all four of the samples and lead was detected at significant concentrations in two of the four samples.

Sample results from Demolition Area 3 indicate the presence of two TAL metals (nickel and strontium) and perchlorate at significant concentrations in at least one of the surface soil samples. Significant concentrations of perchlorate and strontium are presented on Figure 6-6. Of these, strontium was detected at significant concentrations in three of the five samples and perchlorate was detected at significant concentrations in two of the five samples.

6.4 Firing Ranges and Firing Points

There are 31 firing ranges and/or firing points that are awaiting remediation. Seven of these firing ranges/firing points were selected for sampling based on their proximity to Lacamas Creek. The locations that were selected for sampling included:

- M203 HE Grenade Range;
- 1,000-Inch Range;
- 1,000-Yard Range;
- Artillery Position 5;
- Artillery Position 6;
- Artillery Position 7; and
- Former Artillery Position 1/Stokes Mortar Target Area.

The 1,000-Yard Range was determined to be the same as the west pop-up target area and was, therefore, not sampled as a firing range. These locations and results will be discussed below. Artillery Position 5 and the Former Artillery Position 1/Stokes Mortar Target Area were combined after consultation with the TM and site workers who indicated there was no distinct position difference. Changes to the sample plan are provided in the SPAFs presented in Appendix G.

6.4.1 Firing Range Sample Locations

A total of 16 samples were collected from the two ranges. Eight surface soil samples (FR01SS through FR08SS) were collected from the perimeter of the 1,000-Inch Range (Figure 6-7). Eight surface soil samples (FR09SS through FR16SS) were collected near the perimeter of the M203 HE grenade range (Figure 6-9). A number of mounds were noted on this firing range. Samples were collected from the mounds. The samples from each of the ranges were collected in areas designed to maximize the potential area of contamination present at the ranges. No soil staining or discernible odors were noted in these samples.

6.4.2 Firing Range Sample Results

Sample results are presented in Table 6-4. Sample results from the 1,000-Inch Range indicate the presence of four TAL metals (copper, lead, nickel, and strontium) and perchlorate at significant concentrations in at least one of the surface soil samples. Significant concentrations of lead and perchlorate are presented on Figure 6-8. Of these, lead was detected at significant concentrations in all eight samples, and nickel was detected at significant concentrations in all but one of the samples.

Sample results from the M203 HE grenade range indicate the presence of one nitroaromatic/nitramine (3,5-dinitrobenzenamine) and one TAL metal (nickel) at significant concentrations in at least one of the samples. Significant concentrations of the nitroaromatics/nitramines are present on Figure 6-10.

6.4.3 Firing Point Sample Locations

A total of 16 surface soil samples (FP01SS through FP16SS) were collected from the three firing ranges. Five samples (FP01SS through FP05SS) were collected from Artillery Position 7 (Figure 6-5). The samples were collected from the perimeter of the artillery position. No special features were noted at this artillery position. Five surface soil samples (FP06S through FP10SS) were collected from Artillery Position 6 (Figure 6-5). The samples were collected from the perimeter of the artillery position. A gas line easement is present running west-southwest of the artillery position. No other additional features were noted in this area. Six surface soil samples (FP11SS through FP16SS) were collected from Artillery Position 5 (Figure 6-9). The samples were collected from the perimeter of the artillery position. A grounding stake was noted near sample location FP15SS. Additionally, a concrete block, identified by the EPA-contracted UXO technician as a mortar target, was present adjacent to the southern portion of sample location PF16SS. The samples were collected from areas that would maximize the potential area of contamination. No soil staining or discernible odors were noted in these samples.

6.4.4 Firing Point Sample Results

Sample results are presented in Table 6-5. Sample results from Artillery Position 7 indicate the presence of two TAL metals (beryllium and nickel) at significant concentrations in at least one of the surface soil samples. Of these, nickel was detected at significant concentrations in all five of the samples. Nitroaromatics/nitramines and perchlorate were not detected above the instrument detection limit in any of the samples from Artillery Position 7.

Sample results from Artillery Position 6 indicate the presence of two TAL metals (lead and nickel) at significant concentrations in one of the surface soil samples (FP10SS). Significant concentrations of lead are presented on Figure 6-6. Nitroaromatics/nitramines and perchlorate were not detected above the instrument detection limit in any of the samples from Artillery Position 6.

Sample results from Artillery Position 5 indicate the presence of two nitroaromatics/nitramines (2,4-dinitrotoluene and 3,5-dinitrobenzenamine), two TAL metals (beryllium and nickel), and perchlorate at significant concentrations in at least one of the surface soil samples. Significant concentrations of the nitroaromatics/nitramines and perchlorate are presented on Figure 6-10. Of these, nickel was detected at significant concentrations in all six samples.

6.5 Firing Bank

A firing bank adjacent to the 1,000-Inch Range was discovered during the Phase II field event. Samples were not planned to be collected from this feature in the SQAP; however, the TM decided to collect samples due to the proximity and potential overland flow pathway to Lacamas Creek from this feature (see the SPAF, Appendix G).

The firing bank appears to be a natural hillside at the southern edge of the 1,000-Inch Range. The bank is approximately 12 feet tall and 200 feet long.

6.5.1 Sample Locations

Six surface soil samples (FB01SS through FB06SS) were collected from the firing bank associated with the 1,000-Inch Range (Figure 6-7). The samples were collected near the perimeter of the bank to maximize the potential area of contamination associated with this source. No soil staining or discernible odors were noted in these samples. No notations of metal fragments or bullets were noted in the field sampling forms (Appendix C).

6.5.2 Sample Results

Sample results are presented in Table 6-6. Sample results indicate the presence of four TAL metals (antimony, copper, lead, and nickel) at significant concentrations in at least one of the surface soil samples. Significant concentrations of lead are presented on Figure 6-8. Of these, nickel was detected at significant concentrations in all samples and lead was detected at significant concentrations in all but one of the samples. Nitroaromatics/nitramines were not detected above the instrument detection limit and perchlorate was not detected at significant concentrations in any of the samples.

6.6 Pop-Up Pond and Targets

A Pop-Up Pond and associated targets are present west of the CITA and adjacent to the southern portion of Lacamas Creek. The Pop-Up Pond is estimated to be approximately 2.26 acres. A number of outfall pipes around the pond were noted during the Phase II field event. It appears that all outfalls discharge into David Creek.

6.6.1 Pop-Up Pond Sample Locations

A total of 12 samples (PU01SD through PU12SD) were collected from the Pop-Up Pond (Figure 6-11). Nine samples were collected from the perimeter of the pond, and three samples were collected from an island present in the center of the

pond. The SQAP included collecting 10 sediment samples from the perimeter of the pond. The TM decided that it would be prudent to determine if the island was a potential source of contamination. Based on this, three of these 10 sediment samples (PU04SD, PU05SD, and PU06SD) were collected from the island. Additionally, during a reconnaissance of the pond to determine sample locations, an outfall leading from the pond to David Creek (Outfall 1) was discovered. It was decided that one of the sediment samples (PU08SD) would be placed near this outfall. Furthermore, during additional reconnaissance and in the midst of sample collection, two additional outfalls (Outfall 2 and Outfall 3, which consist of a series of three pipes) were discovered. The TM decided that two additional sediment samples (PU10SD near Outfall 2 and PU12SD near Outfall 3) would be added. These samples were collected from the pond immediately under the outfall.

6.6.2 Pop-Up Pond Sample Results

Sample results from the Pop-Up Pond are presented in Table 6-7. Significant concentrations of lead and strontium are presented on Figure 6-12. Sample results of the Pop-Up Pond perimeter sediment samples (PU01SD through PU3SD, PU07SD, PU09SD, and PU11SD) indicate the presence of two TAL metals (lead and strontium) at significant concentrations in at least one of the six samples. Of these, strontium was detected at significant concentrations in four of the sediment samples. Nitroaromatics/nitramines and perchlorate were not detected above the instrument detection limit in any of these samples.

Sample results for the Pop-Up Pond island samples (PU04SD through PU06SD) indicate the presence of two TAL metals (beryllium and strontium) at significant concentrations in at least one of the sediment samples. Of these, strontium was detected at significant concentrations in all three samples. Nitroaromatics/nitramines and perchlorate were not detected above the instrument detection limit in any of the samples.

Sample results for the outfall sediment samples (PU08SD, PU10SD, and PU12SD) indicate the presence of two TAL metals (beryllium and strontium) at significant concentrations in at least one of the sediment samples. Of these, strontium was detected at significant concentrations in all three samples.

Strontium was detected at significant concentrations, with respect to the background concentration, in 10 of the 12 sediment samples collected from this potential source.

6.6.3 Pop-Up Targets Sample Locations

A west and east Pop-Up Targets area were identified for sampling in the SQAP. Upon examination in the field, the west Pop-Up Target area was observed to be within the 1,000-Yard Range. The Pop-Up Target areas were identified in the SQAP for field screening using the field-portable XRF. Forty field screening locations were planned in the SQAP; however, 32 locations were selected for

screening with the field-portable XRF as directed by the TM (see the SPAF, Appendix G). Readings for antimony, arsenic, and lead were collected on XRF collection forms. These forms are presented with the Pop-Up Targets field forms in Appendix C. GPS locations for all field screened locations were also collected. These locations are presented in Appendix H. The project manager and TM reviewed the XRF readings and determined the locations with the highest readings and providing the largest possible potential area of contamination would be selected for fixed laboratory analysis. The field team then sampled these selected locations. A total of nine samples (PT10SS through PT18SS) were collected from the 1,000-Yard Range (Figure 6-11). At sample location PT11SS, the land surface was barren of vegetation for at least 6 feet in all directions. It was noted that around all pop-up target bases, soil appeared to have been removed to a depth of approximately 6 to 8 inches (though some locations were deeper than eight inches) in a 12-foot diameter around the bases (Appendix D; Pop-up Targets Photographs 12 and 16 through 18).

Ten XRF locations were planned in the east targets area. Readings for antimony, arsenic, and lead were collected on XRF collection forms. These forms are presented with the Pop-Up Targets field forms in Appendix C. GPS locations for all field screened locations were also collected. These locations are presented in Appendix H. The project manager and TM reviewed the XRF readings and determined the locations with the highest readings and providing the largest possible potential area of contamination would be selected for fixed laboratory analysis. The field team then sampled these selected locations. A total of nine samples (PT01SS through PT09SS) were collected from the east targets area (Figure 6-11). It was noted that excavation had occurred extensively throughout this area.

6.6.4 Pop-Up Targets Sample Results

Surface soil samples results for the 1,000-Yard Range and Pop-Up Target are presented in Table 6-8. Sample results from the east target indicate the presence of three TAL metals (copper, lead, and nickel) at significant concentrations in at least one of the nine surface soil samples. Of these, lead and nickel were detected at significant concentrations in all nine samples. Perchlorate was not detected at significant concentrations in any of the east target samples. Nitroaromatics/ nitramines were not detected above the instrument detection limit in any of the samples.

Sample results for the 1,000-Yard Range indicate the presence of two TAL metals (lead and nickel) at significant concentrations in at least one of the nine surface soil samples. Significant concentrations of lead are presented on Figure 6-12. Of these, nickel was detected at significant concentrations in all nine samples. Nitroaromatics/nitramines and perchlorate were not detected above the instrument detection limit in any of the samples.

7 Migration/Exposure Pathways and Targets/Receptors

The following subsections describe migration pathways and potential targets/receptors within the site's range of influence (Figures 7-1 and 7-2). This section discusses the ground water migration pathway, the surface water migration pathway, the soil exposure pathway, and the air migration pathway. Sample results are discussed as elevated with respect to background concentrations for the ESI samples.

7.1 Ground Water Migration Pathway

The target distance limit (TDL) for the ground water migration pathway is a 4-mile radius that extends from the sources at the site. Figure 7-1 depicts the ground water 4-mile TDL.

7.1.1 Geologic Setting

Camp Bonneville lies within the Willamette Lowland portion of the Willamette Valley and Puget Sound Physiographic Province. The Willamette Lowland lies between the Cascade Mountains to the east and the Coast Range to the west. The Willamette Valley is part of an elongate alluvial plain that has an elevation near sea level in Portland, Oregon and at the Columbia River (Orr and Orr 1999).

Camp Bonneville is located along the eastern edge of the Willamette Lowland near the foothills of the Cascade Mountains. The U.S. Geological Survey published a geologic map of the Lacamas Creek 7.5-minute quadrangle in 2006 (Evarts 2006). This map provides a more detailed description of the geology in the Camp Bonneville area. The following geologic units are present at Camp Bonneville in order from oldest to youngest: Basaltic Andesite of the Elkhorn Mountain, Sandy River Mudstone, Lower (Conglomerate) member of the Troutdale Formation, Landslide Deposits, and Alluvial Sediments (Evarts 2006).

The geologic history of the area includes the accretion of a submarine oceanic island archipelago (Orr and Orr 1999) as evidenced through the presence of Oligocene age tholeiitic basaltic andesite and basalt flows and flow breccia (Basaltic Andesite of Elkhorn Mountain) (Evarts 2006). The Basaltic Andesite of the Elkhorn Mountain unit is present as bedrock throughout Camp Bonneville. The uppermost bedrock is severely weathered as characterized by clay-rich materials described in boring logs from throughout the site (Orr and Orr 1999).

The Sandy River Mudstone unconformably overlies the basaltic andesite and was formed when the Portland Basin was a lake fed by the ancestral Columbia and Willamette Rivers (Orr and Orr 1999; Evarts 2006). The mudstone is characterized in boring logs from throughout Camp Bonneville by clayey siltstone and fine-grained sandstone. At Camp Bonneville, the Sandy River Mudstone is present in a small valley that extends between Camp Killpack and Camp Bonneville cantonments (BCRRT 2009a)

The Troutdale Formation is the result of deposition of western flowing streams that crossed the Cascade Range, including the ancestral Columbia River. An older conglomerate member of the Troutdale Formation is present along the west-southwest portion of Camp Bonneville (Evarts 2006). In addition, a remnant of the conglomerate is present at Demolition Area 1/Landfill 4. At Camp Bonneville, the conglomerate is deeply weathered. It is described as a weakly to moderately cemented pebble and cobble conglomerate with lenses of coarse sandstone (BCRRT 2009a).

Recent alluvium and landslide deposits are present along Lacamas Creek, East Fork Lacamas Creek, North Fork Lacamas Creek, and David Creek (Evarts 2006). The alluvial deposits consist of unconsolidated silt, sand, and gravel. Well-rounded quartzite pebbles from the Troutdale Formation are present in these deposits (BCRRT 2009a). Recent landslide deposits consist of diamictons of bedrock and surficial material that has been transported downslope. These landslide deposits are located in areas of steep bedrock terrain and appear to be the result of failed weathered, clay-rich, flow breccias (BCRRT 2009a).

7.1.2 Aquifer System

Camp Bonneville lies within the Portland Basin portion of the Willamette Lowland Aquifer System. The Portland Basin is bounded to the east by the Cascade Mountains, to the north by the Lewis River, and to the west by the Coast Range.

The Basaltic Andesite of the Elkhorn Mountain unit generally has little capacity to store or transmit water. Where water is present, it is located at the soil/rock interface or in fractured zones within the rock (McFarland and Morgan 1996). At Camp Bonneville, this unit is not considered to be a productive aquifer, with some exceptions where potable water has been encountered in fracture zones.

The Sandy River Mudstone is a low permeability unit. As described in the geology section above, this unit is only present in a small valley that extends between Camp Killpack and Camp Bonneville cantonments. It is not present at Demolition Area 1/Landfill 4.

The Troutdale Conglomerates are generally considered excellent water-bearing units and commonly serve as water sources for municipal, industrial, and

irrigation supplies (McFarland and Morgan 1996). In 2006, EPA designated the Troutdale aquifer a sole-source aquifer in the Clark County, Washington area. This aquifer system provides approximately 99% of the available drinking water to the residents living over it. There are no other available drinking water sources that would be economically feasible to supply these residents (EPA 2006). At Camp Bonneville, the Conglomerate Member of the Troutdale Formation is present along the west-southwest portion of Camp Bonneville (Evarts 2006). In addition, a remnant of the conglomerate is present at Demolition Area 1/Landfill 4. The remnant is disconnected/isolated from the Troutdale Conglomerate located at the west-southwest property line of Camp Bonneville. The remnant was most likely isolated from the rest of the unit to the west-southwest by the downcutting of Lacamas Creek. Camp Bonneville lies within the Streamflow Source Area of the Troutdale Aquifer. The Streamflow Source Area is defined by EPA as "the upstream headwaters area of streams that flow into the recharge area of the aquifer" (EPA 2006).

Movement of ground water in the Portland Basin is primarily controlled by topography (Morgan and McFarland 1996). Topography also appears to control ground water flow at Camp Bonneville (BCRRT 2009a). Ground water typically discharges to Lacamas Creek and its tributaries. However, EPA has described ground water pumping in the Lacamas Creek watershed that has resulted in a lowering of the potentiometric surface. This lowering of ground water levels has resulted in the loss of reaches of Lacamas Creek and its tributaries. (EPA 2006)

7.1.2.1 Troutdale and Unconsolidated Alluvium Aquifer System Sole Source Aquifer Designation

In November 2005, a petition was submitted to EPA to designate the Troutdale and Unconsolidated Alluvium Aquifer as a sole source of drinking water in the area of Clark County, Washington. The petitioners included Columbia Riverkeeper, Rosemere Neighborhood Association, and eight independent Clark County citizens. (EPA2006)

The Sole Source Aquifer Program is authorized by the Safe Drinking Water Act of 1974. EPA defines a sole or principal source aquifer as "an aquifer or aquifer system which supplies at least 50% of the drinking water consumed in the area overlying the aquifer, and for which there is no alternative source or combination of alternative drinking water sources which could physically, legally, and economically supply those dependent upon the aquifer." For convenience, all EPA designated sole or principal source aquifer systems are often referred to simply as "sole source aquifers." (EPA 2006)

The aquifer system boundaries that were originally petitioned were slightly extended in the southern, eastern, and northern sections of the area, as recommended by EPA during their review of the petition. The final boundaries are presented on Figure 7-4. The Columbia River forms the southern and western boundaries of the Troutdale aquifer system. The northern boundary follows the

North Fork of the Lewis River from its confluence with the Columbia River, east to the confluence of Cedar Creek. Cedar Creek is used as the northeast boundary between the Troutdale unit and the older rocks unit, and the creek also most likely acts as a local ground water divide for the upper parts of the aquifer system. The aquifer boundary follows Cedar Creek east where the boundary turns southeast and follows the mapped geologic contact between the Troutdale Formation and the older rock unit. The eastern boundary follows the geologic contact south to the Little Washougal River, then follows the Little Washougal River to its confluence with the Washougal River. The boundary then follows the Washougal River south to Woodburn Hill, where it turns northwest and follows the geologic contact along a small outcrop of the older rocks unit. The boundary follows the geologic contact through the City of Camas, and meets the Columbia River. In the northern part of the area, the aquifer system boundary is drawn around Bald Mountain, which is excluded from the aquifer system because it is composed of the older rocks unit (EPA 2006).

Based on the information included in the petition and findings during its review, the EPA concluded "A sole source aquifer system must supply at least 50% of the drinking water consumed within the natural boundaries of the aquifer system, and there can be no economically or legally available alternative source that could supply the entire population living in the area. The Troutdale Aquifer System supplies over 99% of the drinking water to people living in the petitioned area, and there are no economically and legally available alternative sources of water. The political and legal constraints on available water supplies in the area cause even potentially adequate volumes to be unattainable within any reasonable timeframe. Given these conditions, the Troutdale Aquifer System meets the EPA criteria of a sole or principle source aquifer under Section 1424(e) of the Safe Drinking Water Act." (EPA 2006)

7.1.2.2 On-Site Ground Water Monitoring

Twenty-seven monitoring wells exist at Camp Bonneville. Of these 27 wells, 19 are currently monitored. Monitoring wells at Demolition Area 2 and Demolition Area 3 are no longer sampled after previous quarters' sampling events resulted in no exceedances of MTCA cleanup levels for site contaminants of concern. The majority of these monitoring wells are located in the valley that follows Lacamas Creek through Camp Bonneville (Central Valley). As described in *Ground Water Sampling and Analysis Report for Camp Bonneville for the 4th quarter of 2006* (PBS 2007), the following wells are currently monitored at the site:

- Base Boundary at Lacamas Creek
  - Paired wells: LC-MW01S and LC-MW01D
  - Paired wells: LC-MW02S and LC-MW02D
  - Paired wells: LC-MW03S and LC-MW03D
  - Paired wells: LC-MW04S and LC-MW04D

- Demolition Area 1/Landfill 4 (A – shallow, B – deep)
  - Paired wells: L4-MW01A and L4-MW01B
  - Paired wells: L4-MW02A and L4-MW02B
  - Paired wells: L4-MW03A and L4-MW03B
  - L4-MW04A
  - L4-MW05A
  - L4-MW07B
  - L4-MW17 (bedrock)
  - L4-MW18 (alluvium)

Quarterly ground water sampling at Camp Bonneville includes well depth data as well as static water level data in each monitoring well. In addition, ground water samples collected from Base Boundary at Lacamas Creek monitoring wells were analyzed for field measurements (pH, specific conductance, temperature, and total dissolved solids), TPH-Gx (gasoline), TPH-Dx (diesel), VOCs, SVOCs, explosive compounds (including HMX, RDX, NG, and PETN), picric acid, perchlorate, priority pollutant metals (total and dissolved), TOC, DOC, TSS, alkalinity, and inorganic ions.

Ground water samples collected from Demolition Area 1/Landfill 4 monitoring wells are analyzed for field measurements (pH, specific conductance, temperature, and total dissolved solids), VOCs, explosive compounds (including HMX, RDX, NG, and PETN), and perchlorate.

Based on the quarterly monitoring report (PBS 2007) for Base Boundary wells at Lacamas Creek, metals concentrations have decreased over the period of monitoring. Petroleum hydrocarbons have not been detected in any samples over the period of monitoring, with the exception of a single detection of diesel range petroleum hydrocarbons (0.14 milligrams per liter in January 2006). Perchlorate concentration trends in ground water samples have been variable despite Interim Removal Actions that have occurred at Demolition Area 1/Landfill 4.

Based on the 4th quarter 2006 monitoring report (PBS 2007), depth to ground water in the area of Demolition Area 1/Landfill 4 ranged from approximately 11 feet to 30.8 feet (note: all depths to ground water are described from top of casing rather than the land surface). Depth to ground water in monitoring well L4-MW07B located downgradient of the landfill was approximately 30.32 feet. Depth to ground water in monitoring wells L4-MW17 and L4-MW18, along North Fork Lacamas Creek at the base of the stream ravine and downgradient of Demolition Area 1/Landfill 4 was 9.63 feet and 10.14 feet, respectively.

Monitoring of the ground water wells was ceased for approximately 1 year. Monitoring of the ground water resumed in January 2011.

Based on the most recent round of ground water sampling for which results are available (3rd Quarter 2010), sample results indicate perchlorate concentrations

remain in excess of MTCA Method B Cleanup values at six monitoring locations at Demolition Area 1/Landfill 4. Also at these same locations, HMX concentrations exceeded MTCA Method B values. The highest levels of HMX, RDX, and perchlorate continue to be at the paired monitoring wells MW02A and MW02B, consistent with historical results. (PBS 2010)

7.1.3 Drinking Water Targets/Receptors

Approximately 9,627 people use ground water for drinking water purposes within the 4-mile TDL. A combination of Group A and Group B community water systems and domestic wells are present. The Washington Administrative Code (WAC) defines the group designation for community water systems. The definitions, as provided by the Washington State Department of Health, include:

- **Group A:** (WAC 246-290) Group A water systems are those with 15 or more service connections, regardless of the number of people; or systems serving an average of 25 or more people per day for 60 or more days within a calendar year, regardless of the number of service connections. Group A water systems do not include systems serving fewer than 15 single-family residences, regardless of the number of people.

- **Group B:** (WAC 246-291) Group B water systems serve less than 15 residential connections and less than 25 people per day; or 25 or more people per day fewer than 60 days per year. Group B water systems are those public water systems that do not meet the definition of a Group A water system.

DOH maintains records of all active public water systems. Public water systems, regardless of group designation, indicate the total number of wells in the system, the number of connections, and the total population served. A search of the DOH Sentry Internet database revealed the presence of 18 Group A community wells serving a total population of 830 people, and 182 Group B community wells serving a total population of 1,083 people (WDOH 2009).

Domestic drinking water well logs are maintained by Ecology. A search of the Ecology well log database revealed the presence of a total of 3,269 domestic wells within the 4-mile TDL. Domestic wells do not record the actual number of people served by each well; therefore, each well is assigned the average number of people per household for Clark County, Washington of 2.67, for a total population of 7,715 people served by domestic wells (Census 2011; Ecology 2009). The nearest well is located from 0 to ¼ mile of the site. Population figures were rounded the neared whole integer for reporting purposes. The number of drinking water wells and associated population within the 4-mile TDL by distance ring is presented in Table 7-1.

Given the surrounding land use, it is assumed that ground water is used for the irrigation of commercial livestock within the TDL. A wellhead protection area is present within the 4-mile TDL.

7.1.4 Ground Water Sample Locations and Results

A total of 11 ground water samples (LF01GW through LF07GW, and LF12GW through LF15GW) were collected from the boreholes between Demolition Area 1/Landfill 4 and the adjacent North Fork Lacamas Creek during the Phase I field event (Figure 6-1). The samples were submitted for off-site fixed laboratory analysis of nitroaromatics/nitramines, perchlorate, TAL metals, SVOCs, and VOCs.

Ground water analytical results are presented in Table 7-2. Sample results indicated the presence of RDX at elevated concentrations in 6 of the 11 samples. Perchlorate was detected at elevated concentrations in 10 of the 11 samples (only location LF12GW did not have a detection of perchlorate). A total of 12 TAL metals (barium, chromium, cobalt, copper, lithium, manganese, mercury, nickel, strontium, titanium, vanadium, and zinc) were detected at elevated concentrations in at least one of the ground water samples. Elevated concentrations of nitroaromatics/nitramines, perchlorate, and strontium are presented on Figure 6-2.

One SVOC [bis(2-ethylhexyl)phthalate] was detected at an elevated concentration in one of the ground water samples. RDX, perchlorate, lead, and bis(2-ethylhexyl)phthalate were also detected at significant concentrations in the co-located subsurface soil samples (see Section 6). No VOCs were detected above the instrument detection limit in any of the ground water samples.

7.1.5 Monitoring Well Sample Locations and Results

Five shallow existing monitoring wells (L4-MW02A through L4-MW05A and MW-17) and four deep existing monitoring wells (L4-MW02B, L4-MW03B, L4-MW07B, and MW-18) were selected for sampling during the Phase I field event (Figure 7-5). These nine wells are all associated with Demolition Area 1/Landfill 4. The samples were submitted for off-site fixed laboratory analysis for nitroaromatics/nitramines, perchlorate, TAL metals, SVOCs, and VOCs.

Shallow monitoring well analytical sample results are presented in Table 7-3. Sample results indicate the presence of HMX at an elevated concentration in one well (L4-MW02A). RDX was detected at elevated concentrations in four of the five wells. Perchlorate was detected at an elevated concentration in one shallow well (L4-MW02A). Elevated concentrations of nitroaromatics/nitramines and perchlorate are presented on Figure 7-6. It should be noted that the background shallow monitoring well (L4-MW01A) also contained perchlorate at a fairly high concentration. Finally, one SVOC (bis[2-ethylhexyl]phthalate) was detected at an elevated concentration in one shallow well (MW-17). No TAL metals or VOCs were detected at elevated concentrations in the shallow well samples.

Deep monitoring well analytical sample results are presented in Table 7-4. Sample results indicate the presence of HMX at an elevated concentration in one deep monitoring well (L4-MW02B). RDX was detected at elevated concentrations in two of the four deep monitoring wells (L4-MW02B and L4-MW03B). Perchlorate was detected at elevated concentrations in three of the four deep monitoring wells (L4-MW02B, L4-MW03B, and L4-MW07B). Elevated concentrations of nitroaromatics/nitramines and perchlorate are presented on Figure 7-6. Four TAL metals (barium, manganese, titanium, and vanadium) were detected at elevated concentrations in at least one of the deep monitoring wells. Of these, manganese was detected at elevated concentrations in three of the four deep monitoring wells. One SVOC [bis(2-ethylhexyl)phthalate] was detected at an elevated concentration in one of the deep monitoring wells. Five VOCs (1,1,1-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, 1,1-dichloroethane, chloroform, and dichlorodifluoromethane) were detected at elevated concentrations in at least one of the deep monitoring wells. All of these, except for chloroform, were detected in one deep well (LF-MW02B).

7.2 Surface Water Migration Pathway

The surface water migration pathway TDL begins at the probable point of entry (PPE) of surface water runoff from the site to a surface water body and extends downstream for 15 miles. Figure 7-2 depicts the surface water migration TDL.

The average annual precipitation for Vancouver, Washington is 39.48 inches (WRCC 2009). The 2-year 24-hour rainfall event for Vancouver, Washington is 2.5 inches (NOAA 1973). Portions of the site are located in a 100-year flood plain (FEMA 1991).

Soils at the site consist of Hesson clay loam (0 to 8% slopes) and McBee silty clay loam (0 to 3% slopes). The Hesson clay loam is the predominant soil type in the county. In a typical soil profile, the surface layer is a reddish-brown clay loam approximately 8 inches thick. The subsurface layer is dark reddish-brown clay loam approximately 4 inches thick. Below this layer is friable, dark reddish-brown clay loam approximately 10 inches thick. The next layer to a depth of approximately 91 inches is reddish-brown clay. The Hesson clay loam is well drained and has moderately slow permeability. The McBee clay loam occurs on depressions that are sometimes subject to flooding from nearby streams. In a typical profile, the surface layer is a silty clay loam approximately 11 inches thick. It is very dark brown in the upper portion and dark brown in the lower portion. The next layer is approximately 41 inches thick and is comprised as follows: 10 inches of friable very dark reddish-brown silty clay loam; 11 inches of firm dark brown silty clay loam; and the lower 20 inches is firm grayish-brown and dark yellowish-brown silty clay loam. The underlying material to a depth of approximately 65 inches is gray and brown clay. The McBee silty clay loam is somewhat poorly drained and moderately permeable (USDA 1972).

7.2.1 Overland Pathway

Camp Bonneville is located within the Lacamas Creek watershed, more specifically Upper Lacamas Creek. Lacamas Creek is fed by numerous tributaries that run through Camp Bonneville. There are four major tributaries to Lacamas Creek that run through the site: North Fork Lacamas Creek, East Fork Lacamas Creek, David Creek, and Buck Creek. Numerous PPEs are present within the site on Lacamas Creek and on various tributaries. The PPEs are presented below by water body:

- **North Fork Lacamas Creek:** Overland flow from Demolition Area 1/Landfill 4;
- **East Fork Lacamas Creek:** Overland flow from the CITA;
- **David Creek:** Overland flow from the CITA (including the entire portion that flows through the CITA), Outfalls 1 through 3 from the Pop-Up Pond, and overland flow from Demolition Area 2;
- **Buck Creek:** Overland flow from the 1,000-Inch Range; and
- **Lacamas Creek:** Overland flow from Demolition Area 3, the 1,000-Yard Range, the Firing Bank, the M203 HE Grenade Range, Artillery Position 5, and Artillery Position 6.

The 15-mile TDL begins at the most upstream PPE associated with Demolition Area 1/Landfill 4 on North Fork Lacamas Creek through Camp Bonneville to the most downstream PPE associated with Demolition Area 3 on Lacamas Creek then continues approximately 12.61 miles downstream (through Lacamas Lake, which is approximately 9 miles downstream) to its confluence with the Washougal River. From this location, the TDL continues approximately 1.43 miles downstream to the confluence with the Columbia River and concludes approximately 0.96 mile downstream in the Columbia River.

Flow rates are not available for Lacamas Creek or Lacamas Lake. The flow rate for the Washougal River as measured at Washougal, Washington (near the confluence of Lacamas Creek and the Washougal River) is 800.5 cubic feet per second (cfs) and the flow rate for the Columbia River at Vancouver, Washington is reported to be 215,900 cfs (USGS 2009). The flow rate for Lacamas Creek was noted to be less than 10 cfs on the Phase II Field Sampling Form (Appendix C).

7.2.1.1 Sample Locations and Results

One overland pathways sample (OP01SS) was collected from a drainage ditch from Artillery Positions 6 and 7, Demolition Area 3 (discussed in sources section), and Lacamas Creek.

Sample results are presented in Table 7-5. No analytes were detected at elevated concentrations in the overland pathway sample.

7.2.2 Drinking Water Targets/Receptors

Surface water is not used for drinking water purposes within the TDL. The Columbia River is a major recreation area.

7.2.3 Human Food Chain Targets/Receptors

Two artificial impoundments on Lacamas Creek were created to support a trout sports fishery (WC 1997). These impoundments are no longer fished; however, they were actively used when the site was in operation. Fish catch is not reported for Lacamas Creek or Lacamas Lake; however, it was reported that these water bodies are known fishing locations for human consumption (Reynolds 2009). It is estimated that greater than 1 to 100 pounds of fish are caught annually from the creek or the lake for human consumption. Fishing is not known, nor expected, to occur above Lacamas Lake due to the presence of a dam which does not contain fish ladders to allow the passage of fish from the lake to the creek.

The most current sport catch data are from 2000 to 2001 (WDFW 2005). Fishing is reported for the entire Washougal River, of which approximately 1% lies within the TDL. Fish catch data is presented in numbers of fish caught; therefore, the average weight of each fish is used to determine the pounds of fish caught within the TDL. The total pounds of each fish species is then multiplied by 1% to determine the pounds of fish caught within the TDL. Fish catch for the Columbia River is reported from the Bonneville Dam to the Columbia River, of which approximately 0.5% is within the TDL. The same process for determining pounds of fish within the TDL as discussed above is used here. Fish catch data is presented in Table 7-6. In this table, fish catch estimates have been rounded to the nearest whole number.

7.2.4 Environmental Targets/Receptors

State- and Federal-listed threatened and endangered species are present within the TDL. The Federal-listed threatened Lower Columbia River Evolutionarily Significant Unit (ESU) Steelhead (*Oncorhynchus mykiss*), the Lower Columbia River ESU Chinook salmon (*Oncorhynchus tshawytscha*), and the Lower Columbia River ESU Chum salmon (*Oncorhynchus keta*) are present within Lacamas Creek, the Washougal River, and the Columbia River. The Federal-listed endangered Bradshaw's Lomatium (*Lomatium bradshawii*) is present within Lacamas Creek. Additionally, the State-listed threatened Dense Sedge (*Carex densa*), Hall's aster (*Aster hallii*), the Oregon coyote thistle (*Eryngium petiolatum*), and the Western Wahoo (*Euonymus occidentalis*) are present on Lacamas Creek (Hanson 2011). Table 7-7 provides a summary of the environmental targets within the TDL.

A total of 18.03 miles of wetland frontage are present along the TDL (Hanson 2011). Wetland frontages by surface water body within the TDL are depicted on Figure 7-7 and are as follows:

- Lacamas Creek – 17.86 miles (of which 6.44 miles are within the boundaries of the site);
- Washougal River – 0.09 mile, and
- Columbia River – 0.08 mile.

7.2.5 Sample Locations and Results

7.2.5.1 North Fork Lacamas Creek

Two sediment samples (LF01SD and PP01SD) were collected from North Fork Lacamas Creek during the Phase I field event. Sample LF01SD was collected at a seep that was discovered to be emanating from Demolition Area 1/Landfill 4. Sample PP01SD was collected from North Fork Lacamas Creek adjacent to the seep. The Phase I sediment samples were submitted for off-site fixed laboratory analysis of TAL metals, perchlorate, nitroaromatics/nitramines, SVOCs, VOCs, grain size, and TOC. Additionally, the PPE sample was field screened for perchlorate.

Six surface water (NF02SW through NF05SW, NF07SW, and NF09SW) and nine sediment samples (NF01SD through NF09SD) were collected from North Fork Lacamas Creek during the Phase II field event (Figure 7-8). The Phase II samples were collected in order from downstream toward upstream locations to avoid cross-contamination. Sample NF01SD was collected approximately 300 feet upstream of the confluence of East Fork Lacamas Creek. Samples NF02SW/SD was collected 1,600 feet upstream of sample NF01SD on North Fork Lacamas Creek. Samples NF03SW/SD were collected approximately 210 feet upstream of sample NF02SW/SD in proximity to sample PP01SD which was collected during the Phase I field sampling event. Samples NF04SW/SD were collected approximately 300 feet upstream of sample NF03SW/SD in proximity to sample location LF05SB/GW which was collected during the Phase I field event. Samples NF05SW/SD were collected approximately 100 feet upstream of sample NF04SW/SD. Sample NF06SD was collected approximately 60 feet upstream of sample NF05SW/SD in proximity to samples LF04SB/GW which were collected during the Phase I field event. Samples NF07SW/SD were collected approximately 118 feet upstream of sample NF06SD in proximity to LF02GW which was collected during the Phase I field event. Sample NF08SD was collected approximately 188 feet upstream of sample NF07SW/SD. Finally, samples NF09SW/SD were collected approximately 285 feet upstream of sample NF08SD. Based on the map, it appears this sample was collected from an unnamed stream; however, during the field event, it was thought this was North Fork Lacamas Creek.

The Phase II surface water and sediment samples were submitted for off-site fixed laboratory analysis of TAL metals, perchlorate, nitroaromatics/nitramines, SVOCs, and VOCs. Additionally, the sediment samples were submitted for off-site fixed laboratory analysis for TOC and grain size.

Sediment sample results from the Phase I field event are presented in Table 7-8. Perchlorate was detected in the seep sample collected from along North Fork Lacamas Creek (LF01SD) at an elevated concentration of 1.5 µg/kg. Elevated concentrations of perchlorate and strontium are presented on Figure 7-9. Sample results indicate the presence of two TAL metals (arsenic and strontium), perchlorate, and one SVOC [bis(2-ethylhexyl)phthalate] at elevated concentrations in at least one of the two samples collected.

Surface water sample results from the Phase II field event are presented in Table 7-9. Sample results indicate the presence of total and dissolved manganese, perchlorate, one SVOC (diethylphthalate), and one VOC (toluene) at elevated concentrations. Perchlorate was detected at elevated concentrations in two of the samples (NF02SW/D at 0.13 µg/L and NF03SW/D at 0.086 µg/L). Elevated concentrations of perchlorate are presented on Figure 7-9. Total manganese was detected at elevated concentrations in four of the six surface water samples, and dissolved manganese was detected at elevated concentrations in all six of the surface water samples. Diethyphthalate and toluene were not likewise detected in the Demolition Area 1/Landfill 4 subsurface soil or ground water samples and, therefore the concentrations of diethlphthala and toluene detected in NF02SW/D and NF03SW/D, respectively, may not be associated with this source. Manganese was not detected at significant concentration in the subsurface soil samples, but was detected in the ground water samples collected from Demolition Area 1/Landfill 4. Perchlorate was detected at significant concentrations in the subsurface soil samples and at elevated concentrations in the ground water samples collected from Demolition Area 1/Landfill 4.

Sediment sample results from the Phase II field event are presented in Table 7-10. Sediment sample results indicate the presence of one nitroaromatic/nitramine (3-nitrotoluene), one TAL metal (nickel), and two VOCs (2-butanone and acetone) at elevated concentrations in at least one of the samples. Elevated concentrations of 3-nitrotoluene are presented on Figure 7-9. Acetone was also detected at significant concentrations in the subsurface soil samples. Nickel was not detected at significant concentrations in the subsurface soil samples; however, it was detected at elevated concentrations in the Demolition Area 1/Landfill 4 ground water samples.

7.2.5.2 East Fork Lacamas Creek

Three sediment samples (EF01SD through EF03SD) were collected from East Fork Lacamas Creek during the Phase II field event (Figure 7-10). Sample EF03SD was collected approximately 100 feet upstream of the confluence of East Fork Lacamas Creek and Lacamas Creek. Sample EF01SD was collected approximately 1,429 feet upstream of location EF03SD. Sample EF02SD was collected adjacent to the North Fence Road which runs alongside the CITA and approximately 1,076 feet upstream of sample EF01SD. No discernible staining or odors were noted in the samples. The samples were submitted for off-site fixed

laboratory analysis for TAL metals, perchlorate, nitroaromatics/nitramines, TOC, and grain size.

East Fork Lacamas Creek sediment sample results are presented in Table 7-11. Sample results do not indicate the presence of any analyte at elevated concentrations.

7.2.5.3 David Creek

Four sediment samples (DC01SD through DC04SD) were collected from David Creek during the Phase II field event (Figure 6-3). Sample DC01SD was collected from David Creek near Outfall 3. Sample DC02SD was collected from David Creek near Outfall 2, and sample DC03SD was collected from David Creek near Outfall 1. Finally, sample DC04SD was collected from David Creek inside the CITA fence line.

David Creek sediment sample results are presented in Table 7-12. The samples were analyzed for TAL metals, TOC, perchlorate, and grain size. The sample results did not indicate the presence of any analytes at elevated concentrations.

7.2.5.4 Buck Creek

One sediment sample (BC01SD) was collected from Buck Creek approximately 100 feet from the confluence with Lacamas Creek during the Phase II field event (Figure 7-11). The sample was collected upstream of an access road to the 1,000-Inch Range.

Buck Creek sediment sample results are presented in Table 7-13. The Buck Creek sediment sample was analyzed for TAL metals, perchlorate, TOC, and grain size. Sample results do not indicate the presence of any analytes at elevated concentrations.

7.2.5.5 Lacamas Creek

Four surface water samples (LC03SW, LC11SW, LC14SW, and LC15SW) and 15 sediment samples (LC01SD through LC15SD) were collected from Lacamas Creek during the Phase II field event (Figures 7-12 and 7-14). The samples were collected in order from downstream toward upstream locations to avoid cross-contamination. The surface water samples were co-located with their respective sediment samples (e.g., LC11SW was co-located with sample LC11SD).

Sample LC01SD was collected 0.8 mile from the western border of Camp Bonneville at the 217th Street bridge. Sample LC02SD was collected at the western border of Camp Bonneville. Samples LC03SW/LC03SD were collected from Lacamas Creek at the confluence of the drainage ditch associated with the overland pathway sample (OP01SS). This sample is the PPE for Demolition Area 3 and Artillery Positions 6 and 7. Sample LC04SD was collected 2,475 feet upstream of sample LC03SD on Lacamas Creek. Sample LC05SD was collected 1,542 feet upstream of sample LC04SD on Lacamas Creek. Sample LC06SD was

collected 1,277 feet upstream of sample LC05SD and is the PPE for Firing Position 5. Sample LC07SD was collected 825 feet upstream of sample LC06SD. Sample LC08SD was collected 1,792 feet upstream of sample LC07SD and is the PPE for the M203 HE Hand Grenade Range Target. Sample LC09SD was collected 557 feet upstream of sample LC008SD. Sample LC10SD was collected 689 feet upstream of sample LC09SD and approximately 30 feet downstream of the confluence with Buck Creek. Samples LC11SW/SD were collected 698 feet upstream of sample LC10SD in Lacamas Creek and is the PPE for the 1,000-Inch Range. Sample LC12SD was collected 2,223 feet upstream of sample LC11SD on Lacamas Creek. Sample LC13SD was collected 1,165 feet upstream of sample LC12SD and approximately 50 feet downstream of the confluence of David Creek. A blue sheen was observed on the west bank of the creek adjacent to the sample location. Samples LC14SW/SD were collected 1,165 feet upstream of sample LC13SD and approximately 30 feet upstream of the confluence with David Creek. Samples LC15SW/SD were collected 2,757 feet upstream of sample LC15SD and were collected approximately 20 feet downstream of the confluence with East Fork Lacamas Creek and 10 feet downstream of the confluence with North Fork Lacamas Creek.

Surface water samples results are presented in Table 7-9. The samples were analyzed for nitroaromatics/nitramines, total TAL metals, dissolved TAL metals, and perchlorate. Surface water sample results indicate the presence of total manganese at elevated concentrations in two of the four samples, dissolved manganese at elevated concentrations in three of the four samples, and perchlorate at elevated concentrations in all four of the surface water samples collected from Lacamas Creek. Concentrations of perchlorate detected in surface water samples collected from Lacamas Creek range from 0.079 µg/L to 0.13 µg/L. Elevated concentrations of perchlorate are presented on Figures 7-13 and 7-15. Manganese; however, was not likewise detected at significant concentrations in any of the source samples collected. No nitroaromatics/nitramines were detected at elevated concentrations.

Sediment sample results are presented in Table 7-14. The sediment samples were analyzed for nitroaromatics/nitramines, TAL metals, perchlorate, TOC, and grain size. Samples LC15SD, LC14SD, and LC13SD were compared to the background samples collected from East Fork Lacamas Creek (BG03SD) and North Fork Lacamas Creek (BG04SD). Samples LC12SD and LC11SD were also compared to the background sample collected from Buck Creek (BG02SD). The remainders of the samples (LC01SD through LC10SD) were compared to these three background samples as well as the background sample collected from Buck Creek (BG02SD). For comparison purposes, the highest detected background concentration of an analyte was used to determine if Lacamas Creek sample results were elevated. The results did not indicate the presence of any elevated concentrations in Lacamas Creek sediment samples relative to their respective background concentrations.

7.3 Soil Exposure Pathway

The soil exposure pathway is evaluated based on the threat to resident and nearby populations from soil contamination within the first 2 feet of the surface.

7.3.1 Site Setting and Exposed Sources

The site is surrounded by a maintained fence and security. The current use of the site does not include any recreational use.

7.3.2 Targets/Receptors

A total of 2,780 people reside within a 1-mile travel distance of the site (Hanson 2011). The nearest residence is located on site. This residence is populated by two people. A total of between 2 and 30 people work at the site. Table 7-15 provides a summary of the population within the 4-mile TDL.

The site is not used for commercial agriculture, commercial silviculture, commercial livestock production, or commercial livestock grazing.

The State-listed endangered Hairy-stemmed checker-mallow (*Sidalcea hirtipes*) is present on site (Hanson 2011).

7.3.2.1 Sample Locations and Results

Surface soil samples were collected at the site. Please refer to Section 6 of this document for information regarding the locations and analytical results of these samples.

7.4 Air Migration Pathway

The air migration pathway TDL is a 4-mile radius that extends from the sources at the site (Figure 7-1).

7.4.1 Human Targets

A total of 35,845 people reside within the 4-mile TDL. The population by distance ring is presented in Table 7-15. Additionally, five schools with a total population of students and teachers of 3,319 people are present from 3 to 4 miles of the site.

Commercial agriculture, commercial silviculture, or a major or designated recreation area is not present within the 4-mile TDL.

7.4.2 Environmental Targets

Federal- and State-listed threatened and endangered species and wetlands are present within the 4-mile TDL. The Federal-listed threatened Lower Columbia River ESU Steelhead, the Lower Columbia River ESU Chinook salmon, the Lower Columbia River ESU Chum salmon, and the Federal-listed endangered Bradshaw's Lomatium are present within the TDL. Additionally, the State-listed threatened Dense Sedge, Hall's aster, the Oregon coyote thistle, the Western Wahoo, the Western Gray Squirrel (*Sciurus griseus*), and the State-listed

endangered Hairy-stemmed checker-mallow (*Silsalcea hirtipes*) are present within the TDL (Hanson 2011). Table 7-7 provides a summary of the environmental targets within the TDL.

A total of 1,489.77 acres of wetlands are present within the TDL (Hanson 2011). Wetland acreage by distance ring is presented in Table 7-15.

8 Summary and Conclusions

Camp Bonneville is a former military training facility which was in operation from 1910 through 1995 when it was selected for closure by the BRAC committee. It was used from 1910 to 1995 for firing range practice. During that time, military munitions were stored and/or used at the site including artillery ammunition, mortar ammunition, air-launched rockets, shoulder-fired rockets, guided missiles, bombs, land mines, practice grenades, fuses, and small arms ammunition (Ecology 2011). Other historical operations at the site have included the storage of pesticides, maintenance of vehicles, storage of diesel fuel for building heating, sewage lagoons, at least four landfills (one landfill, Landfill 1, has been reported and identified on maps; however, it has not been visually located), various caliber firing ranges, and troop maneuvers.

Since its closure in 1995, numerous investigations have been conducted which have documented the presence of contamination above regulatory cleanup criteria. Additionally, a number of removals have occurred throughout various areas of the site. The planned future use of the site is as a regional park.

EPA's expanded site inspection included the collection of surface soil, subsurface soil, ground water, surface water and sediment samples from various locations throughout the site to determine the presence or absence of contamination associated with potential contaminant source areas such as Demolition Area 1/Landfill 4, firing ranges, firing points, the Pop-Up Pond, Demolition Areas 2 and 3, and receptors such as Lacamas Creek and its tributaries.

8.1 Sources

The sources selected for sampling as part of this investigation were chosen because they have been identified by previous studies and investigations as still requiring remediation. These sources include:

- Demolition Area 1/Landfill 4;
- CITA;
- Various Firing Ranges and Firing Points;
- A firing bank; and
- The Pop-Up Pond and targets.

A total of 101 source samples were collected during the investigation. All source areas that were sampled were determined to contain hazardous substances at significant concentrations as defined in Section 5. A summary of hazardous substances by source area is further outlined below.

8.1.1 Demolition Area 1/Landfill 4

Analytical results of subsurface soil samples collected from this source indicate the presence of RDX, perchlorate, lead, one SVOC and one VOC at elevated concentrations in at least one sample collected. Sample results are presented in Table 6-1. Sample locations are depicted in Figure 6-1.

8.1.2 Central Impact Target Area

Analytical results of surface soil samples collected from this source indicate the presence of one nitroaromatics/nitramine (3,5-Dinitrobenzenamine), nickel, and perchlorate at significant concentrations in at least one sample collected. Sample results are presented in Table 6-2. Sample locations are depicted in Figure 6-2.

8.1.3 Demolition Areas 2 and 3

8.1.3.1 Demolition Area 2

Analytical results of surface soil samples collected from this source indicate the presence of one nitroaromatics/nitramine (4-amino,2,6-Dinitrotoluene) and four TAL metals at significant concentrations in at least one sample. Sample results are presented in Table 6-3. Sample locations are depicted in Figure 6-2.

8.1.3.2 Demolition Area 3

Analytical results of surface soil samples collected from this source indicate the presence of three nitroaromatics/nitramine (2,4,6-Trinitrotoluene, 2-amino,4,6-Dinitrotoluene, and 3,5-Dinitrobenzenamine), two TAL metals (nickel and strontium), and perchlorate at significant concentrations in at least one sample collected. Sample results are presented in Table 6-3. Sample locations are depicted in Figure 6-3.

8.1.4 Firing Ranges

8.1.4.1 1,000-Inch Range

Analytical results of surface soil samples collected from this source indicate the presence of two TAL metals and perchlorate at significant concentrations in at least one sample collected. Lead was detected at significant concentrations in all eight samples and nickel was detected at significant concentrations in all but one of the samples. Sample results are presented in Table 6-4. Sample locations are depicted in Figures 6-4 and 6-5.

8.1.4.2 M203 HE Grenade Range

Analytical results of surface soil samples collected from this source indicate the presence of one nitroaromatics/nitramine (3,5-Dinitrobenzenamine), one TAL metal (nickel), and perchlorate at significant concentrations in at least one of the

samples collected. Sample results are presented in Table 6-4. Sample locations are depicted in Figure 6-5.

8.1.5 Artillery Positions

8.1.5.1 Artillery Position 5

Analytical results of surface soil samples collected from this source indicate the presence of two nitroaromatics/nitramines (2,4-Dinitrotoluene and 3,5-Dinitrobenzenamine), two TAL metals (beryllium and nickel), and perchlorate at elevated concentrations in at least one sample collected. Sample results are presented in Table 6-5. Sample locations are depicted in Figure 6-5.

8.1.5.2 Artillery Position 6

Analytical results of surface soil samples collected from this source indicate the presence of two TAL metals at elevated concentrations (lead and nickel). Sample results are presented in Table 6-5. Sample locations are depicted in Figure 6-3.

8.1.5.3 Artillery Position 7

Analytical results of surface soil samples collected from this source indicate the presence of two TAL metals (beryllium and nickel) at significant concentrations. Of these, nickel was detected at significant concentrations in all five surface soil samples. Sample results are presented in Table 6-5. Sample locations are depicted in Figure 6-3.

8.1.6 Firing Bank

Analytical results of surface soil samples collected from this source indicate the presence of four TAL metals (antimony, copper, lead, and nickel) at significant concentrations. Sample results are presented in Table 6-6. Sample locations are depicted in Figure 6-4.

8.1.7 Pop-up Pond

Samples associated with this source were collected from the perimeter of the pond, from the island in the pond, and from three outfalls associated with the pond. Analytical results of sediment samples collected from this source indicate the presence of three TAL metals (beryllium, lead, and strontium) detected at significant concentrations. Of these, strontium was detected at significant concentrations in four of the six samples collected from the perimeter of the pond, all three samples collected from the island, and all three samples collected at the outfalls. Sample results are presented in Table 6-7. Sample locations are depicted in Figure 6-6.

8.1.8 Pop-up Targets

Analytical results of surface soil samples collected from the Pop-up Targets east area indicate the presence of three TAL metals (copper, lead, and nickel) were detected at significant concentrations in at least two of the surface soil samples collected. Of these, both lead and nickel were detected at significant concentra-

tions in all nine surface soil samples. Sample results are presented in Table 6-8. Sample locations are depicted in Figure 6-6.

Analytical results of surface soil samples collected from the 1,000-Yard Range area indicate the presence of two TAL metals (lead and nickel) at significant concentrations. Of these, nickel was detected at significant concentrations in all nine surface soil samples. Sample results are presented in Table 6-8. Sample locations are depicted in Figure 6-6.

8.2 Targets/Receptors

This investigation was designed to determine if contamination associated with site sources is impacting targets/receptors including ground water associated with Demolition Area 1/Landfill 4, surface water, sediments, and wetlands associated with Lacamas Creek and its tributaries. Wetlands are present along the entire frontage of Lacamas Creek throughout the site.

A total of 64 target/receptor samples were collected during this investigation, including 20 ground water samples, 10 surface water samples, 33 sediment samples, and one surface soil sample. The sample results show that contamination from on-site sources is migrating and has reached these targets/receptors.

Perchlorate contamination associated with on-site sources is migrating and has reached North Fork Lacamas Creek and Lacamas Creek within the site boundaries.

Perchlorate was detected at elevated concentrations in all four of the surface water samples collected from Lacamas Creek and from two of the six surface water samples collected from North Fork Lacamas Creek (NF02SW and NF03SW). Targets/receptors associated with these sample locations include wetlands.

Additionally, both total and dissolved manganese were detected at elevated concentrations in the surface water samples associated with Demolition Area 1/Landfill 4; however, these contaminants were not likewise detected at significant concentrations in the subsurface soil samples collected during the Phase I field sampling event.

Sediments in David Creek, Buck Creek, and East Fork Lacamas Creek do not appear to be impacted by site sources based on analytical results.

8.3 Conclusions

Based on sample results, contamination is present at on-site sources at significant concentrations. Contamination is migrating and has reached surface water in North Fork Lacamas Creek and Lacamas Creek. Analytical results of samples collected at the site also show that contamination continues to impact ground water.

9 References

Atlanta Environmental Management, Inc. (AEM), September 25, 2003, *Draft Final Site Investigation Report Small Arms Ranges and Demolition Areas 2 and 3*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA65-03-F-0002, Delivery Order Number GS-10F-0135M.

Agency for Toxic Substances and Disease Registry (ATSDR), September 22, 2008, *Public Health Assessment for Camp Bonneville Military Reservation Clark County, Washington*.

Baker, M.B., Jr., (Baker), December 12, 2006a, *Draft Final Remedial Investigation/Feasibility Study Report Small Arms Ranges*, prepared for Bonneville Conservation Restoration and Renewal Team.

———, December 6, 2006b, *Final Remedial Investigation Report Demolition Areas 2 and 3*, prepared for Bonneville Conservation Restoration and Renewal Team.

———, November 2006c, *Camp Bonneville Cultural and Historical Resources Protection Plan*, prepared by Lisa Folb, for Bonneville Conservation, Restoration, and Renewal Team.

Bonneville Conservation, Restoration, and Renewal Team (BCRRT), August 2009a, *Draft Remedial Investigation/Feasibility Study RI/FS for Site-Wide Ground Water Remedial Action Unit 2C, Camp Bonneville Military Reservation, 2301 Northeast Pluss Road, Vancouver, WA 98682*, Prepared for the Washington State Department of Ecology.

———, May 2009b, *Draft Supplemental Remedial Investigation/Feasibility Study for RAU3*.

———, March 2009c, *Environmental Study Area After Action Report*, prepared for Washington Stated Department of Ecology.

———,February 2008, *Draft Final Remedial Investigation/Feasibility Study for RAU 3*.

Ecology and Environment, Inc. (E & E), August 2011a, *Addendum to Camp Bonneville Sampling and Quality Assurance Plan*, prepared for United

States Environmental Protection Agency, Contract Number EP-S7-06-02, Technical Direction Document Number 11-02-0010.

———, May 2011b, *Camp Bonneville Sampling and Quality Assurance Plan*, prepared for United States Environmental Protection Agency, Technical Direction Document Number 11-02-0010.

———, February 2010, *Camp Bonneville Preliminary Assessment*, prepared for United States Environmental Protection Agency, Contract Number EP-S7-06-02, Technical Direction Document Number 09-05-0003.

Evarts, R.C., 2006, *Geologic Map of the Lacamas Creek Quadrangle, Clark County, Washington: Scientific Investigations Map 2924*.

Federal Emergency Management Agency (FEMA), May 2, 1991, *Flood Insurance Rate Map, Clark County, Washington*, Panel Number 5300024 0350 C.

Gary Struthers Associates, Inc. (GSA), April 2002, *Final Closure Report: Environmental Restoration Drum Burial Area*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-95-G-0001, Task Order Number 58.

———, December 2001, *Final Closure Report: Environmental Restoration Pesticide Building #4126 and Ammunition Bunkers #29532, #2952, and #2950*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-95-G-0001, Task Order Number 58.

———, September 2000, *Draft Final Closure Report: Environmental Restoration Multi-Sites*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-95-G-0001, Task Order Number 58.

Hanson, Alan, August 3, 2009, memorandum to Renee Nordeen, Ecology and Environment, Inc., regarding GIS Analysis for Camp Bonneville.

Hart Crowser (HC), December 22, 1998, *Draft Project Evaluation Report Surface Water Investigation of Lacamas Creek and Tributaries*, prepared for United States Army Corps of Engineers, Contract Number DACA67-98-D-1008, Delivery Order Number 007.

Local Redevelopment Authority (LRA), September 1998, *Camp Bonneville Reuse Plan*, prepared with the assistance of Otak, Inc., updated February 20, 2003 and November 15, 2005.

Maptech Terrain Navigator, 2001, version 5.01.

McFarland, W.D., and Morgan, D.S, 1996, *Description of the Ground-Water Flow System in the Portland Basin, Oregon and Washington*: U.S. Geological Survey Water-Supply Paper 2470-A.

Morgan, D.S., and W.D. McFarland, 1996, *Simulation Analysis of the Ground-Water Flow System in the Portland Basin, Oregon and Washington*: U.S. Geological Survey Water-Supply Paper 2470-B.

National Oceanic and Atmospheric Administration (NOAA), 1973, *Western United States Precipitation Frequency Atlas*, Volume 2.

Orr, E.L., and W.N. Orr, 1999, *Geology of Oregon (fifth edition)*: Kendall/Hunt Publishing Company, Dubuque, Iowa.

Parsons Infrastructure and Technology Group (Parsons), November 29, 2004, *Draft Remedial Investigation/Feasibility Study Remedial Action Unit 3*, prepared for the U.S. Army Corps of Engineers Seattle District and Huntsville Center, Contract Number DACA87-00-D-0038, Delivery Order Number 0017.

———, January 2002, *Draft Reconnaissance Results Small Arms Ranges Camp Bonneville, Vancouver, Washington*, prepared for Department of the Army, Headquarters, I Corps and For Lewis, Contract Number DACA87-95-D-0018 Delivery Order Number 0031.

———, August 2001, *Final Summary Report Geophysical Investigation of the Suspected Drum Burial Area*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA87-95-D-0018, Delivery Order Number 0031.

PBS Environmental (PBS), November 2010, *Draft Groundwater Sampling and Analysis Report – 3rd Quarter 2010*, prepared for Washington State Department of Ecology.

———, 2007, *Draft Ground water Sampling and Analysis Report –_ 4th Quarter, 2006 for the Camp Bonneville Facility located in Vancouver, Washington*.

Pentec Environmental Inc. (Pentec), February 23, 1995, *Camp Bonneville Endangered Species Survey*, prepared for the U.S. Army Corps of Engineers Seattle District Environmental Resources Section, Contract Number DACW67-92-D-1001, Work Order Number 7.

Reynolds, Nathan, December 1, 2009, personal communication with Renee Nordeen, Ecology and Environment, Inc., regarding Cowlitz Tribal concerns at the Camp Bonneville site.

Shannon and Wilson, Inc. (SWI), July 1999a, *Multi-Sites Investigation Report, Camp Bonneville, Washington*, prepared for the U.S. Army Corps of Engineers, Contract Number DACA67-94-D-1014.

———, August 1999b, *Landfill 4-Demolition Area 1 Investigation Report*, prepared for U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-94-D-1014, Delivery Oder Number 17.

Tetra Tech, Inc., February 2006, *Final Interim Removal Action Report Landfill 4-Demolition Area 1/Demoition Area 1 for Camp Bonneville, Washington*, prepared for Department of the Army, Atlanta Field Office, Contract Number DAAD11-03-F-0102.

United States Army Corps of Engineers (Corps), St. Louis District, July 1997, *Final Archives Search Report Conclusions and Recommendations, Camp Bonneville, Clark County, Washington*.

United States Department of Agriculture (USDA), 1972, *Soil Survey of Clark County, Washington*.

United States Department of Commerce (Census), 2011, *Profile of General Demographic Characteristics, 2010 Census of Population and Housing: Washington*.

URS Corporation (URS), February 2003, *Landfill 4-Demolition Area 1 Demolition Area Number 1 Expanded Site Inspection*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-98-D-1005, Delivery Order Number 0054.

———, August 2002, *Record of Decision Multiple Sites*, prepared for the U.S. Army Corps of Engineers.

———, December 2000a, *Supplemental Site Investigation Report: Ammunition Storage Magazines and Pesticide Storage Area*, prepared for the U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-98-1005, Delivery Order Number 0035.

———, September 2000b, *BRAC HTRW Site Closure Report: for Landfills 1, 2, and 3; Former Burn Area, Buildings 1962 and 1963; Grease Pits at the Camp Bonneville and Killpack Cantonments; Former Sewage Pond; and Hazardous Materials Accumulation Point, Camp Bonneville, Washington*, prepared for Seattle District U.S. Army Corps of Engineers, Contract Number DACA67-98-D-1005, Delivery Order Number 43.

U.S. Army Chemical Materials Agency (CMA), October 2007, *Chemical Agent Identification Sets Fact Sheet*.

United States Department of Agriculture Soil Conservation Service (USDA), November 1972, *Soil Survey of Clark County, Washington*.

United States Environmental Protection Agency (EPA), January 2010b, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, OSWER 9240.1-51, EPA 540-R-10-011.

———, April 2007, *USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration, SOM01.2*

———, July 2006, *Final Support Document for Sole Source Aquifer Designation of the Troutdale Aquifer System*: EPA 910-R-06-006.

———, 2000, *Data Quality Objectives Process for Superfund Interim Final Guidance*, Office of Solid Waste and Emergency Response, Publication Number 9355.9-01 PB 94-963203, EPA 540-R-93-071.

United States Geological Survey (USGS), 2009, USGS Surface-Water Annual Statistics for Washington, USGS Site 14144700 Columbia River at Vancouver, WA.,

UXB International, Inc. (UXBI), October 12, 2000, *Final Removal Report Ordnance and Explosive Removal Action Camp Bonneville, Vancouver, Washington*, prepared for United States Corps of Engineers, Contract Number DACA87-97-D-0006, Delivery Order Number 0013.

Washington State Department of Ecology (Ecology), October 2011, Camp Bonneville Military Reservation fact sheet, Publication Number 11-09-066.

Washington State Department of Fish and Wildlife (WDFW), May 2005, *Washington State Sport Catch Report 2002*, Fish Program Science Division.

Washington State Department of Health (WDOH), 2009, community well database search, https://fortress.wa.gov/doh/eh/portal/odw/si/FindWaterSystem.aspx.

Woodward Clyde Consultants (WC), January 30, 1997, *U.S. Army Base Realignment and Closure Program: Environmental Baseline Survey Report, Camp Bonneville, Washington*, prepared for U.S. Army Corps of Engineers Seattle District, Contract Number DACA67-95-D-1001, Delivery order Number 0009.

———, 1995, *Base Realignment Closure Cleanup Plan for Camp Bonneville*, prepared for U.S. Army Corps of Engineers, Contract Number DACA67-95-D-1001, Delivery Order Number 0009.

Western Regional Climate Center (WRCC), May 27, 2009, Period of Record Monthly Climate Summary Station Vancouver 4 NNE, Washington (458773), Period of Record 8/1/1891 to 12/31/2008.

Washington State Department of Ecology (Ecology), 2009, Web search of well logs for surrounding area.

———, February 4, 2003, Enforcement Order Number 03TCPHQ-5286.

Wydoski, Richard S., and Richard R. Whitney, 2003, *Inland Fishes of Washington, Second Edition*, American Fisheries, Bethesda, Maryland.

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Tables

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Table 2-1 1997 BRAC Parcel Descriptions

BRAC PARCEL NUMBER AND LABEL	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)[b]	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	REMEDIATION/ MITIGATION
1(1)	10,7	3,822.72	1	This area does not have a history of storage, release, or disposal, or migration from adjacent properties of hazardous substances or petroleum products.	No remediation is necessary.
2(7)HR(P) Historic Landfill	7,9	0.25	7	A cultural resources survey at this site noted disturbed ground with evidence of use as a sanitary type landfill. A specimen from this site dates the use to the early 1900s.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
3(7)HR(P) Sewage Lagoons and Historic Landfill	7,9	2.76	7	This parcel is associated with sewage lagoons in use since 1978. A landfill was discovered during excavation for the sewage lagoons. It is estimated that this landfill was used from the 1940s to 1950s; however, the type and quantity of material located at this site is unknown. Twelve percent sodium hypochlorite above reportable quantities is stored in Building 1995.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
4(7)HR(P) Historic Burn Area	7,9	0.25	7	This is a reported burn site. There is a lack of documentation supporting the existence of or the type and quantity of material burned at this site.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
5(7)HR(P) Trash Burial Site	8,9	0.25	7	This is a reported trash burial site. There is a lack of documentation supporting the existence of or the type and quantity of material buried at this site.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
6(7)HR(P) Grease Pit	6,9 and Camp Bonneville Cantonment Inset	0.25	7	These two grease pits, located across from Building 1828, are corrugated metal pipes that extend into an underground pit filled with gravel. They were designed to accept grease from the mess hall; however, there is a potential for other substances to have been discarded in these pits.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
7(2)PS Camp Bonneville Cantonment AST	6,9 and Camp Bonneville Cantonment Inset	2.50	2	This area contains twenty-four 275-gallon ASTs that store diesel to power the HVAC system associated with individual facilities. There is no history or reports of a release.	No remediation is currently planned.
8(7)HR(P) Former Buildings 1983 and 1962	6,9 and Camp Bonneville Cantonment Inset	0.37	7	Buildings 1983 and 1962 were located at this site and were destroyed by fire. There is a possibility of a release of lead or other substances associated with the use or design of the buildings.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.

Table 2-1 1997 BRAC Parcel Descriptions

BRAC PARCEL NUMBER AND LABEL	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)[b]	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	REMEDIATION/ MITIGATION
9(7)HR(P) Building 1864	6,9 and Camp Bonneville Cantonment Inset	0.25	7	Building 1864 stored 55-gallon drums of 2,4,5-T; 2,4-D; and an unknown amount of DDT from 1977 to 1980. There is no evidence of a release of these chemicals. However, there is potential for past release of these chemicals.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
10(1) Building 1834	6,9 and Camp Bonneville Cantonment Inset	0.25	1	This facility is the gas mask training chamber and was used for an unknown period. This building was investigated for tear gas (o-chlorobenzal-malononitrile) residue.	Investigation results indicated no hazardous substances are present on building materials or in surrounding surface soils.
11(7)HR(P) Grease Pit	3,7 and Camp Killpack Cantonment Inset	0.25	7	This grease pit, located across from Building 4368, is a corrugated metal pipe that extends into an underground pit filled with gravel. It was designed to accept grease from the mess hall; however, there is a potential for other substances to have been discarded in this pit.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
12(7)PR(P)HR(P) Building 4475	3,7 and Camp Killpack Cantonment Inset	0.25	7	Building 4475 had a maintenance pit that reportedly received waste oil and antifreeze. The pit is now covered by the concrete floor of the building. Small scale pesticides mixing and loading occurred in front of the building. A three- to four-foot wide strip on the south side of Building 4475 has stressed vegetation and red staining, possibly from drainage off the galvanized metal roof.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
13(7)PR(P)/HR(P) Buildings 4476A and 4475B	3,7 and Camp Killpack Cantonment Inset	0.13	7	Building 4475B is used for storage. During the EBS visual inspection, four 5-gallon drums of oil, four 5-gallon drums of antifreeze, and eight 5-gallon drums of transmission oil were observed. Building 4476A is a storage shed that contains a 1,060-gallon AST with secondary containment. Although no evidence of releases was observed, the U.S. Army plans to sample soil at these locations because of potential past releases of these chemicals.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.

Table 2-1 1997 BRAC Parcel Descriptions

BRAC PARCEL NUMBER AND LABEL	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)[b]	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	REMEDIATION/ MITIGATION
14(7)PR(P)/HR/(P) Former Vehicle Maintenance Rack and UST	3,7 and Camp Killpack Cantonment Inset	0.25	7	Building 4476 is a hazardous waste accumulation point used to store waste oil and other vehicle fluids. This former location of a vehicle maintenance rack reportedly received waste oil and antifreeze. A UST was removed without documentation at the location of Building 4476.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
15(5)PR Building 4475 LUST	3,7 and Camp Killpack Cantonment Inset	0.08	5	A 275-gallon AST and a 275-gallon UST located east of Building 4475 were removed in 1995. Evidence of soil contamination was noted during removal.	Additional soil removal was conducted in fiscal year 1997; however, closure documentation has not been finalized.
16(7)HR(P) Building 4126	3,7 and Camp Killpack Cantonment Inset	0.25	7	Building 4126 was used to store 55-gallon drums of 2,4,5-T; 2,4-D; and an unknown amount of DDT until 1977. There is no evidence of a release of these chemicals; however, there is potential for past release of these chemicals.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
17(7)HR(P) Former Sewage Pond	6,8 and Camp Bonneville Cantonment Inset	0.25	7	This area is the location of a former open sewage pond.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
18(7)HR(P) Suspected Drum Burial Site	3,7	0.25	7	This area reportedly contains buried drums of unknown contents.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
19(7)HR(P) Suspected Disposal Site	4,6	0.25	7	Waste paint and solvent was reportedly disposed of in this area.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
20(7)PR(P)/HR(P) Wash Point	3,7 and Camp Killpack Cantonment Inset	0.25	7	Vehicle washing may result in release of POLs, other vehicle fluids, and metals.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
21(7)HR(P) Demolition Area 1 and Landfill 4	9,12	4.60	7	This area was used for the demolition of UXO and reportedly used as a landfill for disposal of building demolition debris.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.

Table 2-1 1997 BRAC Parcel Descriptions

BRAC PARCEL NUMBER AND LABEL	LOCATION (X,Y COORDINATES)	APPROXIMATE SIZE (ACRES)[b]	ENVIRONMENTAL CONDITION CATEGORY NUMBER	BASIS	REMEDIATION/ MITIGATION
22(7)HR(P) Demolition Area 2	10,8	2.30	7	This area was used for the demolition of UXO.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.
23(2)HS Building 1815	6,9 and Camp Bonneville Cantonment Inset	0.25	2	Building 1815 stores greater than one pound reportable quantity of 12 percent sodium hypochlorite for water treatment.	No remediation is necessary.
24(2)HS Building 4522	2,8	0.25	2	Building 4522 stores greater than one pound reportable quantity of 12 percent sodium hypochlorite for water treatment.	No remediation is necessary.
25(7)HR(P)	6,7	0.25	7	The building was a tear gas mask training chamber and was used for an unknown period. The building was destroyed by fire.	Investigation and, if necessary, remediation are planned under the BRAC 95 Program.

Source: Woodward Clyde 1997

Table 2-2 1999 Multi-Sites Investigation – Analytical Procedures

Analytical Parameter	Method
Total Petroleum Hydrocarbons	WTPH-HCID, WTPH-G, WTPH-D, WTPH-D Extended
Organochlorine Pesticides and Polychlorinated Biphenyls	EPA Method SW846-8081
Volatile Organic Compounds	EPA MethodSW846-8260A
Semivolatile Organic Compounds	EPA Method SW846-8270B
Organophosphorus Compounds	EPA Method SW846-8141A
Chlorinated Herbicides	EPA Method SW846-8150B
Nitroaromatics and Nitramines	EPA Method SW846-8330
Ammonium Picrate/Picric Acid	EPA Method SW-846-8321 modified
Pentaerythritol Tetranitrate	EPA Method SW846-8321
CS and Breakdown Products	EPA Method SW8468270C modified
Metals	EPA Method SW846-6020
Mercury	EPA Method SW846-7470A/7471A
Cyanide	EPA Method SW846-9012
Common Anions	EPA Method SW846-300.0
Common Cations	EPA Method SW846-6010A
Carbonate/Bicarbonate	EPA Method E310.1
Total Suspended Solids	EPA Method E130.2
Asbestos	EPA Method 600
Moisture	ASTM Method D2216
Total Organic Carbon	Walkey-Black
Fecal Coliform	Method SM Part 900
Fecal Streptococcus	Method SM Part 900

Source: SWI 1999

Key:
EPA = United States Environmental Protection Agency.

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Table 3-1 Sample Collection and Analytical Summary

EPA Sample ID	Station Location	CLP Sample ID	Matrix	Sample Depth (bgs)	Sampler	Sample Date	Sample Time	Nitroaromatics /Nitramines	Total Metals	Perchlorate	Dissolved Metals	SVOCS	VOCS	Grain Size	TOC	Field Perchlorate	XRF	MS/MSD	Location	Description
11204300	BG01GW	JDQ50	GW	2.6 feet	BC	5/18/2011	1109	X	X	X		X	X						Demolition Area 1/Landfill 4	Purged clear brown sediment, no odor.
11204301	BG01SB	JDQ51	SB	2.6 feet	EL	5/17/2011	0933	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Moist, medium brown, clay rich minor gravel, no odor.
11204302	BG02GW	JDQ52	GW	16.22 feet	BC	5/20/2011	1511	X	X	X		X	X					X	Background	Well L4-MW01A,Clear, no odor, MS/MSD
11204303	BG03GW	JDQ54	GW	12.19 feet	DP	5/20/2011	1654	X	X	X		X	X					X	Background	Well L4-MW01B,Clear, no odor. MS/MSD
11204305	RS02WT	JDQ55	WT	NA	RN	5/21/2011	1455	X	X	X		X	X						Not applicable	Rinsate blank collected from hand auger.
11204306	LF01GW	JDQ56	GW	1.5 feet	AM	5/18/2011	1540	X	X	X		X	X						Demolition Area 1/Landfill 4	Light translucent brown, no odor.
11204307	LF01SB	JDQ57	SB	1.5 feet	DP	5/16/2011	1140	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Moist, medium brown, sandy clay, no odor.
11204308	LF02GW	JDQ58	GW	2.0 feet	AM	5/19/2011	0945	X	X	X		X	X						Demolition Area 1/Landfill 4	Light translucent brown, no odor.
11204309	LF02SB	JDQ59	SB	2.0 feet	DP	5/16/2011	1235	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Saturated, medium brown, clay with sand, no odor.
11204310	LF03GW	JDQ60	GW	1.8 feet	DP	5/19/2011	0956	X	X	X		X	X						Demolition Area 1/Landfill 4	Tan/brown sediment clearing after +/-3 min. pumping, no odor.
11204311	LF03SB	JDQ61	SB	1.8 feet	BC	5/16/2011	1403	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Damp, medium reddish brown, fine sand with small gravel and clay, no odor.
11204312	LF04GW	JDQ62	GW	1.6 feet	AM	5/19/2011	1025	X	X	X		X	X						Demolition Area 1/Landfill 4	Very light brown, no odor.
11204313	LF04SB	JDQ63	SB	1.6 feet	BC	5/16/2011	1432	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Saturated, medium brown, fine sand with small gravel and clay, no odor.
11204314	LF05GW	JDQ64	GW	2.2 feet	AJ	5/19/2011	1455	X	X	X		X	X						Demolition Area 1/Landfill 4	Light brown to clear, no odor.
11204315	LF05SB	JDQ65	SB	2.2 feet	DP	5/16/2011	1505	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Moist, medium brown, fine sand with clay and trace pebbles, no odor.
11204316	LF06GW	JDQ66	GW	1.8 feet	AM	5/19/2011	1135	X	X	X		X	X						Demolition Area 1/Landfill 4	Light brown, no odor.
11204317	LF06SB	JDQ67	SB	1.8 feet	EL	5/16/2011	1534	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Moist, medium brown, small pebble approximately 15%, fine sand with clay, no odor.
11204318	LF07GW	JDQ68	GW	1.4 feet	DP	5/19/2011	1206	X	X	X		X	X						Demolition Area 1/Landfill 4	Light tan sediment, no odor.
11204319	LF07SB	JDQ69	SB	1.7 feet	EL	5/17/2011	1052	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Saturated, medium brown, trace small gravel, sand fine to medium, no odor.
11204322	LF08SB	JDQ72	SB	0.7 feet	EL	5/17/2011	1132	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Saturated, medium brown, fine sand with gravel, little to no clay, no odor.
11204323	LF09SB	JDQ73	SB	0.3 feet	DP	5/17/2011	1343	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Wet, medium brown, fine sand with gravel, no odor.
11204326	LF01SD	JDQ76	SD	0-6 inches	DP	5/18/2011	0855	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Moist, medium brown, sand with some clay, no odor.
11204327	PP01SD	JDQ77	SD	0-6 inches	DP	5/18/2011	0911	X	X	X		X	X			X			Probable Point of Entry	Saturated, medium brown, sand with small gravel, no odor.
11204328	LF12GW	JDQ78	GW	2.1 feet	DP	5/19/2011	0855	X	X	X		X	X						Demolition Area 1/Landfill 4	Slight brown sediment, no odor.
11204329	LF12SB	JDQ79	SB	2.1 feet	EL	5/17/2011	1511	X	X	X		X	X						Demolition Area 1/Landfill 4	Wet, medium brown, fine to medium sand, gravel, clay, no odor.
11204330	LF13GW	JDQ80	GW	1.6 feet	BC	5/18/2011	1415	X	X	X		X	X						Demolition Area 1/Landfill 4	Light brown, muddy but cleared after a while, no odor.
11204331	LF13SB	JDQ81	SB	1.6 feet	EL	5/17/2011	1538	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Moist, dark brown, fine to medium sand with clay, trace gravel, no odor.
11204332	LF14GW	JDQ82	GW	2.3 feet	DP	5/18/2011	1455	X	X	X		X	X						Demolition Area 1/Landfill 4	Brown sediment, no odor.
11204333	LF14SB	JDQ83	SB	2.3 feet	EL	5/17/2011	1558	X	X	X		X	X			X			Demolition Area 1/Landfill 4	Wet, medium brown, fine to medium sand with clay, trace small gravel, no odor.
11204334	LF15GW	JDQ84	GW	NA	BC	5/19/2011	1410	X	X	X		X	X						Demolition Area 1/Landfill 4	Light brown-clear sample, no odor.
11204336	MW01GW	JDQ86	GW	23.1 feet	BC	5/20/2011	1000	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW05B,Clear, no odor.
11204337	MW02GW	JDQ87	GW	26.08 feet	BC	5/20/2011	1220	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW03B,Clear, no odor.
11204338	MW03GW	JDQ88	GW	24.12 feet	BC	5/20/2011	1335	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW03A,Clear, no odor.
11204339	MW04GW	JDQ89	GW	24.8 feet	BC	5/20/2011	1700	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW02A,Clear, no odor.
11204340	MW05GW	JDQ90	GW	27.31 feet	BC	5/20/2011	1820	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW04A,Clear, no odor.
11204341	MW06GW	JDQ91	GW	30.89 feet	DP	5/21/2011	1158	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW02B,Clear, no odor
11204342	MW07GW	JDQ92	GW	10.16 feet	BC	5/21/2011	1315	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID MW-17,Clear, no odor.
11204343	BG01SD	JDQA3	SD	0-6 inches	BC	5/18/2011	1042	X	X	X		X	X						North Fork Lacamas Creek background	Saturated, brown to dark brown, well sorted silt trace sand with organic matter, no odor.
11204344	MW09GW	JDQ94	GW	11.14 feet	BC	5/21/2011	1415	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW18,Clear, no odor.
11204345	RS01WT	JDQ95	WT	NA	RN	5/21/2011	1445	X	X	X		X	X						Not applicable	Rinsate blank collected from well screen
11204346	TB01WT	JDQ96	WT	NA	RN	5/16/2011	1020						X						Not applicable	Trip Blank
11204347	TB02WT	JDQ97	WT	NA	RN	5/18/2011	1020						X						Not applicable	Trip Blank
11204348	TB03WT	JDQ98	WT	NA	RN	5/19/2011	0845						X						Not applicable	Trip Blank
11204349	MW08GW	JDQ93	GW	38.75 feet	DP	5/21/2011	1330	X	X	X		X	X						Demolition Area 1/Landfill 4	Well ID L4-MW07B,Clear, no odor.
11344500	FP01SS	J8KL2	SS	0-6 inches	AM	8/22/2011	1145	X	X	X								X	Artillery Position 7	Dry, light brown, silty loam, no odor,
11344501	FP02SS	J8KL3	SS	0-6 inches	AM	8/22/2011	1305	X	X	X									Artillery Position 7	Dry, light brown, silty loam, no odor.
11344502	FP03SS	J8KL4	SS	0-6 inches	AM	8/22/2011	1330	X	X	X									Artillery Position 7	Slightly moist, light brown, silty loam, no odor.
11344503	FP04SS	J8KL5	SS	0-6 inches	AM	8/22/2011	1405	X	X	X									Artillery Position 7	Dry, light brown, silty loam, no odor.
11344504	FP05SS	J8KL6	SS	0-6 inches	AM	8/22/2011	1430	X	X	X									Artillery Position 7	Dry, light brown, silty loam, no odor.
11344505	PU01SD	J8KL6	SD	0-6 inches	MZ	8/22/2011	1427	X	X	X									Pop-up Pond	Wet, brown, silt coarse sand, no odor.

Table 3-1 Sample Collection and Analytical Summary

EPA Sample ID	Station Location	CLP Sample ID	Matrix	Sample Depth (bgs)	Sampler	Sample Date	Sample Time	Nitroaromatics /Nitramines	Total Metals	Perchlorate	Dissolved Metals	SVOCS	VOCS	Grain Size	TOC	Field Perchlorate	XRF	MS/MSD	Location	Description
11344506	PU02SD	J8KL8	SD	0-6 inches	MZ	8/22/2011	1430	X	X	X									Pop-up Pond	Wet, brown, silt, coarse to fine sand, no odor.
11344507	PU03SD	J8KL9	SD	0-6 inches	MZ	8/22/2011	1446	X	X	X									Pop-up Pond	Moist, dark brown, silt with sand, no odor.
11344508	PU04SD	J8KM0	SD	0-6 inches	MZ	8/22/2011	1458	X	X	X									Pop-up Pond	Moist, dark brown, silt with sand, no odor.
11344509	PU05SD	J8KM1	SD	0-6 inches	MZ	8/22/2011	1514	X	X	X									Pop-up Pond	Moist, dark brown, silt with sand, no odor.
11344510	PU06SD	J8KM2	SD	0-6 inches	MZ	8/22/2011	1533	X	X	X									Pop-up Pond	Dry, brown, hard compact silt, no odor.
11344511	PU07SD	J8KM3	SD	0-6 inches	MZ	8/22/2011	1612	X	X	X									Pop-up Pond	Wet, dark grayish brown with black matting, some gravel, no odor.
11344512	PU08SD	J8KM4	SD	0-6 inches	MZ	8/22/2011	1635	X	X	X									Pop-up Pond	Moist, dark brown, silt with gravel, no odor.
11344513	PU09SD	J8KM5	SD	0-6 inches	MZ	8/22/2011	1648	X	X	X									Pop-up Pond	Wet, brown, silt with sand, some gravel, no odor.
11344514	PU10SD	J8KM6	SD	0-6 inches	MZ	8/22/2011	1658	X	X	X									Pop-up Pond	Wet, brown, sandy silt with fine gravel, no odor.
11344515	PU11SD	J8KM7	SD	0-6 inches	MZ	8/22/2011	1708	X	X	X									Pop-up Pond	Wet, light brown, silty clay with sand and gravel, no odor.
11344516	OB01SS	J8KN8	SS	0-6 inches	MZ	8/22/2011	1630	X	X	X									Demolition Area 3	Dry, light brown, silty sandy loam with 5% gravel, no odor.
11344517	PU12SD	J8KM9	SD	0-6 inches	MZ	8/22/2011	1722	X	X	X									Pop-up Pond	Wet, light brown, sandy silt with gravel, no odor.
11344518	FR01SS	J8KN0	SS	0-6 inches	JF	8/23/2011	0901	X	X	X									1,000 inch Range	Dry, light brown, silt with fine gravel, no odor.
11344519	FR02SS	J8KN1	SS	0-6 inches	JF	8/23/2011	0913	X	X	X									1,000 inch Range	Dry, light brown, silt with fine gravel, no odor.
11344520	FR03SS	J8KN2	SS	0-6 inches	JF	8/23/2011	0922	X	X	X								X	1,000 inch Range	Moist, brown, silt with clay, trace fine gravel, no odor,
11344521	FR04SS	J8KN3	SS	0-6 inches	JF	8/23/2011	0930	X	X	X									1,000 inch Range	Dry, brown, silt, no odor.
11344522	FR05SS	J8KN4	SS	0-6 inches	JF	8/23/2011	0941	X	X	X									1,000 inch Range	Dry, light brown, silt, no odor.
11344523	FR06SS	J8KN5	SS	0-6 inches	JF	8/23/2011	0950	X	X	X									1,000 inch Range	Moist, dark brown, silt, no odor.
11344524	FP06SS	J8KN6	SS	0-6 inches	AH	8/23/2011	0946	X	X	X									Artillery Position 6	Dry, brown/light gray, silty sandy loam, no odor.
11344525	FR07SS	J8KN7	SS	0-6 inches	JF	8/23/2011	0955	X	X	X									1,000 inch Range	Dry, light brown, silt with fine gravel, no odor.
11344526	FR08SS	J8KN8	SS	0-6 inches	JF	8/23/2011	1005	X	X	X									1,000 inch Range	Dry, brown, silt with fine gravel, no odor.
11344527	FP07SS	J8KN9	SS	0-6 inches	AH	8/23/2011	1005	X	X	X									Artillery Position 6	Moist, brown/light grey, silty loam, no odor.
11344528	FP08SS	J8KP0	SS	0-6 inches	AH	8/23/2011	1030	X	X	X									Artillery Position 6	Dry, brown, silty sandy loam, no odor.
11344529	FB01SS	J8KP1	SS	0-6 inches	JF	8/23/2011	1055	X	X	X									1,000 inch Range Firing Bank	Moist, reddish brown, silt and clay, no odor.
11344530	FP09SS	J8KP2	SS	0-6 inches	AH	8/23/2011	1053	X	X	X									Artillery Position 6	Dry, light brown, rust/reddish, silt with clay, no odor.
11344531	FB02SS	J8KP3	SS	0-6 inches	JF	8/23/2011	1100	X	X	X									1,000 inch Range Firing Bank	Moist, dark brown, clay and silt with fine gravel, no odor.
11344532	FP10SS	J8KP4	SS	0-6 inches	AH	8/23/2011	1109	X	X	X									Artillery Position 6	Dry, light brown, silty loam, no odor.
11344533	FB03SS	J8KP5	SS	0-6 inches	JF	8/23/2011	1109	X	X	X									1,000 inch Range Firing Bank	Moist, brown, clay and silt, no odor.
11344534	FB04SS	J8KP6	SS	0-6 inches	JF	8/23/2011	1118	X	X	X									1,000 inch Range Firing Bank	Dry, light brown, silt with very fine gravel, no odor.
11344535	FB05SS	J8KP7	SS	0-6 inches	JF	8/23/2011	1126	X	X	X									1,000 inch Range Firing Bank	Dry, brown, silt with fine gravel, no odor.
11344536	OP01SS	J8KP8	SS	0-6 inches	AH	8/23/2011	1135	X	X	X									Overland Pathway from Artillery Position 6	Moist, brown, soft clay, silt, no odor.
11344537	OB02SS	J8KP9	SS	0-6 inches	AH	8/23/2011	1345	X	X	X									Demolition Area 3	Moist reddish/brown clay and silt, no odor.
11344538	FB06SS	J8KQ0	SS	0-6 inches	JF	8/23/2011	1133	X	X	X									1,000 inch Range Firing Bank	Dry, brown, silty loam, trace of fine gravel, organics, no odor.
11344539	FR09SS	J8KQ1	SS	0-6 inches	MZ	8/23/2011	1345	X	X	X									M203 HE Grenade Range Target	Dry, light brown, silty loam with fine gravel, no odor.
11344540	OB03SS	J8KQ2	SS	0-6 inches	AH	8/23/2011	1358	X	X	X									Demolition Area 3	Dry, medium brown, silty sand loam, some clay, no odor.
11344541	FR10SS	J8KQ3	SS	0-6 inches	MZ	8/23/2011	1408	X	X	X									M203 HE Grenade Range Target	Dry, light brown, silty loam with sand and fine gravel, no odor.
11344542	OB04SS	J8KQ4	SS	0-6 inches	AH	8/23/2011	1410	X	X	X									Demolition Area 3	Dry, medium brown, silty sandy loam, no odor.
11344543	FR11SS	J8KQ5	SS	0-6 inches	MZ	8/23/2011	1417	X	X	X									M203 HE Grenade Range Target	Dry, light grayish brown, silty loam, no odor.
11344544	OB05SS	J8KQ6	SS	0-6 inches	AH	8/23/2011	1425	X	X	X									Demolition Area 3	Dry, medium brown, silty sandy loam, no odor.
11344545	FR12SS	J8KQ7	SS	0-6 inches	MZ	8/23/2011	1428	X	X	X									M203 HE Grenade Range Target	Dry, light grayish brown, silty loam, no odor.
11344546	FR13SS	J8KQ8	SS	0-6 inches	MZ	8/23/2011	1440	X	X	X									M203 HE Grenade Range Target	Dry, light grayish brown, silty loam, no odor.
11344547	FR14SS	J8KQ9	SS	0-6 inches	MZ	8/23/2011	1452	X	X	X									M203 HE Grenade Range Target	Dry, grayish brown, silty loam with fine gravel, no odor.
11344548	FR15SS	J8KR0	SS	0-6 inches	MZ	8/23/2011	1509	X	X	X									M203 HE Grenade Range Target	Dry, grayish brown, silty loam, no odor.

Table 3-1 Sample Collection and Analytical Summary

EPA Sample ID	Station Location	CLP Sample ID	Matrix	Sample Depth (bgs)	Sampler	Sample Date	Sample Time	Nitroaromatics /Nitramines	Total Metals	Perchlorate	Dissolved Metals	SVOCS	VOCS	Grain Size	TOC	Field Perchlorate	XRF	MS/MSD	Location	Description
11344549	FR16SS	J8KR1	SS	0-6 inches	MZ	8/23/2011	1525	X	X	X									M203 HE Grenade Range Target	Dry, grayish brown, silty loam, no gravel, no odor.
11344550	FP11SS	J8KR2	SS	0-6 inches	AH	8/23/2011	1536	X	X	X									Artillery Position 5	Dry, medium brown, silty loam, no odor.
11344551	FP12SS	J8KR3	SS	0-6 inches	AH	8/23/2011	1547	X	X	X									Artillery Position 5	Dry, medium brown, silty loam with little gravel, no odor.
11344552	FP13SS	J8KR4	SS	0-6 inches	AH	8/23/2011	1558	X	X	X									Artillery Position 5	Dry, medium brown, silty loam, no odor.
11344553	FP14SS	J8KR5	SS	0-6 inches	AH	8/23/2011	1616	X	X	X									Artillery Position 5	Dry, medium brown, silty loam, no odor.
11344554	FP15SS	J8KR6	SS	0-6 inches	AH	8/23/2011	1633	X	X	X									Artillery Position 5	Dry, medium brown, silty loam, no odor.
11344555	FP16SS	J8KR7	SS	0-6 inches	AH	8/23/2011	1702	X	X	X								X	Artillery Position 5/Mortar Target	Dry, medium brown, poorly sorted silty sandy loam with 20 (¼-2 inch) gravel, no odor.
11344556	CT01SS	J8KR8	SS	0-6 inches	AM	8/24/2011	1007	X	X	X									Central Impact Target Area	Moist, medium brown, silty loam, some gravel, no odor.
11344557	CT02SS	J8KR9	SS	0-6 inches	AM	8/24/2011	1026	X	X	X									Central Impact Target Area	Moist, medium brown, silty loam, no odor.
11344558	CT03SS	J8KS0	SS	0-6 inches	AM	8/24/2011	1046	X	X	X									Central Impact Target Area	Dry, brown, sandy silt, no odor.
11344559	CT04SS	J8KS1	SS	0-6 inches	AM	8/24/2011	1117	X	X	X									Central Impact Target Area	Moist, medium brown, sandy silt, no odor.
11344560	CT05SS	J8KS2	SS	0-6 inches	AM	8/24/2011	1140	X	X	X									Central Impact Target Area	Moist, medium brown, sandy silt, no odor.
11344561	CT06SS	J8KS3	SS	0-6 inches	AM	8/24/2011	1320	X	X	X									Central Impact Target Area	Dry, brown, silt with small amount of gravel, no odor.
11344562	OB06SS	J8KS4	SS	0-6 inches	AH	8/24/2011	1342	X	X	X									Demolition Area 2	Moist, brown, silty loam trace fine gravel, no odor.
11344563	OB07SS	J8KS5	SS	0-6 inches	AH	8/24/2011	1355	X	X	X									Demolition Area 2	Moist, dark brown, silty loam, organics, no odor.
11344564	CT09SS	J8KS6	SS	0-6 inches	AM	8/24/2011	1425	X	X	X									Central Impact Target Area	Dry, medium brown, silt, no odor.
11344565	CT10SS	J8KS7	SS	0-6 inches	AM	8/24/2011	1442	X	X	X									Central Impact Target Area	Dry, medium brown, silt, no odor.
11344566	CT11SS	J8KS8	SS	0-6 inches	AM	8/24/2011	1513	X	X	X								X	Central Impact Target Area	Moist, brown, silt, gravel, and peat, no odor.
11344567	OB08SS	J8KS9	SS	0-6 inches	AH	8/24/2011	1443	X	X	X									Demolition Area 2	Moist, brown, silty loam with gravel, no odor.
11344568	OB09SS	J8KT0	SS	0-6 inches	AH	8/24/2011	1510	X	X	X									Demolition Area 2	Moist, dark brown, silty loam with fine gravel, no odor.
11344569	EF01SD	J8KT1	SD	0-6 inches	AM	8/24/2011	1559	X	X	X									East Fork Lacamas Creek inside CITA	Saturated, medium brown with red color, sand, small gravel, no odor.
11344570	CT07SS	J8KT2	SS	0-6 inches	AM	8/24/2011	1350	X	X	X									Central Impact Target Area	Dry, light brown, silty loam with gravel, no odor.
11344571	CT08SS	J8KT3	SS	0-6 inches	AM	8/24/2011	1405	X	X	X									Central Impact Target Area	Dry, medium brown, silt with gravel, glass fragment observed, no odor.
11344572	PT01SS	J8KT4	SS	0-6 inches	AH	8/24/2011	1416	X	X	X							X		East Pop-up Targets	Dry, grayish brown, silty loam, no odor.
11344573	PT02SS	J8KT5	SS	0-6 inches	AH	8/24/2011	1630	X	X	X							X		East Pop-up Targets	Dry, light grays, brown, silty loam, no odor.
11344574	EF02SD	J8KT6	SD	0-6 inches	AM	8/24/2011	1640	X	X	X									East Fork Lacamas Creek inside CITA	Saturated, medium brown with red, small to large gravel (1 inch), sand, no odor.
11344575	PT03SS	J8KT7	SS	0-6 inches	AH	8/24/2011	1640	X	X	X							X		East Pop-up Targets	Moist, brown, silty loam, trace fine gravel, no odor.
11344576	PT04SS	J8KT8	SS	0-6 inches	AH	8/24/3011	1655	X	X	X							X		East Pop-up Targets	Moist, dark brown, silty loam, no odor.
11344577	PT06SS	J8KT9	SS	0-6 inches	AH	8/24/2011	1720	X	X	X							X		East Pop-up Targets	Dry, grayish brown, silty loam, no odor.
11344578	PT07SS	J8KW0	SS	0-6 inches	AM	8/24/2011	1723	X	X	X							X		East Pop-up Targets	Dry, light brown, sandy, silty, loam, no odor.
11344579	PT05SS	J8KW1	SS	0-6 inches	AH	8/24/2011	1708	X	X	X							X		East Pop-up Targets	Dry, grayish brown, silty loam, no odor.
11344580	PT09SS	J8KW2	SS	0-6 inches	AM	8/24/2011	1736	X	X	X							X		East Pop-up Targets	Dry, medium brown, silty loam, no odor.
11344581	PT10SS	J8KW3	SS	0-6 inches	AH	8/24/2011	1805	X	X	X							X		1,000 Yard Range	Dry, brown, silty loam, no odor.
11344582	PT11SS	J8KW4	SS	0-6 inches	AH	8/24/2011	1803	X	X	X							X		1,000 Yard Range	Dry, light brown, sandy silty loam, no odor.
11344583	PT08SS	J8KW5	SS	0-6 inches	AM	8/24/2011	1730	X	X	X							X		East Pop-up Targets	Dry, grayish brown, silty loam, no odor.
11344584	PT12SS	J8KW6	SS	0-6 inches	BM	8/25/2011	0905	X	X	X							X		1,000 Yard Range	Dry, light tan/brown, silty loam with gravel, coarse to fine, no odor.
11344585	PT13SS	J8KW7	SS	0-6 inches	BM	8/25/2011	0915	X	X	X							X		1,000 Yard Range	Dry, light brown, silty loam with clay, no odor.
11344586	PT14SS	J8KW8	SS	0-6 inches	BM	8/25/2011	0924	X	X	X							X		1,000 Yard Range	Dry, light brown, silty loam, no odor.
11344587	PT15SS	J8KW9	SS	0-6 inches	BM	8/25/2011	0935	X	X	X							X		1,000 Yard Range	Dry, brown, silty loam, no odor.
11344588	PT16SS	J8KX0	SS	0-6 inches	BM	8/25/2011	0940	X	X	X							X		1,000 Yard Range	Dry, brown, silty loam, no odor.
11344589	PT17SS	J8KX1	SS	0-6 inches	BM	8/25/2011	0945	X	X	X							X		1,000 Yard Range	Dry, light brown, silty loam with trace fine gravel, organics present, no odor.
11344590	PT18SS	J8KX2	SS	0-6 inches	BM	8/25/2011	0952	X	X	X							X		1,000 Yard Range	Dry, light brown, silty loam, trace fine gravel, no odor.
11344591	LC01SD	J8KX3	SD	0-6 inches	AM	8/25/2011	1000	X	X	X				X	X				Lacamas Creek	Saturated, medium reddish brown, medium to coarse grain sand with gravel, no odor.
11344592	LC02SD	J8KX4	SD	0-6 inches	BM	8/25/2011	1050	X	X	X				X	X				Lacamas Creek	Saturated, grayish brown, silty sand (ultra fine), some clay, no odor.
11344593	LC03SW	J8KX5	SW	NA	AM	8/25/2011	1050	X	X	X									Lacamas Creek	Clear, no odor.
11344594	LC03SW-D	MJ8KX6	SW	NA	AM	8/25/2011	1050				X									

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11344595	LC03SD	J8KX7	SD	0-6 inches	AM	8/25/2011	1100	X	X	X				X	X				Lacamas Creek	Saturated, medium brown, poorly sorted gravelly, medium coarse grained sand, no odor.
11344596	LC04SD	J8KX8	SD	0-6 inches	AM	8/25/2011	1217	X	X	X				X	X				Lacamas Creek	Saturated, medium brown, medium-fine grained sand with gravel
11344597	LC05SD	J8KX9	SD	0-6 inches	BM	8/25/2011	1150	X	X	X				X	X				Lacamas Creek	Saturated, brown, sandy gravel, rounded, coarse to fine sand, fine to medium, mostly medium with silt, no odor.
11344598	LC06SD	J8KY0	SD	0-6 inches	BM	8/25/2011	1305	X	X	X				X	X				Lacamas Creek	Saturated, grayish brown, silty sand, sand medium. no odor.
11344599	LC07SD	J8KY1	SD	0-6 inches	BM	8/25/2011	1328	X	X	X				X	X				Lacamas Creek	Saturated, brown, silty sand, sand fine, no odor.
11344600	LC08SD	J8KY2	SD	0-6 inches	AM	8/25/2011	1325	X	X	X				X	X				Lacamas Creek	Saturated, medium brown, gravelly sand, no odor.
11344601	LC09SD	J8KY3	SD	0-6 inches	AM	8/25/2011	1343	X	X	X				X	X				Lacamas Creek	Saturated, medium brown, medium grain sand with some silt, no odor.
11344602	LC10SD	J8KY4	SD	0-6 inches	BM	8/25/2011	1421	X	X	X				X	X				Lacamas Creek	Saturated, brown, silty sand, medium sand, no odor.
11344603	BC01SD	J8KY5	SD	0-6 inches	BM	8/25/2011	1435	X	X	X				X	X				Buck Creek	Saturated, brown, silty sand with gravel, trace clay, no odor.
11344604	LC12SD	J8KY6	SD	0-6 inches	AM	8/25/2011	1430	X	X	X				X	X				Lacamas Creek	Saturated, medium brown, silty sand, medium grain, no odor.
11344605	LC11SW	J8KY7	SW	NA	BM	8/25/2011	1455	X	X	X								X	Lacamas Creek	Clear, no odor,
11344606	LC11SW-D	MJ8KY8	SW	NA	BM	8/25/2011	1455				X									
11344607	LC11SD	J8KY9	SD	0-6 inches	BM	8/25/2011	1512	X	X	X				X	X				Lacamas Creek	Saturated, brown, sandy silt, medium to fine sand, trace clay, high organics, no odor.
11344608	LC13SD	J8KZ0	SD	0-6 inches	AM	8/25/2011	1530	X	X	X				X	X			X	Lacamas Creek	Saturated, medium brown, silty sand and gravel, no odor.
11344609	LC14SW	J8KZ1	SW	NA	AH	8/25/2011	1545	X	X	X									Lacamas Creek	Clear, no odor
11344610	LC14SW-D	MJ8KZ2	SW	NA	AH	8/25/2011	1545				X									
11344611	LC14SD	J8KZ3	SD	0-6 inches	AM	8/25/2011	1550	X	X	X				X	X				Lacamas Creek	Saturated, medium brown, silty sand and gravel, no odor.
11344612	LC15SW	J8KZ4	SW	NA	BM	8/25/2011	1625	X	X	X									Lacamas Creek	Clear, no odor.
11344613	LC15SW-D	MJ8KZ5	SW	NA	BM	8/25/2011	1625				X									
11344614	LC15SD	J8KZ6	SD	0-6 inches	BM	8/25/2011	1630	X	X	X				X	X				Lacamas Creek	Moist, dark brown, medium to coarse sand with fine gravel, no odor.
11344615	DC01SD	J8KZ7	SD	0-6 inches	AM	8/25/2011	1630	X	X	X				X	X				David Creek @ Pop-up Pond	Saturated, medium brown, coarse sand with gravel, no odor.
11344616	DC02SD	J8KZ8	SD	0-6 inches	AM	8/25/2011	1650	X	X	X				X	X				David Creek @ Pop-up Pond	Saturated, grayish brown, Soft clay, 10% gravel, trace sand, no odor.
11344617	EF03SD	J8KZ9	SD	0-6 inches	BM	8/25/2011	1650	X	X	X				X	X				East Fork Lacamas Creek	Saturated, brown, gravelly sand with a trace of silt, gravel medium to fine, sand medium to coarse, no odor.
11344618	NF01SD	J8L00	SD	0-6 inches	JF	8/25/2011	1724	X	X	X				X	X				North Fork Lacamas Creek	Saturated, dark brown, silty sand, trace gravel, organics, no odor.
11344619	DC03SD	J8L01	SD	0-6 inches	AH	8/25/2011	1727	X	X	X				X	X			X	David Creek @ Pop-up Pond	Saturated, medium brown, red brown, Clay with sand and gravel, no odor. MS/MSD
11344620	DC04SD	J8L02	SD	0-6 inches	AH	8/25/2011	1748	X	X	X				X	X				David Creek	Saturated, reddish brown, gravel and sand, no odor.
11344621	BG01SD_2	J8L03	SD	0-6 inches	AM	8/26/2011	0940	X	X	X				X	X				David Creek background	Saturated, reddish brown, silty clay with trace sands, no odor.
11344622	NF02SW	J8L04	SW	NA	BM	8/26/2011	0948	X	X	X		X	X						North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Clear, no odor.
11344623	NF02SW-D	MJ8L05	SW	NA	BM	8/26/2011	0948				X									
11344624	NF02SD	J8L06	SD	0-6 inches	BM	8/26/2011	0950	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Saturated, dark brown, small to medium sized gravel, abundant silt and sand, trace of organics, no odor.
11344625	BG02SD	J8L07	SD	0-6 inches	AM	8/26/2011	1015	X	X	X				X	X				Buck Creek background	Saturated, reddish brown, silty clay and medium grain sand, no odor.
11344626	NF03SW	J8L08	SW	NA	BM	8/26/2011	1032	X	X	X		X	X						North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Clear, no odor.
11344627	NF03SW-D	MJ8L09	SW	NA	BM	8/26/2011	1032				X									
11344628	NF03SD	J8L10	SD	NA	MZ	8/26/2011	1034	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Moist, medium brown, sand, silt, no odor.
11344629	NF04SW	J8L11	SW	NA	BM	8/26/2011	1150	X	X	X		X	X						North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Clear, no odor.
11344630	NF04SW-D	MJ8L12	SW	NA	BM	8/26/2011	1150				X									
11344631	NF04SD	J8L13	SD	0-6 inches	MZ	8/26/2011	1200	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Moist/Saturated, medium brown, silt, sand, gravel, no odor.
11344632	BG01SS	J8L14	SS	0-6 inches	AM	8/26/2011	1130	X	X	X									Background	Dry, medium brown, silty loam, no odor.
11344633	NF05SW	J8L15	SW	NA	BM	8/26/2011	1229	X	X	X		X	X						North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Clear, no odor.
11344634	NF05SW-D	MJ8L16	SW	NA	BM	8/26/2011	1229				X									
11344635	NF05SD	J8L17	SD	0-6 inches	MZ	8/26/2011	1235	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Saturated, brown, silt, sand, no odor.
11344636	BG03SD	J8L18	SD	0-6 inches	AM	8/26/2011	1248	X	X	X				X	X				East Fork Lacamas Creek background	Saturated, medium brown, silty sand and gravel, no odor.

Table 3-1 Sample Collection and Analytical Summary

EPA Sample ID	Station Location	CLP Sample ID	Matrix	Sample Depth (bgs)	Sampler	Sample Date	Sample Time	Nitroaromatics /Nitramines	Total Metals	Perchlorate	Dissolved Metals	SVOCS	VOCS	Grain Size	TOC	Field Perchlorate	XRF	MS/MSD	Location	Description
11344637	NF06SD	J8L19	SD	0-6 inches	MZ	8/26/2011	1400	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Moist, brown, sandy, silty, no odor.
11344638	NF07SW	J8L20	SW	NA	BM	8/26/2011	1429	X	X	X		X	X						North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Clear, no odor.
11344639	NF07SW-D	MJ8L21	SW	NA	BM	8/26/2011	1429				X									
11344640	NF07SD	J8L22	SD	0-6 inches	BM	8/26/2011	1422	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Very saturated, brown, sandy, silty, fine grain, small to medium gravel, eastern bank, no odor.
11344641	NF08SD	J8L23	SD	0-6 inches	BM	8/26/2011	1456	X	X	X		X	X	X	X				North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Saturated, brown, sandy, silty, small gravel, no odor.
11344642	NF09SW	J8L24	SW	NA	BM	8/26/2011	1540	X	X	X		X	X					X	North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Clear, no odor. MS/MSD for SVOC,VOC
11344643	NF09SW-D	MJ8L25	SW	NA	BM	8/26/2011	1540				X									
11344644	NF09SD	J8L26	SD	0-6 inches	MZ	8/26/2011	1531	X	X	X		X	X	X	X			X	North Fork Lacamas Creek at Demolition Area 1/Landfill 4	Moist, reddish/brown, silt, clay, no odor,
11344645	BG04SW	J8L27	SW	NA	BM	8/26/2011	1610	X	X	X		X	X						Background	Clear, no odor.
11344646	BG04SW-D	MJ8L28	SW	NA	BM	8/26/2011	1610				X									
11344647	BG04SD	J8L29	SD	0-6 inches	MZ	8/26/2011	1605	X	X	X		X	X	X	X				North Fork Lacamas Creek background	Moist, dark brown, silt, clay, trace of organics, no odor.
11344648	TB01WT	J8L30	WT	NA	RN	8/29/2011	1350						X						Not applicable	Trip Blank

Note: Sample depth is presented in feet below ground surface.
The metals analysis for the CLP sample number is the same with an "M" prefix.

Key:

AJ = Alan Jensen.
AM = Andrew McDonald.
BC = Bryan Ciecko.
BM = Brad Martin.
CLP = Contract Laboratory Program.
DP = Derek Pulvino.
EL = Erin Lynch.
EPA = United States Environmental Protection Agency.
GW = Ground Water.
ID = Identification.
MZ = Mark Zawistoski.
RN = Renee Nordeen.
SB = Subsurface soil.
SD = Sediment.
SVOC = Semivolatile Organic Compounds.
TOC = Total Organic Carbon.
VOC = Volatile Organic Compounds.
X = The sample was analyzed for this parameter.
XRF = X-ray Fluorescence.
bgs = below ground surface.

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Table 3-2 Sample Coding

Digits	Description	Code	Example
1,2	Source Code	BC	Buck Creek
		BG	Background
		CT	Central Impact Target Area
		DC	David Creek
		EF	East Fork Lacamas Creek
		FB	Firing Bank
		FP	Firing Point
		FR	Firing Range
		LC	Lacamas Creek
		LF	Landfill 4
		MW	Monitoring Well
		NF	North Fork Lacamas Creek
		OB	Open Burn/Open Detonation Area
		OP	Overland Pathway
		PP	Probable Point of Entry
		PT	Pop-up Pond Targets
		PU	Pop-up Pond
		RS	Rinsate
		TB	Trip Blank
3,4	Consecutive Number	01	First number of source code
5,6	Matrix Code	GW	Ground Water
		SB	Subsurface Soil
		SD	Sediment
		SS	Surface Soil
		SW	Surface Water
		SW-D	Surface Water – Dissolved Metals Analysis
		WT	Water

Table 4-1 Camp Bonneville Perchlorate Analytical Results

EPA Sample ID	CLP Sample ID	Station Location	Field Result	Fixed Laboratory Result
			Micrograms per kilogram	
11204307	JDQ57	LF01SB	0.71	**0.47**
11204309	JDQ59	LF02SB	0.71	0.425
11204311	JDQ61	LF03SB	0.58	0.365
11204313	JDQ63	LF04SB	0.64	**7.1**
11204315	JDQ65	LF05SB	0.57	**7**
11204317	JDQ67	LF06SB	0.58	**1.6**
11204319	JDQ69	LF07SB	0.59	0.385
11204322	JDQ72	LF08SB	0.61	**0.12**
11204323	JDQ73	LF09SB	0.59	**0.77**
11204329	JDQ79	LF12SB	0.64	0.425
11204331	JDQ81	LF13SB	0.74	**0.93**
11204333	JDQ83	LF14SB	0.66	**0.11**
11204343	JDQA3	BG01SD	0.64	**0.11**
11204327	JDQ77	PP01SD	**1810**	**0.78**

Correlation Coefficient = -0.082985687

Key:

Bold values indicate positive results.

Non-bold values are converted values of one-half of the reporting limit for the original sample results less then the reporting limit.

Table 6-1 Demolition Area 1/Landfill 4 Subsurface Soil Samples Analytical Results Summary

EPA Sample ID	11204301	11204307	11204309	11204311	11204313	11204315	11204317	11204319	11204322	11204323	11204329	11204331	11204333
CLP Sample ID	JDQ51	JDQ57	JDQ59	JDQ61	JDQ63	JDQ65	JDQ67	JDQ69	JDQ72	JDQ73	JDQ79	JDQ81	JDQ83
Station Location	BG01SB	LF01SB	LF02SB	LF03SB	LF04SB	LF05SB	LF06SB	LF07SB	LF08SB	LF09SB	LF12SB	LF13SB	LF14SB
Sample Depth (feet bgs)	2.6	1.5	2.0	1.8	1.6	2.2	1.8	1.4	0.7	0.3	2.1	1.6	2.3
Description	Background												
Nitroaromatics/Nitramines (µg/kg)													
RDX	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	**250**	80 U	80 U	80 U	80 U
Perchlorate (µg/kg)													
Perchlorate	0.82 U	0.47 JQ	0.85 U	0.73 U	**7.1**	**7.0**	**1.6**	0.77 U	0.12 JQ	0.77 JQ	0.85 U	0.93 JQ	0.11 JQ
Target Analyte List Metals (mg/kg)													
Aluminum	**82300**	**69500**	**80600**	**75900**	**71800**	**69000**	**55000**	**57800**	**81200**	**74200**	**59100**	**66800**	**85400**
Arsenic	**4.8**	4.5 U	**4.8**	**6.2**	**5.0**	**5.0**	4.5 U	**6.5**	**5.7**	4.4 U	4.5 U	4.4 U	**5.9**
Barium	**154**	**162**	**171**	**174**	**231**	**191**	**132**	**174**	**139**	**169**	**139**	**174**	**160**
Beryllium	**1.21**	**1.15**	**1.19**	**1.08**	**1.17**	**1.44**	**0.931**	**0.837**	**1.27**	**1.03**	**0.882**	**1.15**	**0.842**
Calcium	**1940**	**3660**	**5380**	**6130**	**2950**	**3350**	**2990**	**2910**	**2020**	**2590**	**4740**	**4960**	**839**
Chromium	**38.0**	**28.4**	**33.3**	**42.6**	**37.7**	**32.9**	**34.8**	**33.9**	**46.9**	**48.1**	**23.4**	**27.7**	**37.7**
Cobalt	**28.4**	**20.8**	**30.2**	**29.4**	**23.7**	**33.1**	**15.9**	**15.8**	**36.7**	**33.0**	**15.3**	**23.3**	**34.5**
Copper	**123**	**106**	**121**	**110**	**115**	**116**	**75.7**	**84.0**	**149**	**105**	**86.7**	**104**	**121**
Iron	**76900**	**55100**	**68400**	**76900**	**65900**	**68000**	**58000**	**62800**	**82600**	**66500**	**42200**	**54200**	**74500**
Lead	**7.8**	**5.0**	**8.7**	**3.7**	**5.1**	**7.0**	**3.4**	**6.3**	**24.2**	**25.5**	**3.1**	**7.3**	**11**
Lithium	**18.3**	**14.7**	**16.1**	**15.8**	**15.4**	**14.8**	**11.1**	**12.6**	**15.7**	**13.7**	**13.7**	**14.7**	**17.3**
Magnesium	**4660**	**4980**	**5620**	**5850**	**5070**	**4880**	**3640**	**3760**	**4410**	**4370**	**4320**	**4650**	**2650**
Manganese	**645**	**516**	**1260**	**1080**	**552**	**1470**	**398**	**412**	**1580**	**1030**	**305**	**839**	**1460**
Mercury	**0.0731**	**0.0334**	**0.0540**	**0.0186**	**0.0303**	**0.0688**	**0.0180**	**0.0358**	**0.105**	**0.0691**	**0.0296**	**0.0625**	**0.0553**
Nickel	**17.4**	**14.8**	**17.0**	**15.7**	**16.2**	**16.5**	**11.9**	**12.7**	**19**	**14.8**	**13.2**	**15.2**	**21.9**
Potassium	**742**	**781**	**897**	**970**	**832**	**818**	**726**	**840**	**638**	**1000**	**761**	**777**	**636**
Selenium	**5.0**	5.0 U	**6.4**	**6.0**	**5.1**	**5.5**	5.0 U	4.9 U	**6.8**	**5.9**	**9.5**	**5.5**	**6.0**
Sodium	**259**	**461**	**462**	**639**	**434**	**293**	**319**	**381**	**170**	**238**	**452**	**376**	**140 JH**
Strontium	**70.6**	**97.2**	**99.1**	**131**	**77.0**	**91.3**	**64.9**	**74.9**	**65.2**	**83.4**	**88.4**	**110**	**26**
Thallium	**6.5 JL**	**5.2 JL**	**6.8 JL**	5.0 UJL	**6.1 JL**	**8.4 JL**	**6.9 JL**	**6.8 JL**	**7.8 JL**	**8.6 JL**	**6.9 JL**	**9.0 JL**	**6.1 JL**
Titanium	**2950**	**2360**	**2620**	**2470**	**2520**	**2560**	**1930**	**1900**	**3250**	**2410**	**1980**	**2160**	**2370**
Vanadium	**212**	**186**	**200**	**204**	**215**	**217**	**158**	**193**	**250**	**192**	**165**	**169**	**221**
Zinc	**82.0**	**88.8**	**101**	**85.4**	**95.2**	**107**	**69.5**	**71.8**	**88.7**	**82.9**	**70.3**	**85.3**	**96.5**
Semivolatile Organic Compounds (µg/kg)													
Bis(2-ethylhexyl)phthalate	290 U	110 JQ	**400**	130 JQ	**1600**	**1200**	240 U	270 U	140 JQ	290 U	280 U	**1400**	270 U
Volatile Organic Compounds (µg/kg)													
Acetone	21 U	22 U	28 U	15 U	22 U	16 U	17 U	19 U	22 U	19 U	20 UJK	**450 JK**	**140 JK**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

Key:

µg/kg = micrograms per kilogram.
bgs = below ground surface.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
H = High bias.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-2 Central Impact Target Area Surface Soil Samples Analytical Results Summary

EPA Sample ID	11344632	11344556	11344557	11344558	11344559	11344560	11344561	11344570	11344571	11344564	11344565	11344566
CLP Sample ID	J8L14	J8KR8	J8KR9	J8KS0	J8KS1	J8KS2	J8KS3	J8KT2	J8KT3	J8KS6	J8KS7	J8KS8
Station Location	BG01SS	CT01SS	CT02SS	CT03SS	CT04SS	CT05SS	CT06SS	CT07SS	CT08SS	CT09SS	CT10SS	CT11SS
Description	Background	Central Impact Target Area										
Nitroaromatics/Nitramines (µg/kg)												
3,5-Dinitrobenzenamine [1]	80 U	80 U	80 U	80 U	80 U	80 U	**130**	80 U	80 U	80 U	80 U	**240**
Perchlorate (µg/kg)												
Perchlorate	0.14 JQ (0.69 SQL)	0.28 JQ	0.7 UJL	0.41 JQ	0.17 JQ	0.078 JQ	0.33 JQ	0.19 JQ	0.18 JQ	0.25 JQ	0.63 UJL	**0.87 JL**
Target Analyte List Metals (mg/kg)												
Aluminum	**43800 JL**	**30400 JL**	**33800 JL**	**32100 JL**	**33200 JL**	**36300 JL**	**34900 JL**	**35700**	**45700 JL**	**34500**	**33500**	**29800 JL**
Arsenic	**5.1**	**2.8**	**3.8**	**3.1**	**3.6**	**4.0**	**3.6**	**2.9**	**4.4**	**2.5**	**2.2**	**4.1**
Barium	**205**	**146**	**156**	**148**	**150**	**123**	**179**	**126**	**175**	**161**	**132**	**133**
Beryllium	0.72 U	0.63 U	0.76 U	0.28 JQ	0.63 U	0.63 U	0.61 U	0.53 JQ	0.63 U	**0.63**	**0.67**	0.46 JQ
Calcium	**2390**	**2350**	**2490**	**2560**	**791**	501 JQ	**1540**	**1930**	**1930**	**2200**	**2660**	**3400**
Chromium	**21.3**	**29.3 JK**	**30.3 JK**	**32.9 JK**	**26.5 JK**	**26.8 JK**	**29.4 JK**	**31.8**	**32.6**	**21.7**	**38.8**	**24.7 JL**
Cobalt	**38.0**	**36.0**	**41.3**	**40.6**	**31.5**	**29.5**	**40.5**	**23.3**	**18.3**	**25.9**	**41.5**	**19.0**
Copper	**99.4**	**69.6**	**81.8**	**93.5**	**61.2**	**53.3**	**74.5**	**74.3**	**72.1**	**91.3**	**105**	**62.5 JL**
Iron	**59600 JL**	**51900 JL**	**56000 JL**	**57000 JL**	**54000 JL**	**60000 JL**	**60200 JL**	**53900 JL**	**43200 JL**	**61100 JL**	**72400 JL**	**51100 JL**
Lead	**9.9**	**13.7**	**13.5**	**106**	**12.0**	**11.5**	**13.7**	**14.0**	**26.2**	**14.0**	**9.6**	**11.9**
Lithium	**7.9**	**5.3**	**6.9**	**7.2**	**5.9**	**6.0**	**6.6**	**8.5**	**6.4**	**9.4**	**6.9**	**5.5**
Magnesium	**3680**	**1790**	**2860**	**3050**	**1760**	**1540**	**2140**	**2140**	**1980**	**3570**	**3070**	**2600**
Manganese	**2290 JL**	**2510 JL**	**2780 JL**	**2930 JL**	**1570 JL**	**1820 JL**	**2130 JL**	**1130 JL**	**1270 JL**	**1390 JL**	**1910 JL**	**684 JL**
Nickel	5.3 JQ (5.8 SQL)	**6.2**	**7.7**	**8.4**	**7.6**	4.8 JQ	**10.7**	**9.0**	**17.2**	**10.3**	**9.5**	4.4 JQ
Strontium	**30.8 JL**	**25.2 JL**	**37.9 JL**	**45.8 JL**	**21.7 JL**	**11.7 JL**	**27.4 JL**	**23.5 JL**	**21.2 JL**	**41.9 JL**	**55.1 JL**	**62.4 JL**
Titanium	**3130 JL**	**1740 JL**	**2480 JL**	**2380 JL**	**2180 JL**	**1950 JL**	**2250 JL**	**2300 JL**	**1990 JL**	**2890 JL**	**3020 JL**	**1570 JL**
Vanadium	**219**	**164 JL**	**185 JL**	**196 JL**	**179 JL**	**197 JL**	**180 JL**	**168**	**155**	**193**	**253**	**219 JL**
Zinc	**99.1**	**58.2**	**66.5**	**67.3**	**46.7**	**40.4**	**65.0**	**48.8**	**74.7**	**70.0**	**66.7**	**71.3**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

[1] The common name for this analyte is 3,5-Dinitrotoluene.

Key:

µg/kg = micrograms per kilogram.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimate because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-3 Demolition Areas 2 and 3 Surface Soil Samples Analytical Results Summary

EPA Sample ID	11344632	11344516	11344537	11344540	11344542	11344544	11344562	11344563	11344567	11344568
CLP Sample ID	J8L14	J8KP8	J8KP9	J8KQ2	J8KQ4	J8KQ6	J8KS4	J8KS5	J8KS9	J8KT0
Station Location	BG01SS	OB01SS	OB02SS	OB03SS	OB04SS	OB05SS	OB06SS	OB07SS	OB08SS	OB09SS
Description	Background	Demolition Area 3					Demolition Area 2			
Perchlorate (µg/kg)										
Perchlorate	0.14 JQ (0.69 SQL)	0.24 JQ	0.072 JQ	**0.97**	0.29 JQ	**1.3**	0.07 JQ	0.44 JQ	0.18 JQ	0.24 JQ
Target Analyte List Metals (mg/kg)										
Aluminum	**43800 JL**	**31100**	**25800 JL**	**20800 JL**	**18400 JL**	**21800 JL**	**35800 JL**	**46900 JL**	**52600**	**35600**
Arsenic	**5.1**	**3.7**	**3.4**	**3.8**	**3.6**	**3.3**	**3**	**3.1**	**1.9**	**2.3**
Barium	**205**	**203**	**353**	**206**	**141**	**277**	**138**	**161**	**204**	**161**
Calcium	**2390**	**4150 JK**	**4380**	**4790**	**4200**	**5880**	**5150**	**6790**	**7700**	**3280**
Chromium	**21.3**	**20.2**	**15.7 JL**	**13.8 JL**	**14.9 JL**	**14.6 JK**	**33.6 JK**	**20.8 JK**	**23.6**	**27.9**
Cobalt	**38.0**	**48.4**	**25.3**	**24.7**	**21.0**	**17.7**	**31.5**	**21.1**	**24.9**	**31.3**
Copper	**99.4**	**93.7**	**123 JL**	**108 JL**	**47.2 JL**	**73.3**	**66.2**	**123**	**91.9**	**72.7**
Iron	**59600 JL**	**56300 JL**	**61600 JL**	**58200 JL**	**38900 JL**	**45900 JL**	**52500 JL**	**45300 JL**	**46400 JL**	**54600 JL**
Lead	**9.9**	**13.4**	**11.8**	**10.4**	**13.5**	**18.4**	**11.1**	**158**	**38.5**	**14.4**
Lithium	**7.9**	**7.5**	**5.6**	**4.6**	**6.4**	**4.9**	**10.8**	**9.0**	**6.4**	**5.2**
Magnesium	**3680**	**4070**	**3830**	**3160**	**3020**	**2990**	**5810**	**7520**	**4400**	**3060**
Manganese	**2290 JL**	**2130 JL**	**983 JL**	**1270 JL**	**1050 JL**	**927 JL**	**1770 JL**	**1400 JL**	**1590 JL**	**2040 JL**
Nickel	5.3 JQ (5.8 SQL)	**9.0**	5.9 JQ	**5.0**	**5.7**	**5.5**	**12.2**	**23.7**	**10.9**	**8.8**
Potassium	589 JQ	**710**	558 JQ	**772**	**846**	**1260**	425 JQ	**1170**	**699**	554 JQ
Sodium	719 U	577 U	740 U	582 U	556 U	589 U	682 U	632 U	**643**	699 U
Strontium	**30.8 JL**	**88 JL**	**212 JL**	**98 JL**	**90.4 JL**	**199 JL**	**74 JL**	**110 JL**	**74.3 JL**	**54.7 JL**
Tin	3.6 U	2.9 U	3.7 UJL	2.9 UJL	2.8 UJL	2.9 U	3.4 U	**4.0**	2.4 JQ	3.5 U
Titanium	**3130 JL**	**2240 JL**	**2650 JL**	**2250 JL**	**1380 JL**	**1500 JL**	**1890 JL**	**1800 JL**	**1780 JL**	**1660 JL**
Vanadium	**219**	**201**	**208 JL**	**200 JL**	**125 JL**	**140 JL**	**195 JL**	**123 JL**	**155**	**182**
Zinc	**99.1**	**76.7**	**77.2**	**64.9**	**59.1**	**48.3**	**68.4**	**74.2**	**85.4**	**58.1**

Note: The inorganic CLP ID begins with an "M"
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

Key:

µg/kg = micrograms per kilogram.
EPA = United States Environmental Protection Agency.
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SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-4 Firing Range Surface Soil Samples Analytical Results Summary

EPA Sample ID	11344632	11344518	11344519	11344520	11344521	11344522	11344523	11344525	11344526	11344539	11344541	11344543	11344545	11344546	11344547	11344548	11344549
CLP Sample ID	J8L14	J8KN0	J8KN1	J8KN2	J8KN3	J8KN4	J8KN5	J8KN7	J8KN8	J8KQ1	J8KQ3	J8KQ5	J8KQ7	J8KQ8	J8KQ9	J8KR0	J8KR1
Station Location	BG01SS	FR01SS	FR02SS	FR03SS	FR04SS	FR05SS	FR06SS	FR07SS	FR08SS	FR09SS	FR10SS	FR11SS	FR12SS	FR13SS	FR14SS	FR15SS	FR16SS
Description	Background	1,000-Inch Range								M203 HE Grenade Range							
Nitroaromatics/Nitramines (µg/kg)																	
3,5-Dinitrobenzenamine [1]	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	**160**	**130**
Perchlorate (µg/kg)																	
Perchlorate	0.14 JQ (0.69 SQL)	0.41 JQ	0.55 JQ	0.59 JQ	0.37 JQ	0.13 JQ	0.22 JQ	**1.8**	0.5 JQ	**0.66**	**0.65**	0.12 JQ	0.1 JQ	0.16 JQ	0.24 JQ	0.19 JQ	0.24 JQ
Target Analyte List Metals (mg/kg)																	
Aluminum	**43800 JL**	**14600**	**36200**	**38300**	**34400**	**36800**	**12400**	**20800 JL**	**18600 JL**	**26100 JL**	**30600 JL**	**42700**	**27200 JL**	**27800 JL**	**31200 JL**	**29000 JL**	**32100 JL**
Arsenic	**5.1**	**2.2**	**3.4**	**3.1**	**3.4**	**3.2**	**2.0**	**3.4**	**3.5**	**3.6**	**3.3**	**2.4**	**3.4**	**3.9**	**4.1**	**3.6**	**4.3**
Barium	**205**	**96.2**	**209**	**147**	**152**	**117**	**80.1**	**122**	**115**	**149**	**153**	**145**	**170**	**134**	**142**	**161**	**165**
Calcium	**2390**	**3920 JK**	**4350 JK**	**3780 JK**	**2200 JK**	**1610 JK**	**8980 JK**	**3100**	**3920**	**4430**	**3560**	**3810**	**5470**	**3120**	**3130**	**3850**	**4220**
Chromium	**21.3**	**13.1**	**25.9**	**21.2**	**25.9**	**25.8**	**3.8**	**18.2 JL**	**18.6 JL**	**22.2 JL**	**23.2 JL**	**45.1**	**21 JK**	**22.6 JK**	**22.3 JK**	**22.4 JK**	**25 JK**
Cobalt	**38.0**	**18.7**	**32.6**	**41.5**	**39.7**	**28.1**	**18.4**	**25.6**	**22.4**	**26.0**	**27.8**	**31.6**	**26.7**	**11.5**	**23.2**	**12.3**	**17.2**
Copper	**99.4**	**46.9**	**268**	**446**	**281**	**112**	**148**	**92.5 JL**	**67.1 JL**	**68.9 JL**	**74.9 JL**	**105**	**73.4**	**48.9**	**63.4**	**46.4**	**57.5**
Iron	**59600 JL**	**34700 JL**	**55700 JL**	**59500 JL**	**61700 JL**	**57400 JL**	**39900 JL**	**46000 JL**	**41700 JL**	**45900 JL**	**49300 JL**	**58300 JL**	**44200 JL**	**47800 JL**	**51400 JL**	**47600 JL**	**57600 JL**
Lead	**9.9**	**121**	**750**	**2310**	**1280**	**139**	**39.0**	**110**	**83.8**	**14.0**	**14.9**	**11.8**	**14.3**	**14.5**	**14.3**	**17.2**	**16.8**
Lithium	**7.9**	**3.4**	**7.2**	**5.3**	**5.8**	**8.1**	**7.4**	**4.6**	**4.4**	**5.9**	**6.6**	**8**	**5.6**	**6.7**	**5.9**	**6.5**	**7.6**
Magnesium	**3680**	**3780**	**3230**	**3560**	**3540**	**4310**	**2990**	**2990**	**3070**	**2750**	**2720**	**3030**	**2670**	**2110**	**2350**	**2370**	**2600**
Manganese	**2290 JL**	**611 JL**	**1220 JL**	**1630 JL**	**1760 JL**	**1050 JL**	**390 JL**	**1100 JL**	**961 JL**	**1350 JL**	**1340 JL**	**1810 JL**	**1160 JL**	**516 JL**	**1060 JL**	**620 JL**	**1080 JL**
Nickel	5.3 JQ (5.8 SQL)	**13.3**	**35.7**	**61.1**	**34.4**	**17.3**	1.5 JQ	**8.3**	**9.8**	4.7 JQ	**5.3**	**12.5**	**5.1**	3.9 JQ	4.2 JQ	4.5 JQ	5.1 JQ
Potassium	589 JQ	**650**	587 U	231 JQ	281 JQ	342 JQ	361 JQ	302 JQ	389 JQ	**663**	458 JQ	689 JQ	280 JQ	261 JQ	647 U	246 JQ	231 JQ
Sodium	719 U	193 JQ	587 U	228 JQ	631 U	597 U	**1720**	567 U	558 U	632 U	597 U	287 JQ	617 U	695 U	647 U	642 U	638 U
Strontium	**30.8 JL**	**41.3 JL**	**83 JL**	**43.3 JL**	**34.1 JL**	**29.2 JL**	**99.7 JL**	**55.5 JL**	**57 JL**	**65.7 JL**	**57.1 JL**	**32.6 JL**	**76.9 JL**	**58.3 JL**	**52.6 JL**	**70.3 JL**	**69.4 JL**
Tin	3.6 U	2.7 U	1.4 JQ	1.4 JQ	3.2 U	3 U	1.4 JQ	**1.1 JL**	2.8 UJL	3.2 UJL	3 UJL	2.3 JQ	3.1 U	3.5 U	3.2 U	3.2 U	3.2 U
Titanium	**3130 JL**	**2430 JL**	**2190 JL**	**2000 JL**	**2240 JL**	**1960 JL**	**3350 JL**	**1710 JL**	**2020 JL**	**1810 JL**	**2040 JL**	**3430 JL**	**1690 JL**	**1290 JL**	**1530 JL**	**1250 JL**	**1590 JL**
Vanadium	**219**	**114**	**210**	**193**	**225**	**180**	**186**	**157 JL**	**142 JL**	**174 JL**	**184 JL**	**223**	**169 JL**	**187 JL**	**191 JL**	**188 JL**	**220 JL**
Zinc	**99.1**	**65.9**	**97.7**	**100**	**89.5**	**72.7**	**69.0**	**74.0**	**69.6**	**89.0**	**93.6**	**75.4**	**79.9**	**69.1**	**74.1**	**90.5**	**108**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

[1] The common name for this analyte is 3,5-Dinitrotoluene.

Key:

µg/kg = micrograms per kilogram.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-5 Artillery Position Surface Soil Samples Analytical Results Summary

EPA Sample ID	11344632	11344500	11344501	11344502	11344503	11344504	11344524	11344527	11344528	11344530	11344532	11344550	11344551	11344552	11344553	11344554	11344555
CLP Sample ID	J8L14	J8KL2	J8KL3	J8KL4	J8KL5	J8KL6	J8KN6	J8KN9	J8KP0	J8KP2	J8KP4	J8KR2	J8KR3	J8KR4	J8KR5	J8KR6	J8KR7
Station Location	BG01SS	FP01SS	FP02SS	FP03SS	FP04SS	FP05SS	FP06SS	FP07SS	FP08SS	FP09SS	FP10SS	FP11SS	FP12SS	FP13SS	FP14SS	FP15SS	FP16SS
Description	Background	Artillery Position 7					Artillery Position 6					Artillery Position 5					
Nitroaromatics/Nitramines (µg/kg)																	
2,4-Dinitrotoluene	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	**350**	80 U
3,5-Dinitrobenzenamine [1]	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	80 U	**250**
Perchlorate (µg/kg)																	
Perchlorate	0.14 JQ (0.69 SQL)	0.096 JQ	0.067 JQ	0.088 JQ	0.66 U	0.13 JQ	0.24 JQ	0.37 JQ	0.069 JQ	0.18 JQ	0.25 JQ	0.076 JQ	0.14 JQ	0.16 JQ	0.22 JQ	**0.7**	0.27 JQ
Target Analyte List Metals (mg/kg)																	
Aluminum	**43800 JL**	**20600**	**19900**	**18300**	**18200**	**21300**	**14100 JL**	**17500 JL**	**12900 JL**	**14700 JL**	**13100 JL**	**16000 JL**	**21600 JL**	**17000 JL**	**17500 JL**	**17000 JL**	**8670 JL**
Arsenic	**5.1**	**2.7**	**2.9**	**2.6**	**3.2**	**3.1**	**2.9**	**3.2**	**2.7**	**4.1**	**2.9**	**4.1**	**4.4**	**4.4**	**4.1**	**4.5**	**3**
Barium	**205**	**201**	**304**	**185**	**185**	**251**	**110**	**97.4**	**106**	**116**	**104**	**173**	**179**	**156**	**212**	**196**	**123**
Beryllium	0.72 U	**0.67**	**0.72**	0.53 JQ	0.53 JQ	0.63 JQ	0.27 JQ	0.24 JQ	0.29 JQ	0.2 JQ	0.29 JQ	0.58 JQ	0.51 JQ	0.47 JQ	**0.65**	**0.74**	0.55 U
Calcium	**2390**	**1790**	**1670**	**1080**	**1410**	**1620**	**3100**	**3180**	**2750**	**2090**	**2210**	**1930**	**1540**	**1670**	**1470**	**1370**	**2970**
Chromium	**21.3**	**16.8**	**15.9**	**15.8**	**15.4**	**17.1**	**10.4 JL**	**13.2 JL**	**9.8 JL**	**10.9 JL**	**10.1 JL**	**16.8 JK**	**19.5 JK**	**17.6 JK**	**17.4 JK**	**17.6 JK**	**10.5 JK**
Cobalt	**38.0**	**20.2**	**31.6**	**17.4**	**18.4**	**34.7**	**8.4**	**10.8**	3.9 JQ	**9.1**	4.6 JQ	**22.2**	**20.5**	**20.7**	**24.3**	**21.7**	**13.8**
Copper	**99.4**	**43.9**	**40.2**	**30.8**	**32.4**	**45.4**	**27.4 JL**	**32.7 JL**	**23.5 JL**	**22.3 JL**	**38.2 JL**	**35.4**	**33.9**	**40.4**	**29.8**	**28.4**	**43.7**
Iron	**59600 JL**	**37200 JL**	**43800 JL**	**34100 JL**	**35300 JL**	**44300 JL**	**37000 JL**	**35800 JL**	**28200 JL**	**55000 JL**	**29100 JL**	**30600 JL**	**39000 JL**	**35300 JL**	**32600 JL**	**34700 JL**	**33200 JL**
Lead	**9.9**	**13.3**	**22.1**	**14.9**	**13.2**	**13.9**	**13.3**	**20.2**	**16.7**	**25.2**	**40.2**	**19.0**	**14.4**	**17.0**	**20.3**	**15.8**	**6.5**
Lithium	**7.9**	**7.0**	**7.1**	**7.4**	**7.9**	**8.0**	**3.6**	**3.2**	**3.2**	**5.9**	**3.4**	**7.8**	**9.7**	**7.9**	**9.1**	**8.9**	**2.8**
Magnesium	**3680**	**2220**	**2190**	**2140**	**2340**	**2230**	**1530**	**1670**	**1340**	**1920**	**1240**	**1960**	**2690**	**2310**	**2010**	**1800**	**2180**
Manganese	**2290 JL**	**1580 JL**	**3110 JL**	**1530 JL**	**1480 JL**	**2550 JL**	**851 JL**	**657 JL**	**324 JL**	**630 JL**	**335 JL**	**1310 JL**	**1940 JL**	**1710 JL**	**2120 JL**	**2070 JL**	**369 JL**
Nickel	5.3 JQ (5.8 SQL)	**7.0**	**8.0**	**7.4**	**7.0**	**7.5**	2.3 JQ	3.1 JQ	3.7 JQ	3.5 JQ	**8.3**	**6.7**	**9.6**	**6.9**	**7.6**	**7.5**	**5.8**
Potassium	589 JQ	602 JQ	**969**	617 JQ	602 JQ	**755**	247 JQ	236 JQ	254 JQ	560 U	222 JQ	410 JQ	**648**	580 JQ	492 JQ	426 JQ	268 JQ
Strontium	**30.8 JL**	**32.9 JL**	**35.7 JL**	**22.8 JL**	**26 JL**	**37.9 JL**	**42.3 JL**	**49.4 JL**	**44.1 JL**	**46.1 JL**	**38.4 JL**	**25.5 JL**	**22.6 JL**	**23.2 JL**	**17.7 JL**	**20.7 JL**	**32.7 JL**
Titanium	**3130 JL**	**1370 JL**	**1170 JL**	**1180 JL**	**1350 JL**	**1310 JL**	**583 JL**	**888 JL**	**422 JL**	**549 JL**	**428 JL**	**587 JL**	**1110 JL**	**884 JL**	**548 JL**	**488 JL**	**2090 JL**
Vanadium	**219**	**122**	**122**	**92.6**	**91.7**	**126**	**135 JL**	**131 JL**	**102 JL**	**138 JL**	**99.9 JL**	**88.7 JL**	**104 JL**	**98.6 JL**	**86.4 JL**	**92.8 JL**	**106 JL**
Zinc	**99.1**	**64.1**	**77.2**	**116**	**65.9**	**62.5**	**47.6**	**49.8**	**41.0**	**45.3**	**43.5**	**61.6**	**61.1**	**63.7**	**78.9**	**58.5**	**64.9**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

[1] The common name for this analyte is 3,5-Dinitrotoluene.

Key:

µg/kg = micrograms per kilogram.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-6 Firing Banks Surface Soil Samples Analytical Results Summary

EPA Sample ID	11344632	11344529	11344531	11344533	11344534	11344535	11344538
CLP Sample ID	J8L14	J8KP1	J8KP3	J8KP5	J8KP6	J8KP7	J8KQ0
Station Location	BG01SS	FB01SS	FB02SS	FB03SS	FB04SS	FB05SS	FB06SS
Description	Background	Firing Bank					
Perchlorate (µg/kg)							
Perchlorate	0.14 JQ (0.69 SQL)	0.55 JQ	**0.67**	0.44 JQ	0.36 JQ	0.36 JQ	0.31 JQ
Target Analyte List Metals (mg/kg)							
Aluminum	**43800 JL**	**26300 JL**	**28900 JL**	**29900 JL**	**32400 JL**	**29100 JL**	**27900 JL**
Antimony	8.6 UJL	**7.9 JL**	**7.6 JL**	**13.5 JL**	7.3 UJL	7.9 UJL	7.2 UJL
Arsenic	**5.1**	**4.4**	**3.7**	**4.2**	**2.9**	**3.6**	**3.1**
Barium	**205**	**151**	**197**	**122**	**128**	**146**	**167**
Calcium	**2390**	**1700**	**2600**	**2260**	**1940**	**2620**	**1450**
Chromium	**21.3**	**21.7 JL**	**23.1 JL**	**21.6 JL**	**19.2 JL**	**19.2 JL**	**22.1 JL**
Cobalt	**38.0**	**41.5**	**29.1**	**31.4**	**34.8**	**35.1**	**38.1**
Copper	**99.4**	**498 JL**	**322 JL**	**443 JL**	**288 JL**	**184 JL**	**81.1 JL**
Iron	**59600 JL**	**63400 JL**	**52100 JL**	**60300 JL**	**58300 JL**	**60800 JL**	**58100 JL**
Lead	**9.9**	**2820**	**1830**	**1990**	**851**	**588**	**25.2**
Lithium	**7.9**	**5.3**	**6.2**	**5.3**	**5.7**	**5.0**	**5.8**
Magnesium	**3680**	**3240**	**1970**	**3210**	**4250**	**4890**	**1900**
Manganese	**2290 JL**	**1720 JL**	**1830 JL**	**1200 JL**	**1360 JL**	**2020 JL**	**2380 JL**
Nickel	5.3 JQ (5.8 SQL)	**70.4**	**44.9**	**46.7**	**33.0**	**18.5**	**7.0**
Strontium	**30.8 JL**	**33.6 JL**	**27.5 JL**	**44.3 JL**	**44.2 JL**	**46.2 JL**	**20.5 JL**
Tin	3.6 U	**1.4 JL**	**1.3 JL**	**1.5 JL**	3.0 UJL	**1.3 JL**	3.0 UJL
Titanium	**3130 JL**	**2220 JL**	**2590 JL**	**2030 JL**	**1740 JL**	**1690 JL**	**2030 JL**
Vanadium	**219**	**218 JL**	**182 JL**	**197 JL**	**172 JL**	**180 JL**	**188 JL**
Zinc	**99.1**	**86.0**	**75.6**	**79.8**	**74.1**	**74.3**	**64.9**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

Key:

µg/kg = micrograms per kilogram.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated value is an estimated quantity.
L = Low bias.
mg/kg = milligrams per kilogram.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-7 Pop-Up Pond Sediment Samples Analytical Results Summary

EPA Sample ID	11344621	11344505	11344506	11344507	11344511	11344513	11344515	11344508	11344509	11344510	11344512	11344514	11344517
CLP Sample ID	J8L03	J8KL6	J8KL8	J8KL9	J8KM3	J8KM5	J8KM7	J8KM0	J8KM1	J8KM2	J8KM4	J8KM6	J8KM9
Station Location	BG01SD_2	PU01SD	PU02SD	PU03SD	PU07SD	PU09SD	PU11SD	PU04SD	PU05SD	PU06SD	PU08SD	PU10SD	PU12SD
Description	Background	Pop-up Pond						Pop-up Pond Island			Outfall 1	Outfall 2	Outfall 3
Target Analyte List Metals (mg/kg)													
Aluminum	**44300**	**21500**	**26400**	**32100**	**45100**	**41300**	**50100**	**35100**	**38700**	**38400**	**29400**	**41900**	**33600**
Arsenic	**3.3**	4.3 U	**4.0**	**4.1**	**4.4**	**3.4**	**4.8**	**3.2**	**2.8**	**3.7**	**4.7**	**3.9**	**3.5**
Barium	**135**	**92.6**	**136**	**162**	**133**	**139**	**122**	**118**	**150**	**162**	**80.6**	**130**	**119**
Beryllium	0.79 U	2.2 U	0.49 JQ	0.63 JQ	0.8 JQ	0.73 JQ	0.9 U	0.53 JQ	**0.84**	**0.67**	**0.84**	0.71 U	0.80 U
Calcium	**1070**	1850 JQ	**1980**	**1980**	**2250**	**8130**	**6550 JK**	**1810**	**3070**	**2830**	**6500**	**1860 JK**	**3000 JK**
Chromium	**23.4**	**18.4**	**26.3**	**32.8**	**26.6**	**27.3**	**26.4**	**20.9**	**28.5**	**26**	**20.5**	**26.4**	**22**
Cobalt	**21.6**	11 JQ	**15.7**	**22.9**	**26.3**	**22.6**	**33.5**	**23.1**	**23.9**	**26.8**	**18.6**	**25.9**	**22.3**
Copper	**71.0 JH**	**47.1**	**45.2**	**69.3**	**109**	**116**	**99.2**	**94.5**	**86.5**	**96.6**	**80.5**	**83.5**	**78.1**
Iron	**50200 JL**	**28700 JL**	**44000 JL**	**60400 JL**	**80900 JL**	**63700 JL**	**80000 JL**	**71400 JL**	**46400 JL**	**77600 JL**	**68400 JL**	**56100 JL**	**48000 JL**
Lead	**11.5 JK**	**26.6**	**26.9**	**9.4**	**9.6**	**107**	**14.6**	**11.3**	**9.5**	**10.8**	**7.0**	**15.2**	**19.9**
Lithium	**7.4**	**5.5**	**8.4**	**7.4**	**6.4**	**7.1**	**5.9**	**4.9**	**6.5**	**6.7**	**7.8**	**6.6**	**4.8**
Magnesium	**2080**	**2180**	**3500**	**3070**	**2800**	**2900**	**3020**	**2410**	**2630**	**2600**	**3020**	**2820**	**2720**
Manganese	**1380 JL**	**282 JL**	**687 JL**	**778 JL**	**460 JL**	**476 JL**	**418 JL**	**531 JL**	**404 JL**	**305 JL**	**631 JL**	**547 JL**	**421 JL**
Nickel	**7.7**	7.4 JQ	**11.6**	**11.9**	**9.0**	9.8 JQ	6.5 JQ	**6.1**	**10.6**	**9.7**	4.8 JQ	**10.5**	**7.5**
Strontium	**13.2 JL**	**33.4 JL**	**36 JL**	**55.3 JL**	**68.5 JL**	**73.3 JL**	**65.6 JL**	**47.1 JL**	**61.9 JL**	**66.4 JL**	**69.2 JL**	**41.9 JL**	**51.2 JL**
Titanium	**2230 JL**	**1150 JL**	**1110 JL**	**1510 JL**	**2450 JL**	**2540 JL**	**1830 JL**	**1960 JL**	**1910 JL**	**1800 JL**	**1920 JL**	**1940 JL**	**1900 JL**
Vanadium	**182**	**103**	**108**	**152**	**272**	**215**	**237**	**188**	**212**	**214**	**197**	**193**	**182**
Zinc	**58.2**	**50.6**	**51.0**	**39.3**	**44.2**	**56.4**	**52.3**	**39.6**	**54.1**	**48.6**	**64.0**	**58.4**	**54.9**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

Key:
µg/kg = micrograms per kilogram.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 6-8 Pop-Up Targets and 1,000-Yard Range Surface Soil Samples Analytical Results Summary

EPA Sample ID	11344632	11344572	11344573	11344575	11344576	11344579	11344577	11344578	11344583	11344580	11344581	11344582	11344584	11344585	11344586	11344587	11344588	11344589	11344590
CLP Sample ID																			
Station Location	BG01SS	PT01SS	PT02SS	PT03SS	PT04SS	PT05SS	PT06SS	PT07SS	PT08SS	PT09SS	PT10SS	PT11SS	PT12SS	PT13SS	PT14SS	PT15SS	PT16SS	PT17SS	PT18SS
Description	Background	Pop-Up Targets East									1,000-Yard Range								
Perchlorate (µg/kg)																			
Perchlorate	0.14 JQ (0.69 SQL)	**0.65**	0.31 JQ	0.29 JQ	0.36 JQ	0.26 JQ	0.16 JQ	0.059 JQ	0.36 JQ	0.16 JQ	0.31 JQ	0.24 JQ	0.33 JQ	0.25 JQ	0.26 JQ	0.19 JQ	0.34 JQ	0.17 JQ	0.15 JQ
TAL Metals (mg/kg)																			
Aluminum	**43800 JL**	**33900 JL**	**36200 JL**	**31100 JL**	**28000 JL**	**27100 JL**	**25900 JL**	**25200 JL**	**23400 JL**	**20000 JL**	**36500 JL**	**39300 JL**	**43400**	**44900**	**40200**	**41800**	**28000**	**33100**	**32800**
Arsenic	**5.1**	**2.3**	**2.1**	**2.8**	**2.7**	**2.7**	**3.5**	**2.6**	**2.7**	**3.5**	**4.2**	**3.3**	**2.8**	**2.9**	**2.5**	**2.5**	**3.7**	**1.6**	**2.5**
Barium	**205**	**221**	**224**	**208**	**195**	**184**	**171**	**143**	**111**	**78.5**	**114**	**153**	**161**	**135**	**145**	**144**	**131**	**144**	**167**
Calcium	**2390**	**2290**	**1580**	**1330**	**1600**	**1970**	**1880**	**1640**	**1900**	**2520**	**2190**	**1130**	**2410 JK**	**2850 JK**	**2470 JK**	**2910 JK**	**1630 JK**	**2170 JK**	**1580 JK**
Chromium	**21.3**	**25.3**	**28**	**25.3**	**25.3**	**24.6**	**25.5**	**24.7**	**29.1 JL**	**41.3**	**27.8**	**31.6 JL**	**25.4**	**26.6**	**30.6**	**27.2**	**26.5**	**24.7**	**26.6**
Cobalt	**38**	**28.1**	**32.8**	**31.9**	**28.5**	**30**	**36.9**	**27.4**	**29.7**	**28.9**	**21.5**	**37.6**	**26.1**	**33.9**	**20.7**	**22.9**	**22.4**	**18.7**	**17.5**
Copper	**99.4**	**361**	**231**	**79.3**	**243**	**57.5**	**66.4**	**392**	**48.8**	**540**	**61**	**244**	**87.1**	**87.1**	**96.2**	**94.4**	**195**	**67.5**	**42.3**
Iron	**59600 JL**	**41200 JL**	**46300 JL**	**41500 JL**	**39800 JL**	**38600 JL**	**41600 JL**	**36400 JL**	**38600 JL**	**32700 JL**	**46100 JL**	**61800 JL**	**50600 JL**	**52000 JL**	**51900 JL**	**56900 JL**	**42600 JL**	**33000 JL**	**49500 JL**
Lead	**9.9**	**1020**	**1090**	**263**	**750**	**278**	**235**	**669**	**48.5**	**314**	**48.1**	**542**	**93.3**	**20.3**	**21.1**	**12.3**	**444**	**27.5**	**16.5**
Lithium	**7.9**	**6.4**	**7**	**5.4**	**6**	**6.6**	**6.3**	**6.6**	**7.1**	**4.4**	**7.8**	**5.6**	**6.1**	**6.7**	**6.4**	**6.9**	**8**	**6.3**	**5.8**
Magnesium	**3680**	**2730**	**2890**	**2150**	**2300**	**2510**	**2350**	**2460**	**2480**	**2160**	**3260**	**2230**	**2950**	**3040**	**2930**	**3220**	**2940**	**2430**	**1720**
Manganese	**2290 JL**	**1870 JL**	**2000 JL**	**1800 JL**	**1720 JL**	**2000 JL**	**2180 JL**	**1630 JL**	**1380 JL**	**1370 JL**	**700 JL**	**1220 JL**	**490 JL**	**747 JL**	**278 JL**	**453 JL**	**807 JL**	**213 JL**	**329 JL**
Nickel	5.3 JQ (5.8 SQL)	**38.9**	**28.8**	**12.6**	**30.1**	**12.3**	**15.1**	**54.4**	**8**	**35.7**	**11.5**	**10.9**	**9.9**	**9.4**	**9.6**	**7.8**	**26.3**	**8.9**	**7.9**
Potassium	589 JQ	**689**	**733**	**643**	477 JQ	**732**	475 JQ	533 JQ	438 JQ	267 JQ	279 JQ	564 U	211 JQ	562 U	571 U	581 U	394 JQ	180 JQ	564 U
Strontium	**30.8 JL**	**54.7 JL**	**46.3 JL**	**40 JL**	**41.8 JL**	**36.8 JL**	**33.5 JL**	**34.2 JL**	**38.6**	**39.5 JL**	**32.1 JL**	**30**	**49.8 JL**	**69.5 JL**	**51.7 JL**	**72 JL**	**35.2 JL**	**47.9 JL**	**43.6 JL**
Titanium	**3130 JL**	**1660 JL**	**1900 JL**	**1220 JL**	**1410 JL**	**1270 JL**	**1140 JL**	**1070 JL**	**1220 JL**	**894 JL**	**1870 JL**	**2370 JL**	**2030 JL**	**2250 JL**	**2270 JL**	**2440 JL**	**1020 JL**	**1970 JL**	**1270 JL**
Vanadium	**219**	**131**	**147**	**136**	**128**	**123**	**133**	**118**	**130 JL**	**139**	**157**	**217 JL**	**193**	**206**	**228**	**215**	**129**	**152**	**221**
Zinc	**99.1**	**83.6**	**98.6**	**66.4**	**73.8**	**64.4**	**58.5**	**65.5**	**56**	**49.4**	**56.6**	**68**	**68.4**	**72.3**	**67.8**	**75.6**	**79.3**	**72.8**	**45.8**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is significant as defined in Section 5.

Key:

µg/kg = micrograms per kilogram.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 7-1 Ground Water Drinking Water Population by Distance Ring

Distance Ring	Number of Wells	Well Population	Total Population for Distance Ring
0 to ¼ mile	Community B – 9	50	404
	Domestic – 150	354	
¼ to ½ mile	Community B – 6	40	335
	Domestic – 125	295	
½ to 1 mile	Community A – 2	21	1,168
	Community B – 24	163	
	Domestic – 417	984	
1 to 2 miles	Community A – 3	80	2,761
	Community B – 66	401	
	Domestic – 966	2,280	
2 to 3 miles	Community A – 6	493	2,345
	Community B – 35	193	
	Domestic – 703	1,659	
3 to 4 miles	Community A – 7	236	2,614
	Community B – 42	235	
	Domestic – 908	2,143	
TOTAL	**3,469**		**9,627**

Source: DOC 2001; Ecology 2009.

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Table 7-2 Demolition Area 1/Landfill 4 Ground Water Samples Analytical Results Summary

EPA Sample ID	11204300	11204306	11204308	11204310	11204312	11204314	11204316	11204318	11204328	11204330	11204332	11204334
CLP Sample ID	JDQ50	JDQ56	JDQ58	JDQ60	JDQ62	JDQ64	JDQ66	JDQ68	JDQ78	JDQ80	JDQ82	JDQ84
Station Location	BG01GW	LF01GW	LF02GW	LG03GW	LF04GW	LF05GW	LF06GW	LF07GW	LF12GW	LF13GW	LF14GW	LF15GW
Description	Background											
Nitroaromatics/Nitramines (µg/L)												
RDX	0.81 U	0.89 U	1.0 U	**1.7**	**3.7**	**5.2**	**4.9**	**3.1**	0.77 U	**1.4**	0.78 UJK	0.80 U
Perchlorate (µg/L)												
Perchlorate	**0.063 JH**	**2.4**	**2.2**	**3.0 JH**	**22 JH**	**36 JH**	**40 JH**	**27 JH**	0.050 U	**0.82 JH**	**0.60 JH**	**8.2 JH**
Target Analyte List Metals (µg/L)												
Aluminum	**2980**	**7280**	**3530**	**22400**	**41400**	**6150**	**2950**	**10400**	**28000**	**39200**	**20400**	**3690**
Barium	**12.5**	**18.2**	**9.5**	**59.9**	**155**	**17.9**	**11.0**	**36.6**	**87.6**	**103**	**50.8**	5.0 U
Calcium	**1800**	**3390**	**6200**	**3600**	**3360**	**1490**	**1360**	**1860**	**9150**	**3200**	**1460**	**2440**
Chromium	10 U	10 U	10 U	10 U	**19**	10 U	10 U	10 U	**12**	**14**	10 U	10 U
Cobalt	5.0 U	5.0 U	5.0 U	**8.2**	**17**	5.0 U	5.0 U	5.0 U	**12**	**9.8**	**6.5**	5.0 U
Copper	5.0 U	**9.2**	**5.0**	**32.0**	**66.8**	**7.2**	5.0 U	**14**	**52.6**	**59.8**	**30.7**	5.0 U
Iron	**2180**	**5720**	**3290**	**15800**	**33300**	**3080**	**1920**	**7290**	**22000**	**23200**	**16800**	**2920**
Lithium	3.0 U	3.0 U	3.0 U	**4.6**	**7.9**	3.0 U	3.0 U	3.0 U	**6.0**	**8.3**	**4.3**	3.0 U
Magnesium	**870**	**1480**	**2150**	**2250**	**3280**	**828**	**792**	**1330**	**4510**	**2860**	**1600**	**1200**
Manganese	**48.4**	**178**	**83.6**	**297**	**425**	**29.5**	**22.4**	**68.4**	**581**	**272**	**194**	**143**
Mercury	0.050 U	0.050 U	0.050 U	0.050 U	**0.0551**	0.050 U	0.050 U	0.050 U	**0.0536**	**0.0684**	0.050 U	0.050 U
Nickel	10 U	10 U	10 U	10 U	**12**	10 U	10 U	10 U	**19**	**12**	10 U	10 U
Potassium	700 U	700 U	700 U	700 U	**880**	700 U	700 U	700 U	700 U	**830**	700 U	700 U
Sodium	**1410**	**1900**	**2710**	**1910**	**2910**	**1980**	**2080**	**2130**	**3260**	**1900**	**1530**	**2150**
Strontium	**22**	**28**	**24**	**48**	**65**	**24**	**19**	**34**	**72**	**51**	**23**	**34**
Titanium	**204**	**502**	**219**	**1540**	**2870**	**321**	**180**	**554**	**1810**	**2410**	**1390**	**156**
Vanadium	10 U	**25**	**13**	**52.3**	**185**	**11**	**10**	**21**	**90.3**	**106**	**67.3**	10 U
Zinc	**5.3**	**12**	**5.9**	**27.4**	**60.4**	**9.0**	5.0 U	**13**	**48.9**	**55.7**	**25.0**	5.0 U
Semivolatile Organic Compounds (µg/L)												
Bis(2-ethylhexyl)phthalate	**13**	R	**5.9**	4.9 JQ	2.1 JQ	R	2.9 JQ	2.8 JQ	**47**	**6.7**	**7.4**	2.9 JQ

Note: The metals CLP Sample ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:
µg/L = micrograms per liter.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
H = High bias.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
K = Unknown bias.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
R = The data are unusable for all purposes.
U = The analyte was not detected at or above the reported limit.

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Table 7-3 Shallow Monitoring Wells Ground Water Samples Analytical Results Summary

EPA Sample ID	11204302	11204336	11204338	11204339	11204340	11204342
CLP Sample ID	JDQ52	JDQ86	JDQ88	JDQ89	JDQ90	JDQ92
Station Location	BG02GW	MW01GW	MW03GW	MW04GW	MW05GW	MW07GW
Depth to Ground Water	16.22	23.1	24.12	24.8	27.31	10.16
Description	Background L4-MW01A	L4-MW05A	L4-MW03A	L4-MW02A	L4-MW04A	MW-17
Nitroaromatics/Nitramines (µg/L)						
HMX	0.75 U	0.8 U	0.82 U	**3**	0.81 U	0.92 U
RDX	0.75 U	**3.2**	**7.5**	**13**	**2.6**	0.92 U
Perchlorate (µg/L)						
Perchlorate	**39**	**31**	**0.35**	**190**	**38**	**0.064**
Target Analyte List Metals (µg/L)						
Aluminum	**1630**	**31**	30 U	**61**	**2530**	**204**
Barium	**8.80**	5.0 U	5.0 U	5.0 U	**9.90**	**9.90**
Calcium	**3210**	**2030**	**1630**	**2190**	**1370**	**32600**
Iron	**1050**	20 U	20 U	20 U	**1900**	**182**
Magnesium	**1710**	**964**	**755**	**482**	**778**	**3880**
Manganese	**13.1**	2.0 U	2.0 U	**12.2**	**22.4**	**20.2**
Potassium	700 U	700 U	700 U	700 U	**710**	700 U
Sodium	**2380**	**1940**	**1420**	**4890**	**1110**	**10100**
Strontium	**39**	**23**	**19**	**28**	15 U	15 U
Titanium	**69.2**	10 U	10 U	10 U	**177**	**11**
Semivolatile Organic Compounds (µg/L)						
Bis(2-ethylhexyl)phthalate	**13**	5.0 U	2.6 JQ	4.6 JQ	**7.7**	**78**

Note: The metals CLP Sample ID begins with an "M".
Depth to ground water is provided in feet from the top of the casing.
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

µg/L = micrograms per liter.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
U = The analyte was not detected at or above the reported result.

Table 7-4 Deep Monitoring Well Ground Water Samples Analytical Results Summary

EPA Sample ID	11204303	11204341	11204337	11204349	11204344
Station Location	BG03GW	MW06GW	MW02GW	MW08GW	MW09GW
CLP Sample ID	JDQ54	JDQ91	JDQ87	JDQ93	JDQ94
Depth to Ground Water	12.19	30.89	26.08	38.75	11.14
Description	Background L4-MW01B	L4-MW02B	L4-MW03B	L4-MW07B	MW-18
Nitroaromatics/Nitramines (µg/L)					
HMX	0.79 U	**6.2**	0.78 U	0.84 U	0.77 U
RDX	0.79 U	**59**	**4.7**	0.84 U	0.77 U
Perchlorate (µg/L)					
Perchlorate	**0.33**	**470**	**4.2**	**2.2**	**0.17**
Target Analyte List Metals (µg/L)					
Aluminum	30 U	30 U	**95**	30 U	**7710**
Barium	5.0 U	5.0 U	5.0 U	5.0 U	**21.5**
Calcium	**2000**	**4360**	**5570**	**2470**	**16800**
Iron	20 U	**2040**	**48**	20 U	**3090**
Magnesium	**1110**	**2190**	**2480**	**1340**	**5240**
Manganese	2.0 U	**2970**	**2.0**	2.0 U	**36.0**
Potassium	700 U	700 U	**730**	700 U	**740**
Sodium	**1410**	**2070**	**3570**	**2160**	**5420**
Strontium	**27**	**31**	**53**	**31**	**76.6**
Titanium	10 U	10 U	10 U	10 U	**183**
Vanadium	10 U	10 U	10 U	10 U	**13**
Semivolatile Organic Compounds (µg/L)					
Bis(2-ethylhexyl)phthalate	2.1 JQ (SQL = 5)	4.4 JQ	5.0 U	**7.6**	5.0 U
Volatile Organic Compounds (µg/L)					
1,1,1-Trichloroethane	5.0 U	**8.1**	5.0 U	5.0 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0 U	**44**	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	**15**	5.0 U	5.0 U	5.0 U
Chloroform	5.0 U	5.0 U	5.0 U	**14**	5.0 U
Dichlorodifluoromethane	5.0 U	**19**	5.0 U	5.0 U	5.0 U

Note: The metals CLP ID begins with an "M".
The depth to ground water is provided in feet from the top of the casing.
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

µg/L = micrograms per liter.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

Table 7-5 Overland Pathway Surface Soil Sample Analytical Results Summary

EPA Sample ID	11344632	11344536
CLP Sample ID	J8L14	J8KP8
Station Location	BG01SS	OP01SS
Description	Background	Overland Pathway
TAL Metals (mg/kg)		
Aluminum	**43800 JL**	**16800 JL**
Arsenic	**5.1**	**3.6**
Barium	**205**	**131**
Calcium	**2390**	**4180**
Chromium	**21.3**	**13.4 JL**
Cobalt	**38.0**	**10.9**
Copper	**99.4**	**38.0 JL**
Iron	**59600 JL**	**38900 JL**
Lead	**9.9**	**20.0**
Lithium	**7.9**	**3.7**
Magnesium	**3680**	**2000**
Manganese	**2290 JL**	**668 JL**
Strontium	**30.8 JL**	**69.7 JL**
Titanium	**3130 JL**	**972 JL**
Vanadium	**219**	**143 JL**
Zinc	**99.1**	**56.0**

Note: Bold type indicates the sample result is above the contract required quantitation limit.

Key:

CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
L = Low bias.
mg/kg = milligrams per kilogram.

Table 7-6 Sport Catch Data

Species	Number Harvested	Average Pound per Fish	Pounds Harvested
Washougal River			
Chinook salmon (*Oncorhynchus tshawytscha*)	1,853 x 1% = 18.53	22	408
Coho salmon (*Oncorhynchus kisutch*)	172 x 1% = 1.72	10	17
Steelhead trout (*Oncorhynchus mykiss*)	1,076 x 1% = 10.76	7.5	81
Columbia River			
Chinook salmon (*Oncorhynchus tshawytscha*)	17,160 x 0.5% = 858	22	1,888
Coho salmon (*Oncorhynchus kisutch*)	2,501 x 0.5% = 1250.05	10	125
White sturgeon (*Acipenser transmontanus)*	2,934 x 0.5% = 146.7	67[a]	983
Steelhead trout (*Oncorhynchus mykiss*)	5,179 x 0.5% = 258.95	7.5	194
Total			**3,696**

Source: Wydoski 2003, WDFW 2005.

[a] Average weight of sturgeon is calculated assuming an average catch length of 5’1”.

Table 7-7 Threatened and Endangered Species by Distance Ring

Distance Ring	Species Name	Status
0 to ¼ mile	Hairy-stemmed Checker-mallow	State-listed threatened
	Small-flowered Trillium	State-listed Species of concern
¼ to ½ mile	None	
½ to 1 mile	Dense Sedge	State-listed Threatened
1 to 2 miles	Western Gray Squirrel	State-listed Threatened
	Western Wahoo	State-listed Threatened
	Lower Columbia River ESU Steelhead	Federal-listed Threatened
	Bradshaw's Lomatium	Federal-listed Endangered
	Dense Sedge	State-listed Threatened
	Hall's Aster	State-listed Threatened
	Oregon Coyote-thistle	State-listed Threatened
2 to 3 miles	Lower Columbia River ESU Steelhead	Federal-listed Threatened
3 to 4 miles	Lower Columbia River ESU Steelhead	Federal-listed Threatened
	Lower Columbia River ESU Chinook	Federal-listed Threatened
	Lower Columbia River ESU Chum	Federal-listed Threatened
	Bradshaw's Lomatium	Federal-listed Endangered
	Dense Sedge	State-listed Threatened

Source: Maguire 2009

Table 7-8 Demolition Area 1/Landfill 4 Sediment Samples Analytical Results Summary

EPA Sample ID	11204343	11204326	11204327
CLP Sample ID	JDQA3	JDQ76	JDQ77
Station Location	BG01SD	LF01SD	PP01SD
Description	Background	Seep	PPE
Perchlorate (µg/kg)			
Perchlorate	0.11 JQ (1.4 SQL)	**1.5**	**0.78**
Target Analyte List Metals (mg/kg)			
Aluminum	**53000**	**108000**	**77800**
Arsenic	4.5 U	**4.7**	**4.7**
Barium	**137**	**62.8**	**180**
Beryllium	**0.813**	**0.581**	**0.859**
Calcium	**7900**	**6140**	**7180**
Chromium	**24.1**	**34.7**	**41**
Cobalt	**22.8**	**47.2**	**44.4**
Copper	**88.4**	**189**	**101**
Iron	**51700**	**96700**	**71200**
Lead	**6.7**	**4.1**	**3.9**
Lithium	**12.1**	**9.99**	**15.6**
Magnesium	**4630**	**10700**	**5390**
Manganese	**1140**	**495**	**1650**
Mercury	**0.0552**	0.0098 U	**0.0164**
Nickel	**12.4**	**25.9**	**15.6**
Potassium	**886**	**783**	**1180**
Selenium	**5**	**7.5**	**7**
Sodium	**388**	**691**	**675**
Strontium	**105**	**430**	**220**
Thallium	**7.8 JL**	4.9 UJL	**6.2 JL**
Titanium	**2040**	**4060**	**2220**
Vanadium	**149**	**200**	**185**
Zinc	**84.5**	**99.8**	**85.7**
Semivolatile Organic Compounds (µg/kg)			
Bis(2-ethylhexyl)phthalate	550 U	270 U	**1900**
Volatile Organic Compounds (µg/kg)			
Acetone	**470 JK**	17 U	16 U

Note: The metals CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

µg/kg = micrograms per kilogram.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SLQ = Sample Quantitation Limit.

Table 7-9 Surface Water Samples Analytical Results Summary

Total Metals EPA Sample ID	11344645	11344622	11344626	11344629	11344633	11344638	11344642	11344648	11344605	11344609	11344612
Total Metals CLP Sample ID	J8L27	J8L04	J8L08	J8L11	J8L15	J8L20	J8L24	J8KX5	J8KY7	J8KZ1	J8KZ4
Total Metals Station Location	BG04SW	NF02SW	NF03SW	NF04SW	NF05SW	NF07SW	NF09SW	LC03SW	LC11SW	LC14SW	LC15SW
Dissolved Metals EPA Sample ID	11344646	11344623	11344627	11344630	11344634	11344639	11344643	11344594	11344606	11344610	11344613
Dissolved Metals CLP Sample ID	MJ8L28	MJ8L05	MJ8L09	MJ8L12	MJ8L16	MJ8L21	MJ8L25	MJ8KX6	MJ8KY8	MJ8KZ2	MJ8KZ5
Dissolved Metals Station Location	BG04SW-D	NF02SW-D	NF03SW-D	NF04SW-D	NF05SW-D	NF07SW-D	NF09SW-D	LC03SW-D	LC11SW-D	LC14SW-D	LC15SW-D
Description	Background			North Fork Lacamas Creek					Lacamas Creek		
Perchlorate (µg/L)											
Perchlorate	0.05 JQ (0.021 SQL)	**0.13 JL**	**0.086 JL**	0.026 JQ	0.024 JQ	0.025 JQ	0.023 JQ	**0.079 JL**	**0.089 JL**	**0.11 JL**	**0.13 JL**
Total Target Analyte List Metals (µg/L)											
Calcium	**6960**	**7580**	**7540**	**7490**	**7380**	**7270**	**6970**	**7730**	**7940**	**7130**	**7380**
Iron	**267**	**461**	**487**	**504**	**508**	**436**	**263**	**421**	**326**	**352**	**404**
Manganese	15 U	**17.2**	12.6 JQ	**16.4**	**16.3**	**15.4**	15 U	10.8 JQ	**22.5**	**15.4**	15 U
Strontium	**32.2**	**35.5**	**35.1**	**36.4**	**35.7**	**35.7**	**32.3**	**34.3**	**33.4**	**35.2**	**36.5**
Dissolved Target Analyte List Metals (µg/L)											
Calcium	**6900**	**7320**	**7310**	**7350**	**7340**	**7230**	**6870**	**7520**	**7540**	**6910**	**7240**
Iron	**333**	**635**	**608**	**641**	**627**	**550**	**346**	**574**	**494**	**492**	**532**
Manganese	11.7 JQ (15 SQL)	**26.3**	**19.9**	**21.8**	**24.2**	**21.2**	**16.1**	**16.2**	**30.6**	**31.4**	13.9 JQ
Strontium	**32.0**	**36.8**	**36.6**	**36.6**	**36.3**	**35.1**	**33.0**	**37.1**	**34.8**	**36.1**	**36.3**
Semivolatile Organic Compounds (µg/L)											
Diethyphthalate	5 U	**8.2**	2.9 JQ	5 U	5 U	5 U	5 U	NA	NA	NA	NA
Volatile Organic Compounds (µg/L)											
Toluene	5 U	5 U	**44**	5 U	5 U	5 U	5 U	NA	NA	NA	NA

Note: The total metals CLP ID begins with an "M".
Bold type indicates the sample result is above the instrument detection limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

µg/L = micrograms per liter.
CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical result is an estimate.
L = Low bias.
NA = The sample was not analyzed for this analyte.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 7-10 North Fork Lacamas Creek Sediment Samples Analytical Results Summary

EPA Sample ID	11344647	11344618	11344624	11344628	11344631	11344635	11344637	11344640	11344641	11344644
CLP Sample ID	J8L29	J8L00	J8L06	J8L10	J8L13	J8L17	J8L19	J8L22	J8L23	J8L26
Station Location	BG04SD	NF01SD	NF02SD	NF03SD 0-0	NF04SD	NF05SD	NF06SD	NF07SD	NF08SD	NF09SD
Description	Background									
Nitroaromatics/Nitramines (µg/kg)										
3-Nitrotoluene	80 U	80 U	80 U	80 U	80 U	**940**	80 U	80 U	80 U	80 U
TAL Metals (mg/kg)										
Aluminum	**37400 JL**	**54200**	**28000**	**50300 JL**	**24600 JL**	**33100 JL**	**35200**	**41900**	**30100 JL**	**41100 JL**
Arsenic	**4.7**	**2.2**	2.2 JQ	**5.9**	**3.6**	**3.0**	**3.9**	**4.1**	**4.0**	**3.3**
Barium	**119**	**166**	**122**	**121**	**81.6**	**137**	**126**	**106**	**107**	**109**
Calcium	**5620**	**5820**	**6090**	**6870**	**3630**	**5370**	**6570**	**11800**	**4300**	**899**
Chromium	**23.2 JL**	**27.2**	**17.8**	**24.0**	**15.3**	**19.5**	**23.0**	**22.7**	**20.9 JL**	**34.1 JL**
Cobalt	**22.9**	**29.9**	**24.1**	**28.5**	**16.1**	**21.4**	**26.6**	**22.7**	**21.3**	**32.2**
Copper	**55.5**	**83.1 JH**	**52.3 JH**	**70.0**	**54.4**	**60.1**	**57.5 JH**	**81.2 JH**	**108**	**81.1**
Iron	**54400 JL**	**54000 JL**	**36800 JL**	**72300 JL**	**37400 JL**	**41800 JL**	**49200 JL**	**48000 JL**	**51000 JL**	**62600 JL**
Lead	**6.3**	**5.5 JK**	**9.0 JK**	**4.5**	**4.3**	**8.6**	**5.1 JK**	**4.6 JK**	**4.2**	**10.7**
Lithium	**7.1**	**6.3**	**4.4**	**6.0**	**5.4**	**5.3**	**6.7**	**8.2**	**6.8**	**7.4**
Magnesium	**3750**	**6660**	**2670**	**4900**	**2630**	**3110**	**3740**	**4670**	**3750**	**1720**
Manganese	**934 JL**	**1070 JL**	**1510 JL**	**1120 JL**	**617 JL**	**722 JL**	**996 JL**	**848 JL**	**693 JL**	**828 JL**
Nickel	5.2 JQ (6.4 SQL)	**10.9**	14.8 U	**6.8**	2.9 JQ	5.1 JQ	4.4 JQ	4.9 JQ	5.0 JQ	**7.1**
Sodium	772 U	775 U	1850 U	381 JQ	658 U	1470 U	541 JQ	**1320**	685 U	734 U
Strontium	**77.3**	**128 JL**	**74.2 JL**	**168 JL**	**49.2 JL**	**71.7 JL**	**74.9 JL**	**100 JL**	**58.5**	**13.3**
Titanium	**1840 JL**	**2420 JL**	**1480 JL**	**1640 JL**	**1460 JL**	**1920 JL**	**1900 JL**	**1810 JL**	**1980 JL**	**2620 JL**
Vanadium	**181 JL**	**173**	**136**	**190**	**129**	**153**	**173**	**169**	**167 JL**	**226 JL**
Zinc	**68.3**	**73.3**	**68.0**	**69.7**	**46.7**	**74.7**	**65.0**	**57.5**	**61.0**	**61.9**
Volatile Organic Compounds (µg/kg)										
2-Butanone	20 U	NA	52 U	15 U	29 U	**510 JK**	15 U	25 U	NA	18 U
Acetone	20 U	NA	**71**	**120**	**76**	**1100 JK**	**17 JK**	25 U	NA	18 U
TOC (mg/kg)										
Total Organic Carbon	**34500**	**12100**	**68300**	**8080**	**12700**	**43400**	**21300**	**24300**	**22900**	**16300**
Grain Size (percent)										
Gravel	**3.5**	**8.1**	**71.9**	**20.5**	**37.4**	**19.7**	**10.5**	**44.7**	**43.7**	**1.2**
Course sand	**3.6**	**11.9**	**7.2**	**29.3**	**22.0**	**19.6**	**13.2**	**12.2**	**14.9**	**2.1**
Medium sand	**32.0**	**50.0**	**8.9**	**33.5**	**19.6**	**21.7**	**27.1**	**16.2**	**20.4**	**9.8**
Fine sand	**37.9**	**21.7**	**10.2**	**10.7**	**18.6**	**29.5**	**27.1**	**22.6**	**17.8**	**18.0**
Very fine sand	**0.9**	**0.4**	**0.5**	**10.7**	**0.4**	**29.5**	**0.5**	**0.5**	**0.4**	**1.4**
Silt	**20.8**	**7.0**	**1.0**	**5.0**	**0.3**	**4.4**	**20.1**	**0.8**	**1.4**	**43.3**
Clay	**1.3**	**0.9**	**0.3**	**0.6**	**1.7**	**3.9**	**1.5**	**3.0**	**1.5**	**24.2**

Note: The inorganic CLP ID begins with an "M"
Bold type indicates the sample result is above the contract required quantitation limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

CLP = Contract Laboratory Program.
CRQL = Contract Required Quantitation Limit.
EPA = United States Environmental Protection Agency.
H = High bias.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the reported result.

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Table 7-11 East Fork Lacamas Creek Sediment Samples Analytical Results Summary

EPA Sample ID	11344636	11344569	11344574	11344617
CLP Sample ID	J8L18	J8KT1	J8KT6	J8KZ9
Station Location	BG03SD	EF01SD	EF02SD	EF03SD
Description	Background	East Fork Lacamas Creek		
Target Analyte List Metals (mg/kg)				
Aluminum	**37900 JL**	**50500 JL**	**34100 JL**	**27400**
Arsenic	**8.1**	**8.4**	**8.0**	**3.7**
Barium	**116**	**180**	**115**	**96.1**
Calcium	**6730**	**8100**	**7910**	**7810**
Chromium	**14.5**	**34.6**	**18.4**	**22.4**
Cobalt	**27.6**	**35.8**	**25.5**	**41.8**
Copper	**79.5**	**114**	**76.6**	**53.6 JH**
Iron	**54600 JL**	**84900 JL**	**55900 JL**	**51400 JL**
Lead	**6.2**	**5.9**	**4.6**	**5.3 JK**
Lithium	**12.0**	**10.5**	**11.1**	**4.1**
Magnesium	**7320**	**8100**	**5580**	**4200**
Manganese	**943 JL**	**1250 JL**	**821 JL**	**1340 JL**
Nickel	**8.9**	**12.2**	**7.3**	**5.7**
Sodium	353 JQ	486 JQ	**784**	**729**
Strontium	**80.7 JL**	**139 JL**	**96 JL**	**82.6 JL**
Titanium	**2630 JL**	**3930 JL**	**2490 JL**	**1650 JL**
Vanadium	**184**	**283**	**202**	**164**
Zinc	**93.5**	**99.0**	**66.9**	**55.3**
Total Organic Carbon (mg/kg)				
Total Organic Carbon	**15400 JH**	**7190**	**6270 JH**	**6850**
Grain Size (percent)				
Gravel	**52.6**	**21.4**	**72.1**	**37.5**
Course sand	**25.4**	**31.2**	**19.9**	**28.0**
Medium sand	**16.4**	**37.2**	**6.9**	**25.5**
Fine sand	**4.7**	**9.0**	**0.4**	**7.2**
Very fine sand	**0.1**	**0.2**	**0.0**	**0.1**
Silt	**0.4**	**0.1**	**0.1**	**1.5**
Clay	**0.4**	**1.0**	**0.6**	**0.2**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the contract required quantitation limit.

Key:

CLP = Contract Laboratory Program.
CRQL = Contract Required Quantitation Limit.
EPA = United States Environmental Protection Agency.
H = High bias.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.

Table 7-12 David Creek Sediment Samples Analytical Results Summary

EPA Sample ID	11344621	11344615	11344616	11344619	11344620
CLP Sample ID	J8L03	J8KZ7	J8KZ8	J8L01	J8L02
Station Location	BG01SD-2	DC01SD	DC02SD	DC03SD	DC04SD
Description	Background	PPE	PPE	PPE	David Creek
Target Analyte List Metals (mg/kg)					
Aluminum	**44300**	**24500**	**32600**	**44400 JL**	**36200**
Arsenic	**3.3**	**2.4**	**1.7**	**4.4**	**4.1**
Barium	**135**	**83.9**	**121**	**146**	**115**
Calcium	**1070**	**4950**	**3580**	**4700**	**7620**
Chromium	**23.4**	**14.2**	**18.4**	**23.2**	**20.2**
Cobalt	**21.6**	**13.8**	**17.2**	**27.6**	**22.0**
Copper	**71.0 JH**	**32.8 JH**	**70.3 JH**	**72.6**	**56.1 JH**
Iron	**50200 JL**	**30700 JL**	**30200 JL**	**60200 JL**	**55500 JL**
Lead	**11.5 JK**	**7.3 JK**	**7.2 JK**	**7.4**	**4.2 JK**
Lithium	**7.4**	**4.3**	**4.6**	**5.2**	**5.8**
Magnesium	**2080**	**2190**	**3100**	**3300**	**3280**
Manganese	**1380 JL**	**404 JL**	**208 JL**	**573 JL**	**1110 JL**
Nickel	**7.7**	4.5 JQ	**8.4**	**8.4**	**5.4**
Sodium	790 U	290 JQ	768 U	259 JQ	**693**
Strontium	**13.2 JL**	**55.8 JL**	**67.4 JL**	**85.4 JL**	**71.1 JL**
Titanium	**2230 JL**	**1100 JL**	**1430 JL**	**1600 JL**	**1660 JL**
Vanadium	**182**	**103**	**163**	**195**	**175**
Zinc	**58.2**	**35.4**	**47.5**	**45.1**	**55.6**
Total Organic Carbon (mg/kg)					
Total Organic Carbon	**24200**	**15000**	**9190**	**5280**	**33000 JH**
Grain Size (percent)					
Gravel	**4.3**	**30.4**	**54.3**	**61.7**	**41.2**
Course sand	**3.9**	**9.4**	**6.6**	**10.5**	**39.2**
Medium sand	**16.3**	**24.1**	**6.5**	**13.1**	**13.7**
Fine sand	**19.8**	**30.4**	**17.1**	**12.0**	**5.2**
Very fine sand	**1.7**	**0.7**	**1.1**	**0.8**	**0.2**
Silt	**30.9**	**1.2**	**2.6**	**0.3**	**0.3**
Clay	**23.1**	**3.8**	**11.8**	**1.7**	**0.2**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the contract required quantitation limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

CLP = Contract Laboratory Program.
CRQL = Contract Required Quantitation Limit.
EPA = United States Environmental Protection Agency.
H = High bias.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.
U = The analyte was not detected at or above the associated value.

Table 7-13 Buck Creek Sediment Samples Analytical Results Summary

EPA Sample ID	11344625	11344603
CLP Sample ID	J8L07	J8KY5
Station Location	BG02SD	BC01SD
Description	Background	Buck Creek
Target Analyte List Metals (mg/kg)		
Aluminum	**39900 JL**	**31100 JL**
Arsenic	**2.5**	**2.4**
Barium	**121**	**115**
Calcium	**2340**	**2730**
Chromium	**17.3**	**28.2**
Cobalt	**21.6**	**32.4**
Copper	**53.0**	**60.4**
Iron	**50200 JL**	**48800 JL**
Lead	**10.0**	**9.4**
Lithium	**5.9**	**5.1**
Magnesium	**1860**	**2140**
Manganese	**1240 JL**	**1190 JL**
Nickel	4.4 JQ (10.4 SQL)	**5.6**
Strontium	**29.5 JL**	**47.7 JL**
Titanium	**1790 JL**	**1950 JL**
Vanadium	**150**	**180**
Zinc	**44.5**	**47.7**
Total Organic Carbon (mg/kg)		
Total Organic Carbon	**44500**	**19800**
Grain Size (percent)		
Gravel	**3.0**	**23.9**
Course sand	**8.2**	**8.7**
Medium sand	**13.0**	**14.0**
Fine sand	**17.0**	**17.9**
Very fine sand	**1.4**	**1.0**
Silt	**38.8**	**23.3**
Clay	**18.6**	**11.2**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the contract required quantitation limit.

Key:

CLP = Contract Laboratory Program.
EPA = United States Environmental Protection Agency.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
L = Low bias.
mg/kg = milligrams per kilogram.
Q = The result is estimated because the concentration is below the Contract Required Quantitation Limit.
SQL = Sample Quantitation Limit.

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Table 7-14 Lacamas Creek Sediment Samples Analytical Results Summary

EPA Sample ID	11344647	11344636	11344614	11344611	11344608	11344621	11344604	11344607	11344625	11344602	11344601	11344600	11344599	11344598	11344597	11344596	11344595	11344592	11344591
CLP Sample ID	L8L29	JL818	J8KZ6	L8KZ3	J8KZ0	J8L03	J8KY6	J8KY9	J8L07	J8KY4	J8KY3	J8KY2	J8KY1	J8KY0	J8KX9	J8KX8	J8KX7	J8KX4	J8KX3
Station Location	BG04SD	BG03SD	LC15SD	LC14SD	LC13SD	BG01SD_2	LC12SD	LC11SD	BG02SD	LC10SD	LC09SD	LC08SD	LC07SD	LC06SD	LC05SD	LC04SD	LC03SD	LC02SD	LC01SD
Description	Background North Fork Lacamas Creek	Background East Fork Lacamas Creek				Contribution David Creek			Contribution Buck Creek										
Target Analyte List Metals (mg/kg)																			
Aluminum	**37400 JL**	**37900 JL**	**46400**	**41300**	**24200**	**44300**	**33800**	**41400**	**39900 JL**	**25800**	**34300**	**37300 JL**	**30900**	**27300**	**33000**	**25900**	**19500**	**27900**	**27800**
Arsenic	**4.7**	**8.1**	**3.7**	**3.7**	**2.4**	**3.3**	**3.7**	**4.2**	**2.5**	**2.9**	**3.7**	**4.1**	**2.8**	**2.5**	**3**	**4.5**	**2.9**	**2.2**	**3.3**
Barium	**119**	**116**	**120**	**115**	**70.6**	**135**	**144**	**165**	**121**	**107**	**132**	**111**	**137**	**126**	**115**	**108**	**105**	**129**	**159**
Calcium	**5620**	**6730**	**8570**	**11100**	**6250**	**1070**	**6320**	**5840**	**2340**	**4470**	**7260**	**11100**	**4630**	**3630**	**7710 JK**	**5600**	**3770**	**4110 JK**	**3400 JK**
Chromium	**23.2 JL**	**14.5**	**21.5**	**15.8**	**13.8**	**23.4**	**19.2**	**26**	**17.3**	**15.1**	**18.6**	**17.9 JL**	**17**	**15.1**	**18.3**	**16.3**	**11.8**	**15.1**	**14.4**
Cobalt	**22.9**	**27.6**	**38**	**22.9**	**17.6**	**21.6**	**22.4**	**28.4**	**21.6**	**16**	**21.7**	**24.1**	**17.9**	**14.4**	**22.6**	**18**	**20.3**	**13.3**	**16.9**
Copper	**55.5**	**79.5**	**64.8 JH**	**62.1 JH**	**44.9 JH**	**71 JH**	**53.3 JH**	**74.1 JH**	**53.0**	**37.3 JH**	**52.4 JH**	**73.7**	**45.3 JH**	**37.6 JH**	**52.9**	**41.6 JH**	**31.3 JH**	**40.3**	**26.7**
Iron	**54400 JL**	**54600 JL**	**47500 JL**	**40000 JL**	**29400 JL**	**50200 JL**	**36800 JL**	**55200 JL**	**50200 JL**	**30800 JL**	**37400 JL**	**40800 JL**	**33700 JL**	**28600 JL**	**39800 JL**	**35900 JL**	**30100 JL**	**31700 JL**	**38200 JL**
Lead	**6.3**	**6.2**	**5.7 JK**	**4.1 JK**	**2.8 JK**	**11.5 JK**	**6.6 JK**	**7 JK**	**10.0**	**6.1 JK**	**5.5 JK**	**3.8**	**6.5 JK**	**4.8 JK**	**4.8**	**2.8 JK**	**4.3 JK**	**5.4**	**6.6**
Lithium	**7.1**	**12**	**8.5**	**7.5**	**4.8**	**7.4**	**4.9**	**6.3**	**5.9**	**4**	**6.3**	**6.1**	**4.6**	**3.9**	**5.2**	**4.3**	**3**	**4.3**	**3.7**
Magnesium	**3750**	**7320**	**6830**	**4690**	**3230**	**2080**	**3490**	**4380**	**1860**	**2660**	**3380**	**3570**	**2980**	**2190**	**2610**	**2420**	**1700**	**2210**	**1660**
Manganese	**934 JL**	**943 JL**	**1220 JL**	**351 JL**	**394 JL**	**1380 JL**	**675 JL**	**897 JL**	**1240 JL**	**563 JL**	**516 JL**	**571 JL**	**503 JL**	**323 JL**	**1210 JL**	**357 JL**	**847 JL**	**315 JL**	**436 JL**
Nickel	5.2 JQ (6.4 SQL)	**8.9**	**8.4**	**6.9**	**4.7**	**7.7**	6.5 JQ	**7.3**	4.4 JQ (10.4 SQL)	4.6 JQ	**7.2**	**6.3**	5.6 JQ	4.6 JQ	**5.5**	4.7 JQ	3.7 JQ	5.4 JQ	4.5 JQ
Sodium	772 U	353 JQ	**719**	**1560**	**686**	790 U	280 JQ	895 U	1260 U	707 U	629 JQ	**800**	859 U	684 U	289 JQ	571 JQ	644 U	840 U	722 U
Strontium	**77.3**	**80.7 JL**	**136 JL**	**113 JL**	**56.2 JL**	**13.2 JL**	**75.2 JL**	**104 JL**	**29.5 JL**	**76.8 JL**	**102 JL**	**111**	**89.7 JL**	**83.3 JL**	**69.7 JL**	**57.1 JL**	**62.9 JL**	**92.3 JL**	**63.9 JL**
Titanium	**1840 JL**	**2630 JL**	**2150 JL**	**1920 JL**	**1640 JL**	**2230 JL**	**1430 JL**	**2040 JL**	**1790 JL**	**1180 JL**	**1690 JL**	**1920 JL**	**1320 JL**	**1130 JL**	**1760 JL**	**1500 JL**	**918 JL**	**1150 JL**	**1200 JL**
Vanadium	**181 JL**	**184**	**149**	**135**	**111**	**182**	**148**	**195**	**150**	**112**	**138**	**147 JL**	**122**	**107**	**138**	**124**	**110**	**107**	**119**
Zinc	**68.3**	**93.5**	**56.6**	**57**	**45.9**	**58.2**	**58.3**	**74.5**	**44.5**	**45.4**	**55.2**	**55.3**	**54**	**41.5**	**53.7**	**40.7**	**42.2**	**43.6**	**46.5**
Total Organic Carbon (mg/kg)																			
TOC	**34500**	**15400 JH**	**7050**	**11400**	**5470 JH**	**24200**	**17800**	**16400**	**44500**	**12800**	**11700**	**6440**	**36200**	**6790**	**5590**	**8150**	**9230**	**16200**	**9370**
Grain Size (percent)																			
Gravel	**3.5**	**52.6**	**44.3**	**68.5**	**55.8**	**4.3**	**0.6**	**2.1**	**3.0**	**45.2**	**25.7**	NA	**0.0**	**0.4**	**60.2**	**49.1**	**60.0**	**2.6**	**0.9**
Course sand	**3.6**	**25.4**	**24.6**	**10.7**	**23.9**	**3.9**	**0.3**	**2.8**	**8.2**	**6.9**	**11.8**	NA	**0.0**	**1.5**	**14.9**	**21.0**	**11.8**	**3.4**	**1.2**
Medium sand	**32.0**	**16.4**	**22.5**	**7.4**	**12.5**	**16.3**	**21.3**	**33.8**	**13.0**	**12.2**	**15.7**	NA	**4.2**	**20.0**	**15.1**	**14.2**	**13.9**	**9.1**	**39.6**
Fine sand	**37.9**	**4.7**	**6.1**	**10.3**	**5.7**	**19.8**	**54.3**	**39.1**	**17.0**	**31.6**	**38.7**	NA	**45.7**	**59.8**	**8.9**	**12.8**	**11.1**	**73.5**	**53.2**
Very fine sand	**0.9**	**0.1**	**0.2**	**0.4**	**0.1**	**1.7**	**1.2**	**1.1**	**1.4**	**0.7**	**0.9**	NA	**2.8**	**1.3**	**0.0**	**0.3**	**0.2**	**3.3**	**0.8**
Silt	**2.8**	**0.4**	**1.8**	**1.4**	**1.9**	**30.9**	**17.9**	**17.1**	**38.8**	**0.5**	**4.3**	NA	**42.4**	**12**	**0.1**	**0.6**	**0.5**	**0.2**	**2.7**
Clay	**1.3**	**0.4**	**0.5**	**1.4**	**0.1**	**23.1**	**4.5**	**4.0**	**18.6**	**2.9**	**2.9**	NA	**4.9**	**4.6**	**0.8**	**2.0**	**2.6**	**7.9**	**1.7**

Note: The inorganic CLP ID begins with an "M".
Bold type indicates the sample result is above the contract required quantitation limit.
Underline type indicates the sample result is elevated as defined in Section 5.

Key:

CLP = Contract Laboratory Program.
CRQL = Contract Required Quantitation Limit.
EPA = United States Environmental Protection Agency.
H = High bias.
ID = Identification.
J = The analyte was positively identified. The associated numerical value is an estimate.
K = Unknown bias.
L = Low bias.
mg/kg = milligrams per kilogram.
NA = Not analyzed for.
Q = The analyte was positively identified. The associated numerical value is above the instrument detection limit but below the CRQL.
SQL = Sample Quantitation Limit.
U = The analyte was not detected at or above the associated value.

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Table 7-15 Population and Wetland Acreage by Distance Ring

Distance Ring	Population	Wetlands acreage
0 to ¼ mile	569	117.02
¼ to ½ mile	570	6.05
½ to 1 mile	1,743	105.33
1 to 2 miles	3,450	147.75
2 to 3 miles	4,147	578.44
3 to 4 miles	22,047 residents 3,319 students and teachers	658.92
TOTAL	**35,845**	**1,613.51**

Source: Hanson 2011

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Figures

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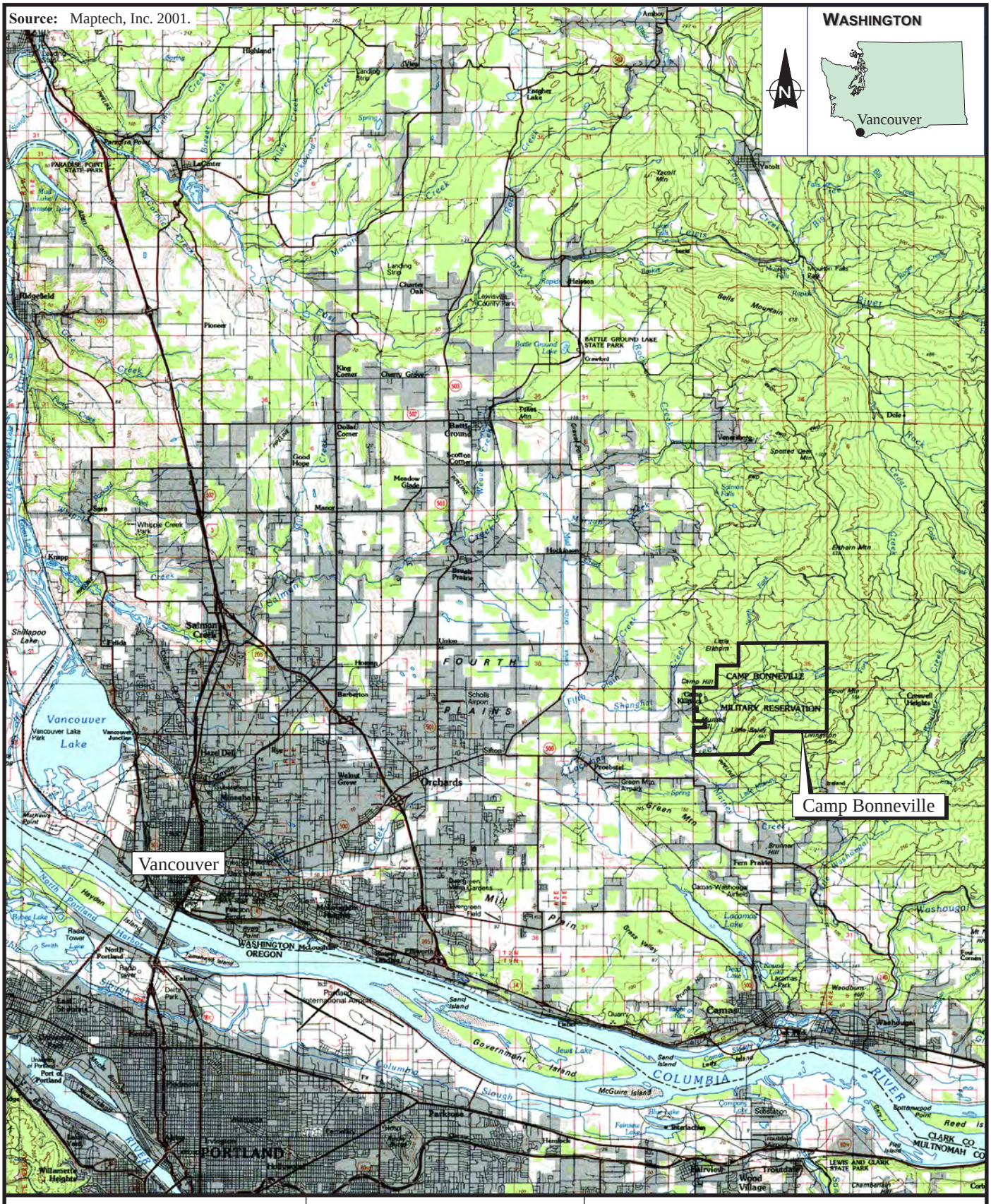

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Figure 2-1

SITE VICINITY MAP

0 1.5 3
Approximate Scale in Miles

Date: 2-15-12

Drawn by: AES

10:START-3\10030010\fig 2-1

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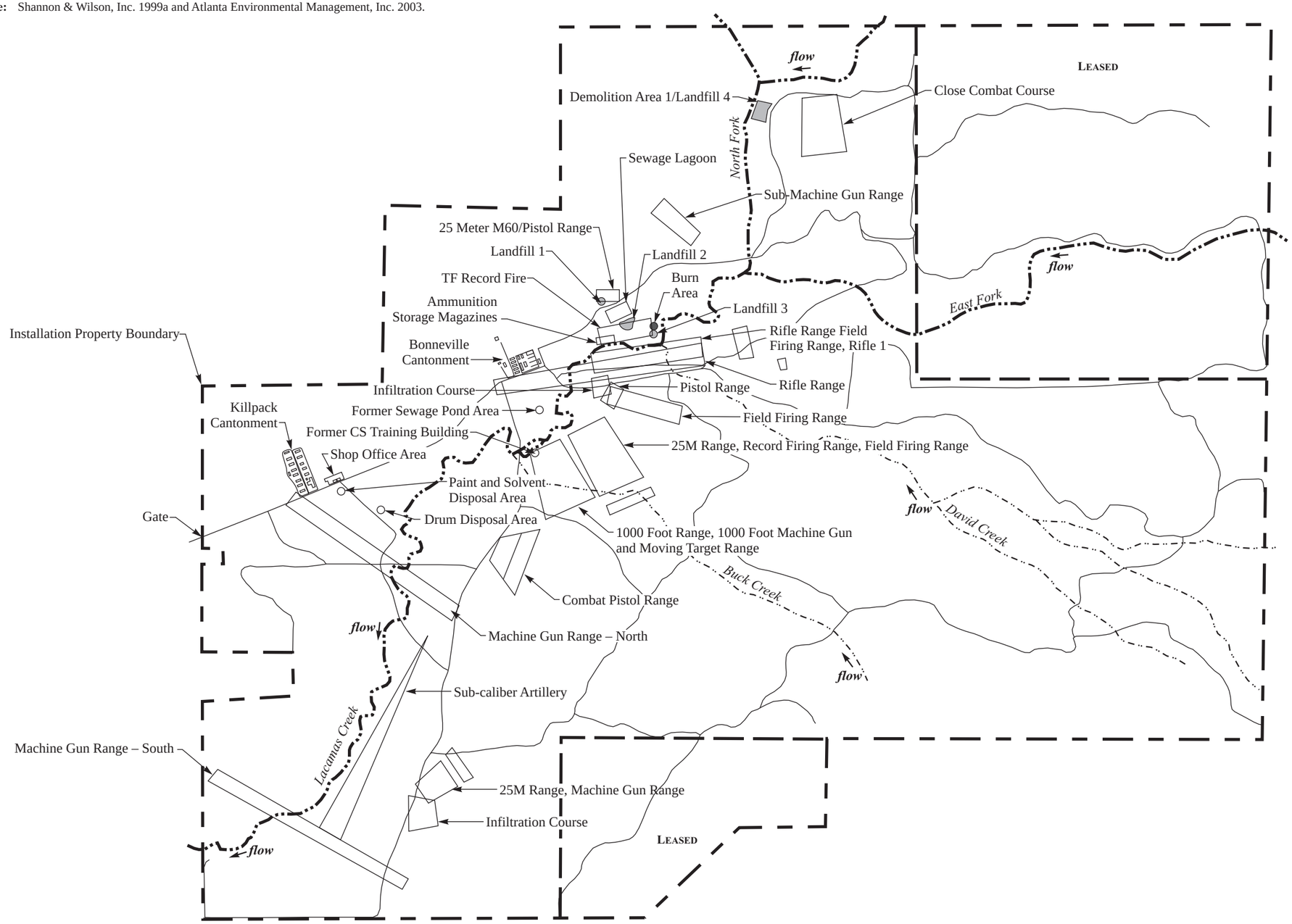
Base Map Reference: Shannon & Wilson, Inc. 1999a and Atlanta Environmental Management, Inc. 2003.



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0 1600 3200
Approximate Scale in Feet

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Figure 2-2
OVERALL SITE MAP

Date:	Drawn by:	
3/26/12	AES	10:START-3\10030010\fig 2-2

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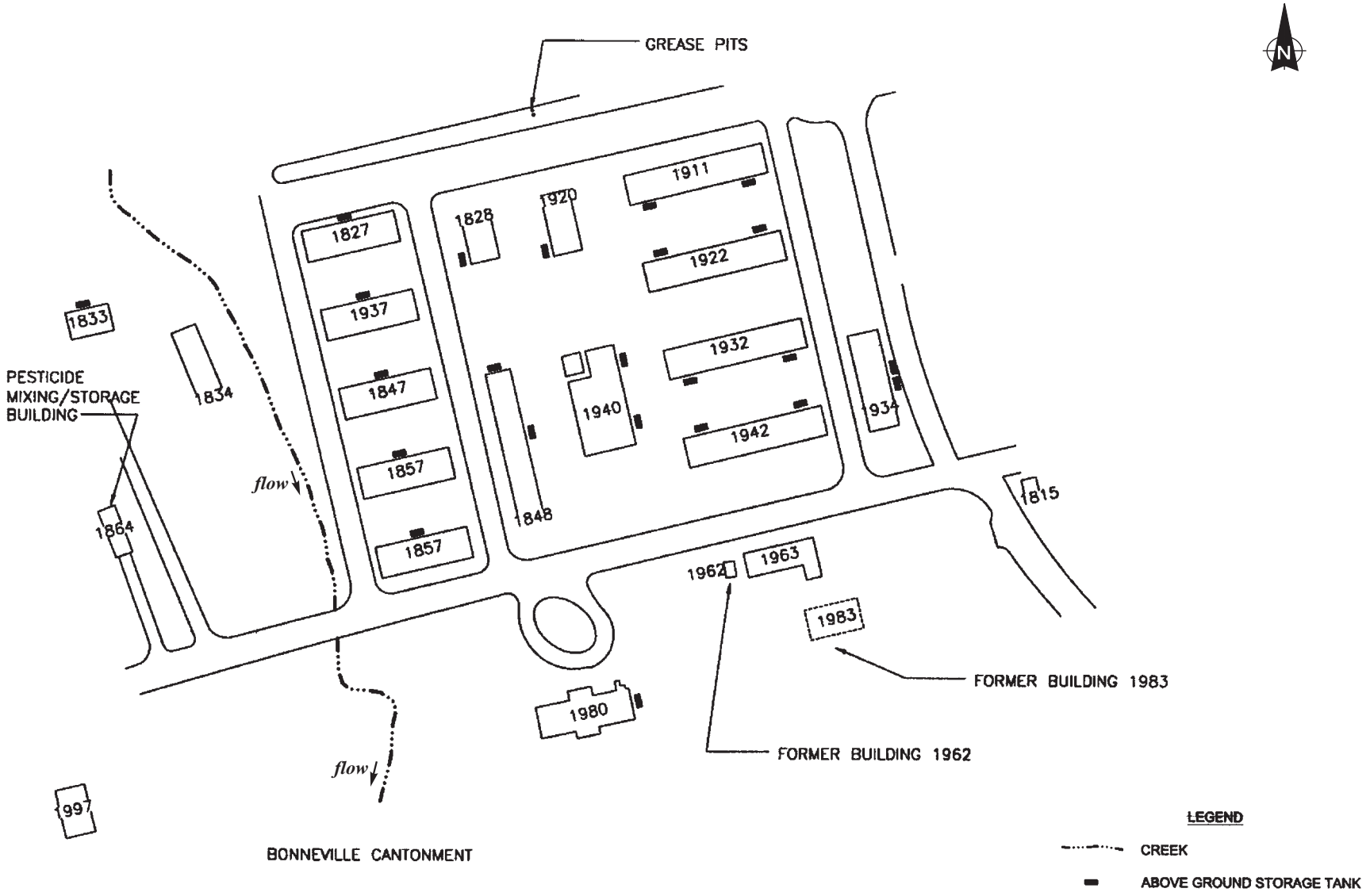
Base Map Reference: Shannon & Wilson, Inc. 1999a.



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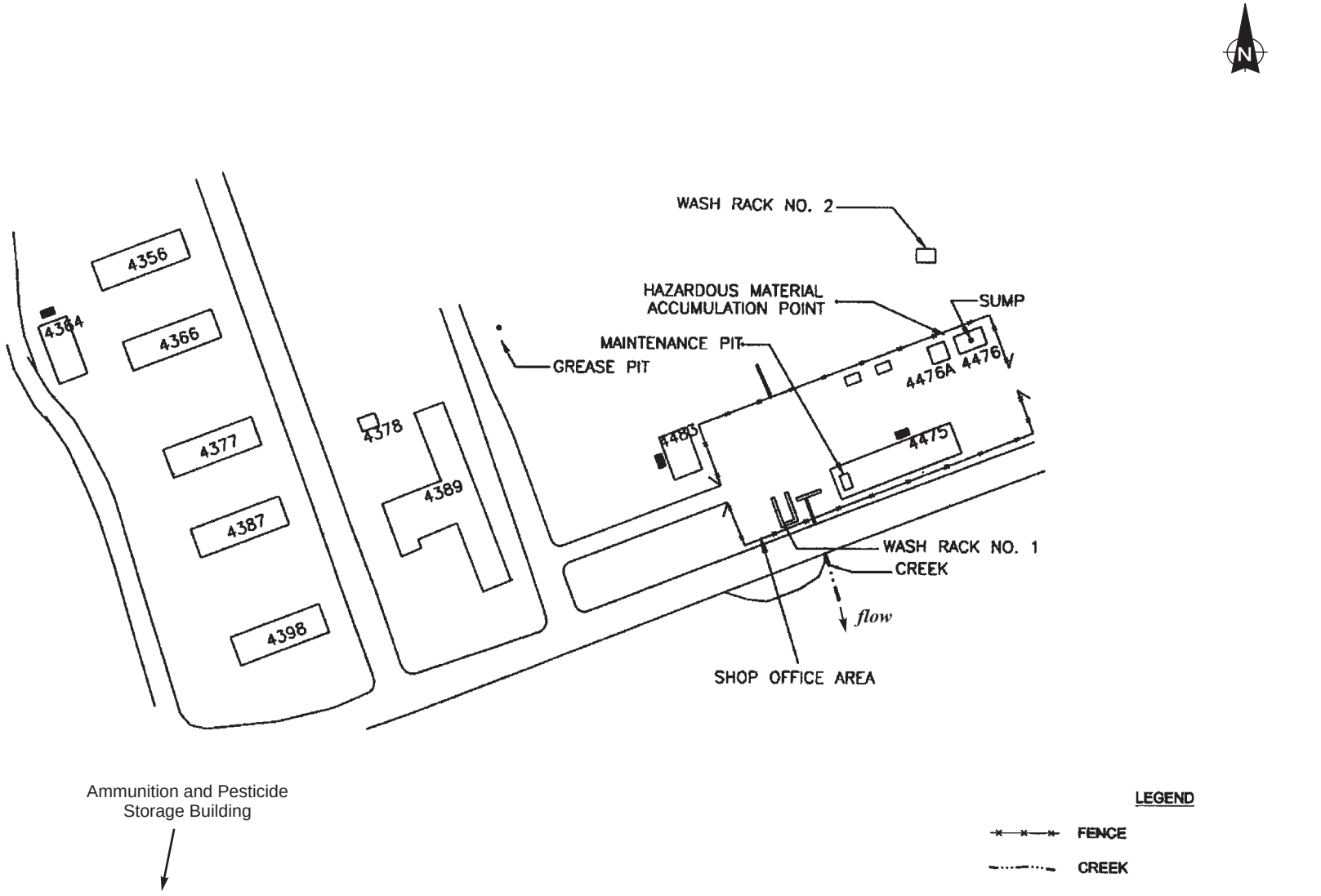
0 100 200
Approximate Scale in Feet

Figure 2-3
BONNEVILLE CANTONMENT SITE MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-3

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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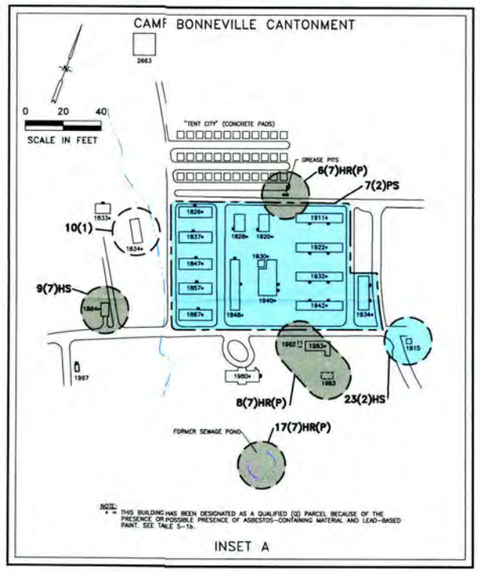
Vancouver, Washington

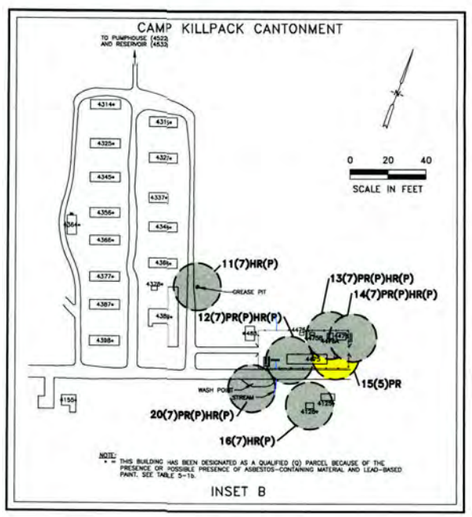
0 100 200
Approximate Scale in Feet

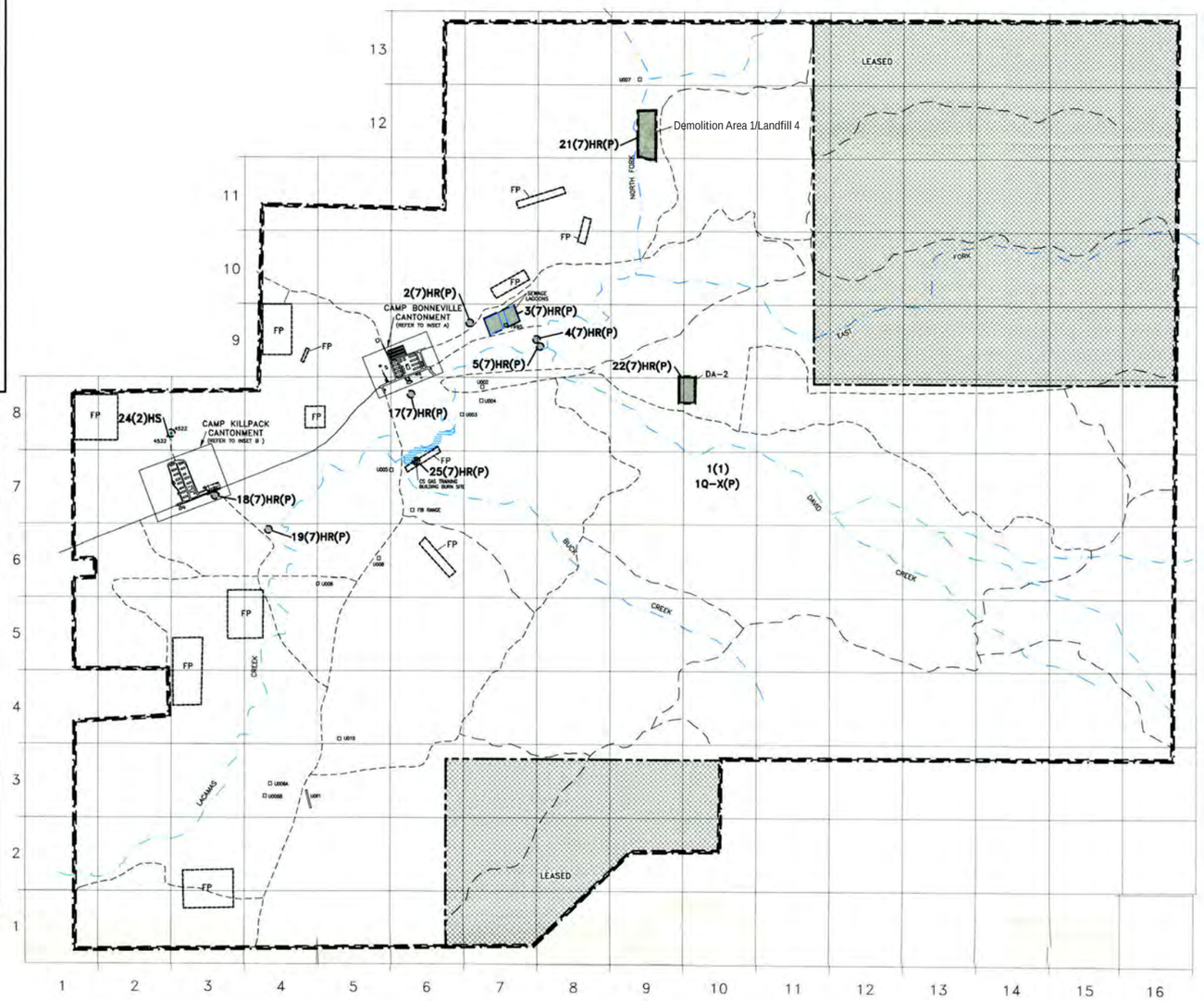
Figure 2-4
KILLPACK CANTONMENT SITE MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-4

Base Map Reference: Woodward-Clyde, 1997.







LEGEND

- INSTALLATION PROPERTY BOUNDARY
- LEASED AREAS BOUNDARY
- BRAC PARCEL BOUNDARY
- QUALIFIED PARCEL BOUNDARY
- ALL WEATHER, HARD SURFACE, ASPHALT ROAD
- ALL WEATHER, LOOSE SURFACE, GRAVEL ROAD
- FAIR WEATHER, LOOSE SURFACE, EARTHEN ROAD
- CREEKS
- SMALL POINT SOURCES OF STORAGE OR POSSIBLE CONTAMINANTS (PCB, UST's, OIL STAIN)
- FIRING POINT (FP) OR DEMOLITION AREA (DA)
- LEASED AREAS

BRAC PARCEL LABEL DEFINITIONS

8(2)PS

- CONTAMINATION DESCRIPTION
  - PS PETROLEUM STORAGE
  - PR PETROLEUM RELEASE OR DISPOSAL
  - HS HAZARDOUS SUBSTANCE STORAGE
  - HR HAZARDOUS SUBSTANCE RELEASE OR DISPOSAL
  - (P) POSSIBLE (UNVERIFIED)
- CATEGORY NUMBER
- PARCEL NUMBER

NON-CERCLA ISSUE (QUALIFIED) LABEL DEFINITIONS

8-19Q-A(P)

- QUALIFIERS
  - A ASBESTOS-CONTAINING MATERIAL
  - L LEAD-BASED PAINT
  - P PCB
  - R RADON
  - X UXO AND/OR ORDNANCE FRAGMENTS
  - RD RADIONUCLIDES
  - (P) POSSIBLE (UNVERIFIED)
- QUALIFIED
- FACILITY NUMBER (IF APPLICABLE)
- PARCEL NUMBER

*Q SEE TABLE 5-15 FOR INDIVIDUAL QUALIFIED BRAC PARCEL NUMBERS AND LABELS

CATEGORY DEFINITIONS

CATEGORY NUMBER	COLOR	ENVIRONMENTAL CONDITION OF PROPERTY
1		Areas where no storage for one year or longer, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). Additionally, includes areas where no evidence exists for the release, disposal, or migration of hazardous substances or petroleum products; however, the area has been used to store less than reportable quantities of hazardous substances (40 CFR 302.4) or 600 or fewer gallons of petroleum products.
2		Areas where only storage of hazardous substances in amounts exceeding their reportable quantity or petroleum products exceeding 600 gallons has occurred, but no release, disposal, or migration has occurred.
3		Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.
4		Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, and all removal or remedial actions to protect human health and the environment have been taken.
5		Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, and removal or remedial actions are underway, but all required actions have not yet been implemented.
6		Areas where storage, release, disposal, or migration of hazardous substances or petroleum products has occurred, but required removal or remedial actions have not yet been initiated.
7		Areas that are not evaluated or require additional evaluation.

25 ACRES

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0 1000 2000
Approximate Scale in Feet

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Figure 2-5
BASE REALIGNMENT AND CLOSURE PARCEL DESIGNATION MAP

Date:	Drawn by:	
3/26/12	AES	10:START-3\10030010\fig 2-5

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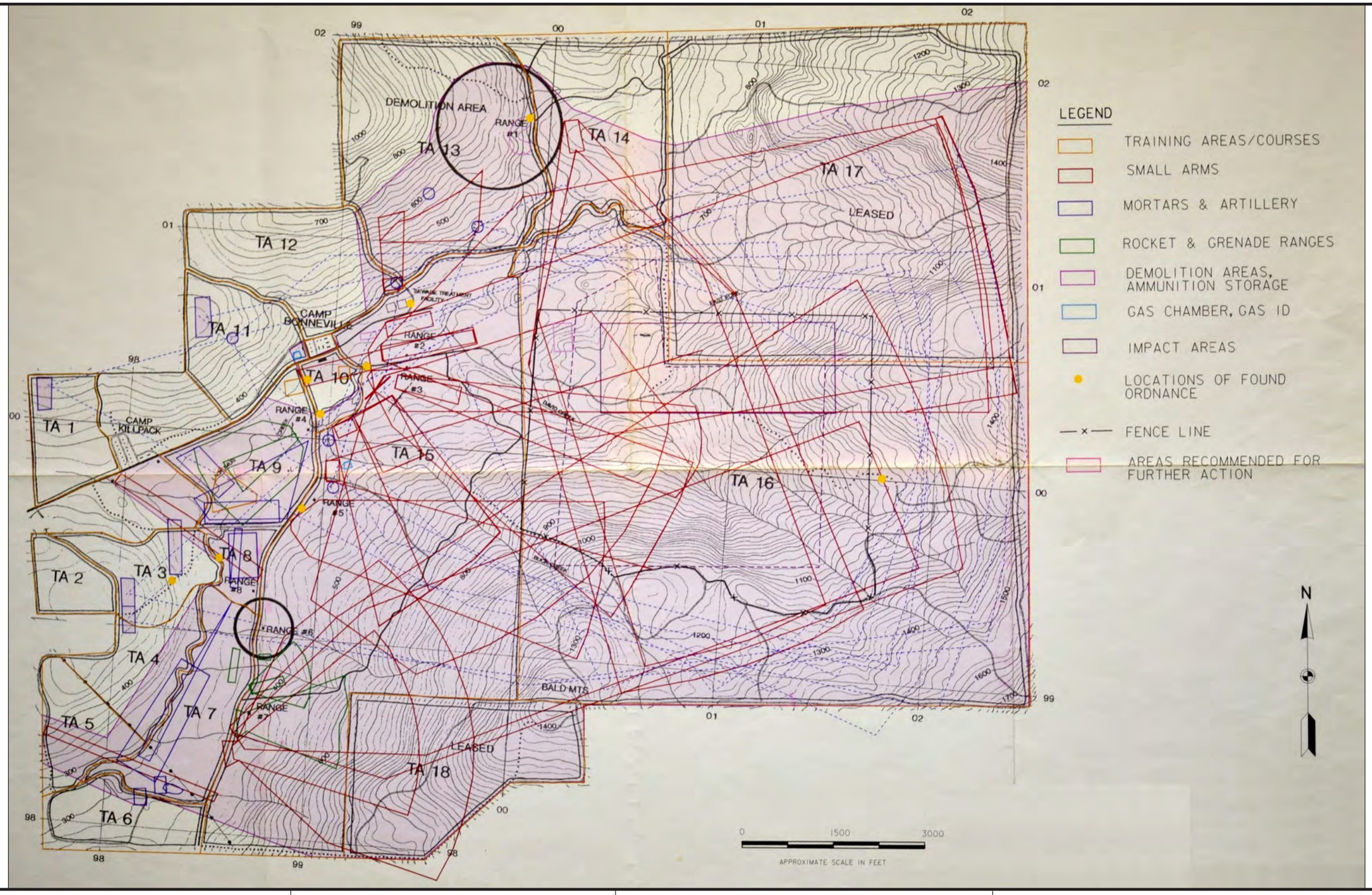

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Base Map Reference: Corps, 1997.

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Figure 2-6
AREAS RECOMMENDED FOR FURTHER ACTION

Date:	Drawn by:	
2/15/12	AES	10:START-3\10030010\fig 2-6

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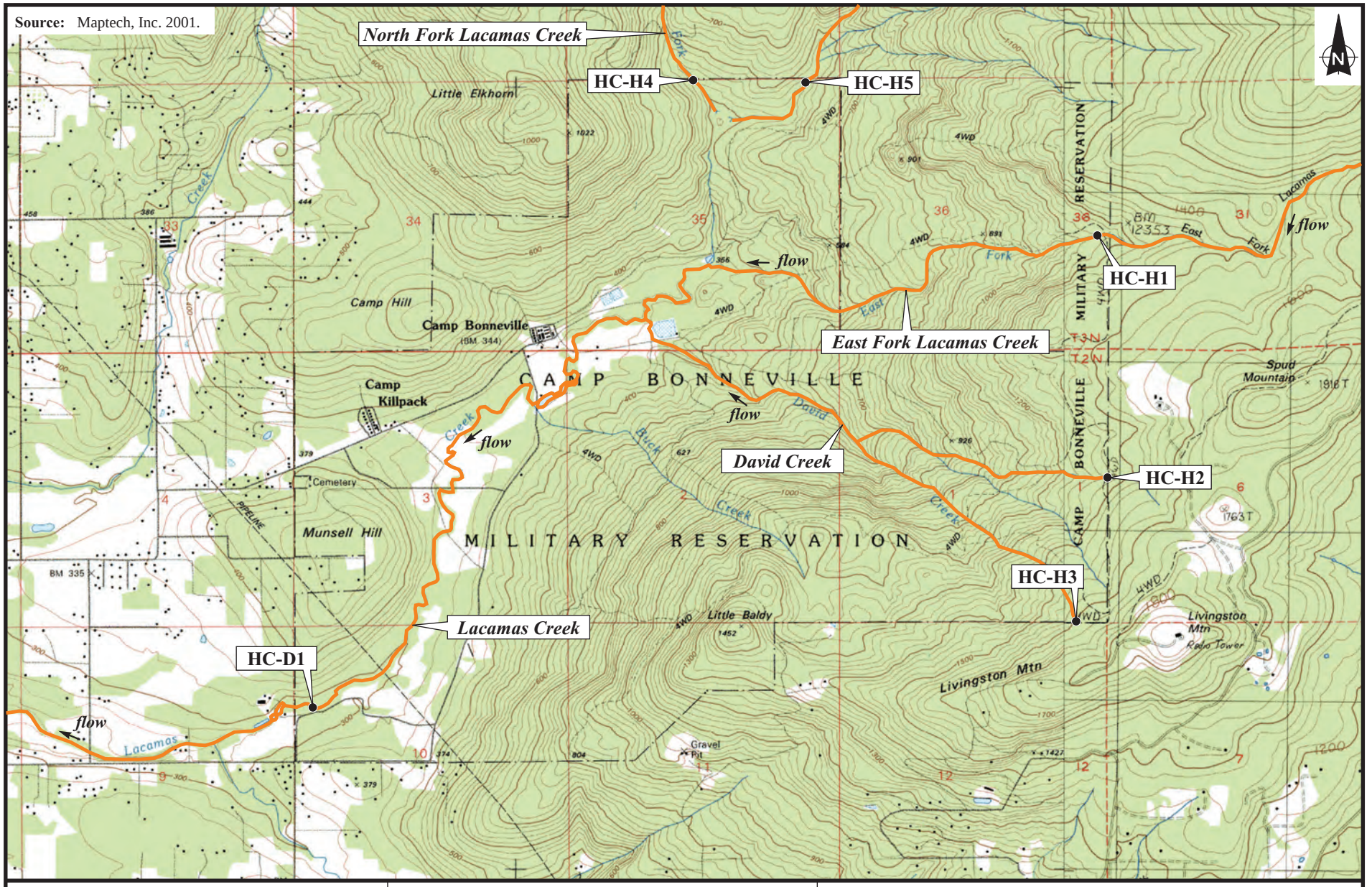

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0 1333 2666
Approximate Scale in Feet

Figure 2-7
1998 CORPS SURFACE WATER INVESTIGATION SAMPLE LOCATIONS

Date:	Drawn by:	
3/26/12	AES	10:START-3\10030010\fig 2-7

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Law Enforcement / Clark College / Rustic Retreat / Outdoor School Classrooms and Offices (C / O)

- Reuse / Renovate Existing Camp Killpack Buildings for Outdoor School, Retreat Center &/or Law Enforcement Training Center
- 3 to 6 Classrooms - New Building
- Administrative Offices
- Future Expansion As Needed
- Law Enforcement Training Areas

Rustic Retreat / Outdoor School (RR / OS)

- Reuse / Renovate Existing Camp Bonneville Buildings
- Classrooms
- Lodging
- Native American Cultural Center
- New Multi-Purpose Building and Other Building Expansion As Needed
- Park Administration Center
- Park Maintenance Headquarters

Rustic Retreat Future Expansion (RRFE)

- Future Building

Regional Park (RP)

- Hiking Trails
- Equestrian Trails
- Mountain Bike Trails
- Picnic Areas & Shelters
- Amphitheater & Stage
- Restrooms
- Tent/Yurt Camping
- RV Camping
- Park Watchperson's Residence
- Archery Range
- Park Entry / Control Station (Fee Collection Booth, Information Board, Kiosk & Turn Around)
- Park Transit Station & Route
- General Store
- Equestrian Center
- Trailhead & Parking

Firing Ranges (FR)

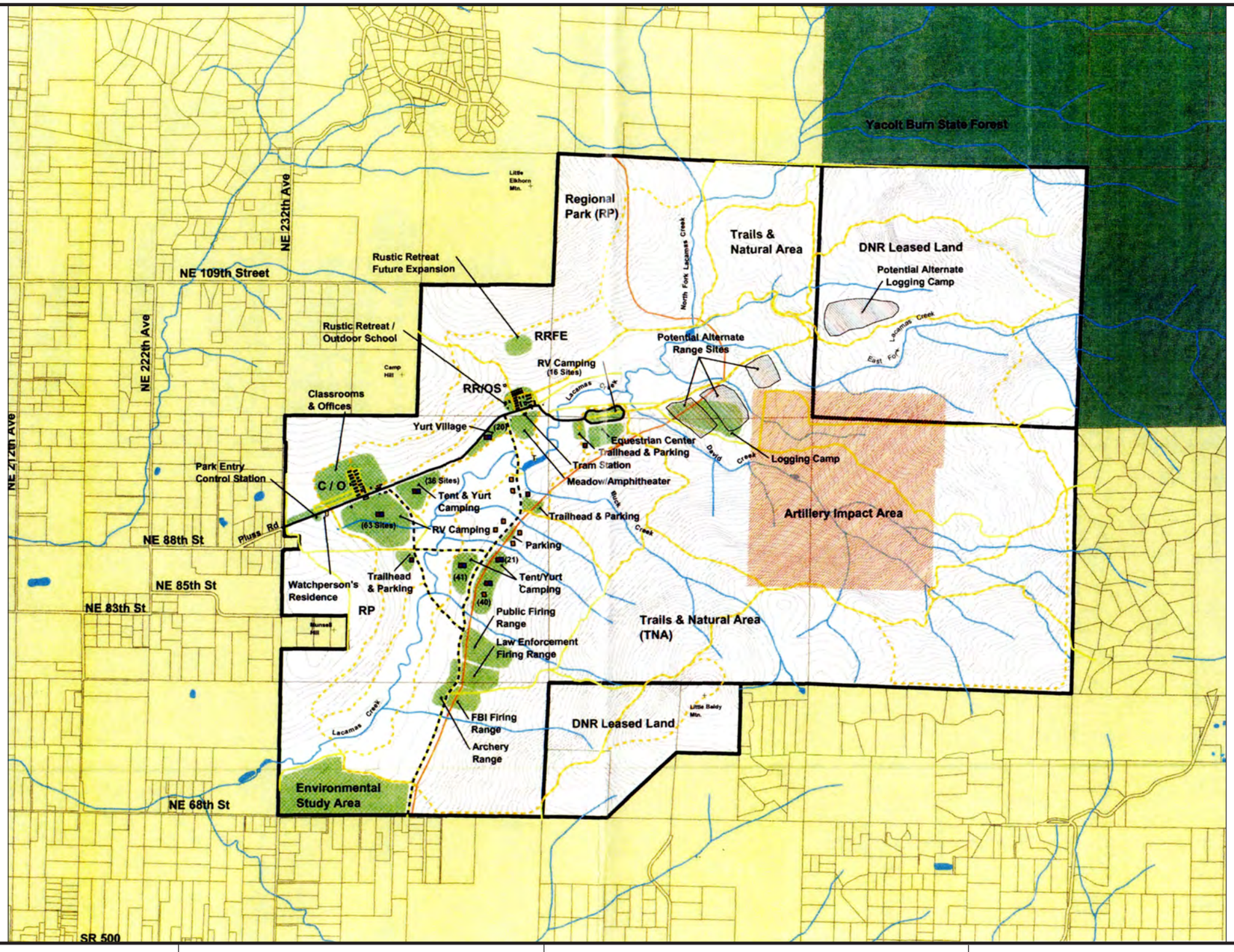
- Local Law Enforcement Range
- FBI Range
- Public Range
- Restrooms for Shooters
- Mine Gravel for Range Site

Environmental Study Area (ESA)

- Outdoor Studies
- CPU Well Field
- Water Resource Center (Wastewater Treatment Facility)

Trail and Nature Areas (TNA)

- Hiking Trails
- Equestrian Trails
- Mountain Bike Trails
- Wildlife Habitat Area



LEGEND

- Restrooms & Showers
- Restrooms
- Watchperson's Residence
- Water Access
- Site Facilities
- 20 Foot Contour Intervals
- Trails
- Existing Unpaved Roads
- Gravel Road
- Paved Road
- Artillery Impact Area
- Regional Park Boundary
- Site Boundary Line
- Existing Buildings
- Taxlots
- Private Property
- Yalcolt Burn State Forest

LAND AREA SUMMARY:

Camp Bonneville:	3,040 acres
DNR Land Area 'A':	620 acres
DNR Land Area 'B':	180 acres
TOTAL AREA:	3,840 acres

Base Map Reference: OTAK 2005.

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0 2,280 4,560
Approximate Scale in Feet

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Figure 2-8
PREFERRED REUSE PLAN

Date:	Drawn by:	
2/15/12	AES	10:START-3\10030010\fig 2-8

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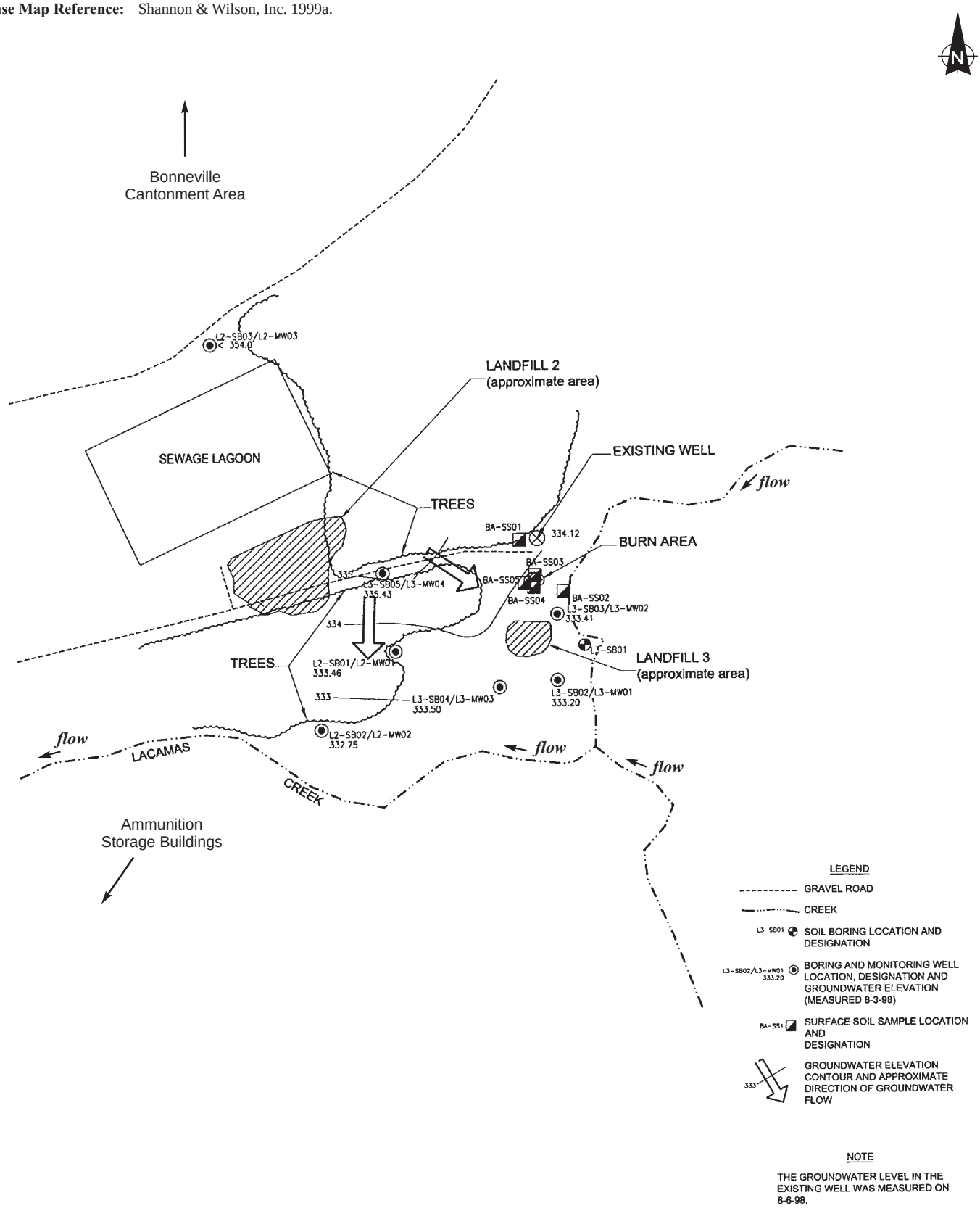
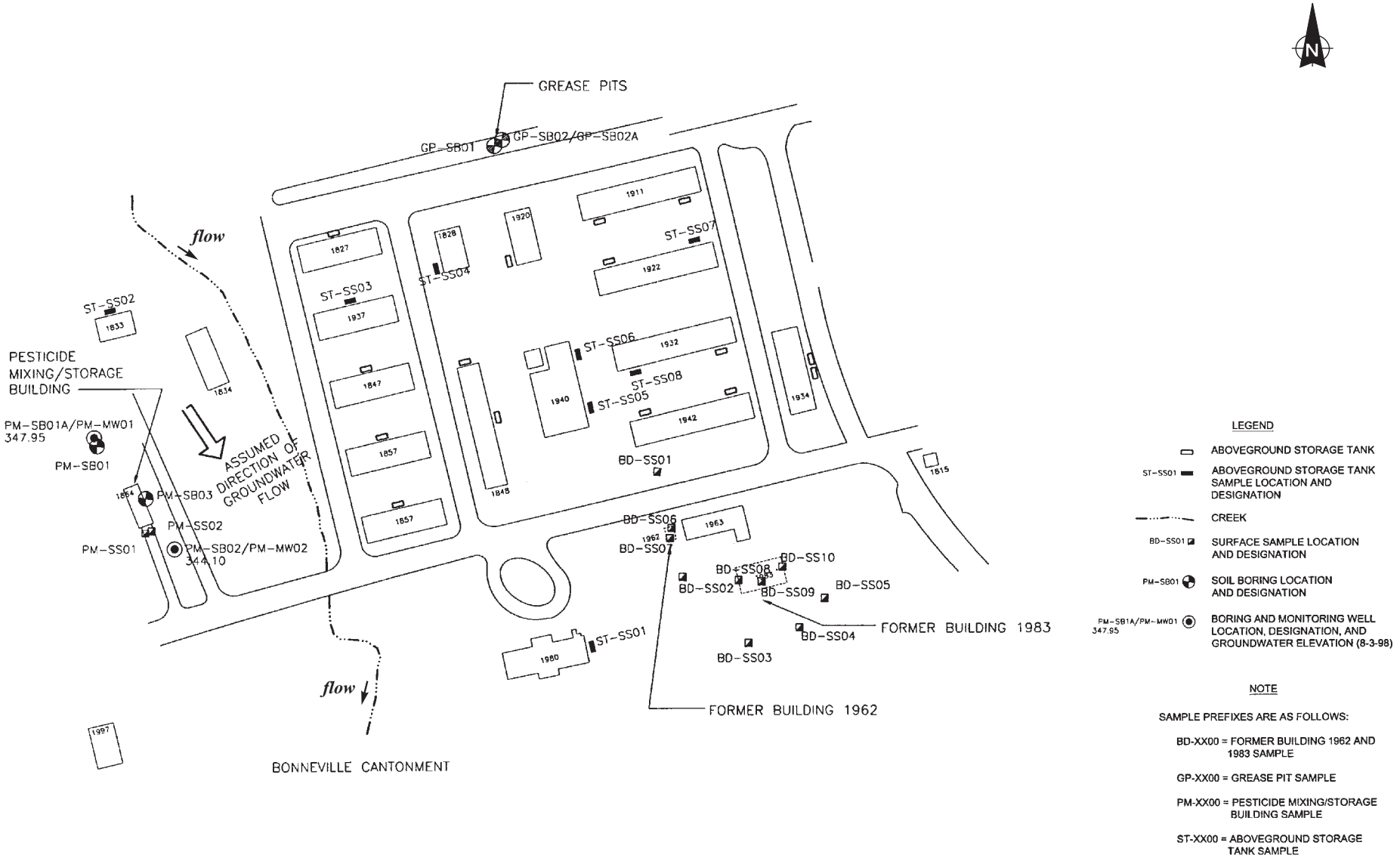
Base Map Reference: Shannon & Wilson, Inc. 1999a.



ecology and environment, inc. Global Specialists in the Environment Seattle, Washington	CAMP BONNEVILLE Vancouver, Washington	Figure 2-9 LANDFILLS 2 AND 3 AND BURN AREA EXPLORATION PLAN		
	0 150 300 Approximate Scale in Feet	Date: 3-27-12	Drawn by: AES	10:START-3\10030010\fig 2-9

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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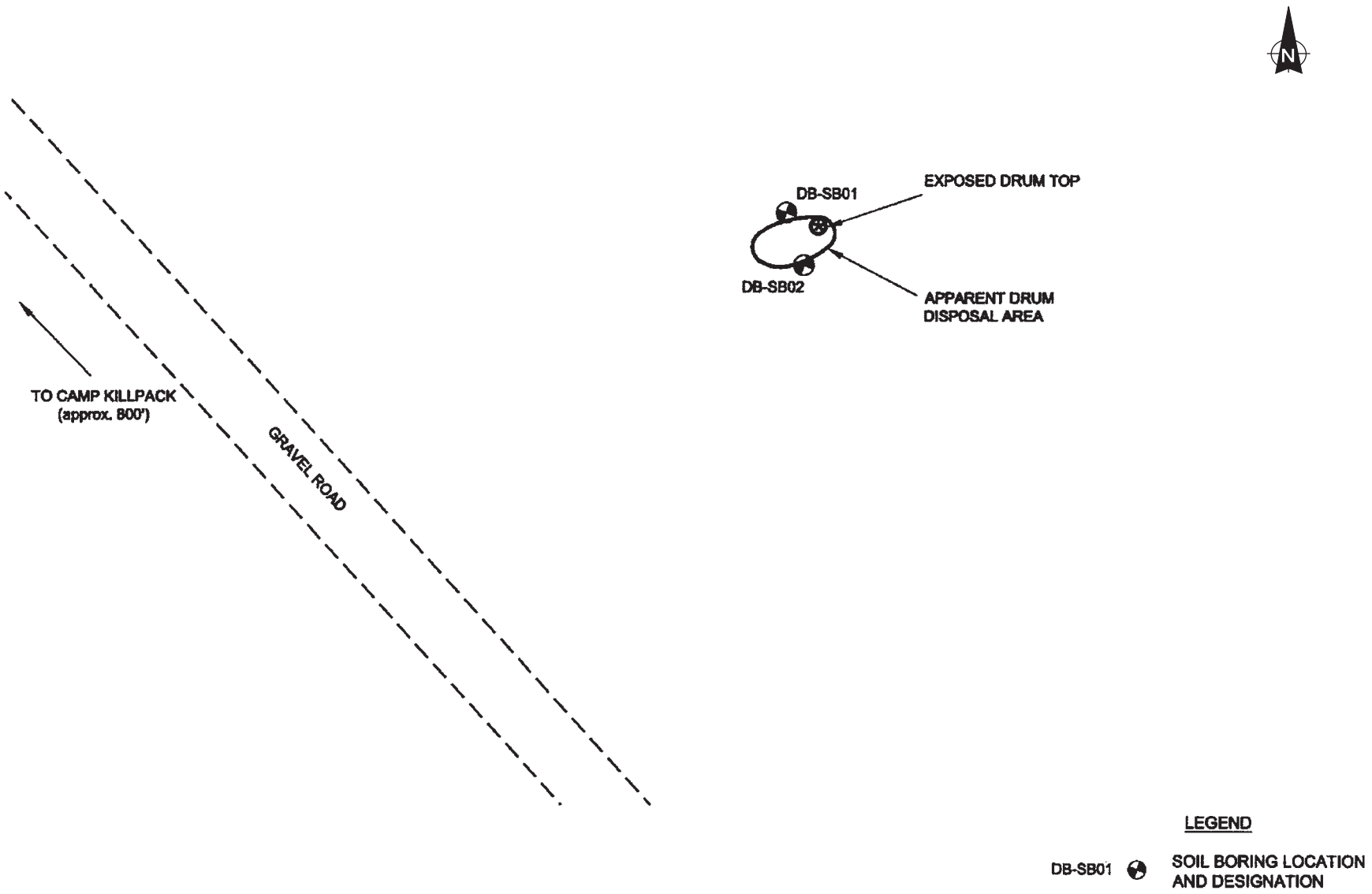
0 40 80
Approximate Scale in Feet

Figure 2-10
BONNEVILLE CANTONMENT AREA
EXPLORATION PLAN

Date:	Drawn by:	
3/26/12	AES	10:START-3\10030010\fig 2-10

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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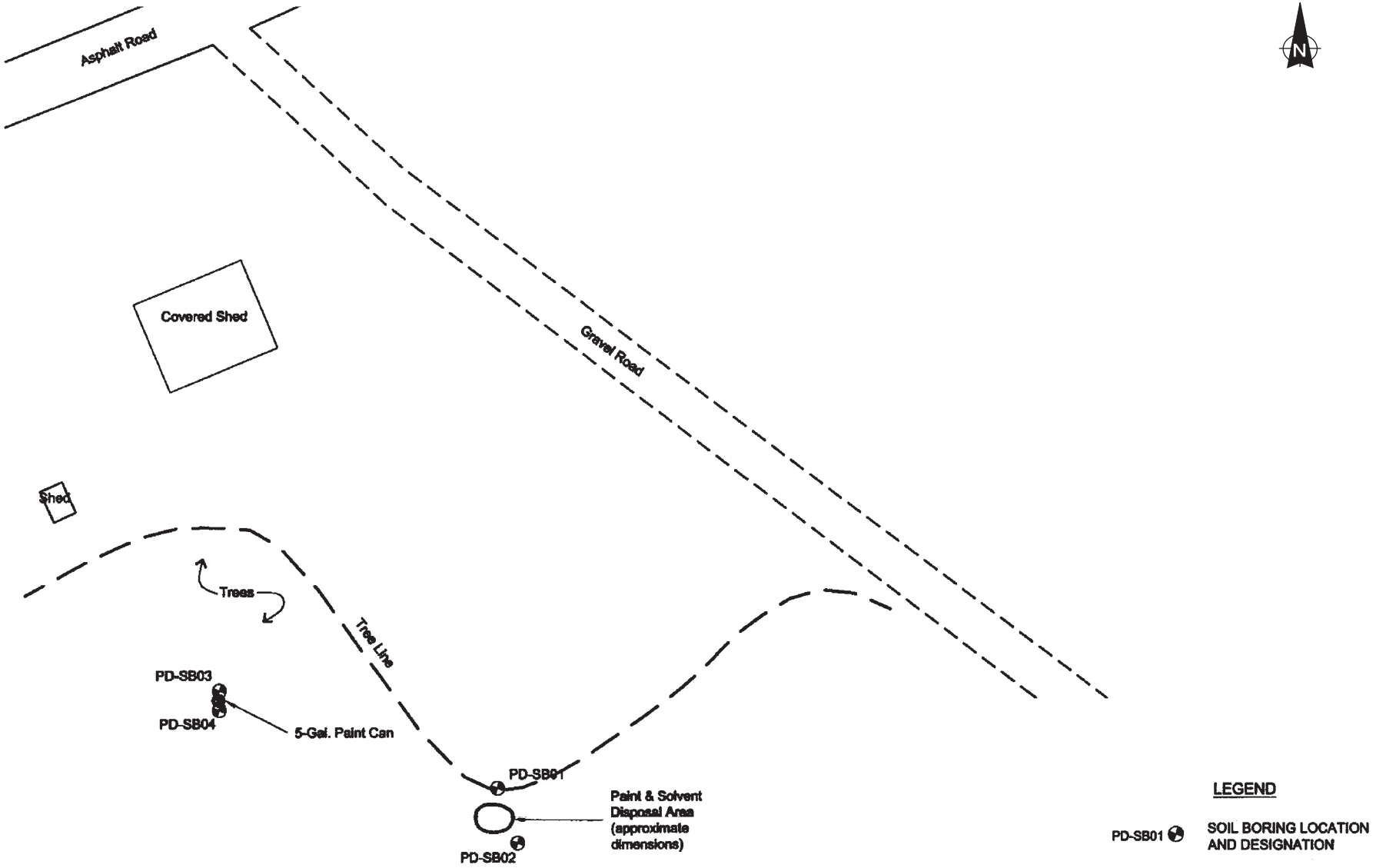
0 30 60
Approximate Scale in Feet

Figure 2-11
DRUM DISPOSAL AREA
EXPLORATION PLAN

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-11

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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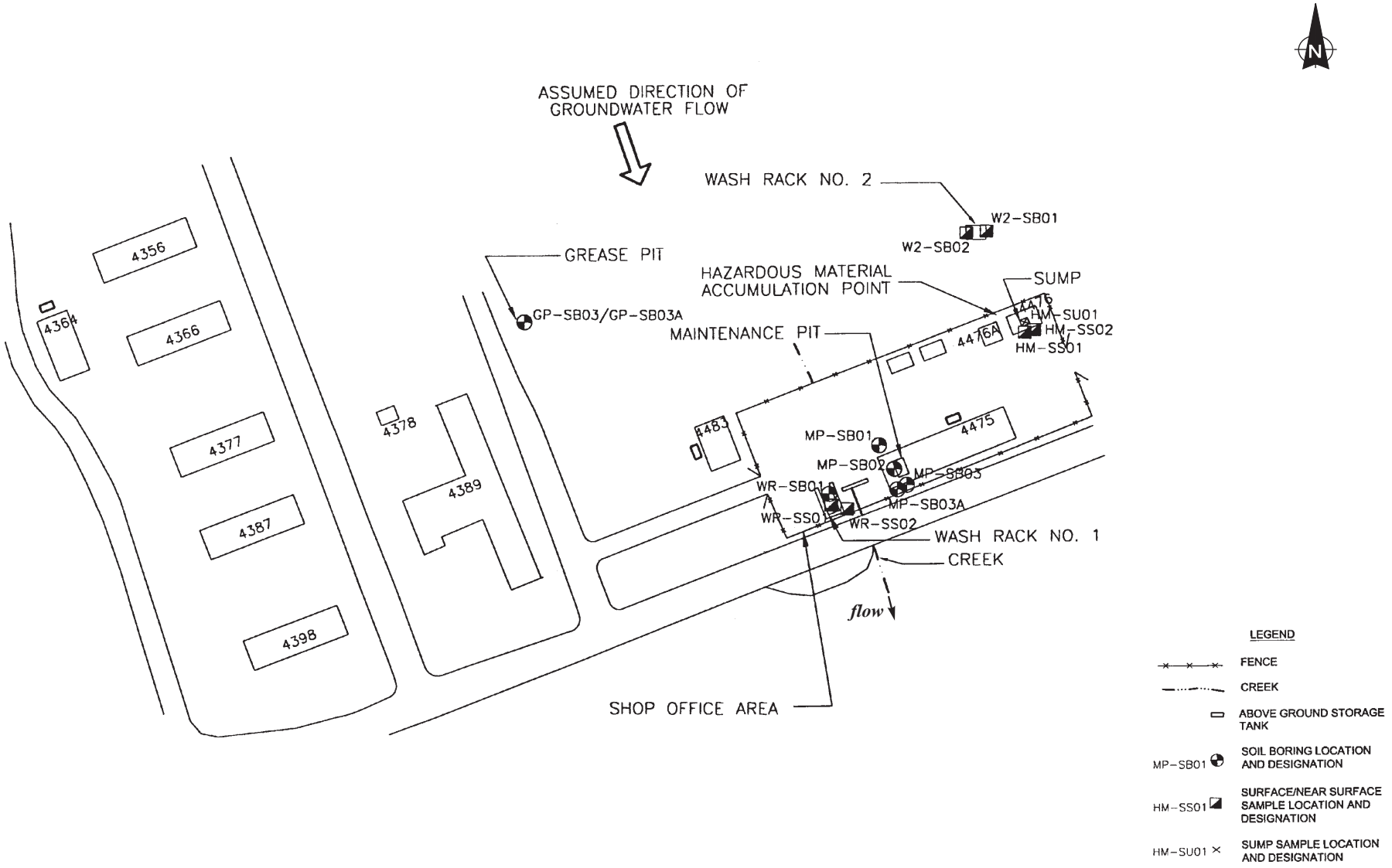
0 40 80
Approximate Scale in Feet

Figure 2-12
PAINT AND SOLVENT DISPOSAL AREA
EXPLORATION PLAN

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-12

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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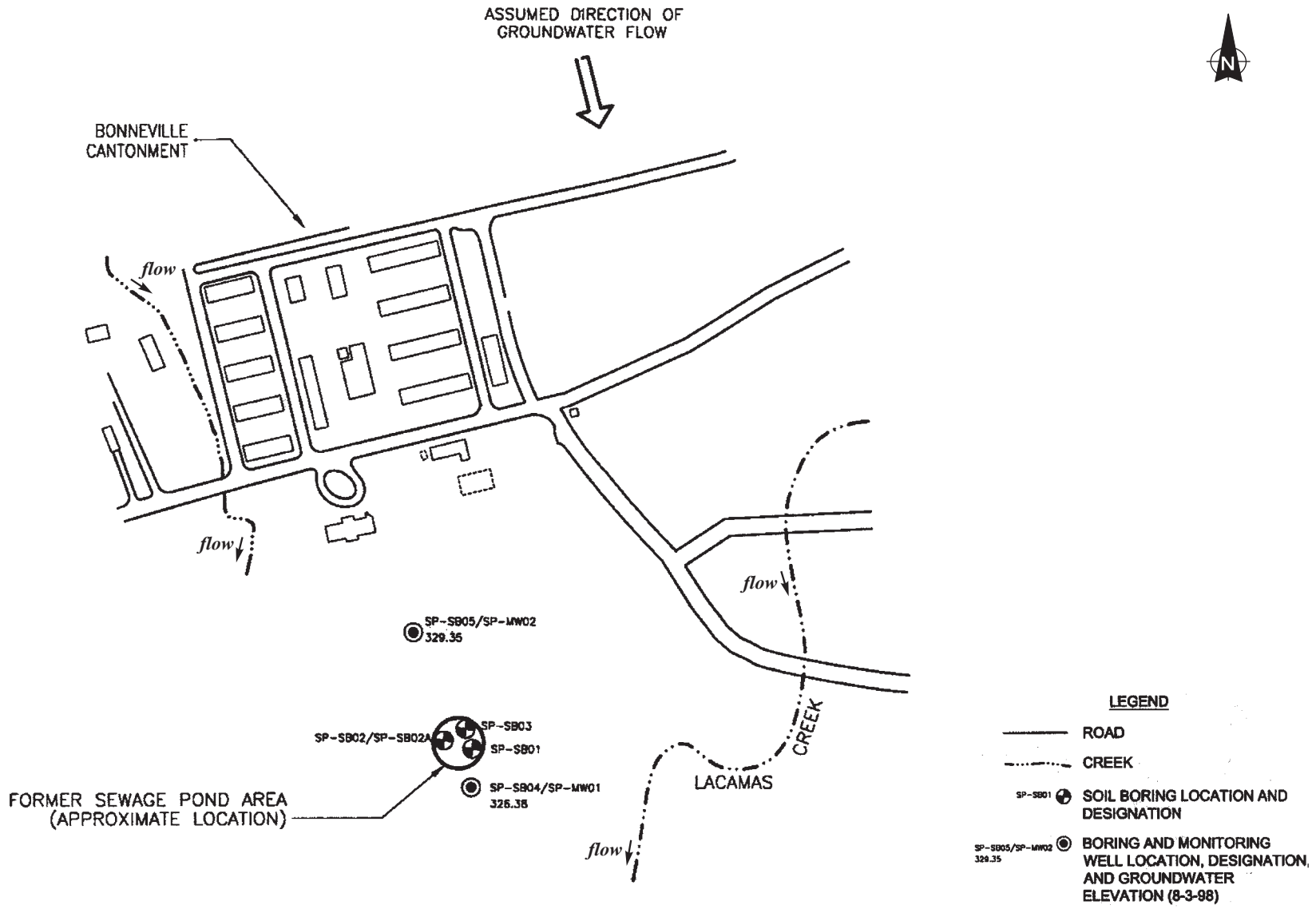
0 80 160
Approximate Scale in Feet

Figure 2-13
KILLPACK CANTONMENT AREA
EXPLORATION PLAN

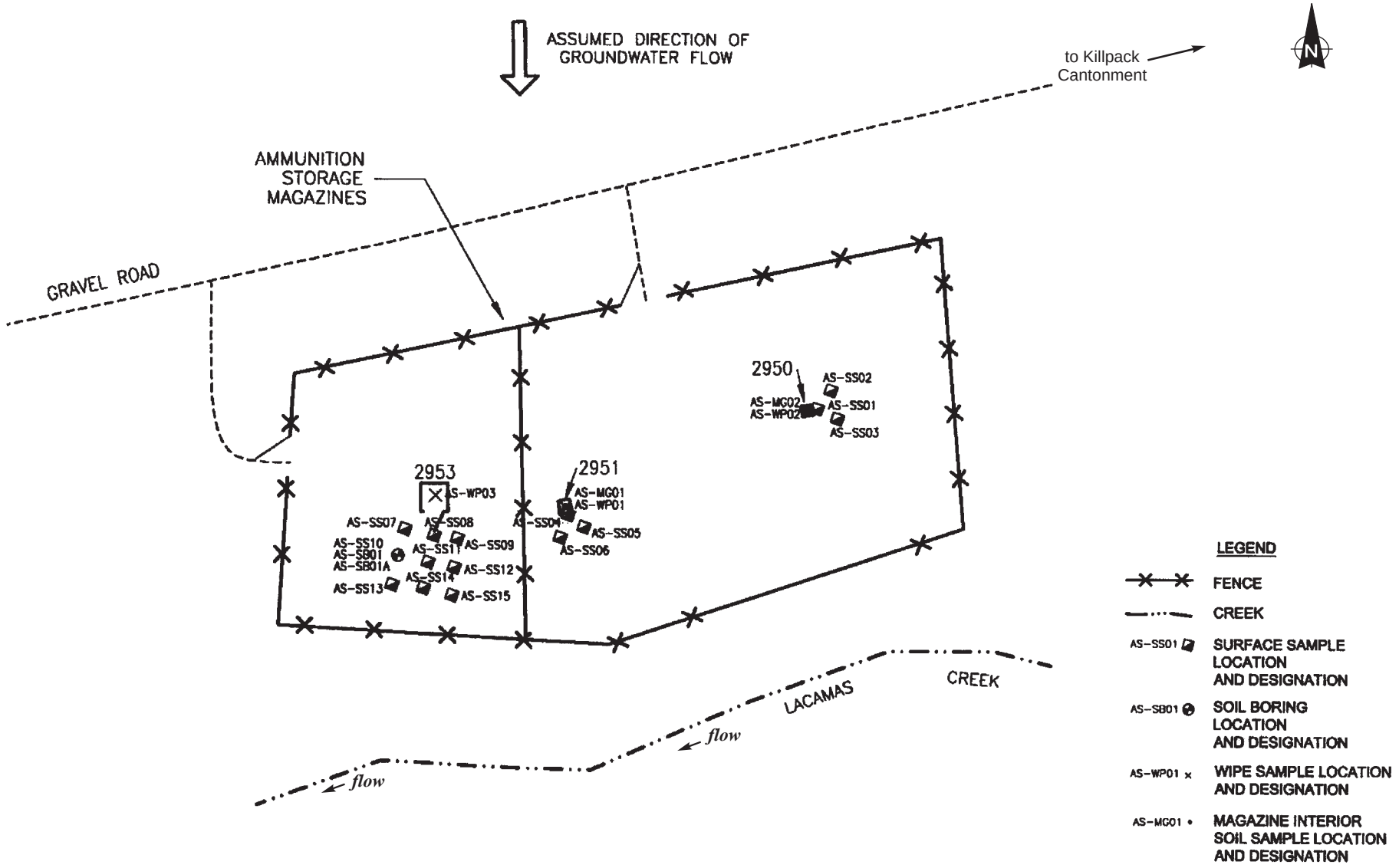
Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-13

Base Map Reference: Shannon & Wilson, Inc. 1999a.



ecology and environment, inc. Global Specialists in the Environment Seattle, Washington	CAMP BONNEVILLE Vancouver, Washington	Figure 2-14 FORMER SEWAGE POND EXPLORATION PLAN		
	0 200 400 Approximate Scale in Feet	Date: 3/27/12	Drawn by: AES	10:START-3\10030010\fig 2-14

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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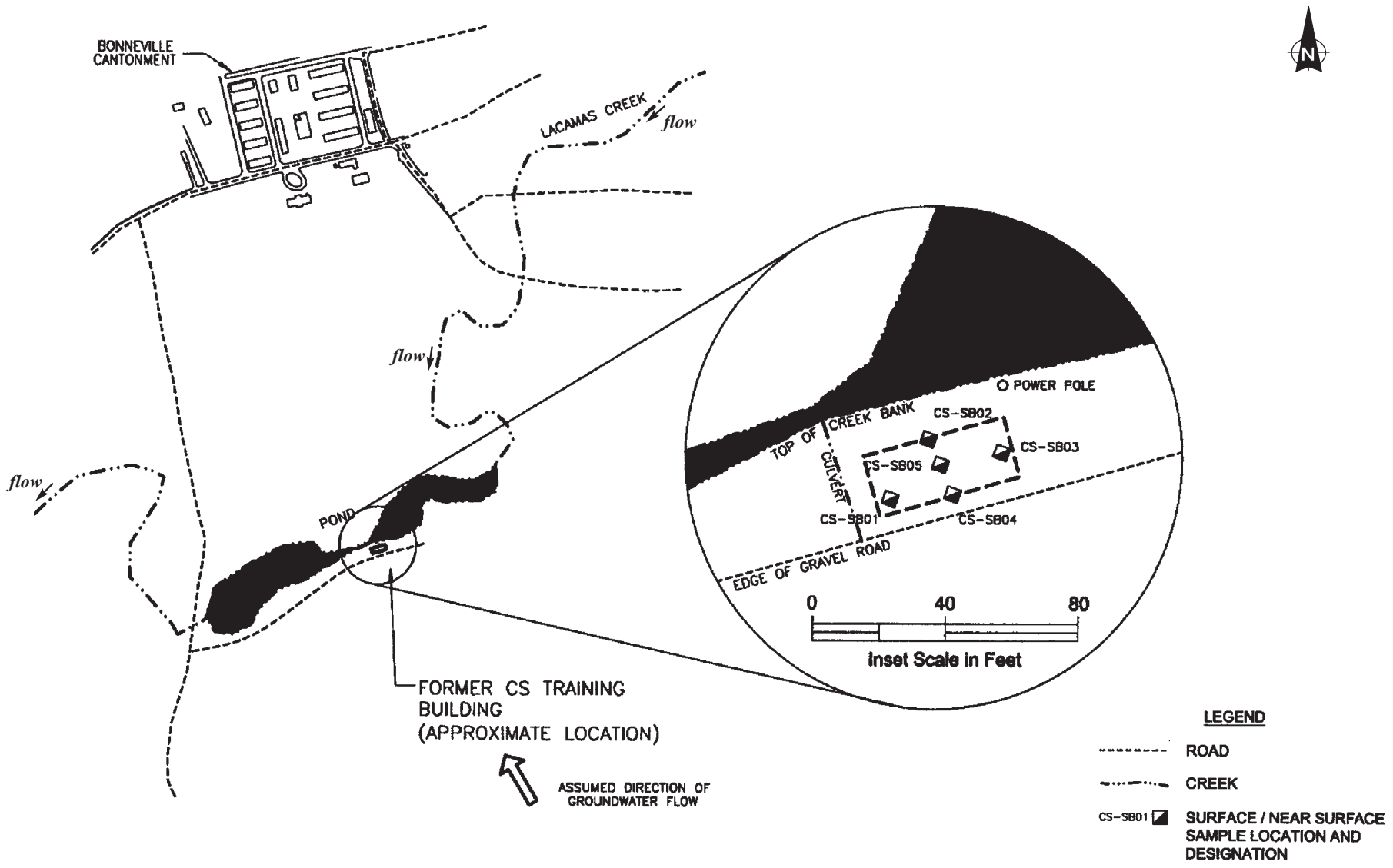
0 50 100
Approximate Scale in Feet

Figure 2-15
AMMUNITION STORAGE MAGAZINES
EXPLORATION PLAN

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-15

Base Map Reference: Shannon & Wilson, Inc. 1999a.



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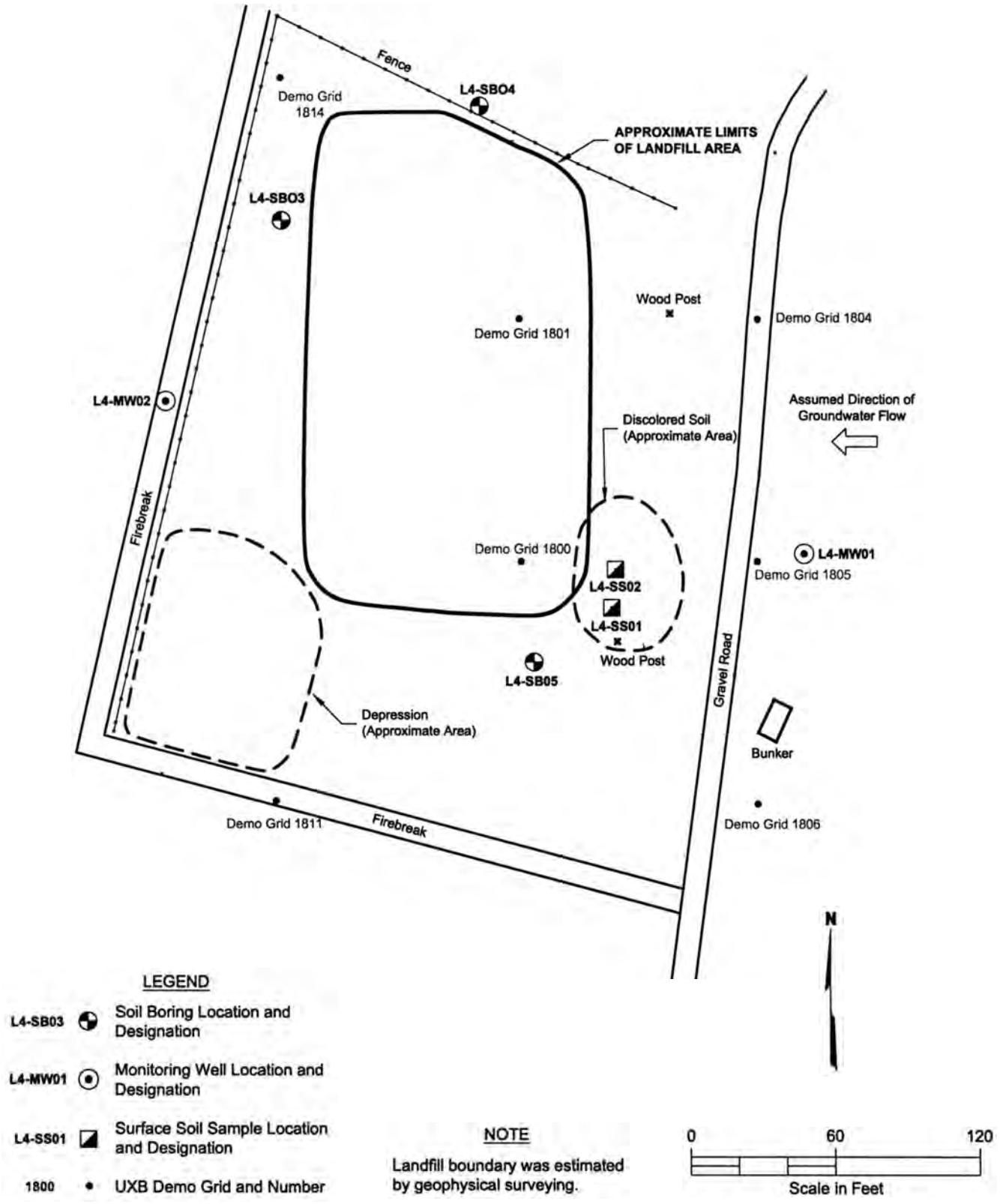
0 400 800
Approximate Scale in Feet

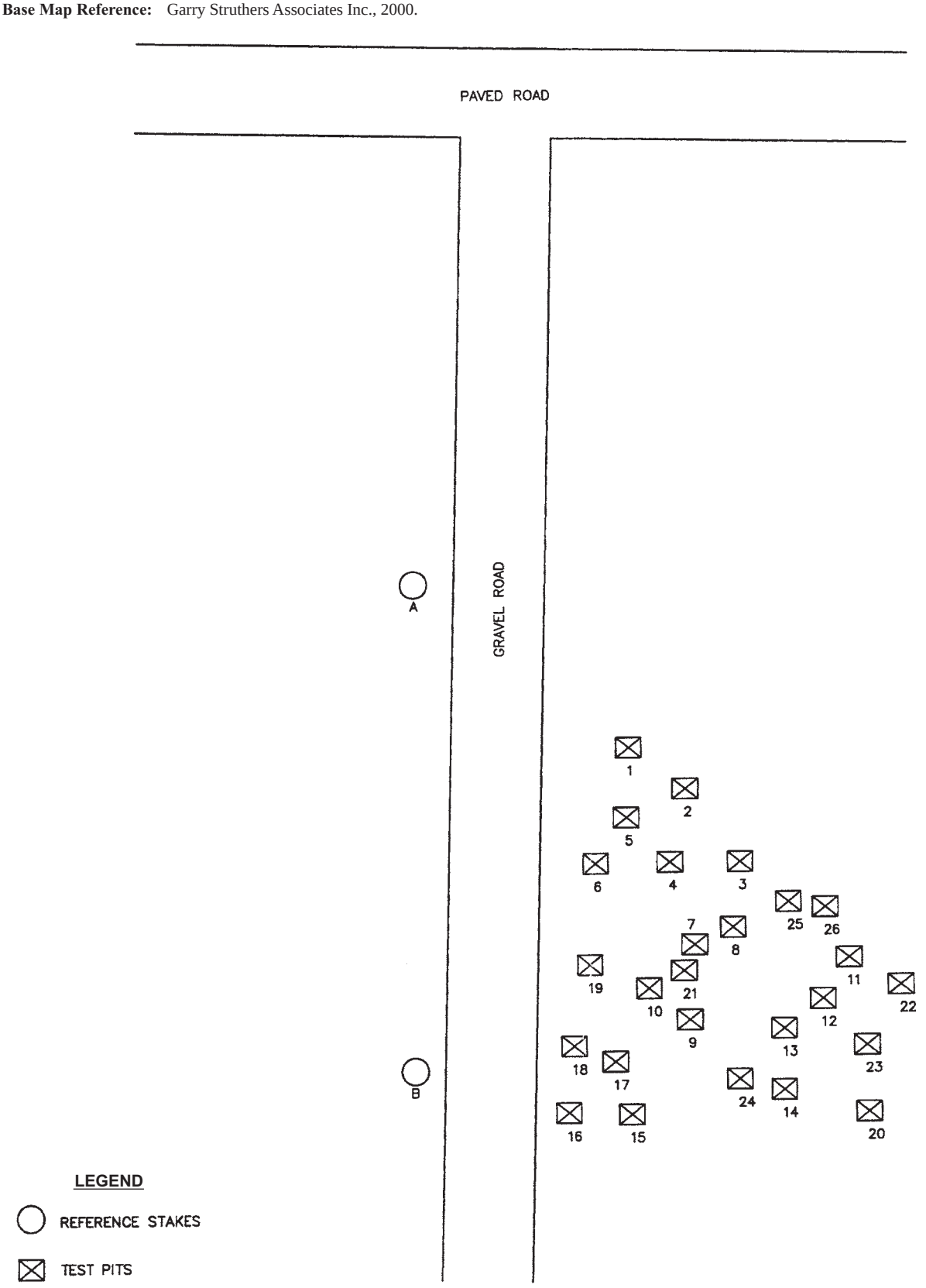
Figure 2-16
CS TRAINING BUILDING AREA
EXPLORATION PLAN

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-16



ecology and environment, inc. Global Specialists in the Environment Seattle, Washington	CAMP BONNEVILLE Vancouver, Washington	Figure 2-17 DEMOLITION AREA 1/LANDFILL 4 EXPLORATION PLAN		
	Base Map Reference: Shannon & Wilson, Inc. 1999b.	Date: 3-27-12	Drawn by: AES	10:START-3\10030010\fig 2-17

Base Map Reference: Garry Struthers Associates Inc., 2000.



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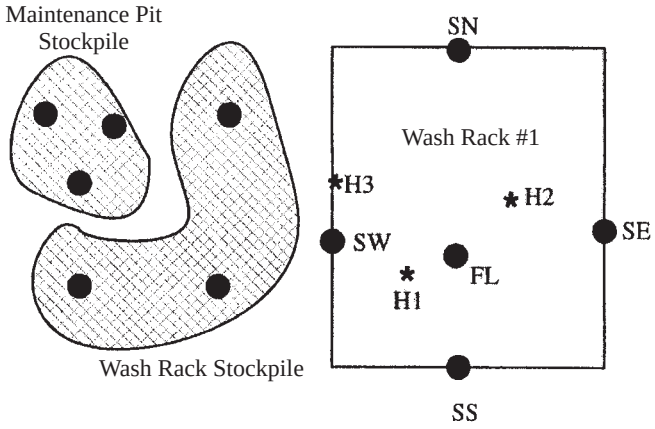
0 30 60
Approximate Scale in Feet

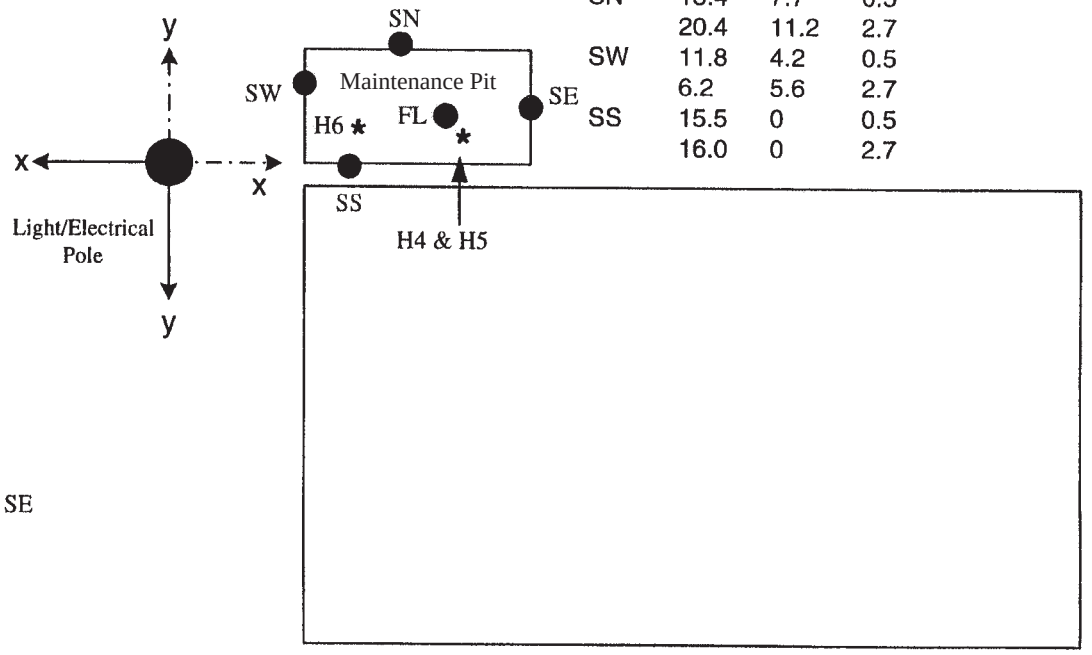
Figure 2-18
DRUM DISPOSAL AREA TEST PIT LOCATIONS

Date:	Drawn by:	
2-15-12	AES	10:START-3\10030010\fig 2-18



Wash Rack Samples

#	X	Y	depth
FL	23.2	23.0	3.5
SE	20.6	21.0	2.5
SN	23.2	13.0	2.5
	27.0	9.0	3.5
SW	26.0	22.5	2.5
	30.8	17.0	3.8
SS	23.2	29.3	3.0



Maintenance Pit Samples

#	X	Y	depth
FL	20.6	3.5	0.8
	16.8	6.9	2.7
SE	27.0	3.7	0.5
	31.3	5.6	2.7
SN	18.4	7.7	0.5
	20.4	11.2	2.7
SW	11.8	4.2	0.5
	6.2	5.6	2.7
SS	15.5	0	0.5
	16.0	0	2.7

All dimensions in feet and tenths of feet.
Depths are feet below ground surface (bgs).

● Sample Location
* Hanby Location

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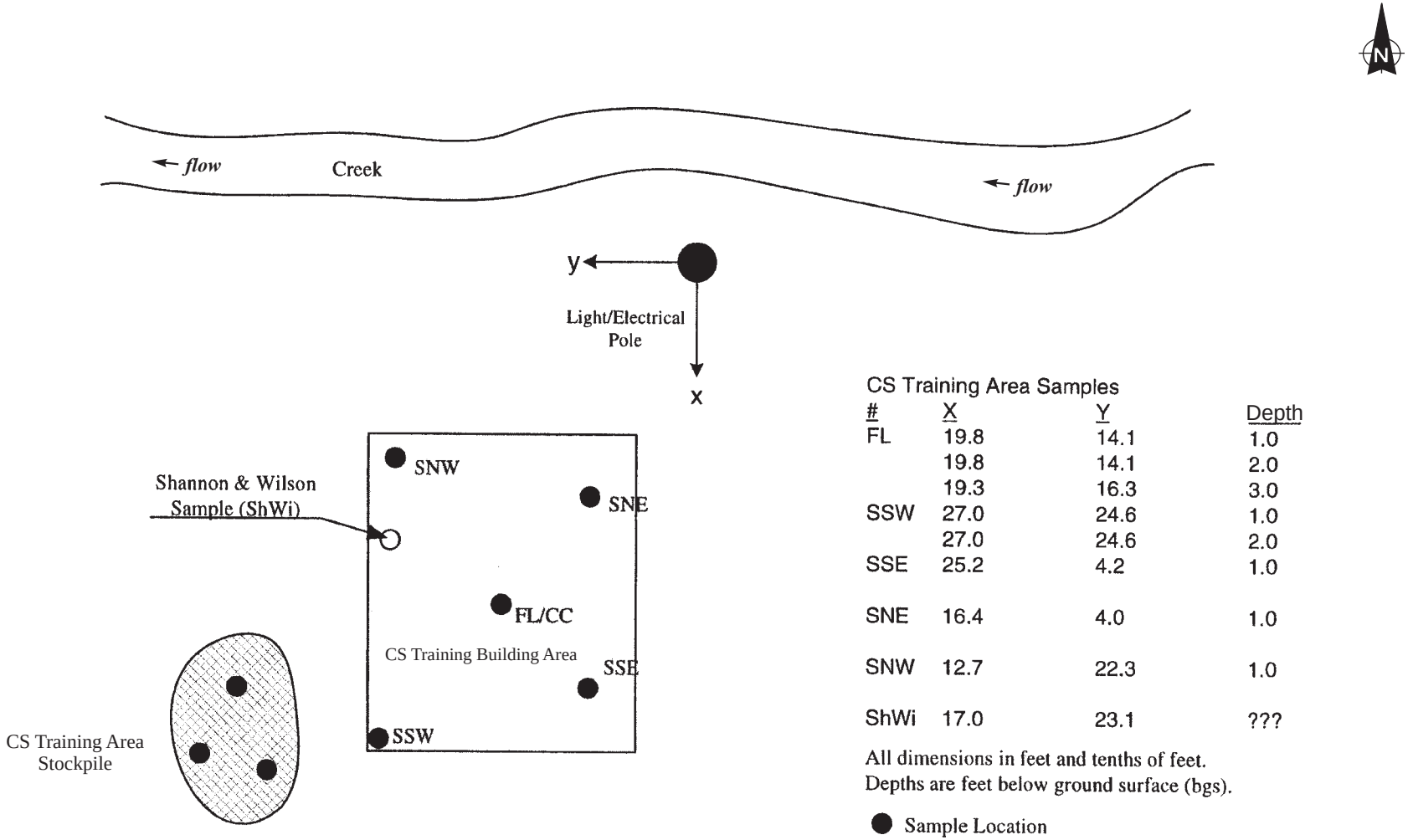
Figure 2-19
WASH RACK AND MAINTENANCE PIT SAMPLE LOCATIONS

Base Map Reference: Garry Struthers Associates Inc., 2000.

Date: 2/15/12

Drawn by: AES

10:START-3\10030010\fig 2-19



CS Training Area Samples

#	X	Y	Depth
FL	19.8	14.1	1.0
	19.8	14.1	2.0
	19.3	16.3	3.0
SSW	27.0	24.6	1.0
	27.0	24.6	2.0
SSE	25.2	4.2	1.0
SNE	16.4	4.0	1.0
SNW	12.7	22.3	1.0
ShWi	17.0	23.1	???

All dimensions in feet and tenths of feet.
Depths are feet below ground surface (bgs).

● Sample Location

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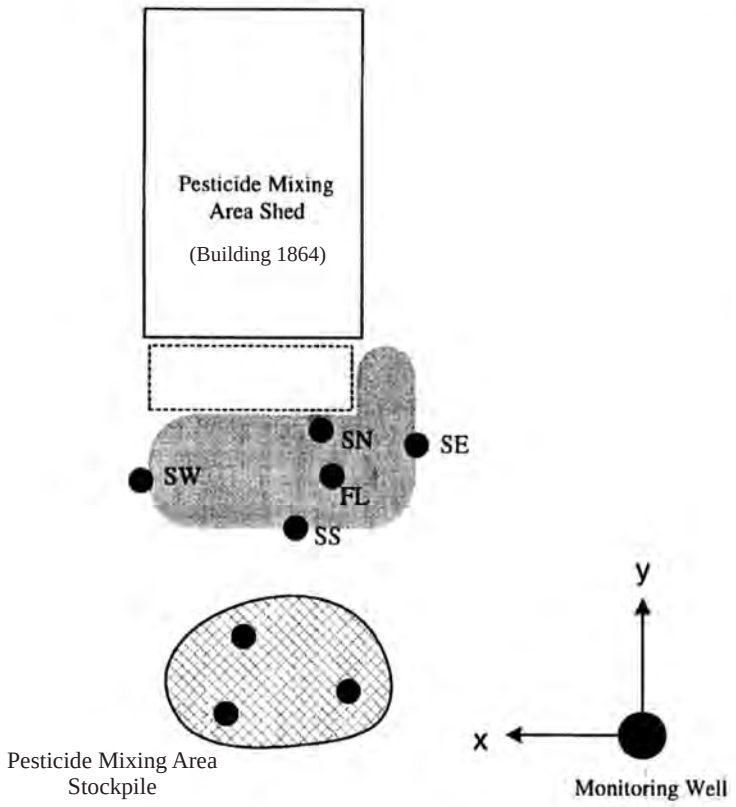
Figure 2-20
FORMER CS TRAINING BUILDING AREA
SAMPLE LOCATIONS

Base Map Reference: Garry Struthers Associates Inc., 2000.

Date: 3/26/12 | Drawn by: AES | 10:START-3\10030010\fig 2-20



Pesticide Mixing Area Samples

#	X	Y	Depth
FL	10.3	20.1	2.5
SN	10.7	20.8	1.5
SE	7.0	20.3	1.5
SS	12.5	15.1	1.5
	10.0	12.4	2.3
SW	15.9	19.2	1.5

All dimensions in feet and tenths of feet.
Depths are feet below ground surface (bgs).

● Sample Location

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Figure 2-21
PESTICIDE MIXING/STORAGE AREA SAMPLE LOCATIONS

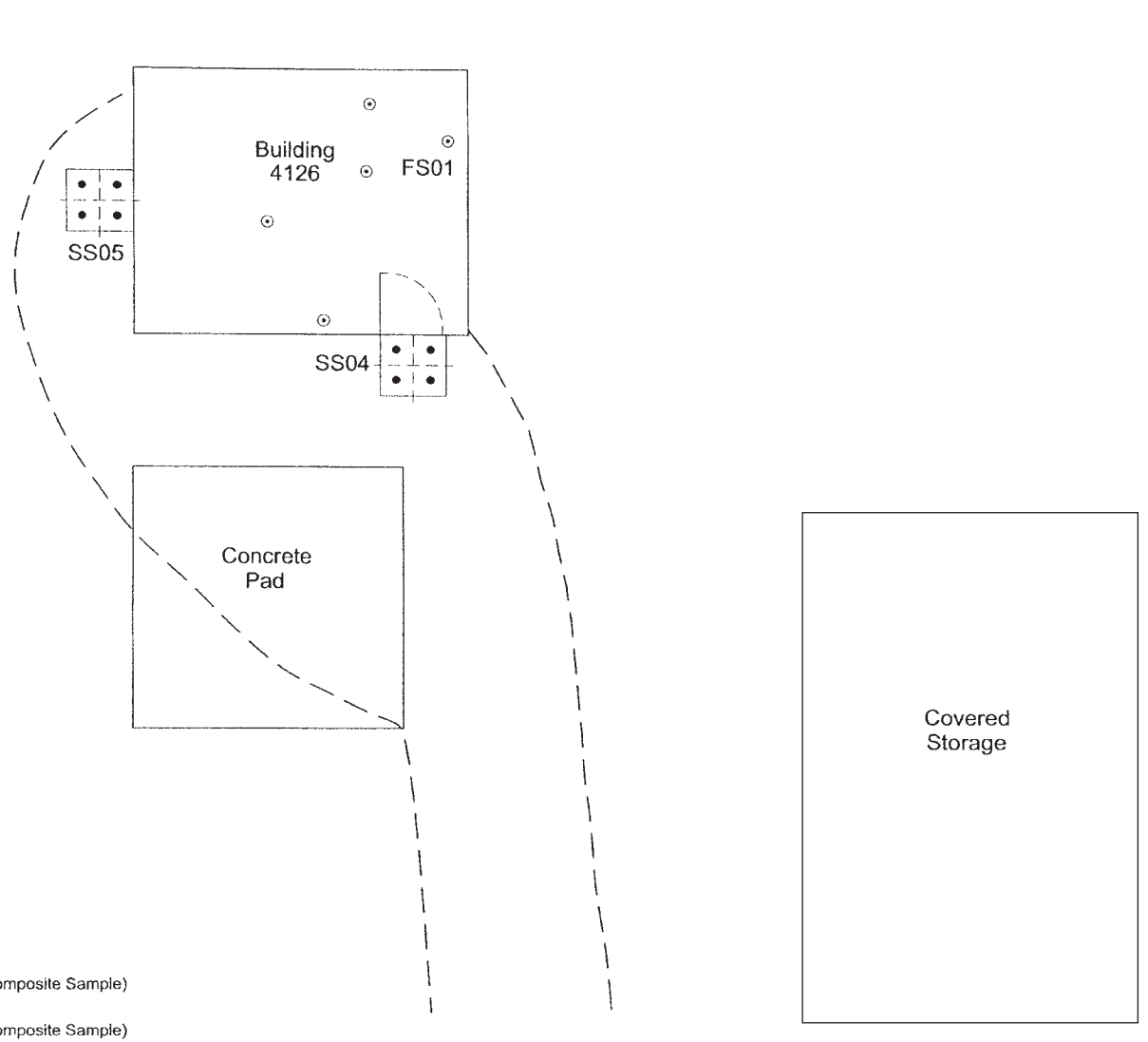
Base Map Reference: Garry Struthers Associates Inc., 2000.

Date: 2/15/12

Drawn by: AES

10:START-3\10030010\fig 2-21

Base Map Reference: URS 2000a.



Legend

FS01 ⊙ Flooring Material Subsample Location (for Composite Sample)

SS04 ● Surface Soil Subsample Location (for Composite Sample)

—— —— UXO Avoidance Perimeter

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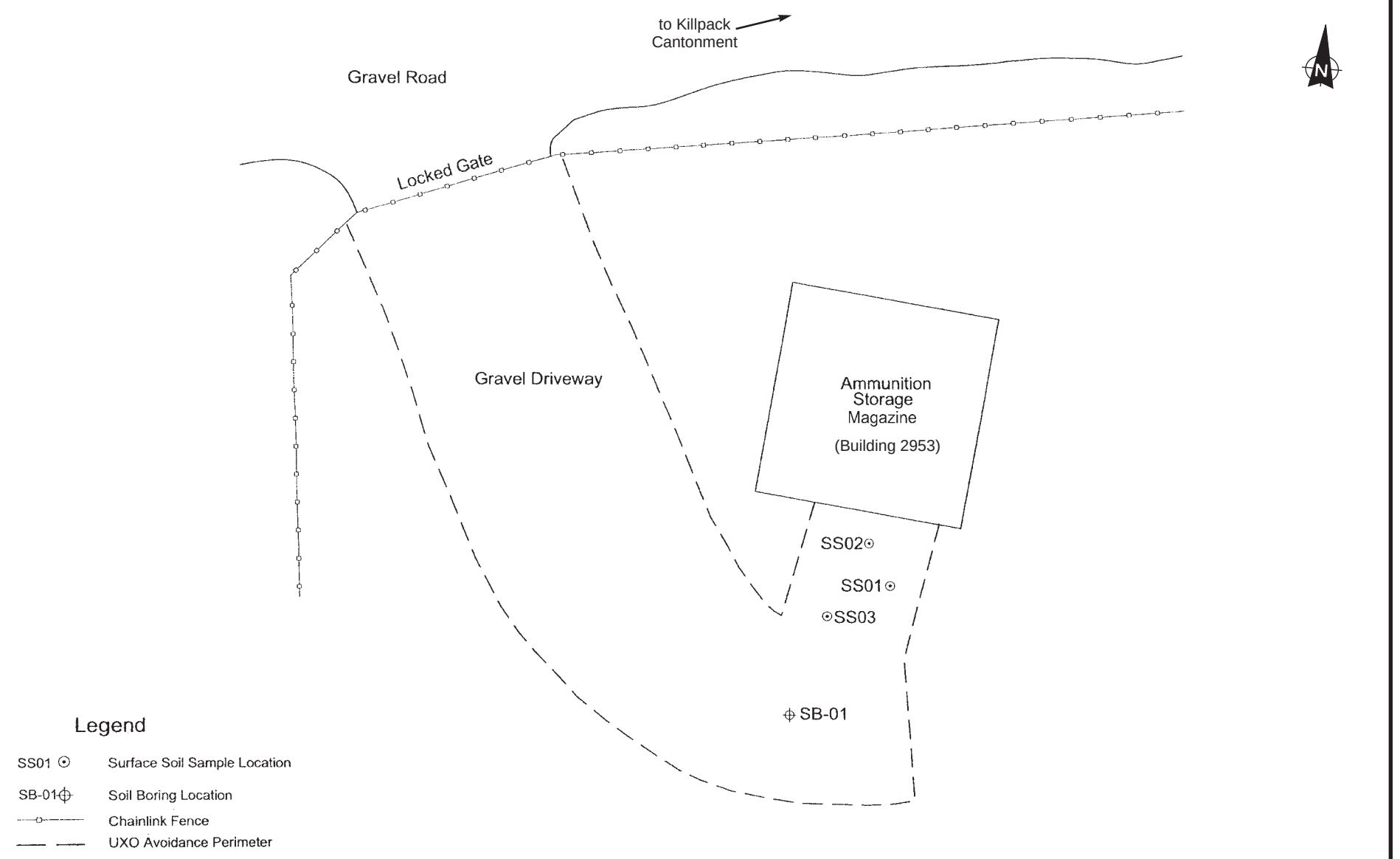
0 5 10
Approximate Scale in Feet

Figure 2-22
PESTICIDE STORAGE AREA SAMPLE LOCATIONS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-22

Base Map Reference: URS 2000a.



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0 5 10
Approximate Scale in Feet

Figure 2-23
AMMUNITION STORAGE MAGAZINES
SAMPLE LOCATIONS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-23

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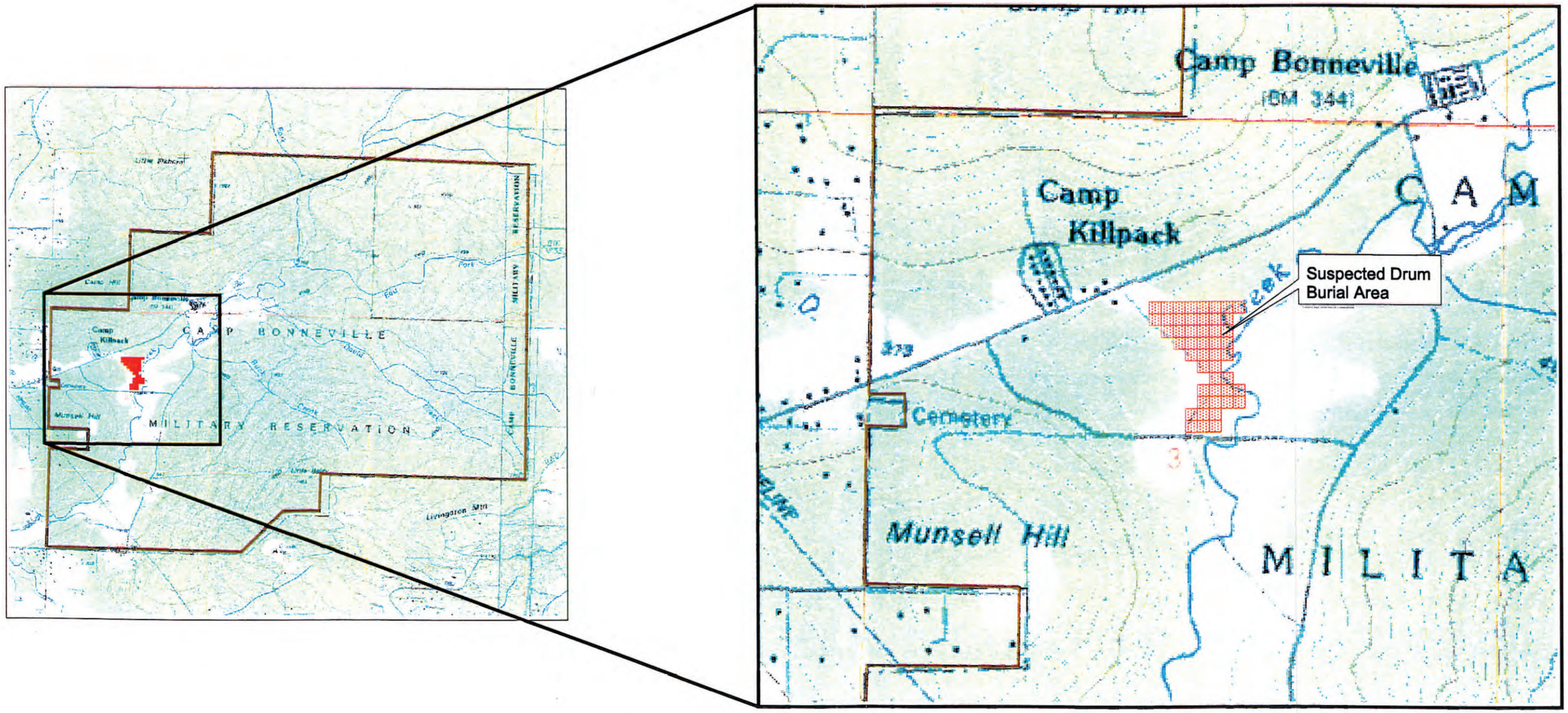

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Base Map Reference: Parsons Engineering Science, Inc. 2001.

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Figure 2-24
GEOPHYSICAL SURVEY SUSPECTED DRUM BURIAL AREA

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-24

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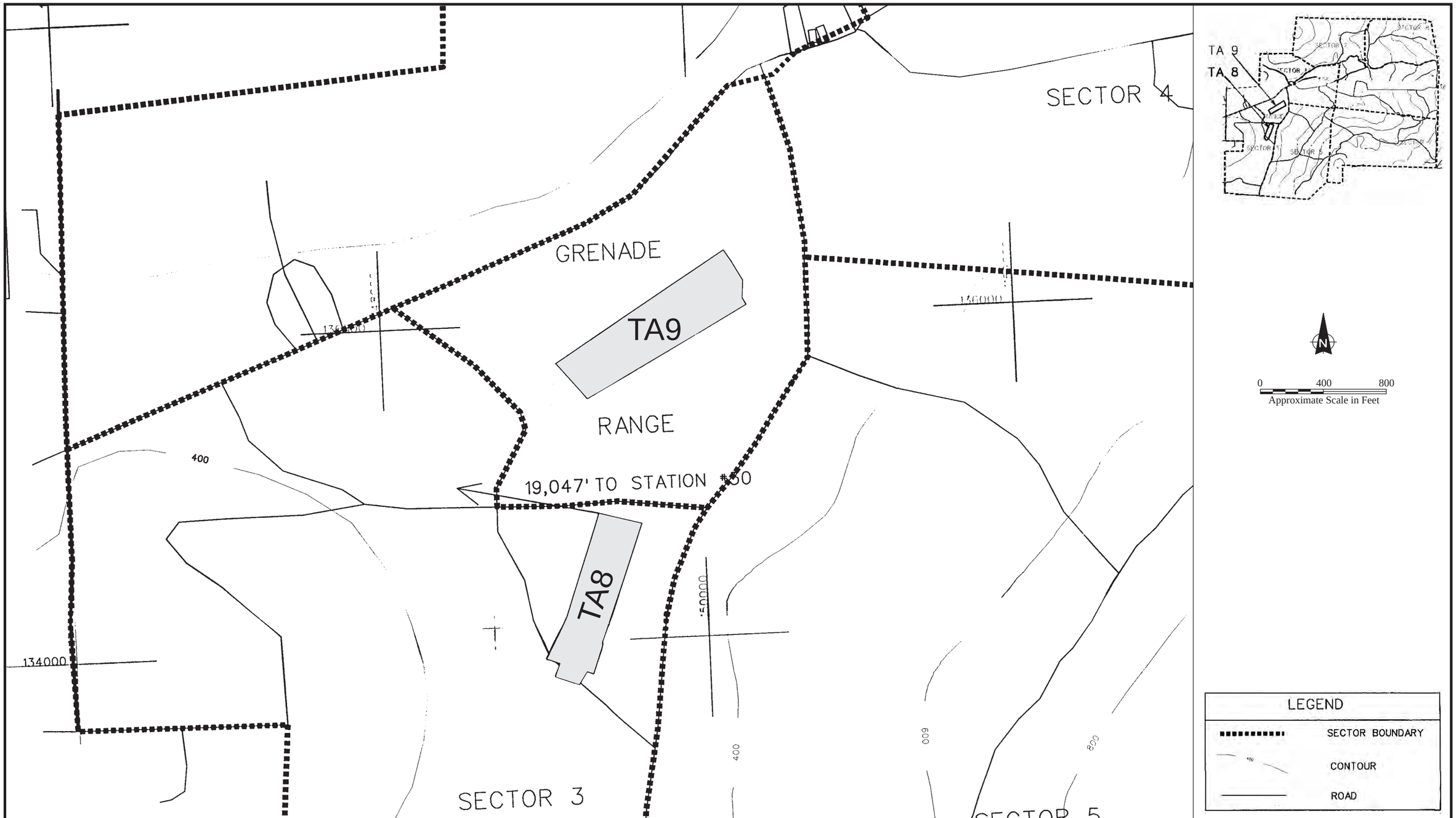

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Base Map Reference: UXB International, 2000.

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Figure 2-25
TA8 AND TA9 UXBI INVESTIGATION AREAS

Date:	Drawn by:	
3/26/12	AES	10:START-3\10030010\fig 2-25

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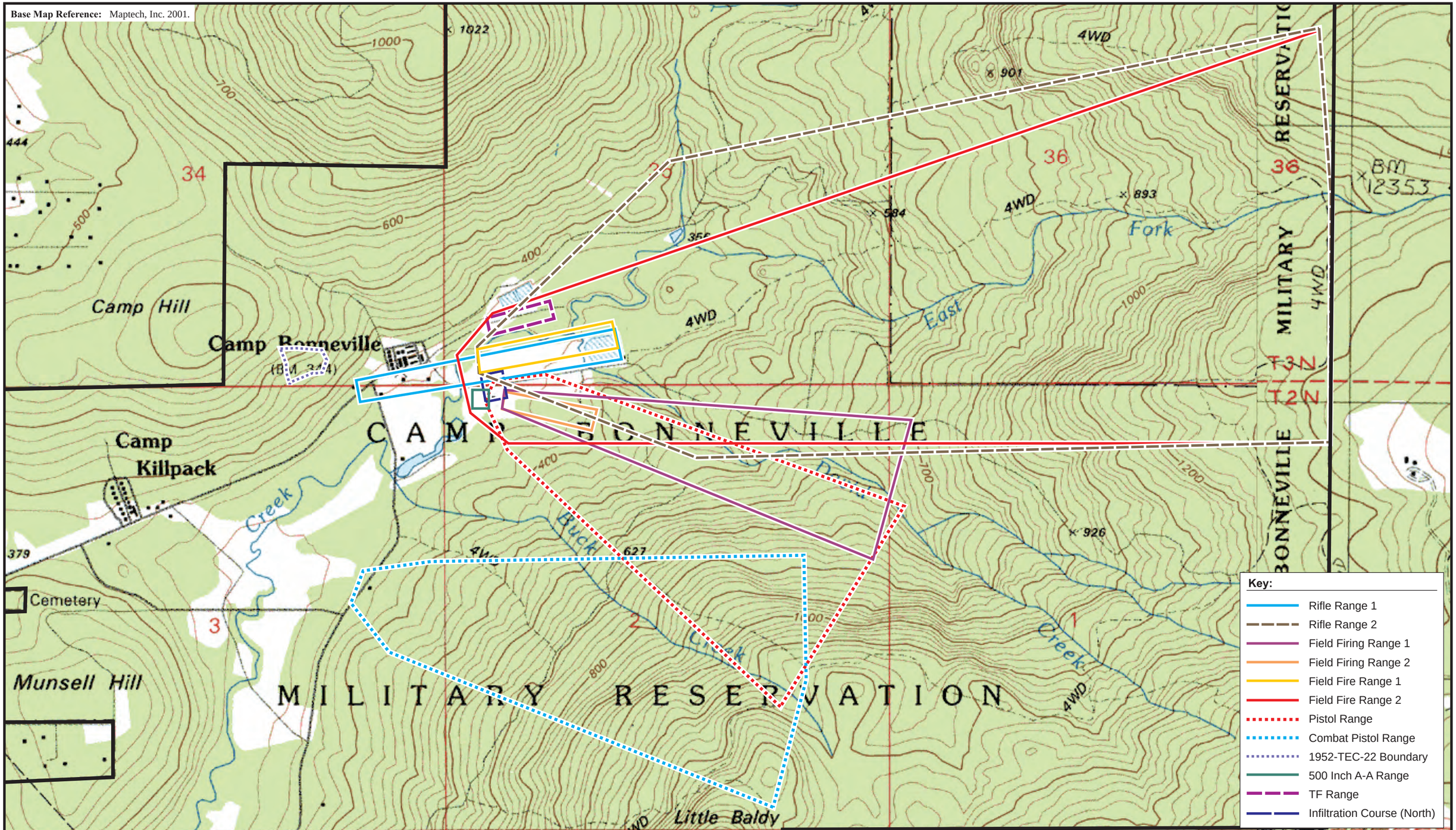

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0 800 1600
Approximate Scale in Feet

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Note: Some area boundary's are approximate. The source documents did not show complete boundary lines.

Figure 2-26
SMALL ARMS RANGE RECONNAISSANCE GROUP 1

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-26

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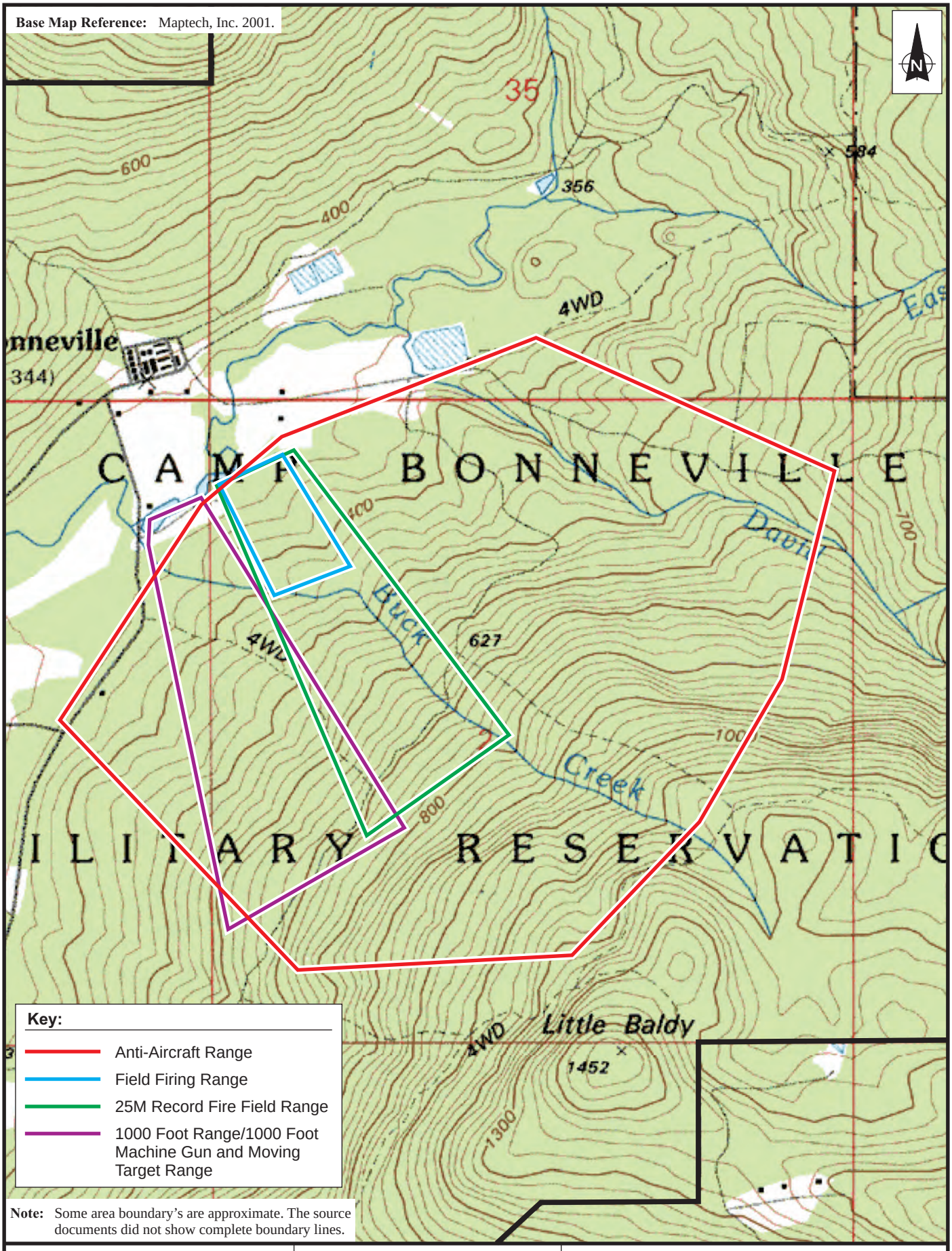

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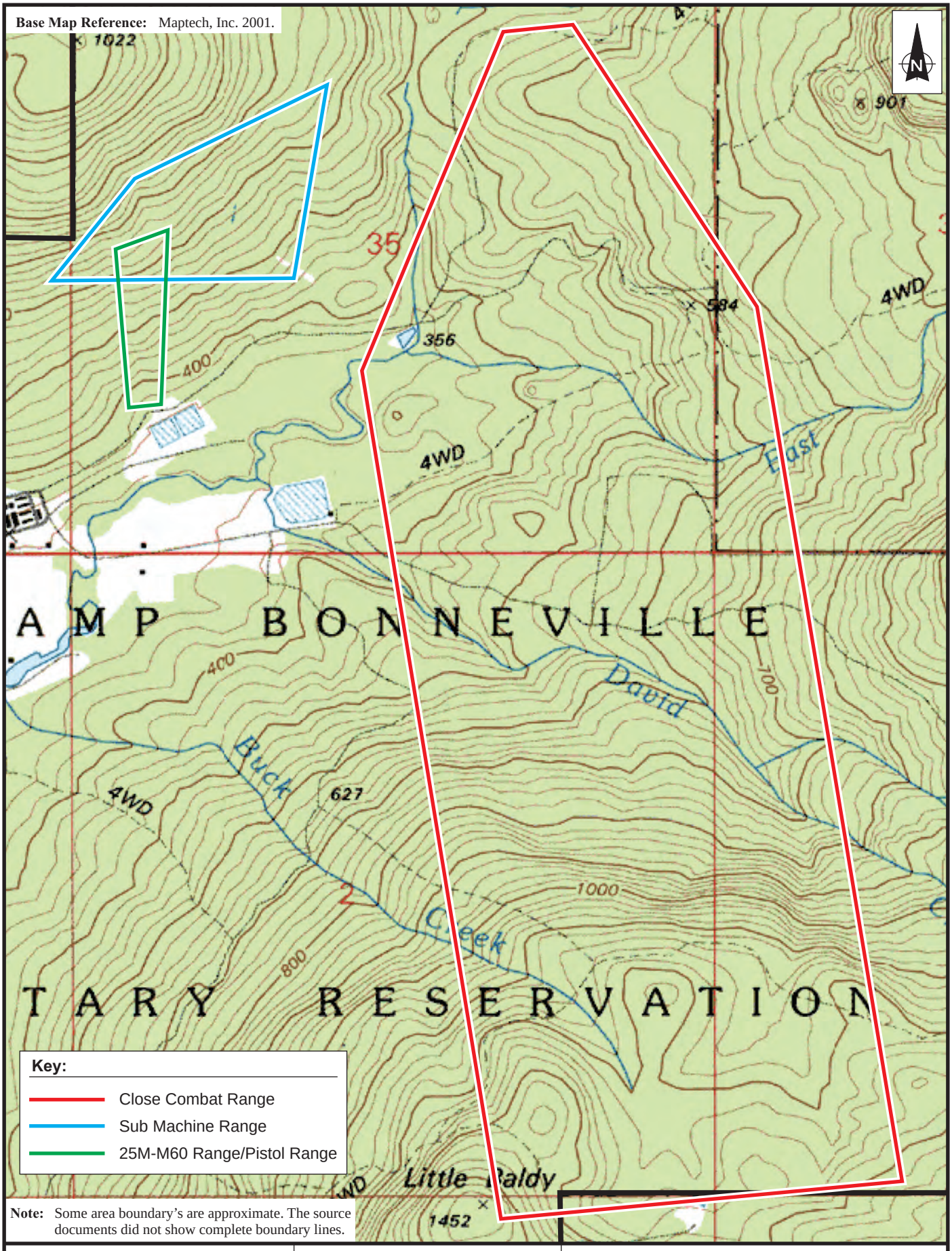
0 800 1600
Approximate Scale in Feet

Figure 2-27

SMALL ARMS RANGE
RECONNAISSANCE GROUP 2

Date:	Drawn by:	
3-27-12	AES	10:START-3\10030010\fig 2-27



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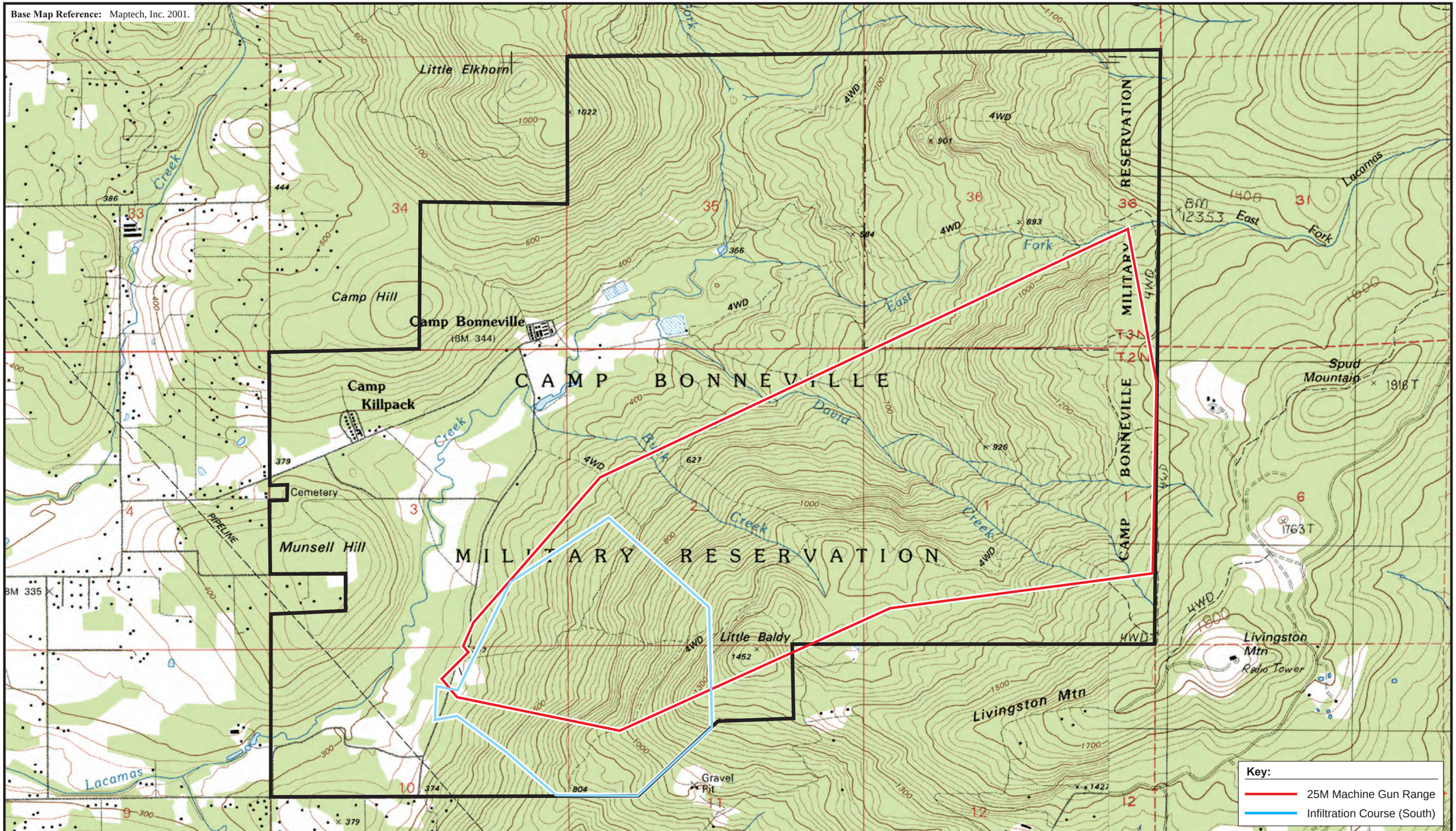
0 800 1600
Approximate Scale in Feet

Figure 2-28

SMALL ARMS RANGE
RECONNAISSANCE GROUP 3

Date:	Drawn by:	
3-27-12	AES	10:START-3\10030010\fig 2-28



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0 800 1600
Approximate Scale in Feet

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Note: Some area boundary's are approximate. The source documents did not show complete boundary lines.

Figure 2-29
SMALL ARMS RANGE RECONNAISSANCE GROUP 4

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-29

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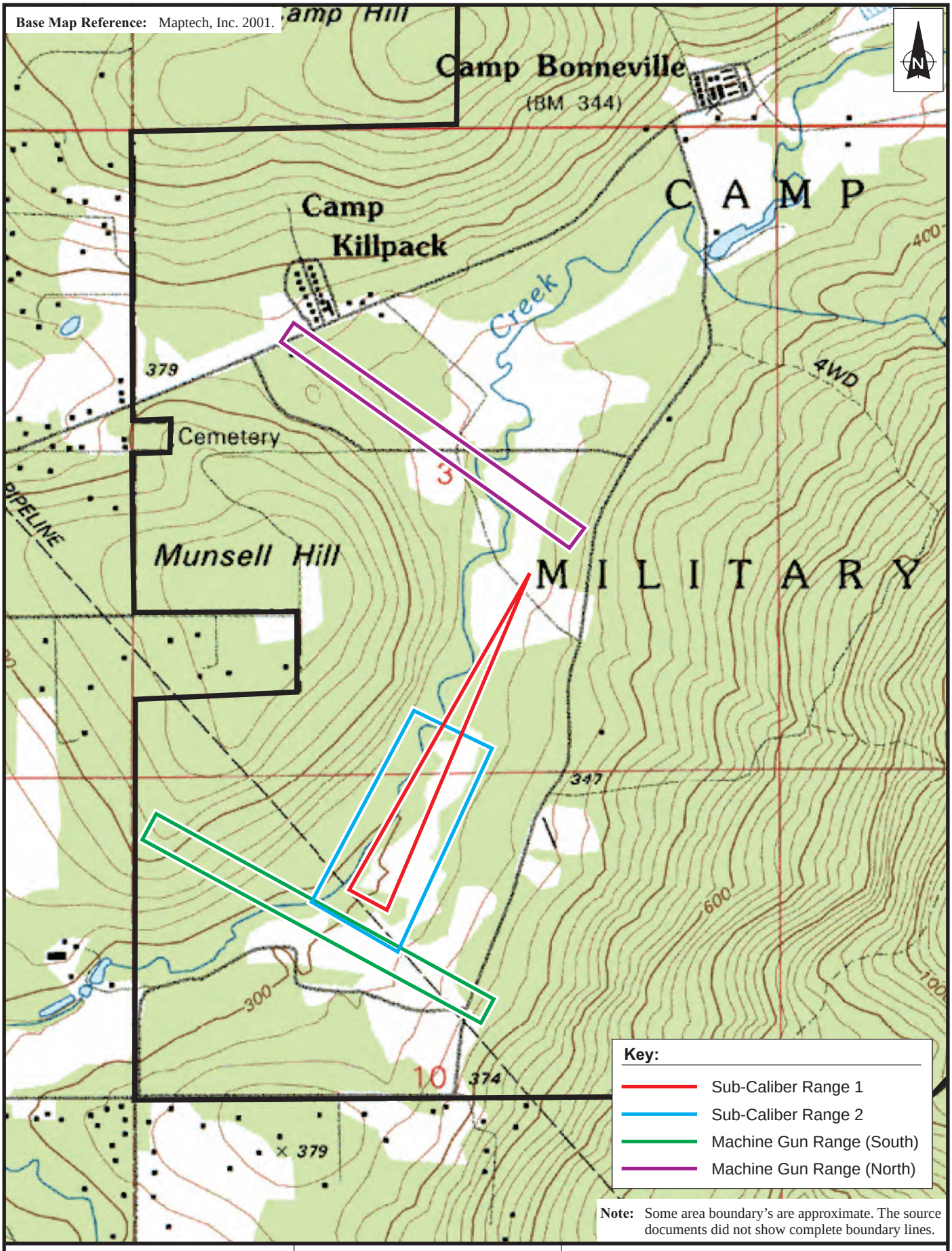

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0 800 1600
Approximate Scale in Feet

Figure 2-30
SMALL ARMS RANGE
RECONNAISSANCE GROUP 5

Date: 3-27-12
Drawn by: AES
10:START-3\10030010\fig 2-30

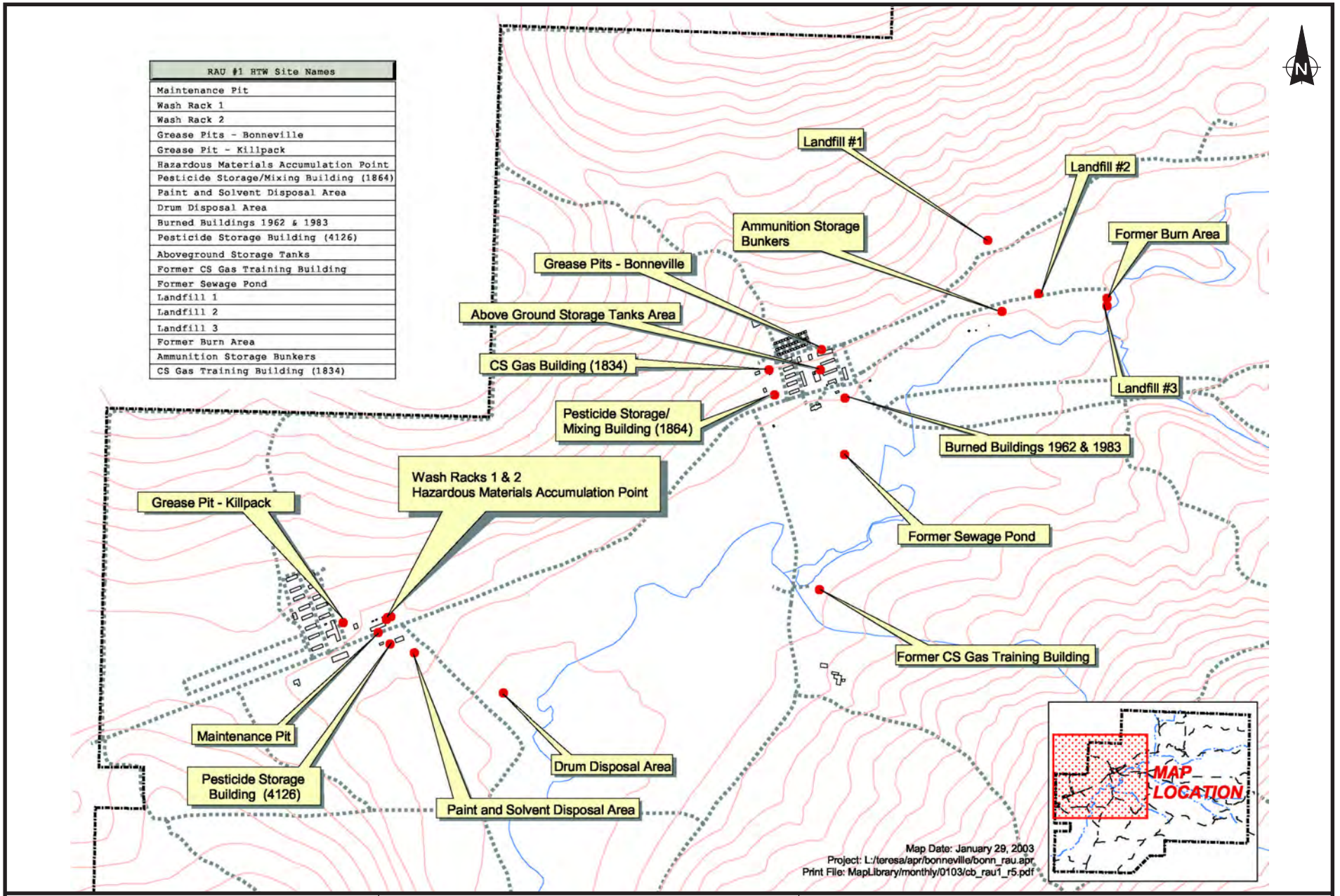

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Figure 2-31
REMEDIAL ACTION UNIT 1

Base Map Reference: WADOE, 2003.

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-31

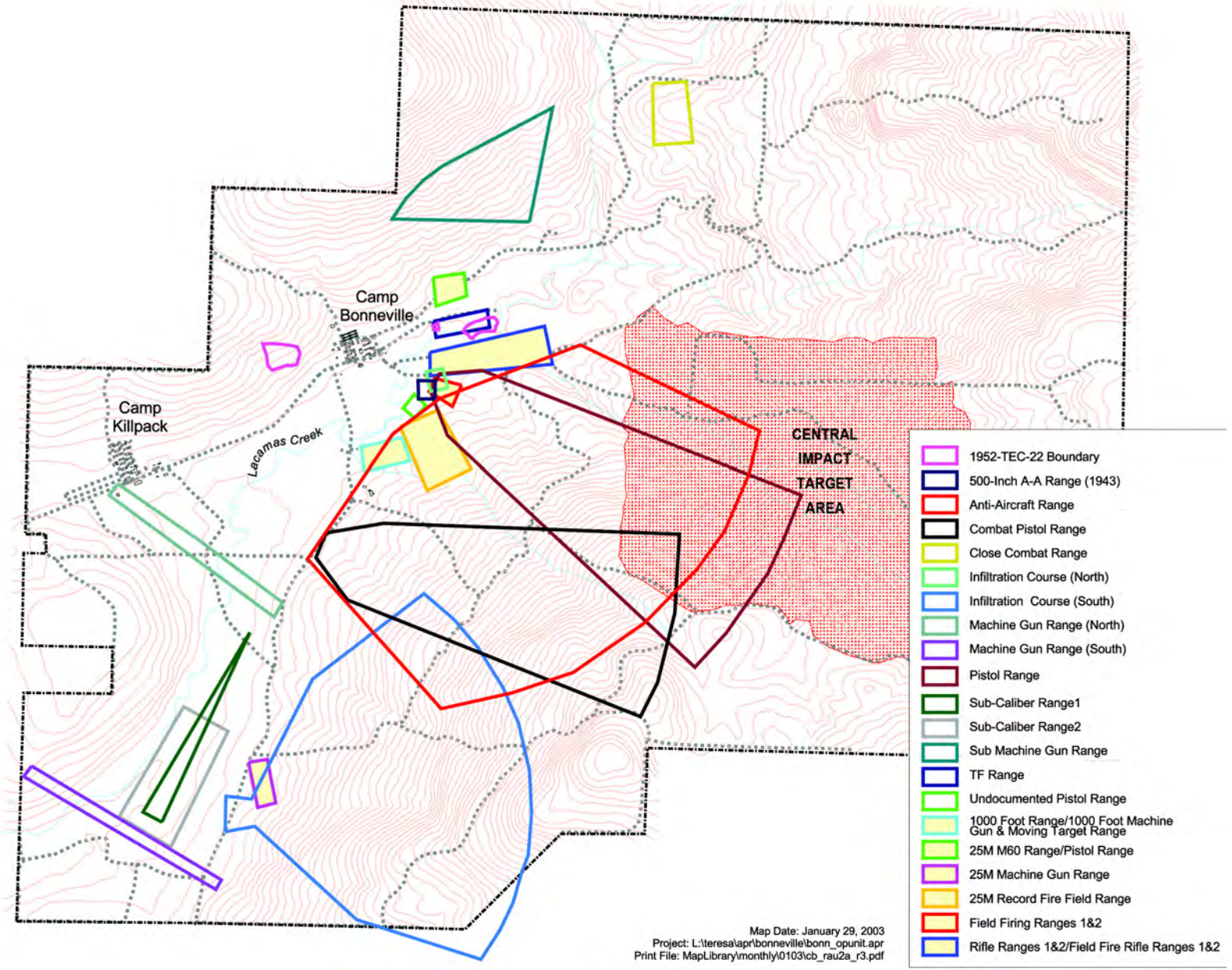

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Figure 2-32
REMEDIAL ACTION UNIT 2A

Base Map Reference: WADOE, 2003.

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-32

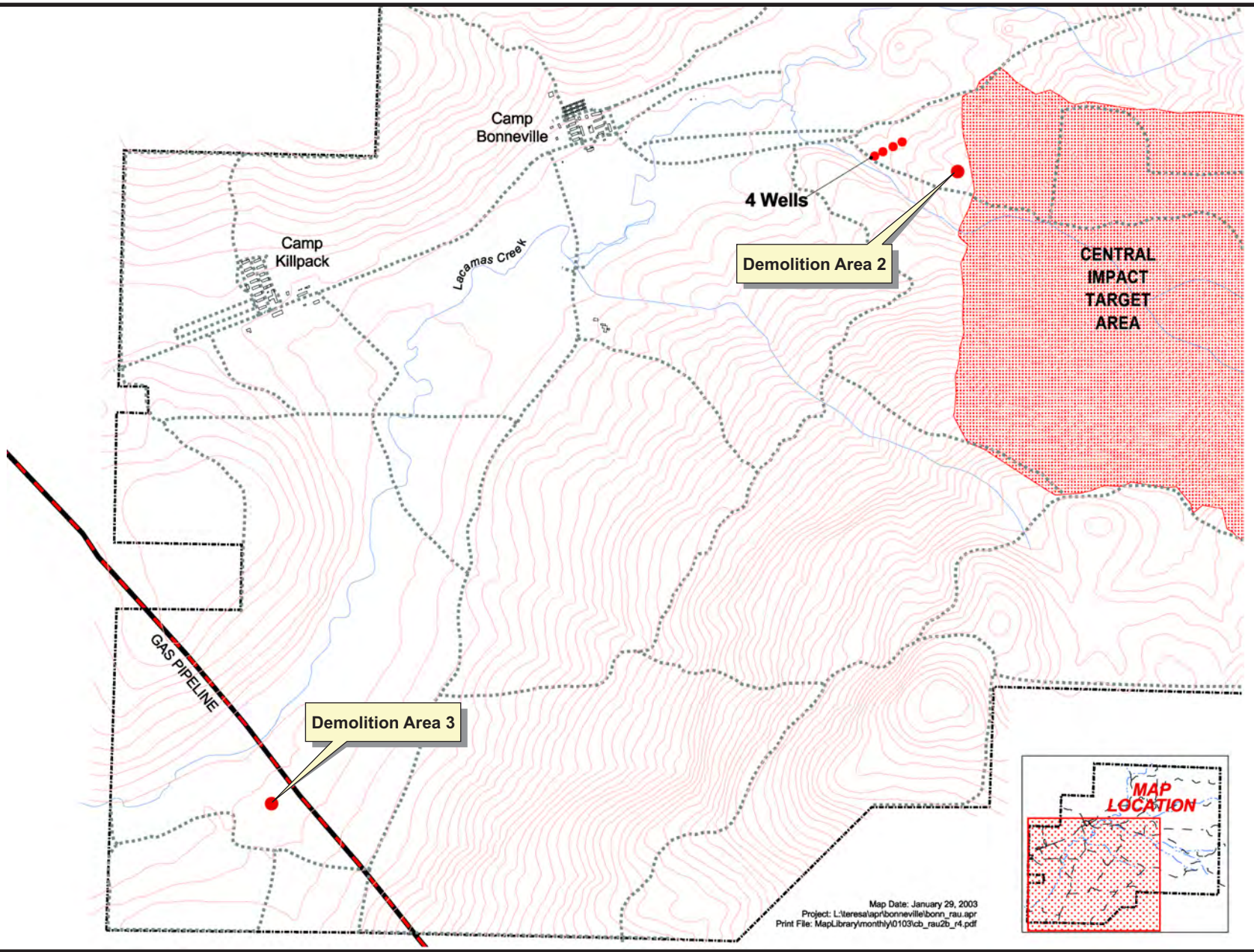

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Figure 2-33
REMEDIAL ACTION UNIT 2B

Base Map Reference: WADOE, 2003.

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-33

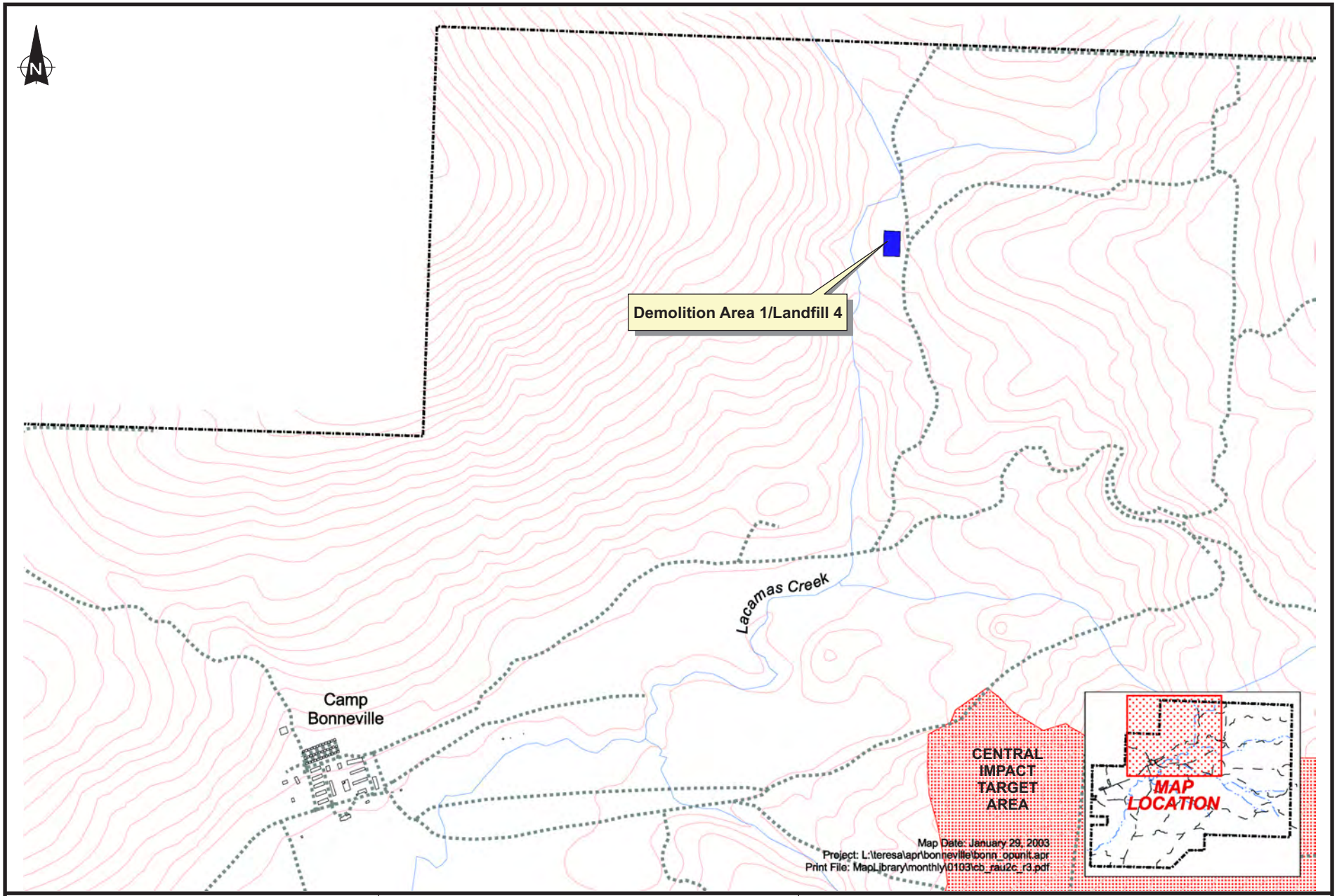

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Figure 2-34
REMEDIAL ACTION UNIT 2C

Base Map Reference: WADOE, 2003.

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-34

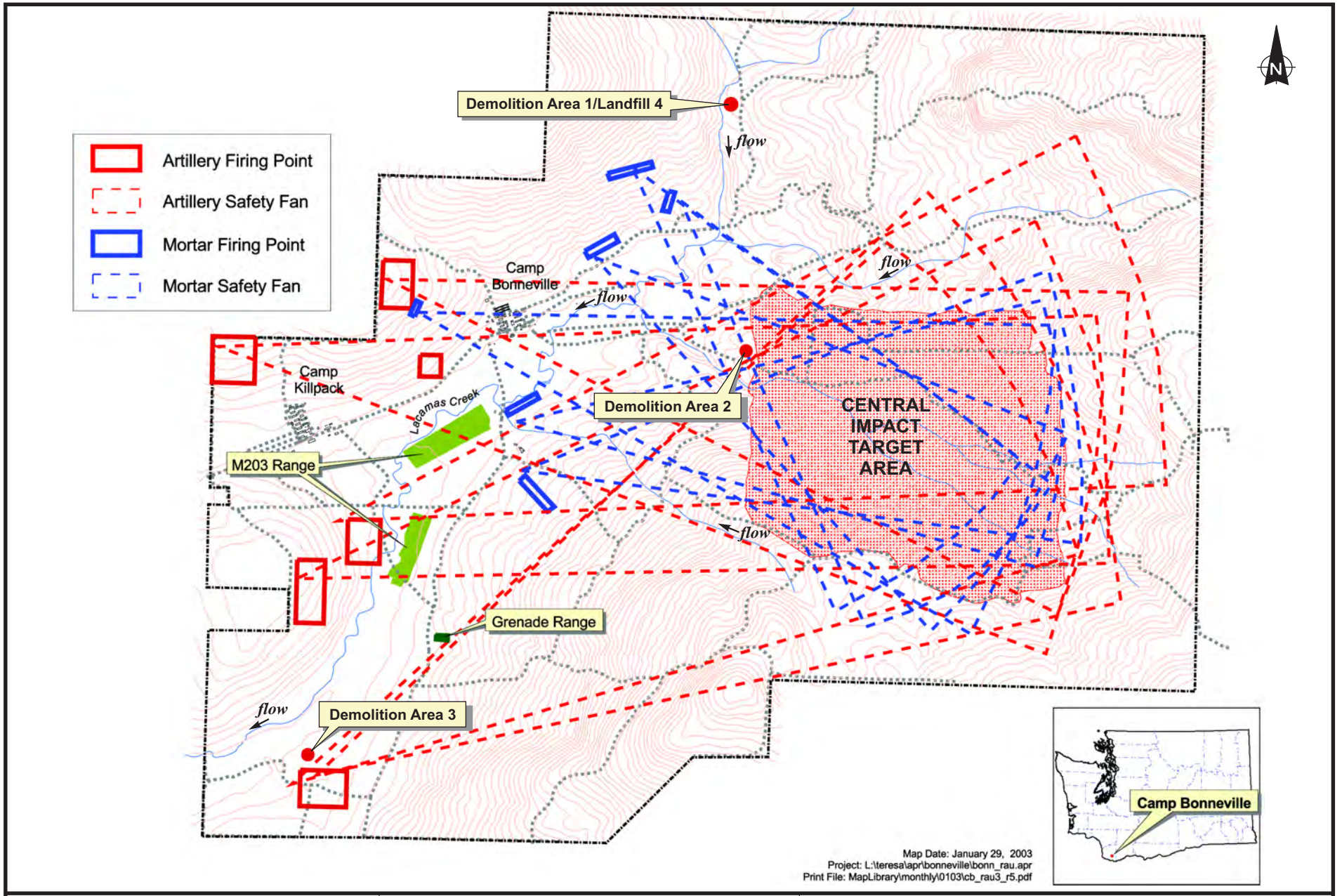

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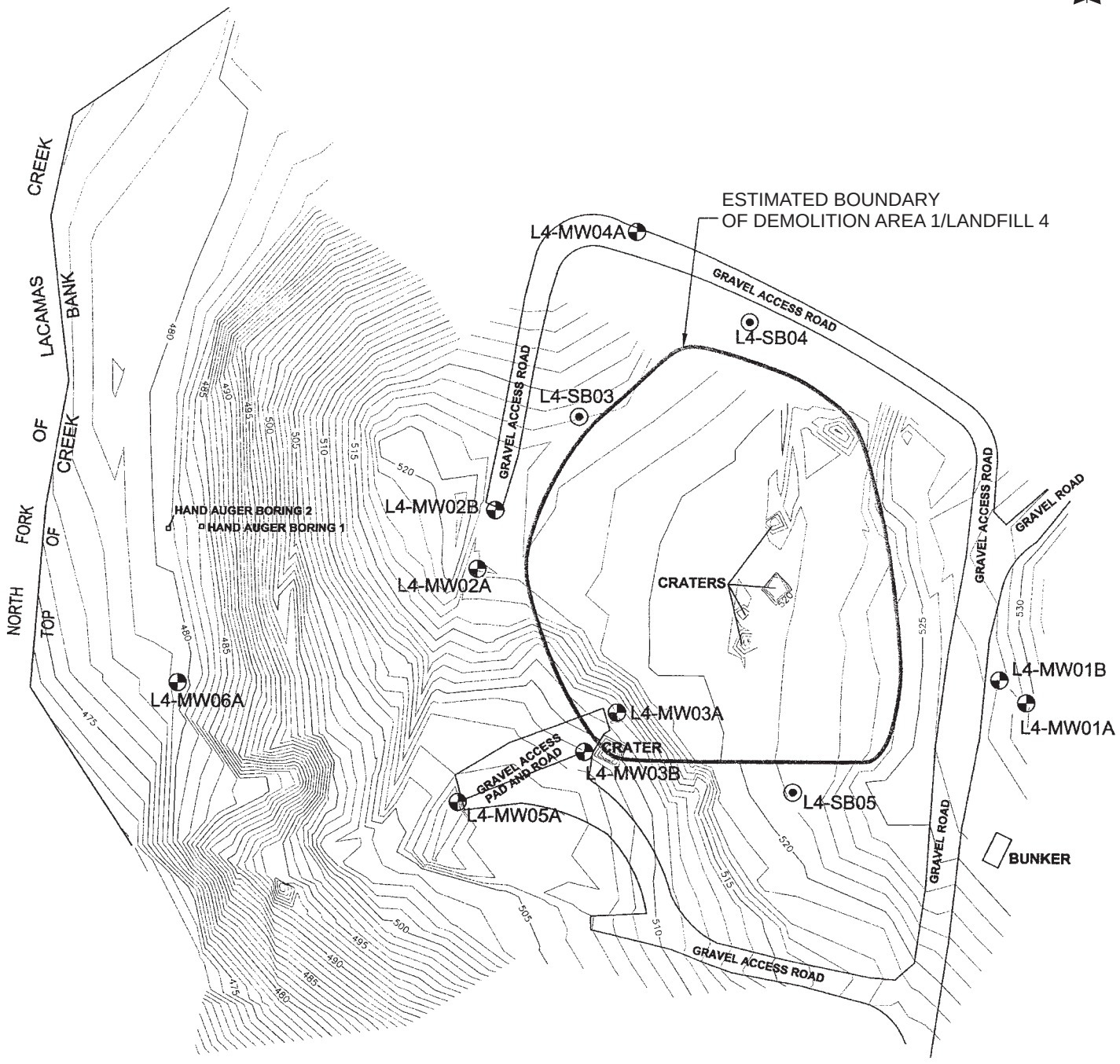
Figure 2-35
REMEDIAL ACTION UNIT 3

Base Map Reference: WADOE, 2003.

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-35

Base Map Reference: URS 2002.



LEGEND

L4-MW04A	MONITORING WELL LOCATION AND DESIGNATION
L4-SB03	SOIL BORING LOCATION AND DESIGNATION

NOTES

1) WELLS L4-MW01A, L4-MW02A AND ALL SOIL BORINGS INSTALLED BY SHANNON & WILSON (1999).
2) TOPOGRAPHY PROVIDED BY OLSEN ENGINEERING
3) WELL L4-MW07B AND SOIL BORING L4-SB07A ARE LOCATED APPROXIMATELY 250 FT SOUTH OF LANDFILL 4

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Figure 2-36
DEMOLITION AREA 1/LANDFILL 4 – SOIL BORINGS AND MONITORING WELL LOCATIONS

0 50 100
Approximate Scale in Feet

Date:	Drawn by:	
4-23-12	AES	10:START-3\10030010\fig 2-36

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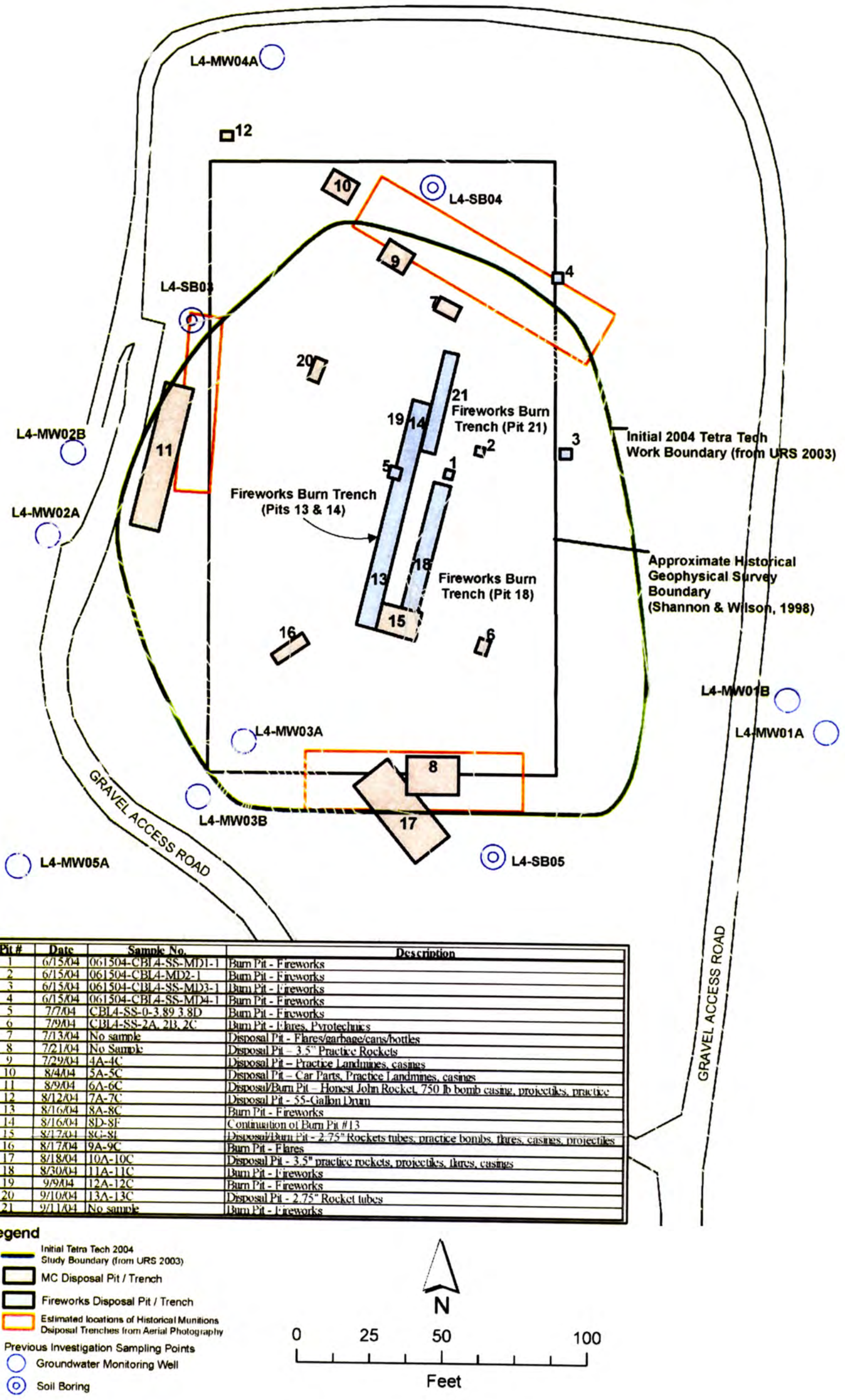
Figure 2-37
SMALL ARMS RANGES AND
DEMOLITION AREAS 2 AND 3

Base Map Reference:
Atlanta Environmental Management, Inc., 2003.

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-37



Pit #	Date	Sample No.	Description
1	6/15/04	061504-CBL4-SS-MD1-1	Burn Pit - Fireworks
2	6/15/04	061504-CBL4-MD2-1	Burn Pit - Fireworks
3	6/15/04	061504-CBL4-SS-MD3-1	Burn Pit - Fireworks
4	6/15/04	061504-CBL4-SS-MD4-1	Burn Pit - Fireworks
5	7/7/04	CBL4-SS-0-3,89 3 8D	Burn Pit - Fireworks
6	7/9/04	CBL4-SS-2A, 2B, 2C	Burn Pit - Flares, Pyrotechnics
7	7/13/04	No sample	Disposal Pit - Flares/garbage/cans/bottles
8	7/21/04	No Sample	Disposal Pit – 3.5" Practice Rockets
9	7/29/04	4A-4C	Disposal Pit – Practice Landmines, casings
10	8/4/04	5A-5C	Disposal Pit – Car Parts, Practice Landmines, casings
11	8/9/04	6A-6C	Disposal/Burn Pit – Honest John Rocket, 750 lb bomb casing, projectiles, practice
12	8/12/04	7A-7C	Disposal Pit - 55-Gallon Drum
13	8/16/04	8A-8C	Burn Pit - Fireworks
14	8/16/04	8D-8F	Continuation of Burn Pit #13
15	8/17/04	8G-8I	Disposal/Burn Pit - 2.75" Rockets tubes, practice bombs, flares, casings, projectiles
16	8/17/04	9A-9C	Burn Pit - Flares
17	8/18/04	10A-10C	Disposal Pit - 3.5" practice rockets, projectiles, flares, casings
18	8/30/04	11A-11C	Burn Pit - Fireworks
19	9/9/04	12A-12C	Burn Pit - Fireworks
20	9/10/04	13A-13C	Disposal Pit - 2.75" Rocket tubes
21	9/11/04	No sample	Burn Pit - Fireworks

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Figure 2-38
LOCATIONS OF DISPOSAL PITS AND TRENCHES AT DEMOLITION AREA 1/LANDFILL 4

Base Map Reference: Tetra Tech, Inc., 2006.

Date: 3/27/12 | Drawn by: AES | 10:START-3\10030010\fig 2-38

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ecology and environment, inc. Global Specialists in the Environment Seattle, Washington	CAMP BONNEVILLE Vancouver, Washington	Figure 2-39 PERCHLORATE SAMPLE RESULTS EXCEEDING CRITERIA AFTER ADDITIONAL EXCAVATION		
	Base Map Reference: Tetra Tech, Inc., 2006.	Date: 3/27/12	Drawn by: AES	10:START-3\10030010\fig 2-39

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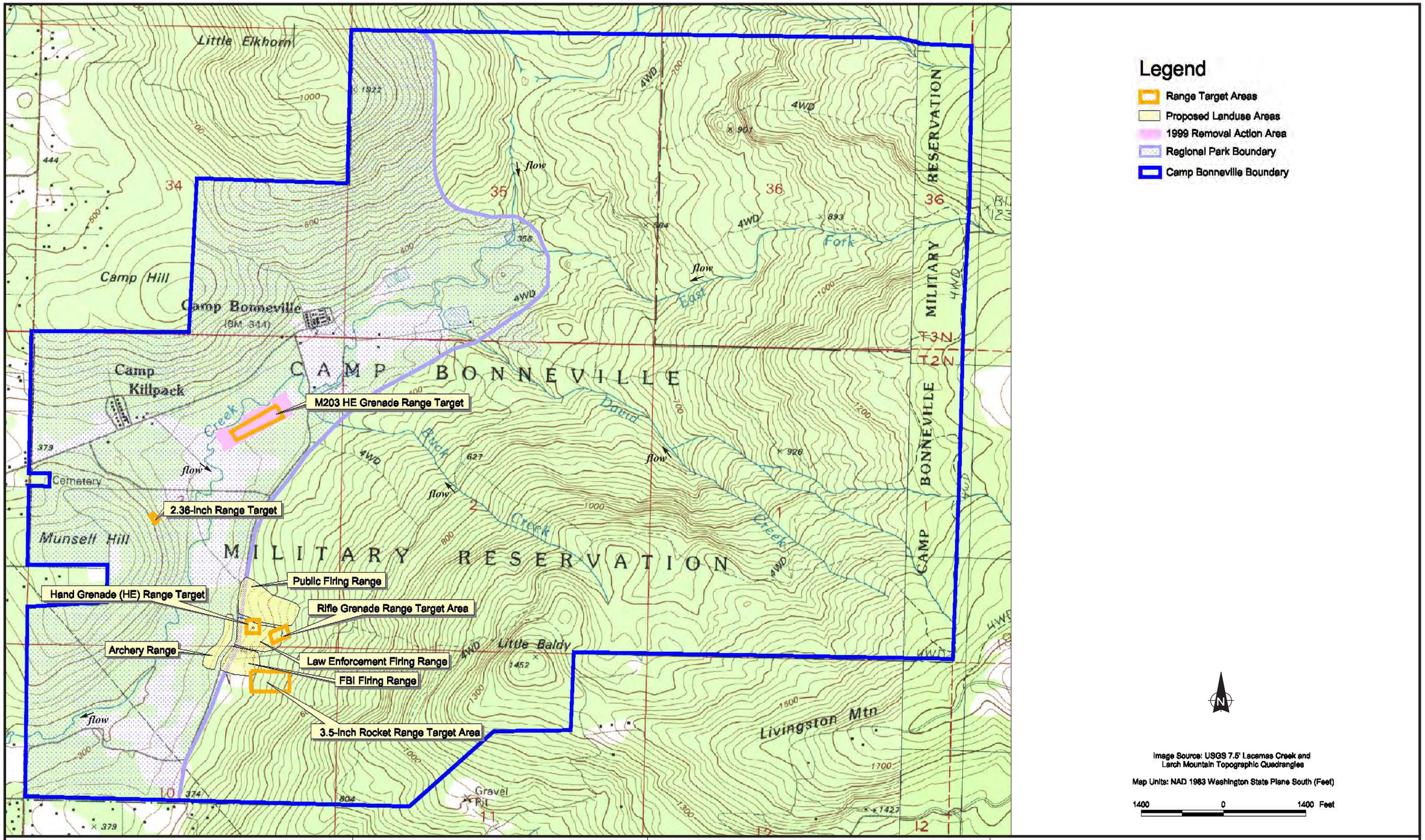

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Seattle, Washington

Base Map Reference: Parsons, 2004.

CAMP BONNEVILLE
Vancouver, Washington

Figure 2-40
TARGET AREA LOCATION MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-40

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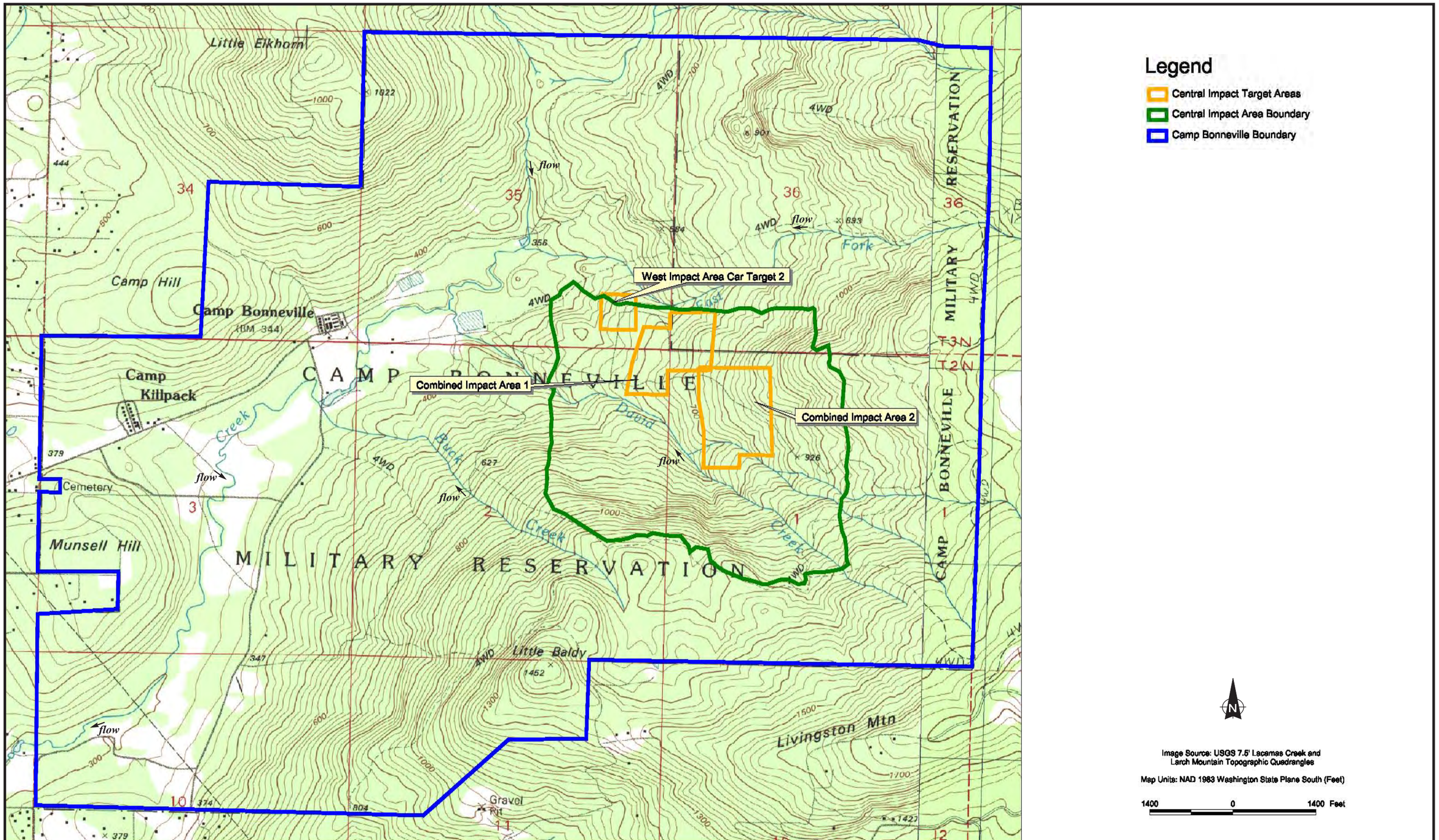

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Seattle, Washington

Base Map Reference: Parsons, 2004.

CAMP BONNEVILLE
Vancouver, Washington

Figure 2-41
CENTRAL IMPACT TARGET AREA LOCATION MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-41

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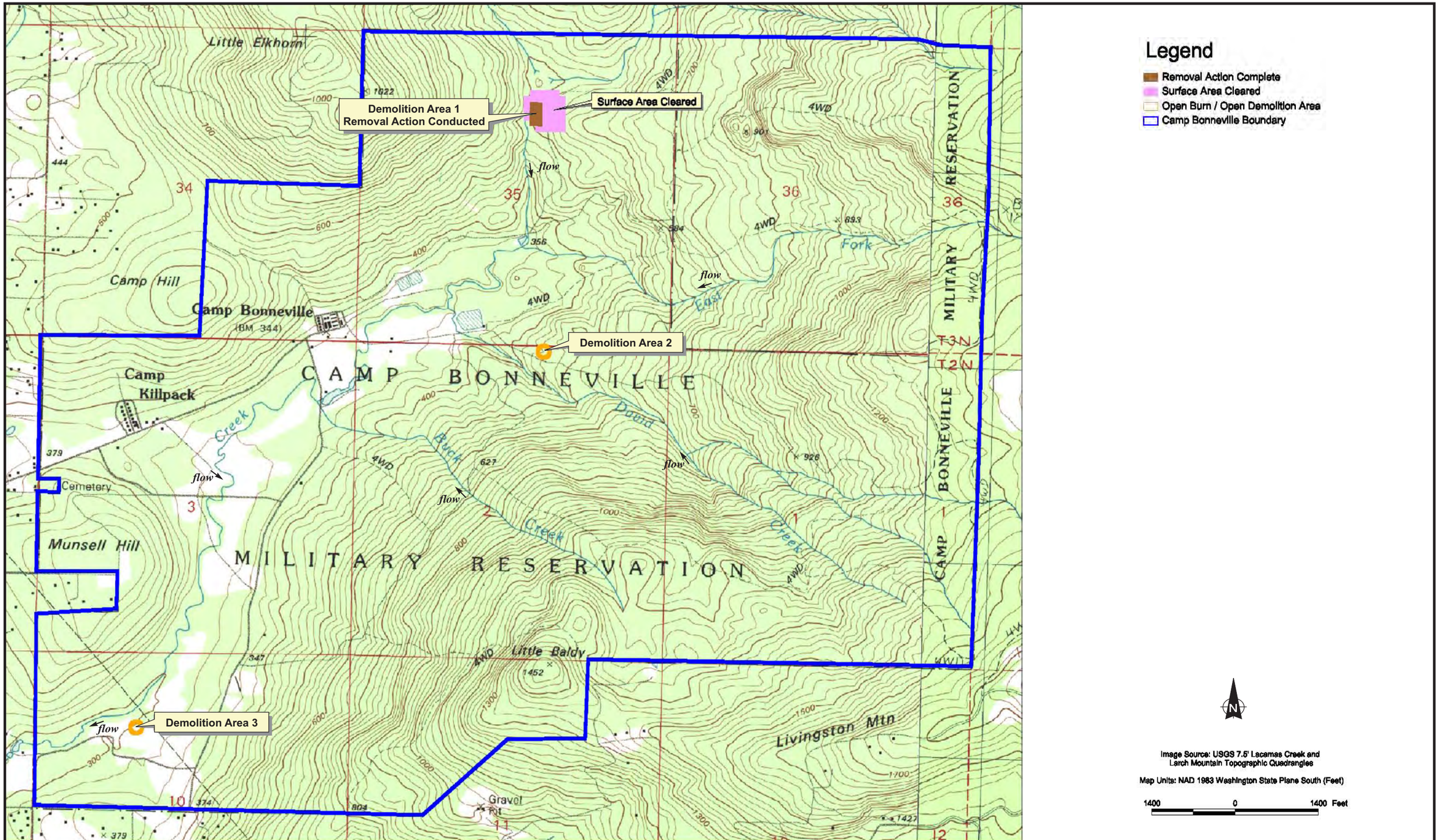

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Base Map Reference: Parsons, 2004.

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Vancouver, Washington

Figure 2-42
DEMOLITION AREA LOCATION MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-42

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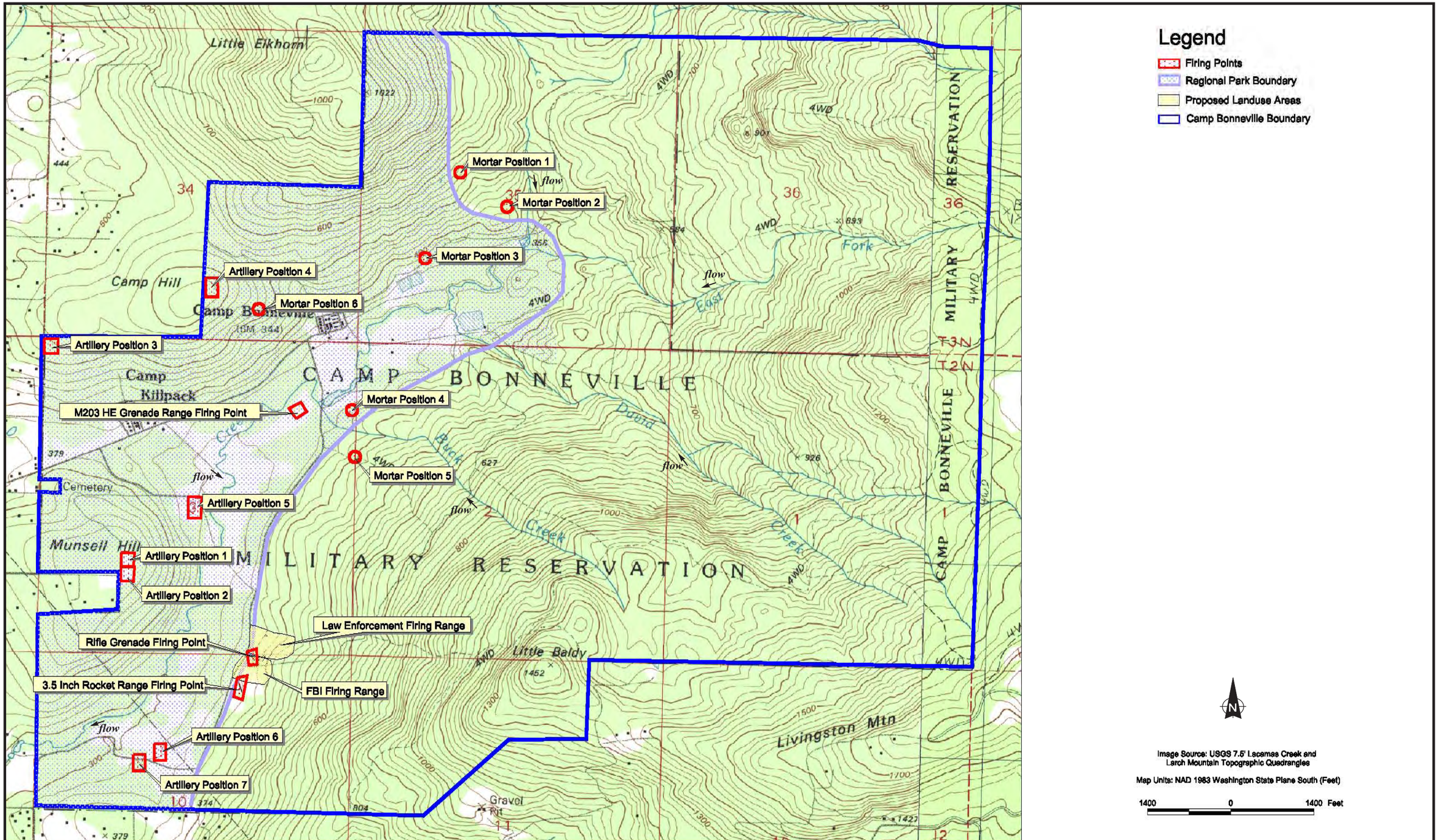

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Base Map Reference: Parsons, 2004.

CAMP BONNEVILLE
Vancouver, Washington

Figure 2-43
FIRING POINT LOCATION MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-43

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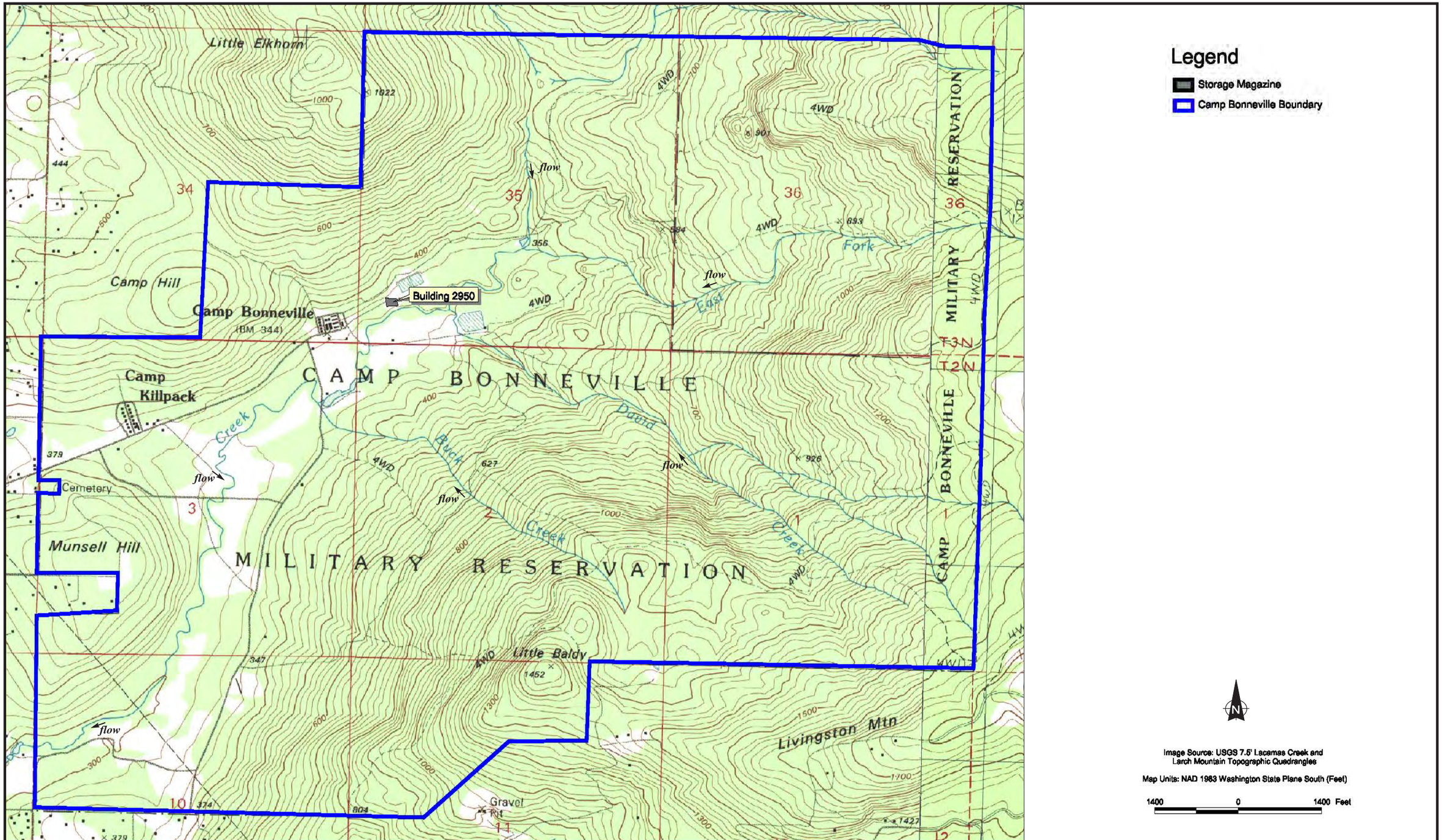

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Base Map Reference: Parsons, 2004.

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Vancouver, Washington

Figure 2-44
STORAGE MAGAZINE/TRANSFER POINT LOCATION MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-44

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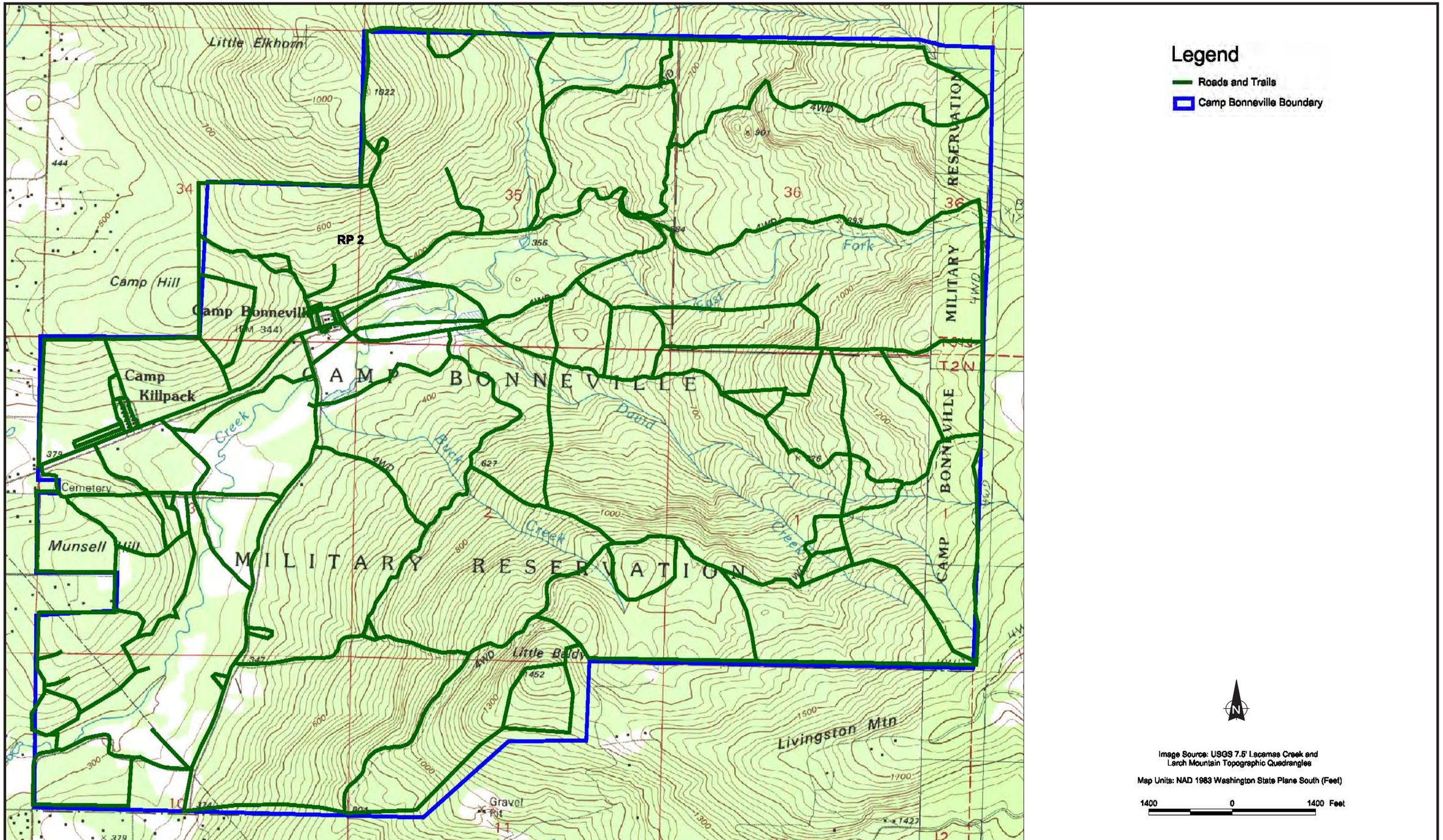

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Base Map Reference: Parsons, 2004.

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Vancouver, Washington

Figure 2-45
ROADS AND TRAILS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-45

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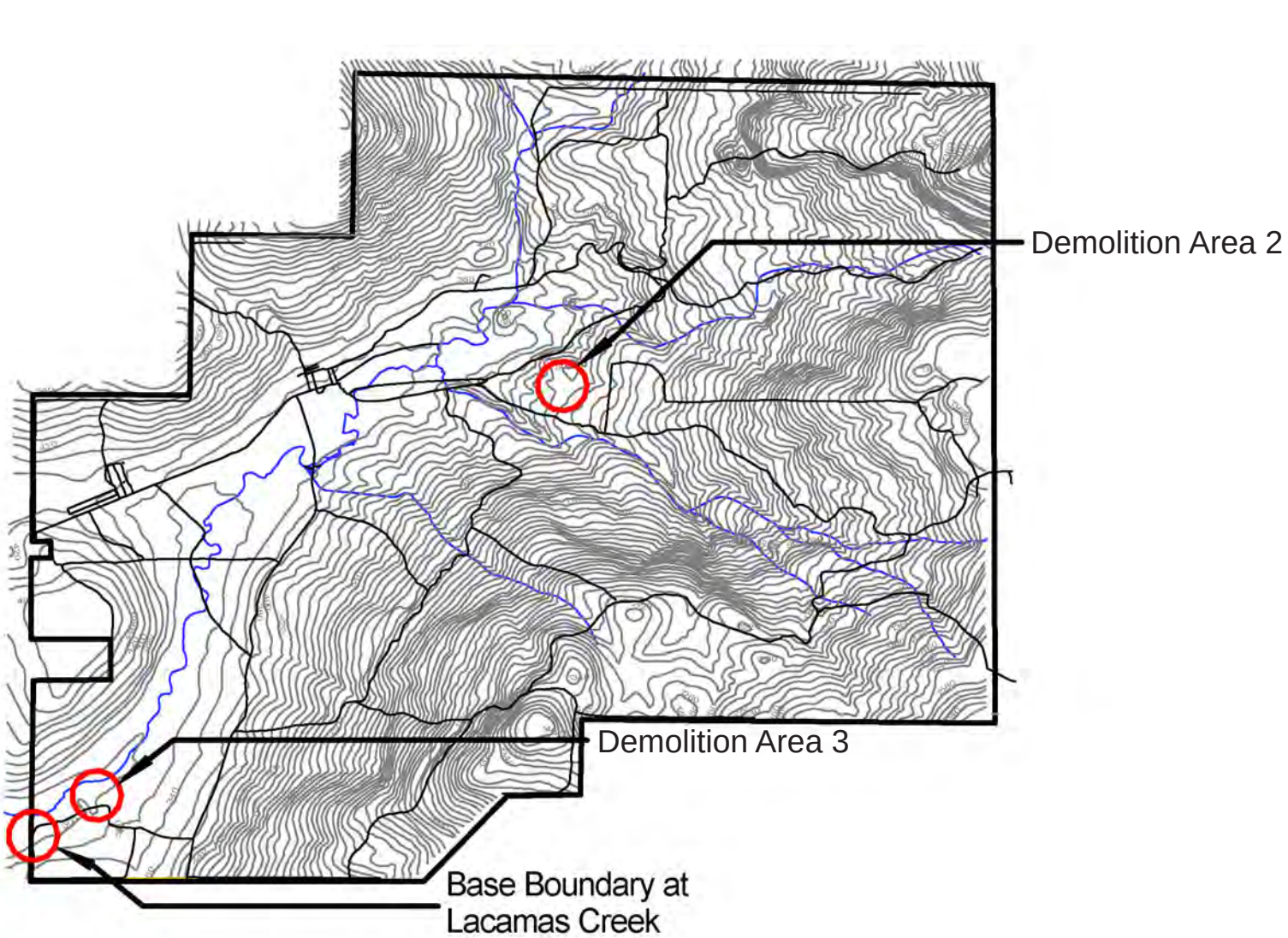

Base Map Reference: Baker 2006b.

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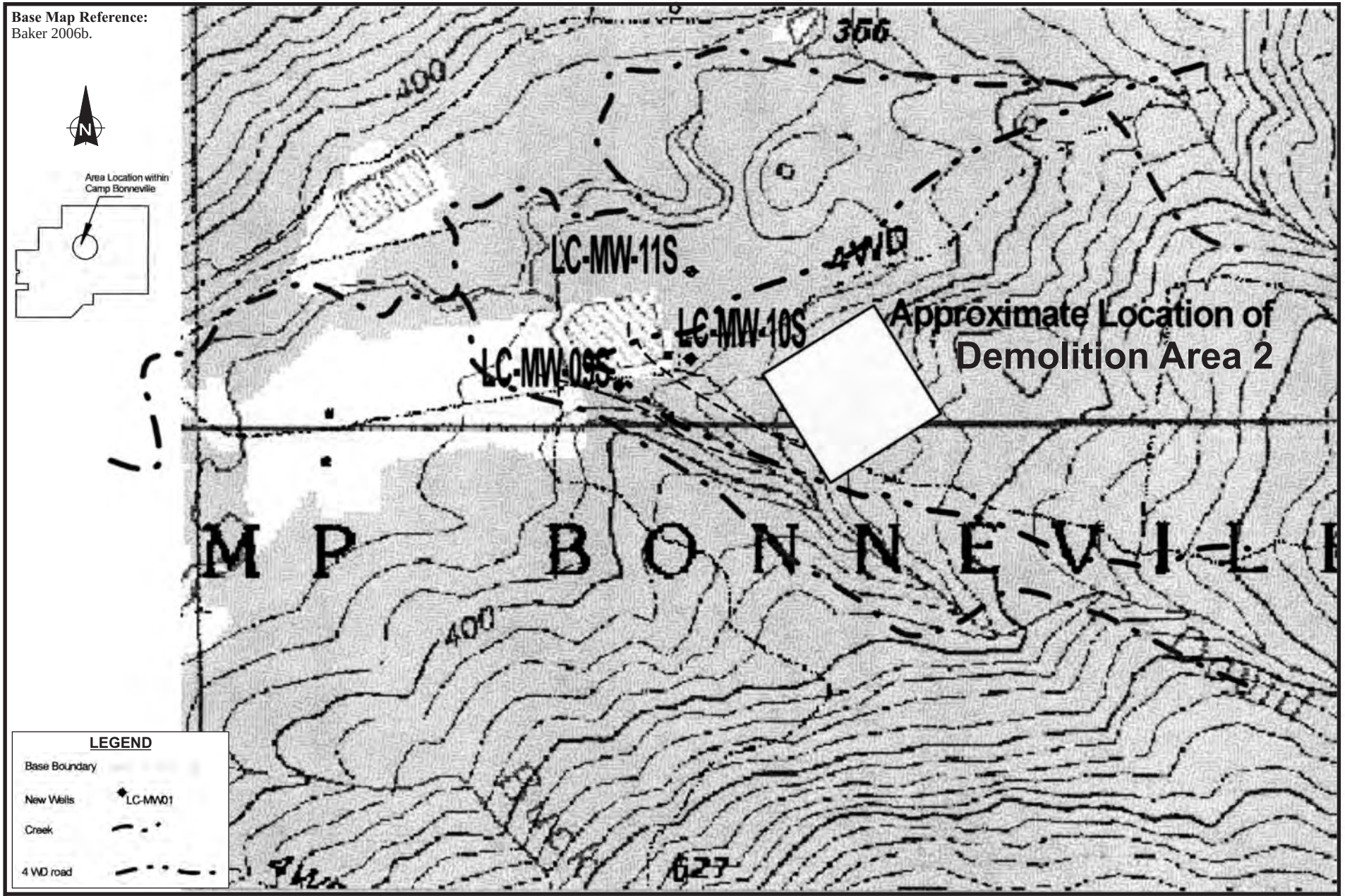
Vancouver, Washington

0 .5 1
Approximate Scale in Miles

Figure 2-46
DEMOLITION AREAS 2 AND 3 LOCATION MAP

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-46



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Seattle, Washington

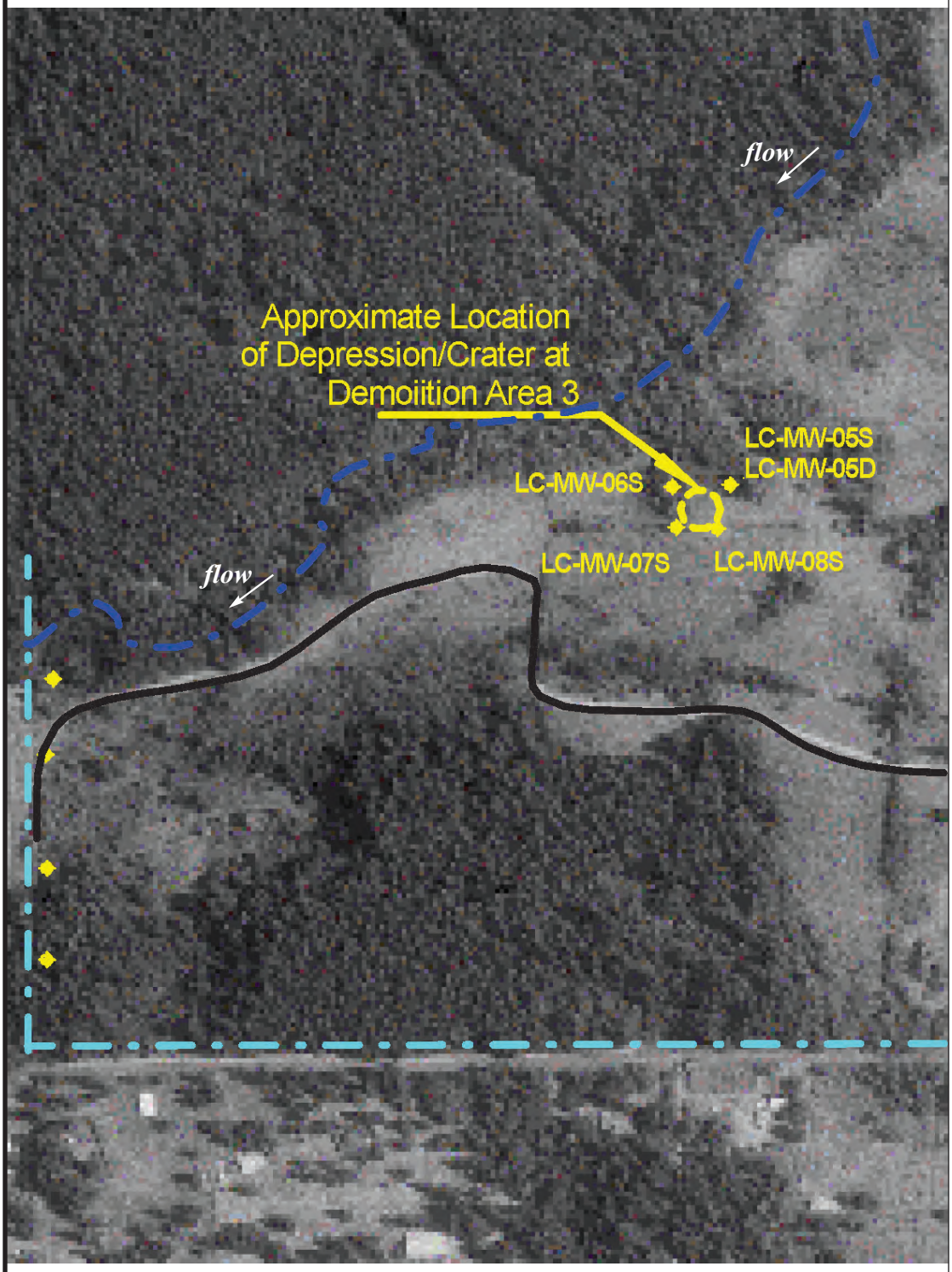
CAMP BONNEVILLE
Vancouver, Washington

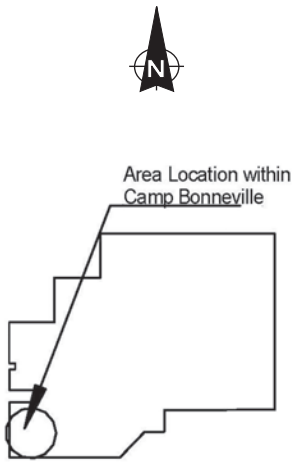
0 500 1,000
Approximate Scale in Feet

Figure 2-47
DEMOLITION AREA 2
MONITORING WELL LOCATIONS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-47

Base Map Reference: Baker 2006b.





LEGEND

Base Boundary

New Wells LC-MW-01S

Lacamas Creek

Road

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Seattle, Washington

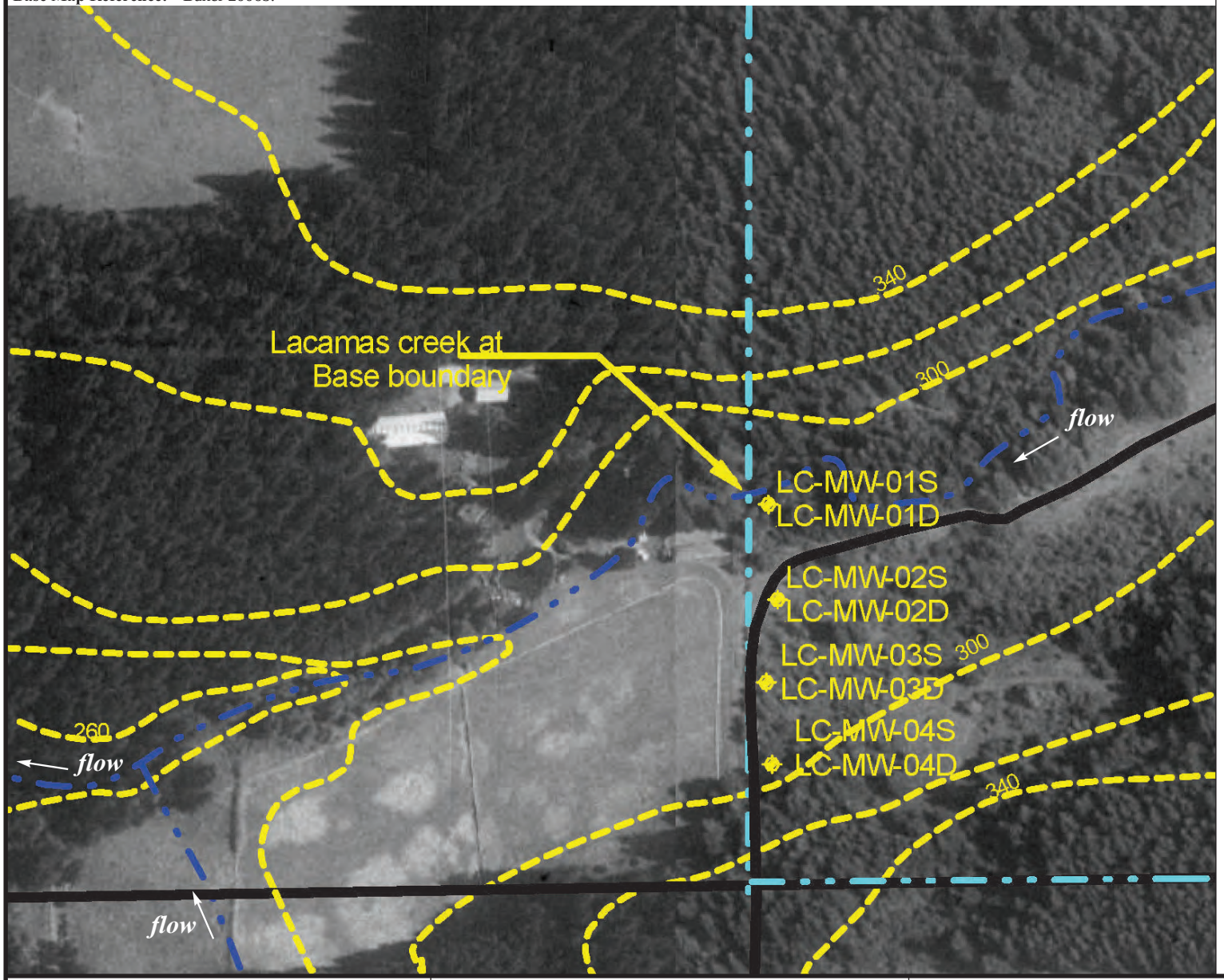
CAMP BONNEVILLE
Vancouver, Washington

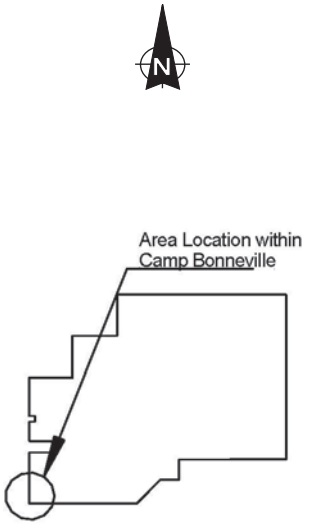
0 250 500
Approximate Scale in Feet

Figure 2-48
DEMOLITION AREA 3
MONITORING WELL LOCATIONS

Date:	Drawn by:	
3-27-12	AES	10:START-3\10030010\fig 2-48

Base Map Reference: Baker 2006b.





LEGEND

Base Boundary

New Wells — LC-MW-01S

Lacamas Creek

Road

ecology and environment, inc.
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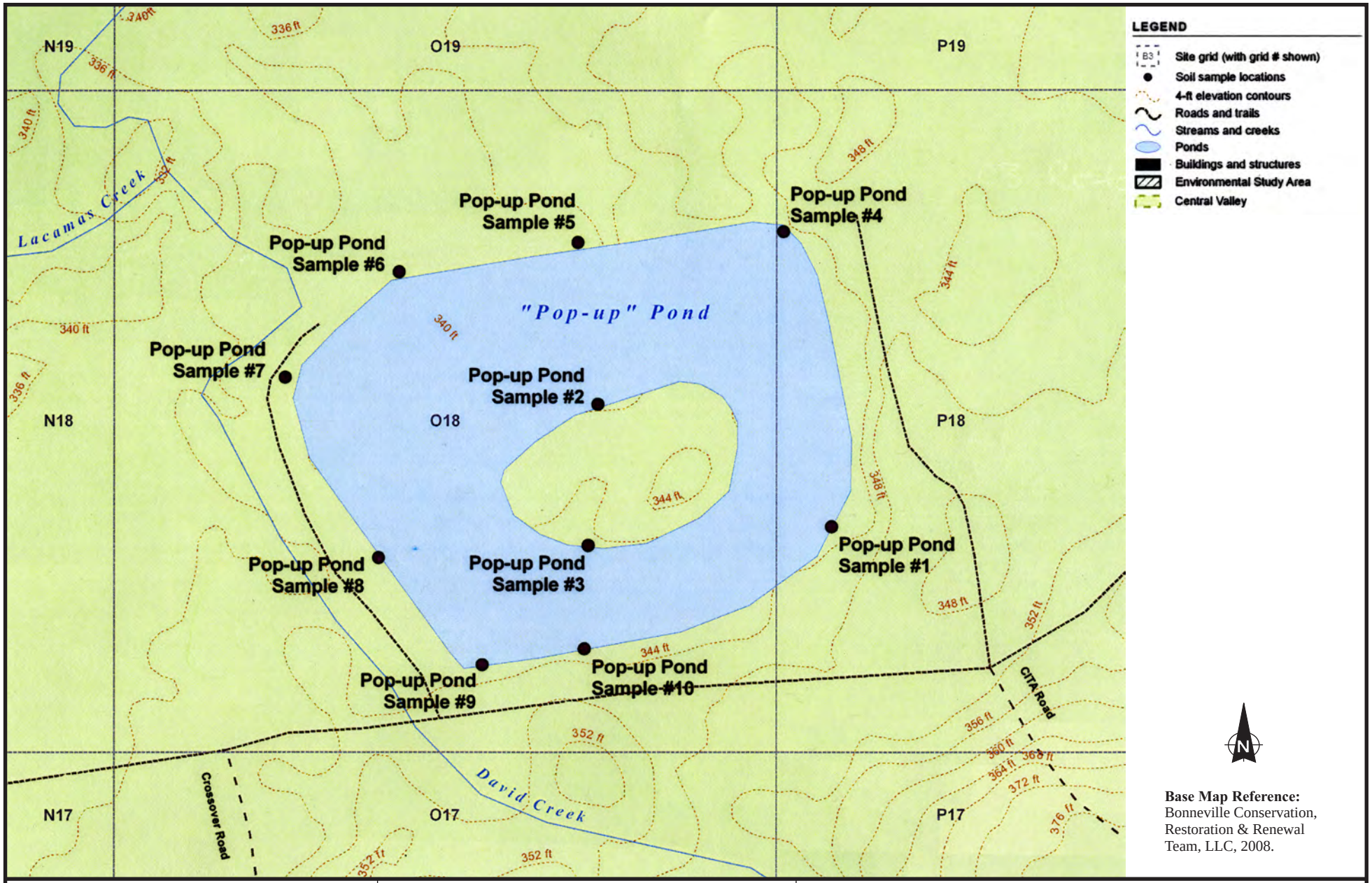
Seattle, Washington

CAMP BONNEVILLE
Vancouver, Washington

0 250 500
Approximate Scale in Feet

Figure 2-49
BOUNDARY WELL LOCATIONS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-49



Base Map Reference:
Bonneville Conservation, Restoration & Renewal Team, LLC, 2008.

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Seattle, Washington

CAMP BONNEVILLE
Vancouver, Washington

0 75 150
Approximate Scale in Feet

Figure 2-50
2007 POP-UP POND
SEDIMENT SAMPLE LOCATIONS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-50

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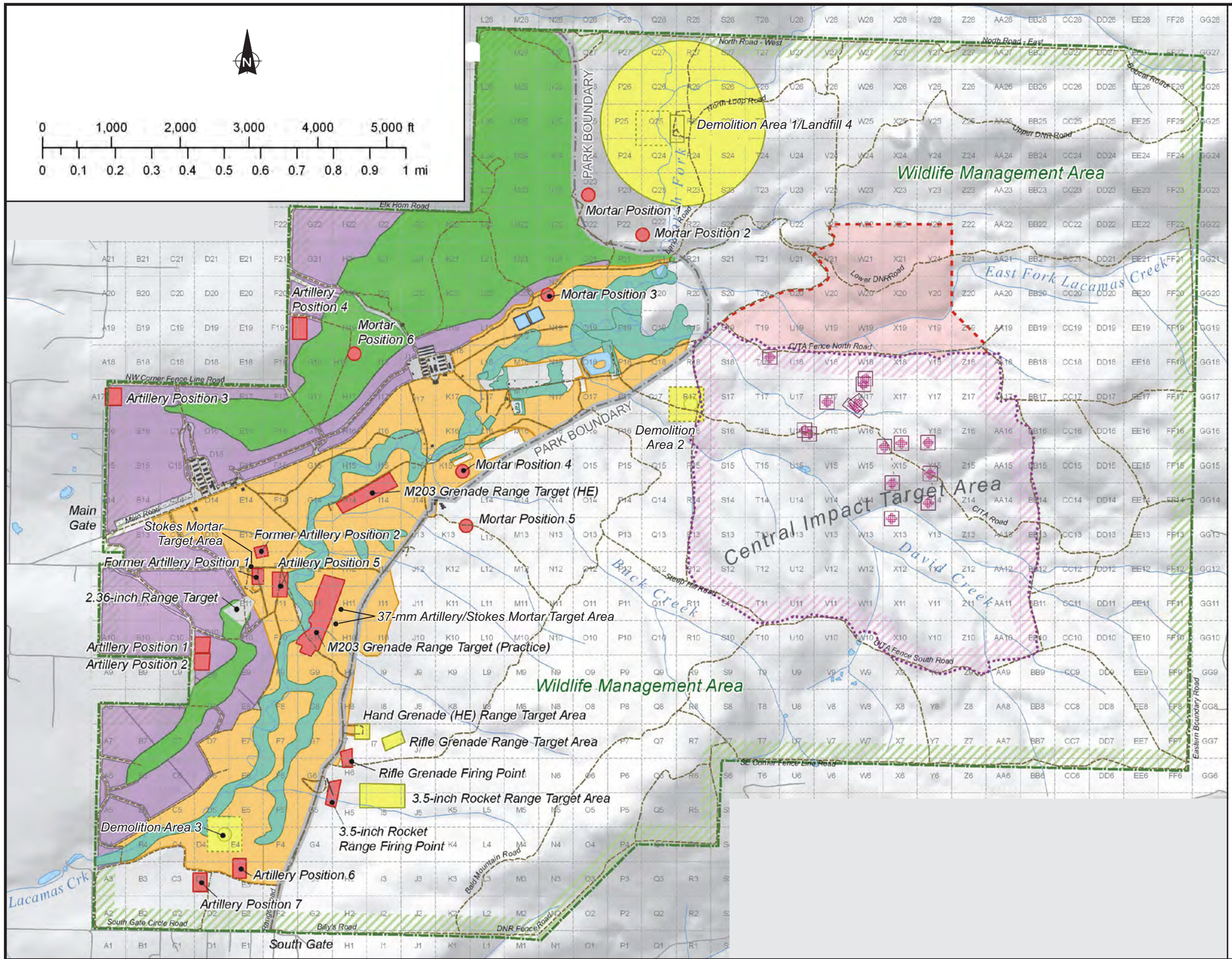

Recommended Clearance Depths

- B3 — Site grid (with grid # shown)
- CITA (Central Impact Target Area / Central Impact Area)
- CITA targets
- Northern CITA expansion (fence)
- Western Slopes - Surface clearance (areas less than 25% slope)
- Western Slopes - Site-wide IC's (areas greater than 25% slope)
- Surface clearance
- Firing points - Sub-surface (to 14-in)

Central Valley Floor

- Frost-depth clearance (to 14-in)
- Frost-depth clearance (to 14-in) with wetland protocols

Target areas and Demolition areas are identified by labels only.

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Seattle, Washington

Base Map Reference: Bonneville Conservation, Restoration & Renewal Team, LLC 2010.

CAMP BONNEVILLE
Vancouver, Washington

Figure 2-51
NEWLY DISCOVERED REMEDIAL WORK AREAS

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 2-51

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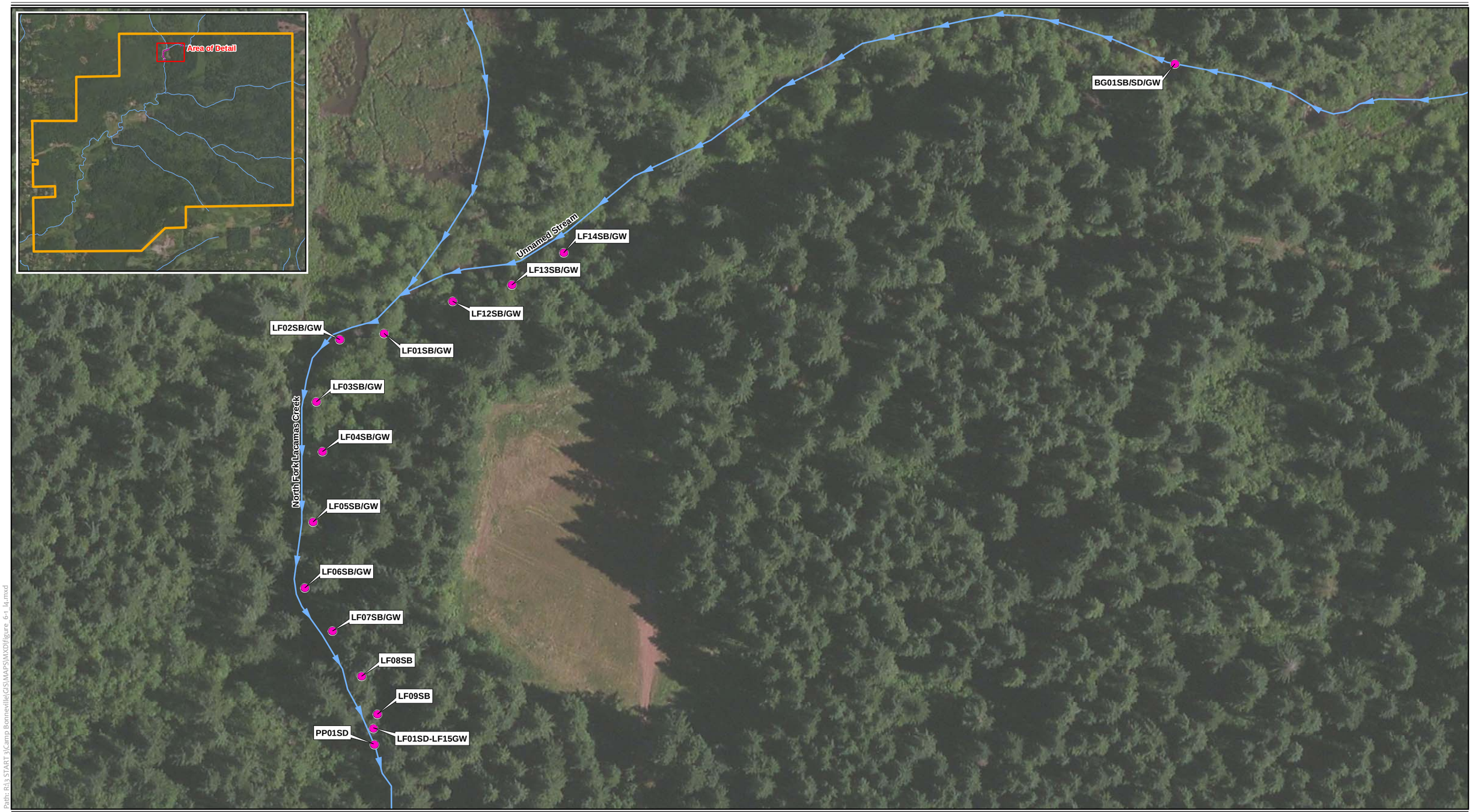

0 50 100 150 200 250 300 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

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Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-1_l4.mxd

Figure 6-1
Demolition Area 1/Landfill 4
Sample Locations

Vancouver, Washington

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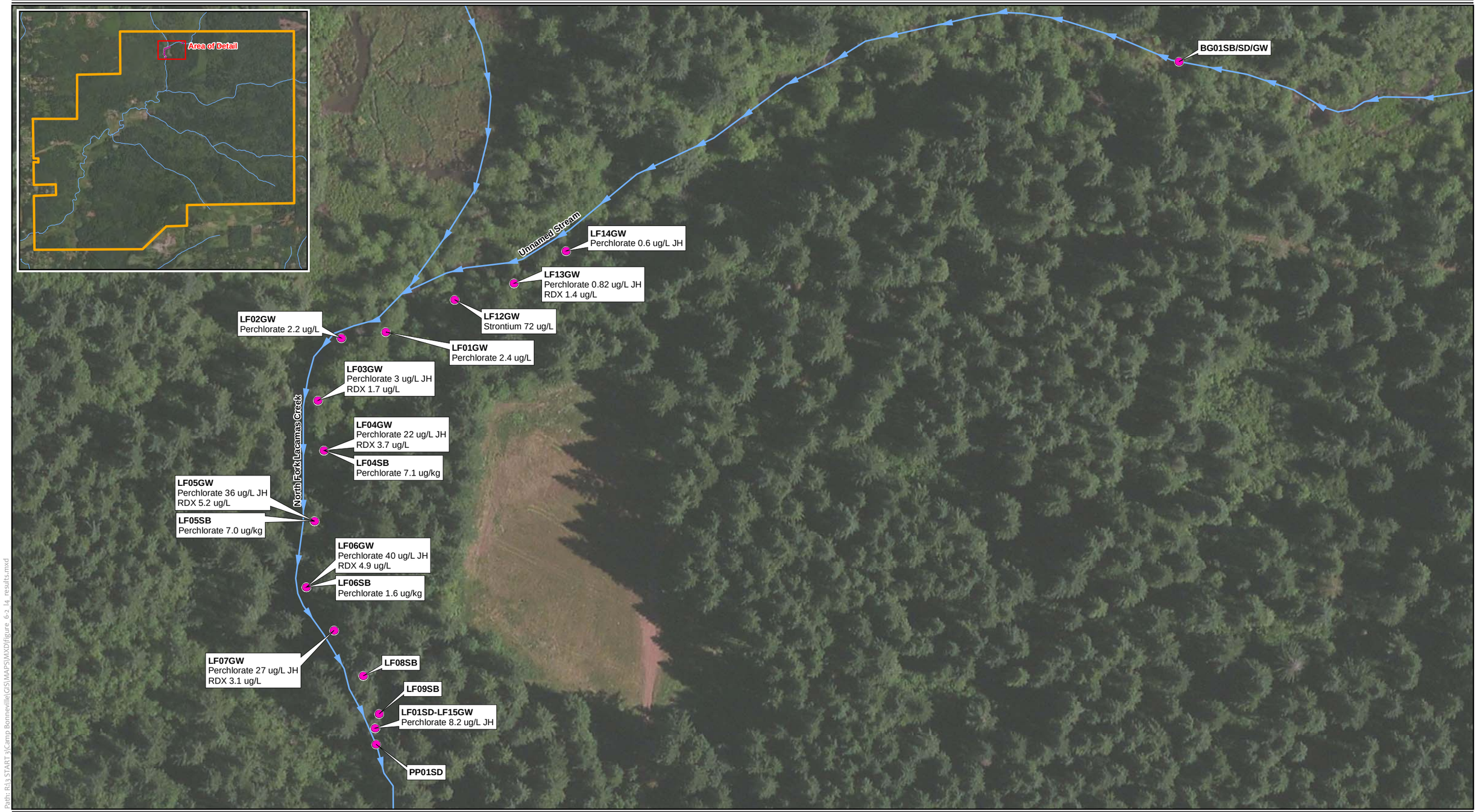

Path: R:\3_START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-2_l4_results.mxd

0 50 100 150 200 250 300 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 6-2
Demolition Area 1/Landfill 4
Significant Concentrations

Vancouver, Washington

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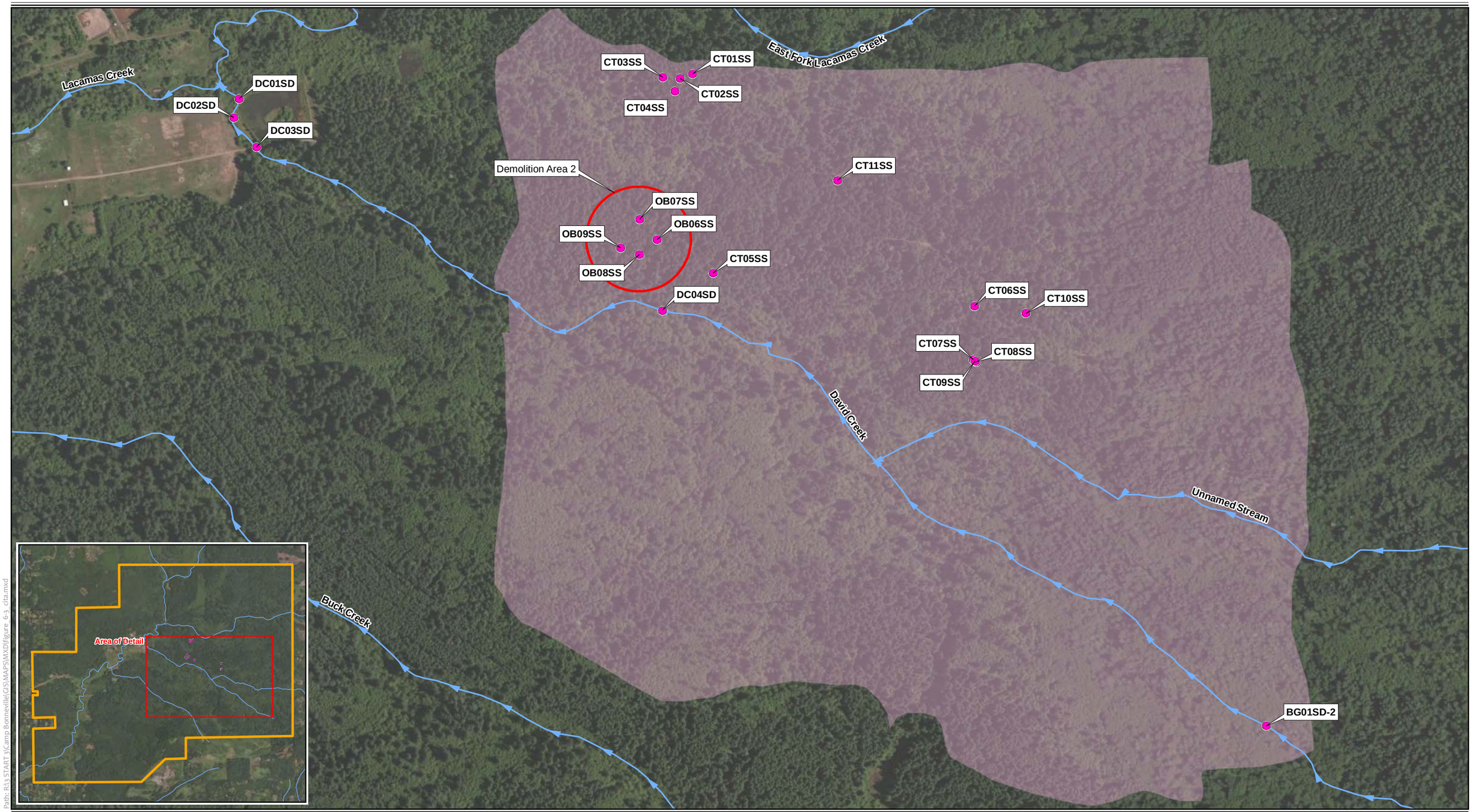

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-3_cita.mxd

0 250 500 750 1,000 1,250 1,500 Feet

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Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

- Sample Location
- Regional Streams
- Central Impact Target Area
- Camp Bonneville Boundary

Figure 6-3
Central Impact Target Area,
Demolition Area 2,
and David Creek Sample Locations
Vancouver, Washington

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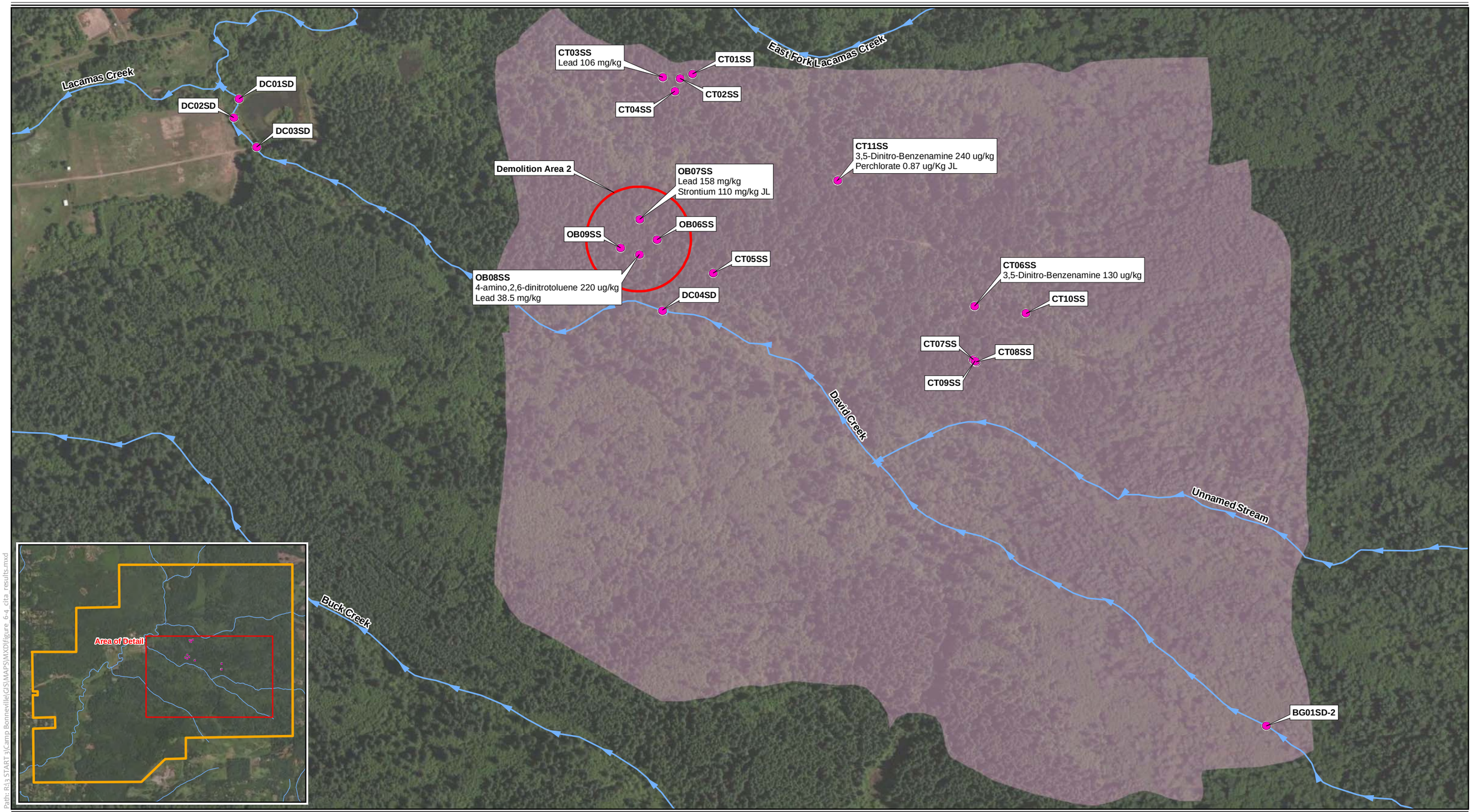

Figure 6-4
Central Impact Target Area,
Demolition Area 2,
and David Creek Significant Concentrations
Vancouver, Washington

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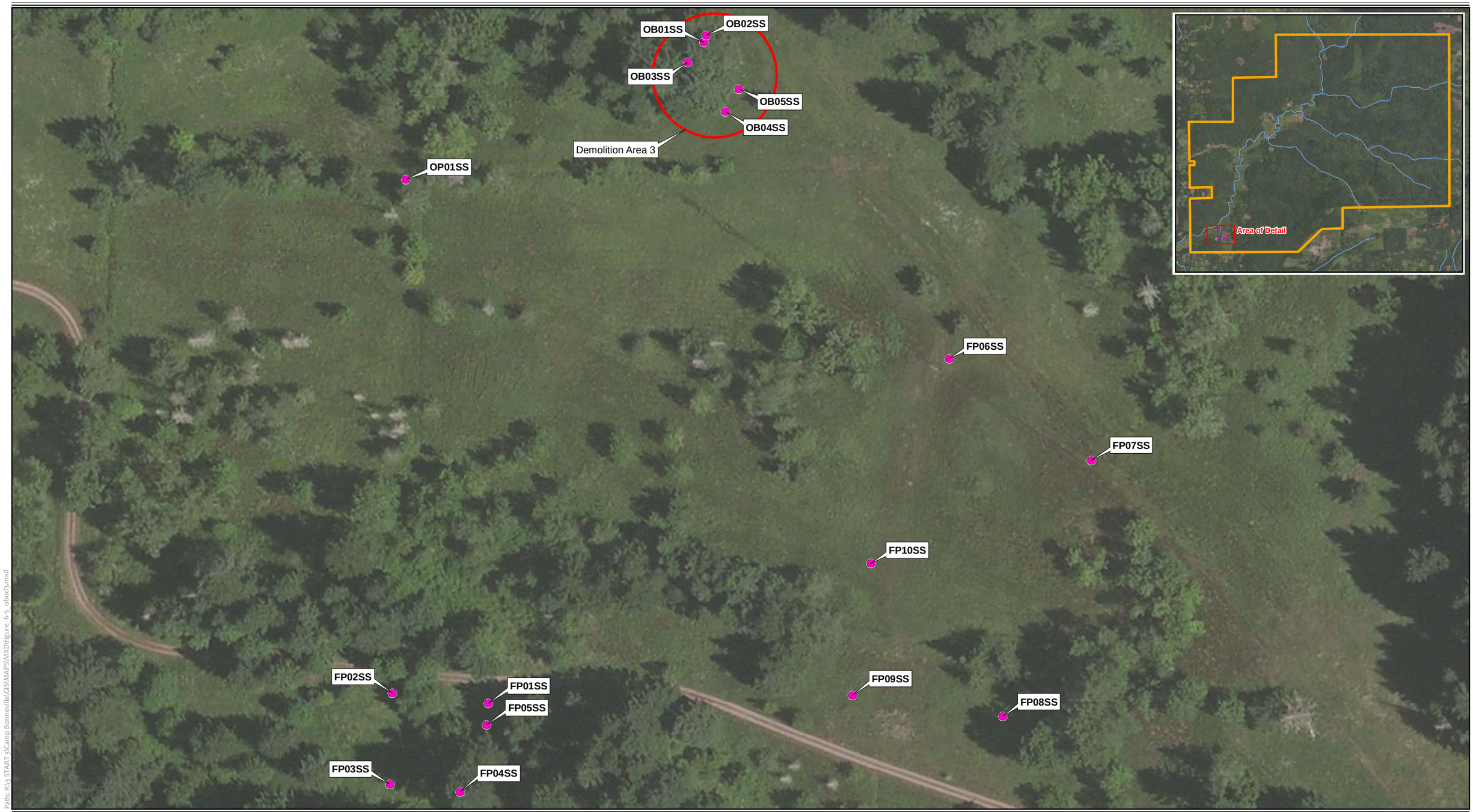

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-5_obod3.mxd

0 50 100 150 200 250 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

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Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 6-5
Demolition Area 3
and Artillery Positions 6 and 7
Sample Locations
Vancouver, Washington

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Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-6_obod3_results.mxd

0 50 100 150 200 250 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 6-6
Demolition Area 3
and Artillery Positions 6 and 7
Significant Concentrations
Vancouver, Washington

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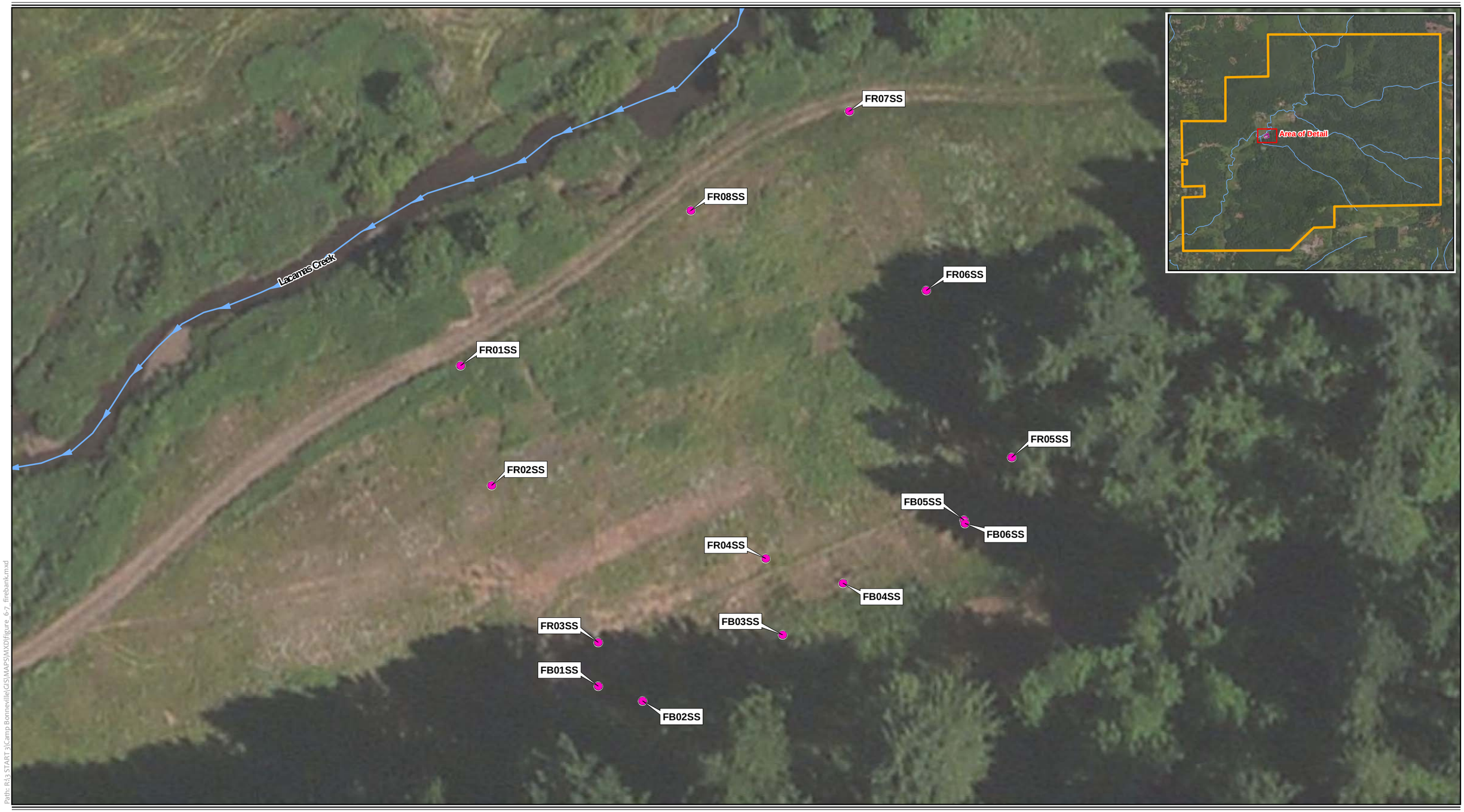

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-7_firebank.mxd

0 25 50 75 100 125 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 6-7
1,000 Inch Range and Firing Bank Sample Locations

Vancouver, Washington

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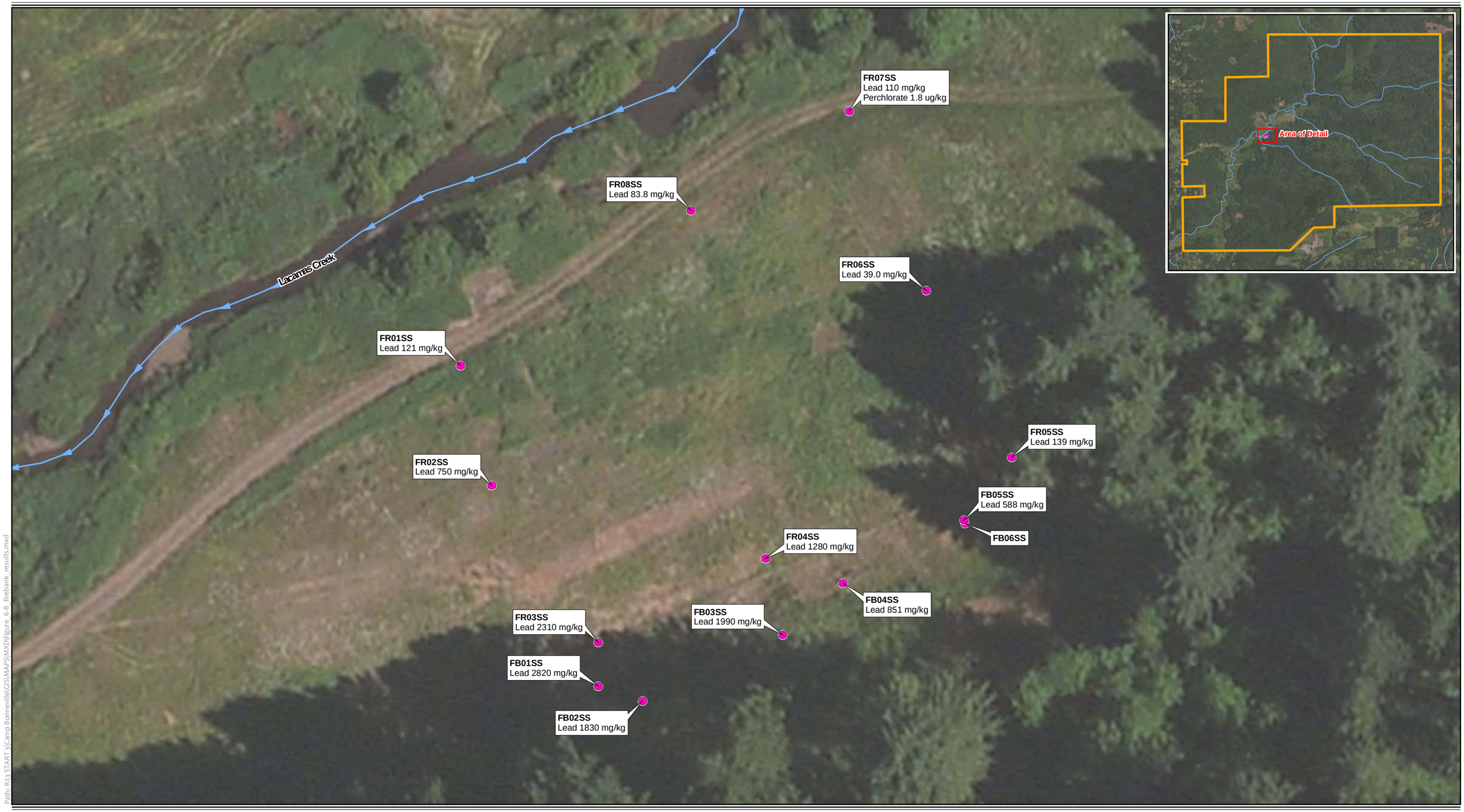

0 25 50 75 100 125 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

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Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-8_firebank_results.mxd

Figure 6-8
1,000 Inch Range and
Firing Bank Significant Concentrations

Vancouver, Washington

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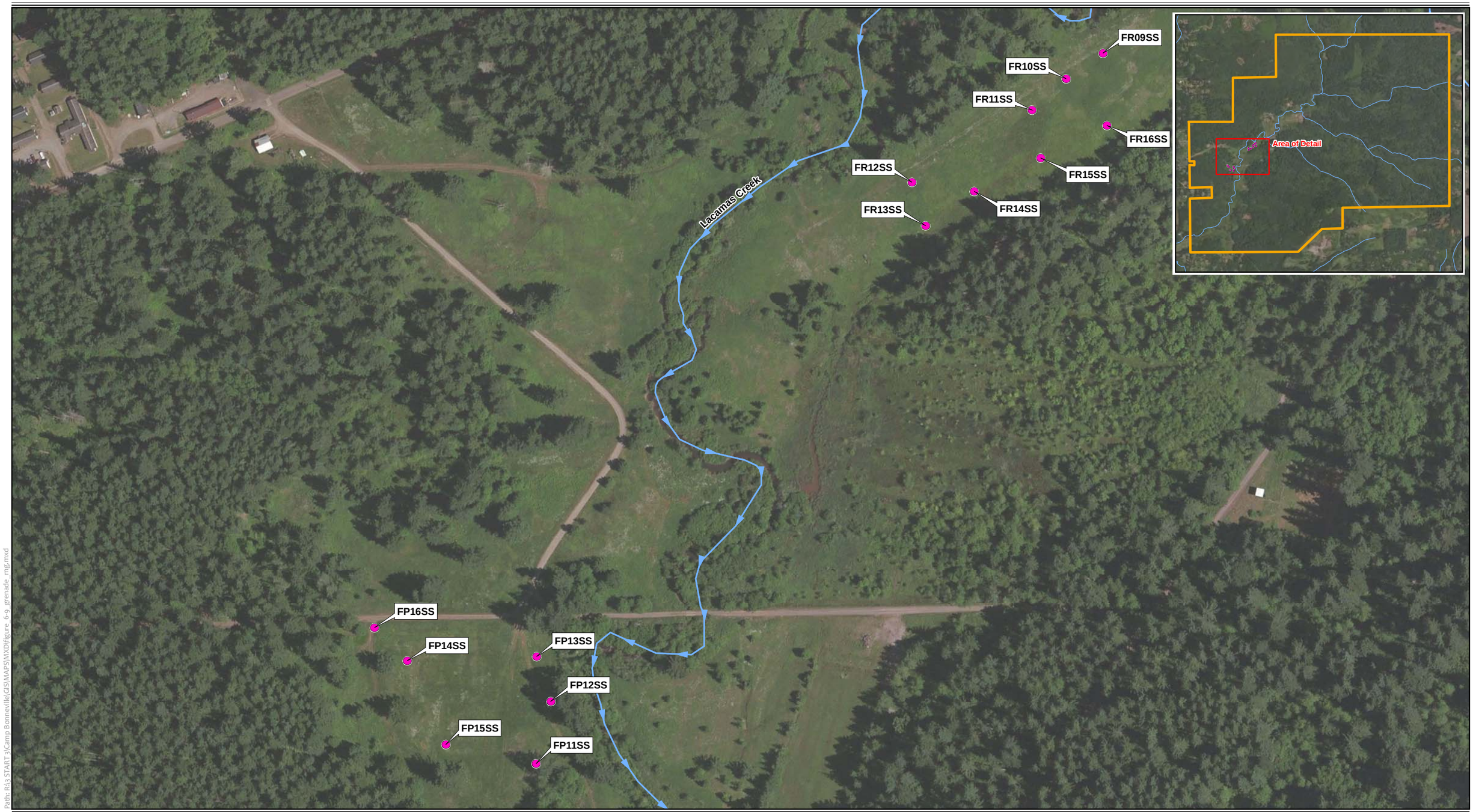

0 100 200 300 400 500 600 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3_START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-9_grenade_mg.mxd

Figure 6-9
Artillery Position 5 and M203 HE Grenade Range Sample Locations
Vancouver, Washington

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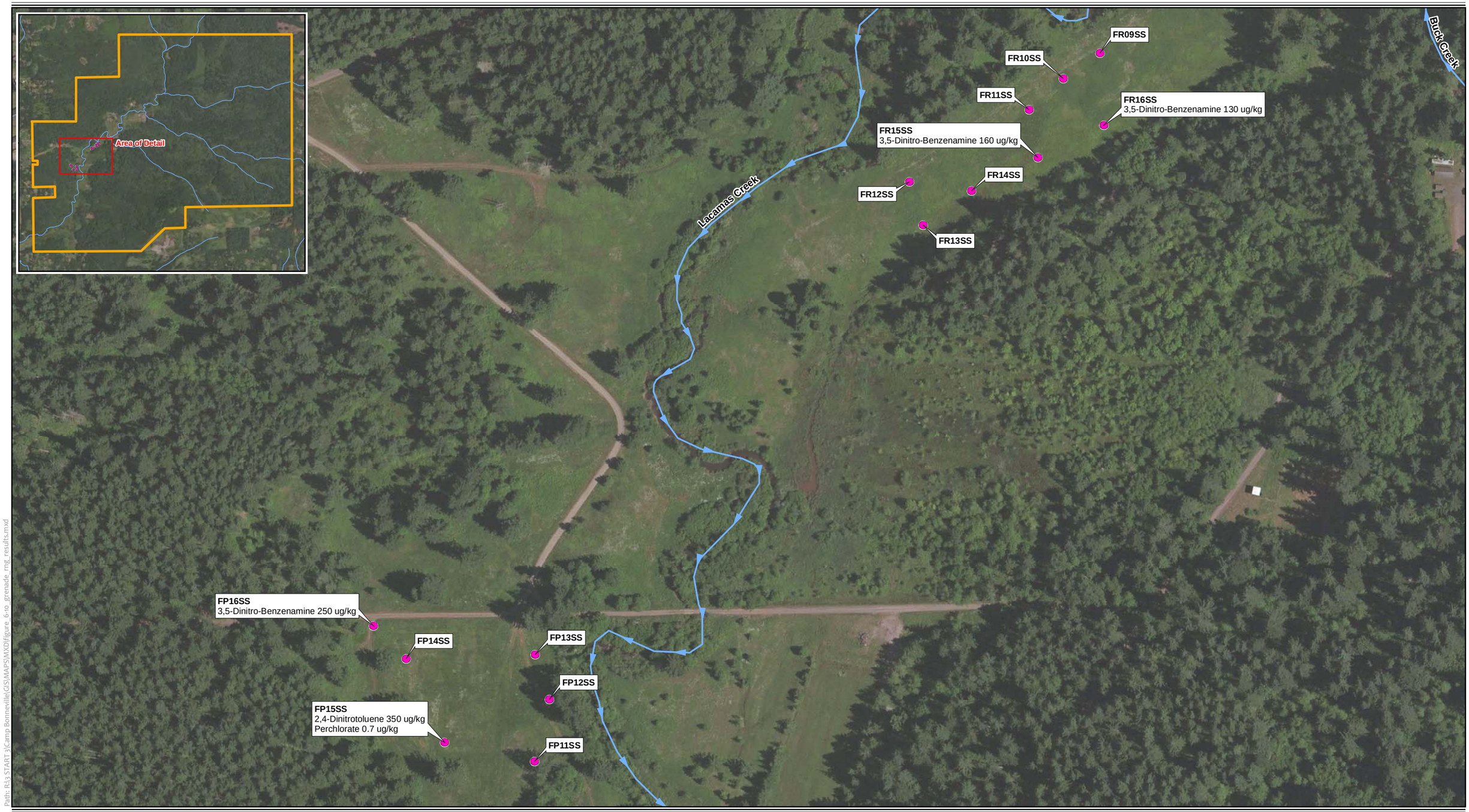

0 100 200 300 400 500 600 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-10_grenade_rng_results.mxd

Figure 6-10
Artillery Position 5 and M203 HE Grenade Range Significant Concentrations Vancouver, Washington

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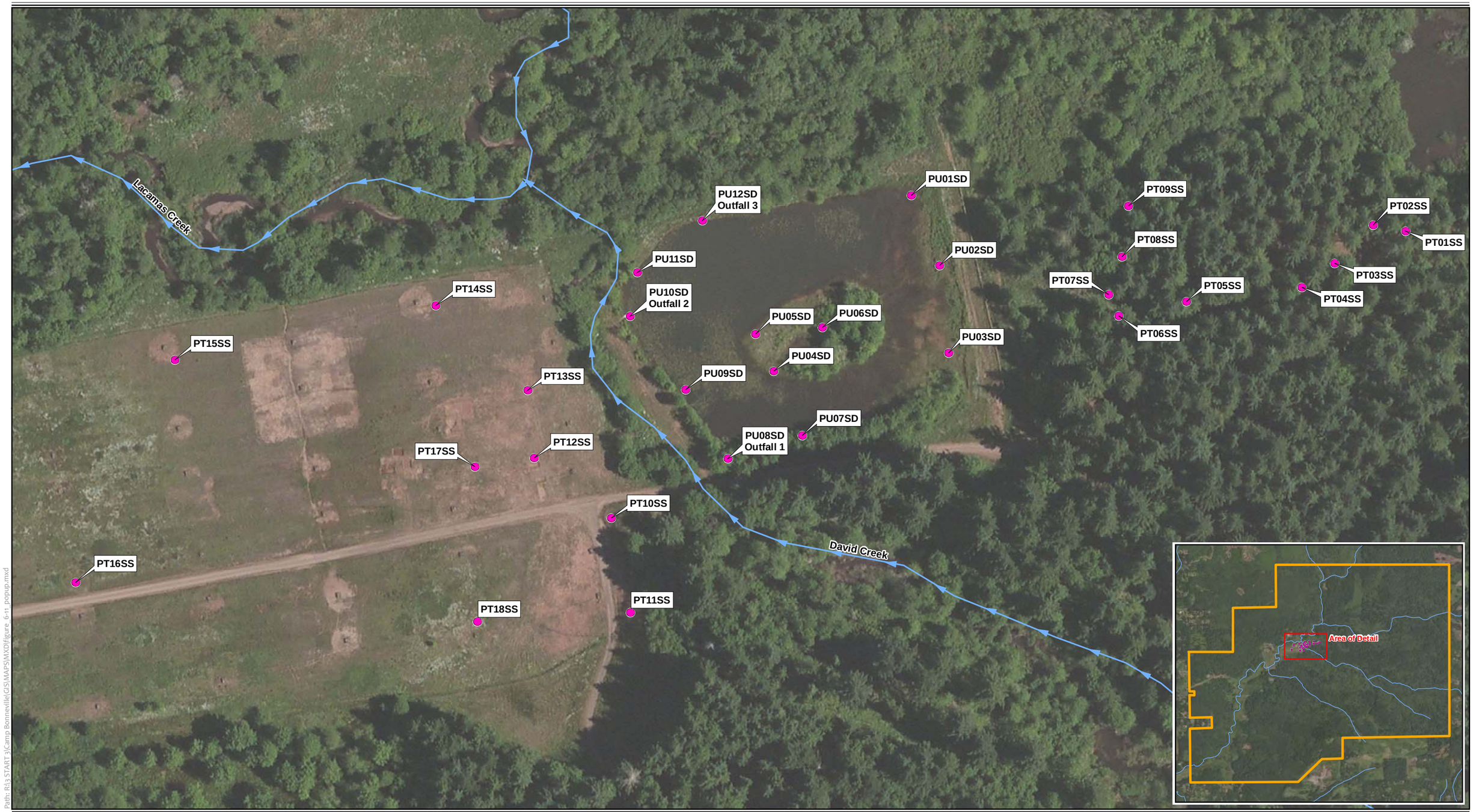

0 50 100 150 200 250 300 350 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
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Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-11_popup.mxd

Figure 6-11
Pop-Up Pond, Pop-Up Targets and 1,000-Yard Range Sample Locations

Vancouver, Washington

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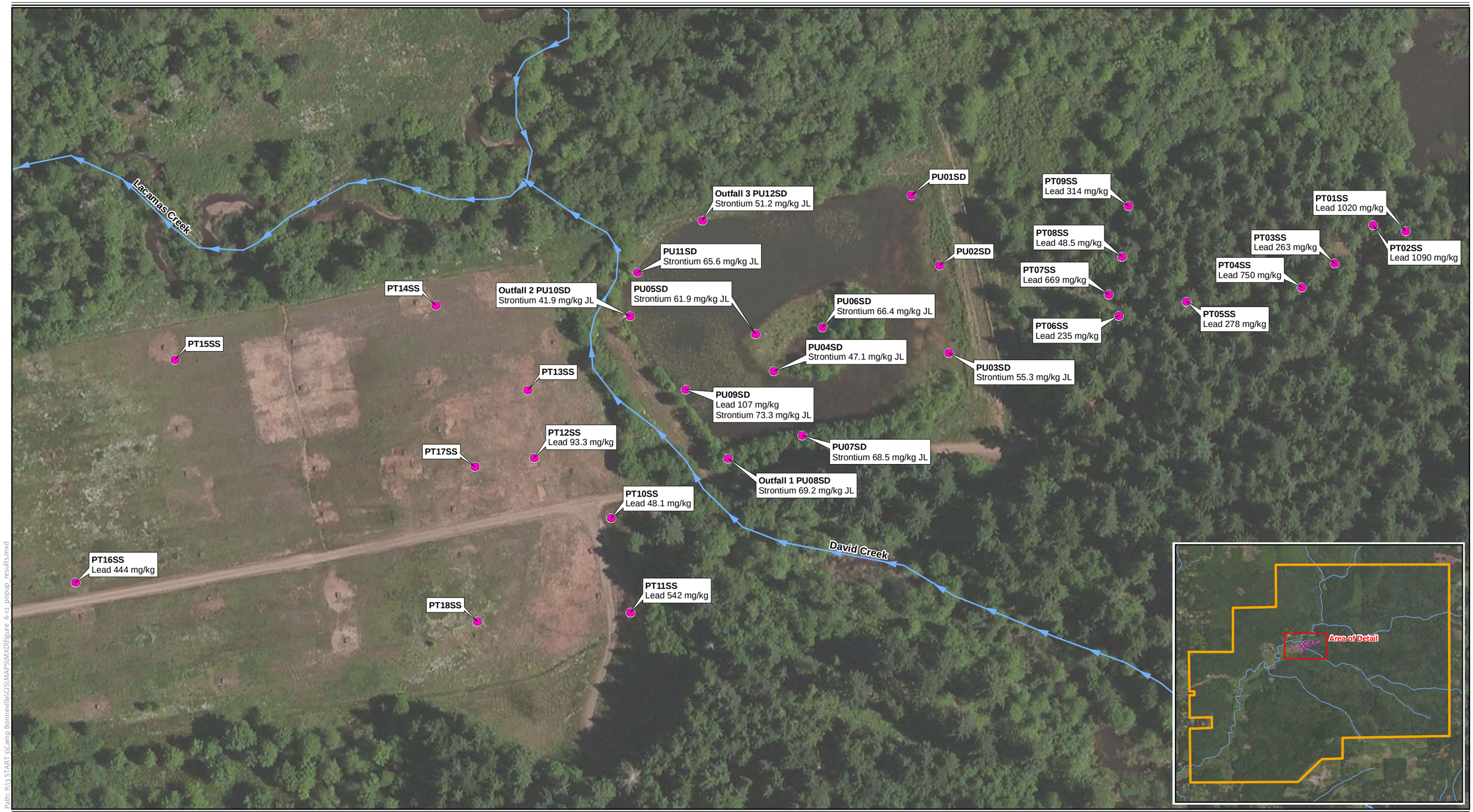

0 50 100 150 200 250 300 350 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

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Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_6-12_popup_results.mxd

Figure 6-12
Pop-Up Pond, Pop-Up Targets and 1,000-Yard Range Significant Concentrations
Vancouver, Washington

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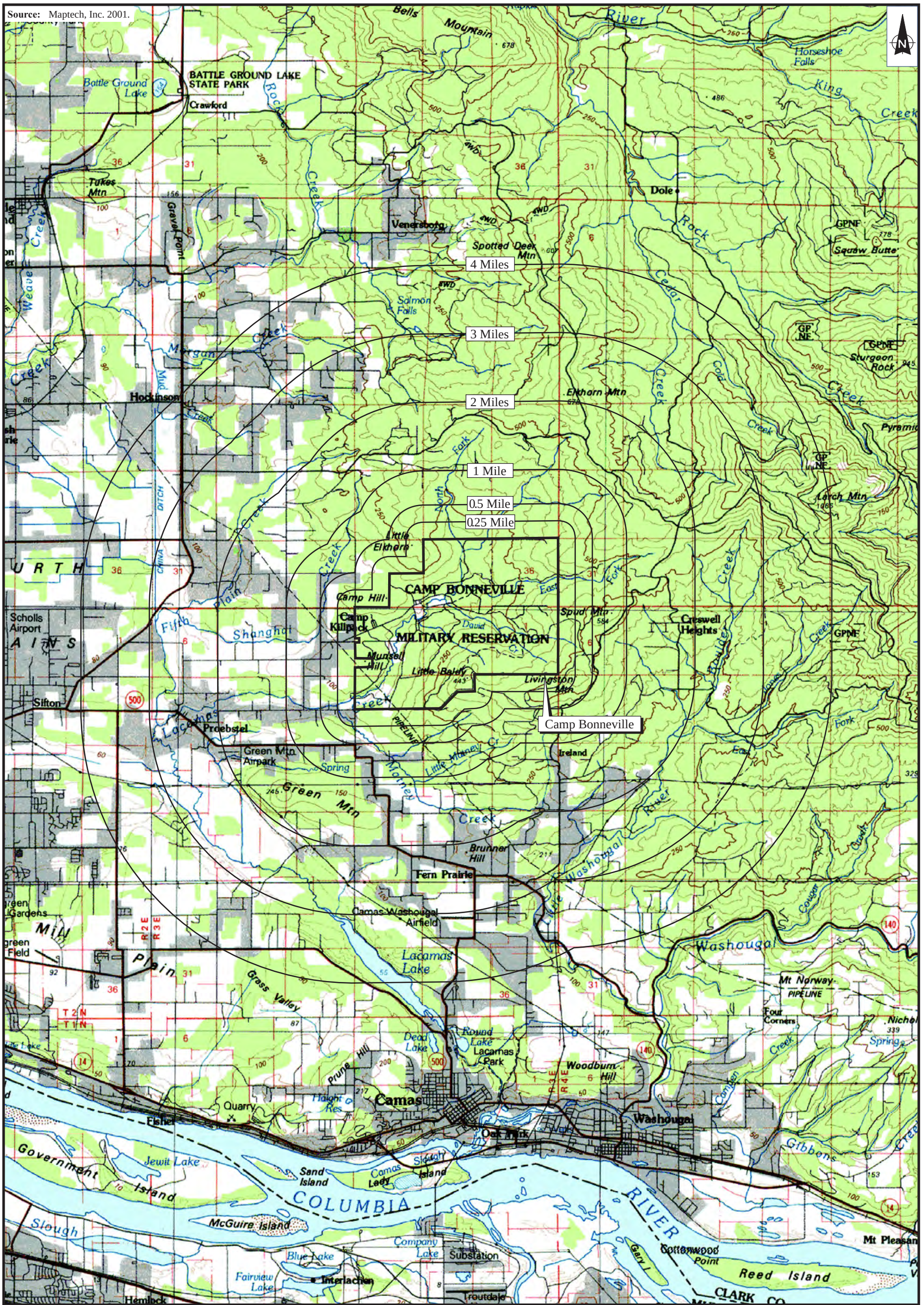

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Vancouver, Washington

Figure 7-1
4-MILE TARGET DISTANCE LIMIT

0 .5 1
Approximate Scale in Miles

Date: 2/15/12

Drawn by: AES

10:START-3\10030010\fig 7-1

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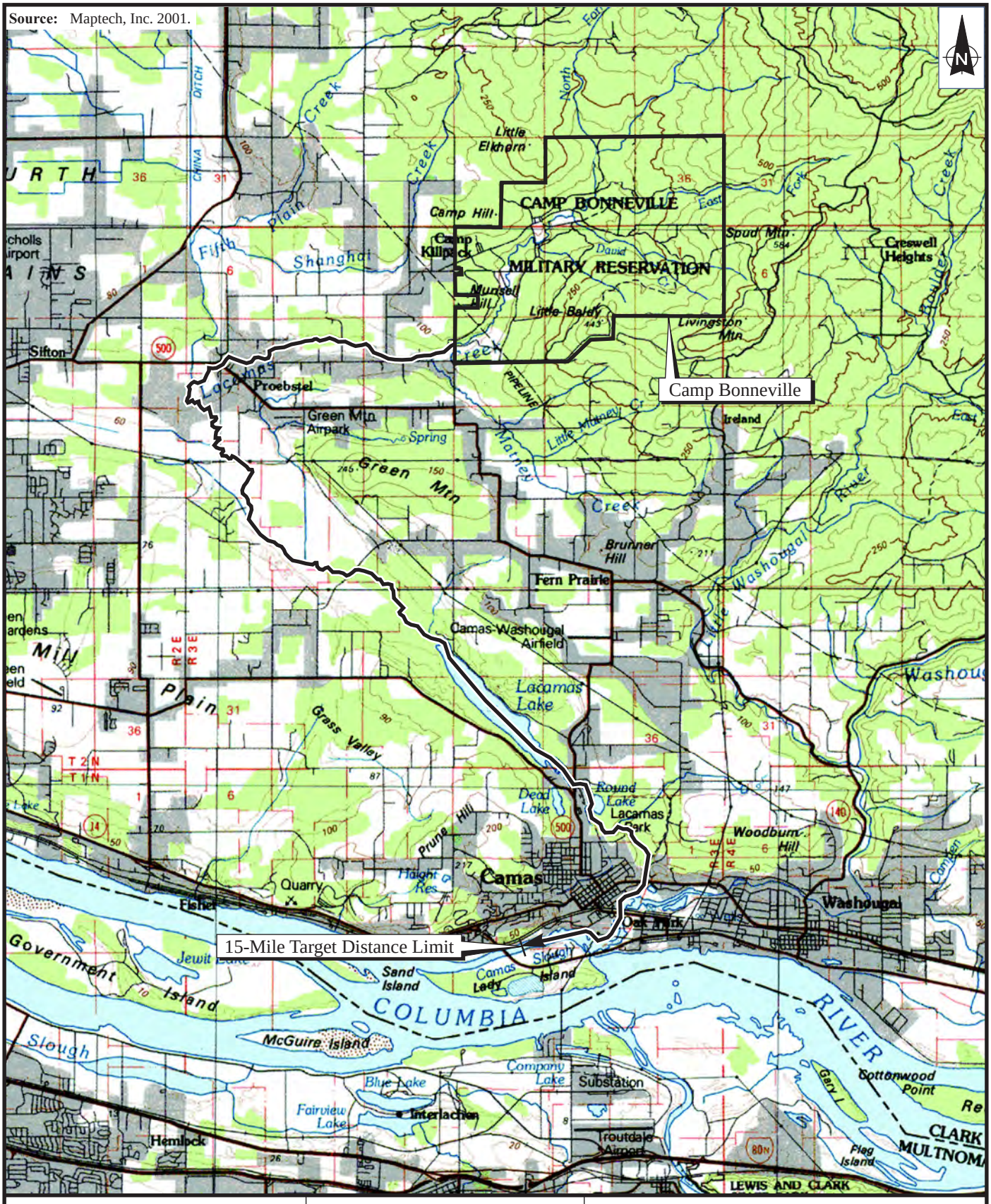

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Seattle, Washington

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Vancouver, Washington

Figure 7-2

15-MILE SURFACE WATER
TARGET DISTANCE LIMIT

0 .75 1.5
Approximate Scale in Miles

Date: 2-15-12

Drawn by: AES

10:START-3\10030010\fig 7-2

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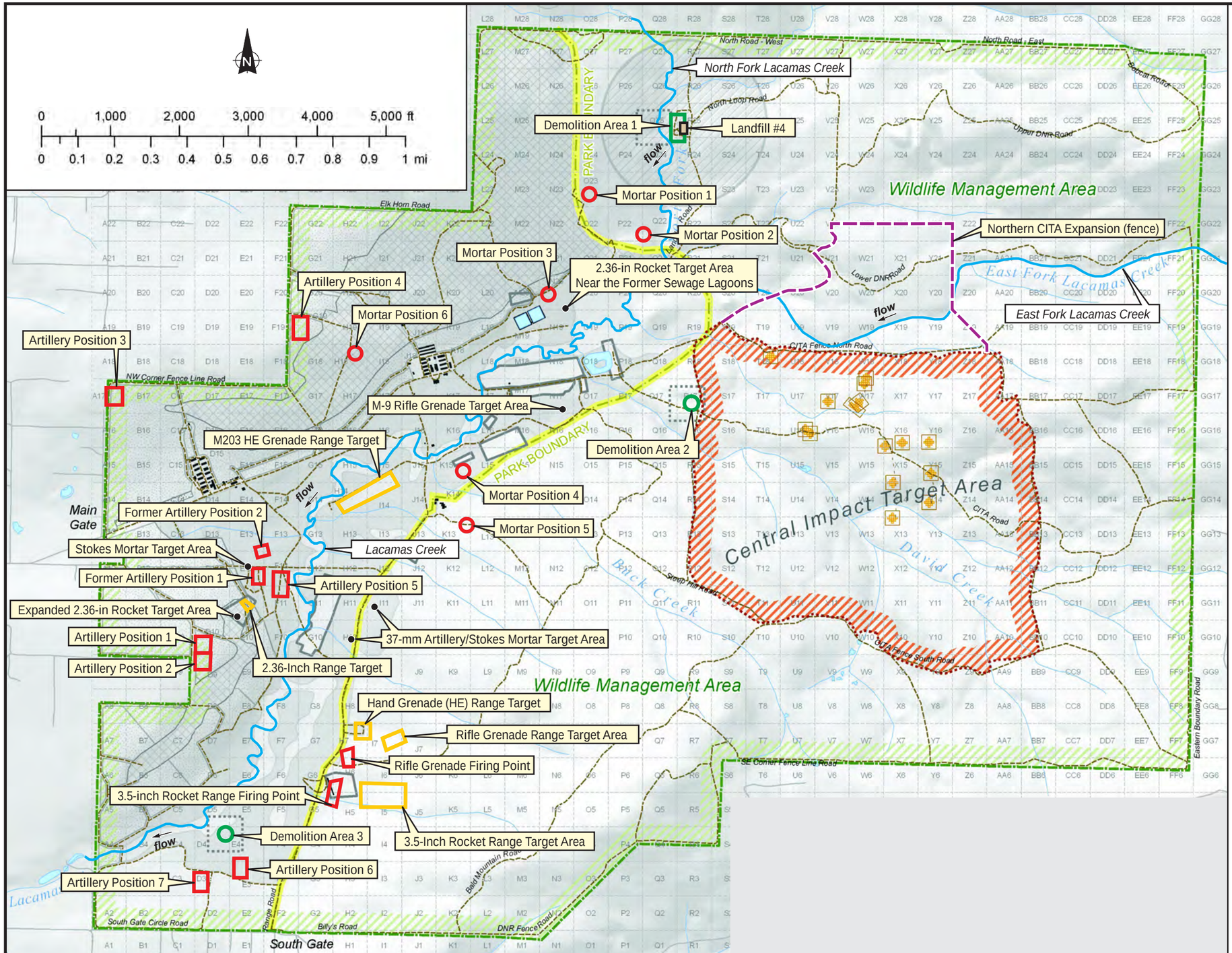

LEGEND

- B3 Site Grid (with grid # shown)
- CITA Targets
- CITA (Central Impact Target Area)
- Firing Points
- Range Target Areas
- Demolition Area

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Base Map Reference: Bonneville Conservation, Restoration & Renewal Team, LLC 2010.

CAMP BONNEVILLE
Vancouver, Washington

Figure 7-3
POTENTIAL SOURCES

Date:	Drawn by:	
3/27/12	AES	10:START-3\10030010\fig 7-3

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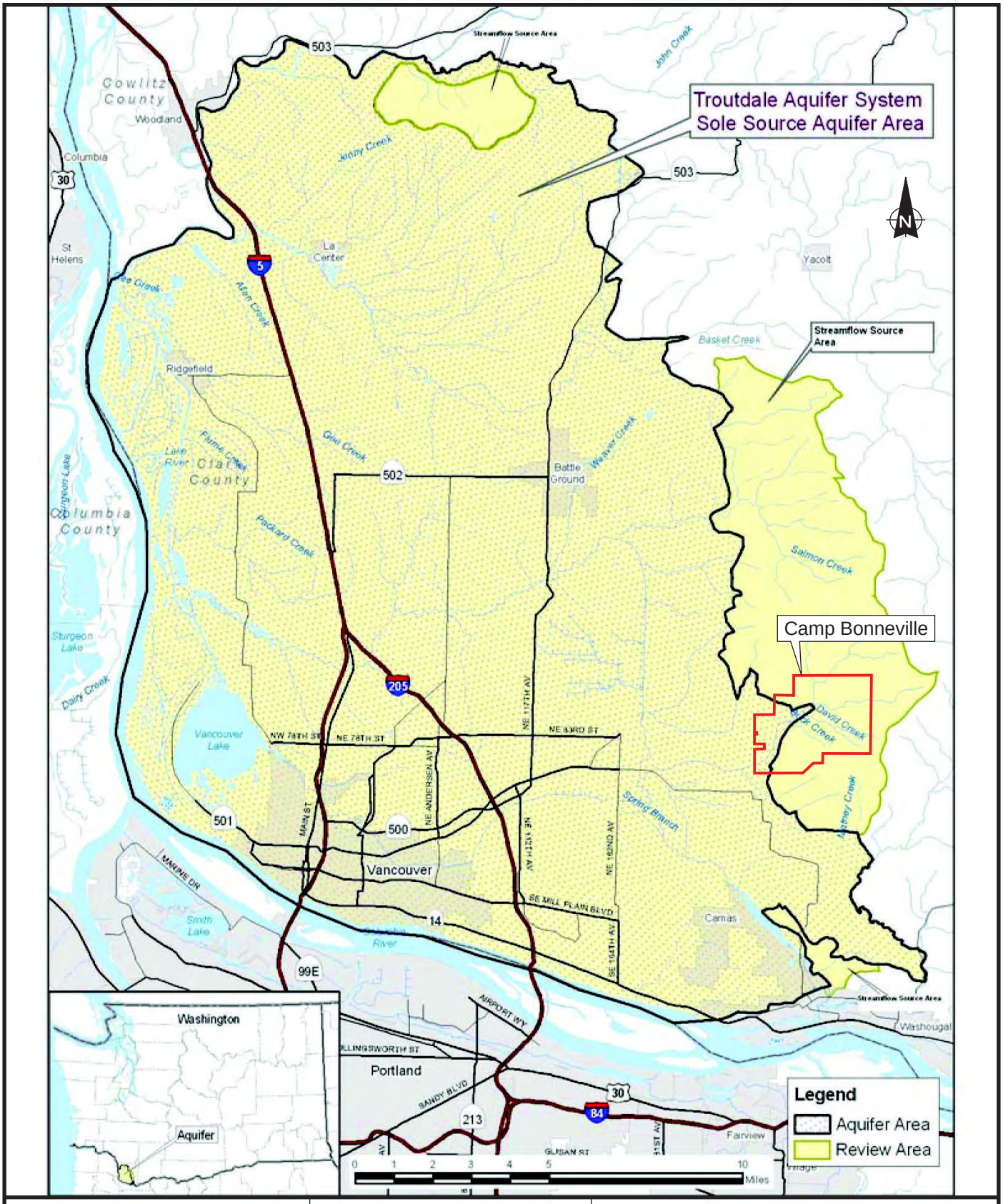

ecology and environment, inc. Global Specialists in the Environment Seattle, Washington	CAMP BONNEVILLE Vancouver, Washington	Figure 7-4 TROUTDALE AND UNCONSOLIDATED ALLUVIUM SOLE SOURCE AQUIFER BOUNDARY		
	Source: EPA, 2006.	Date: 3-27-12	Drawn by: AES	10:START-3\10030010\fig 7-4

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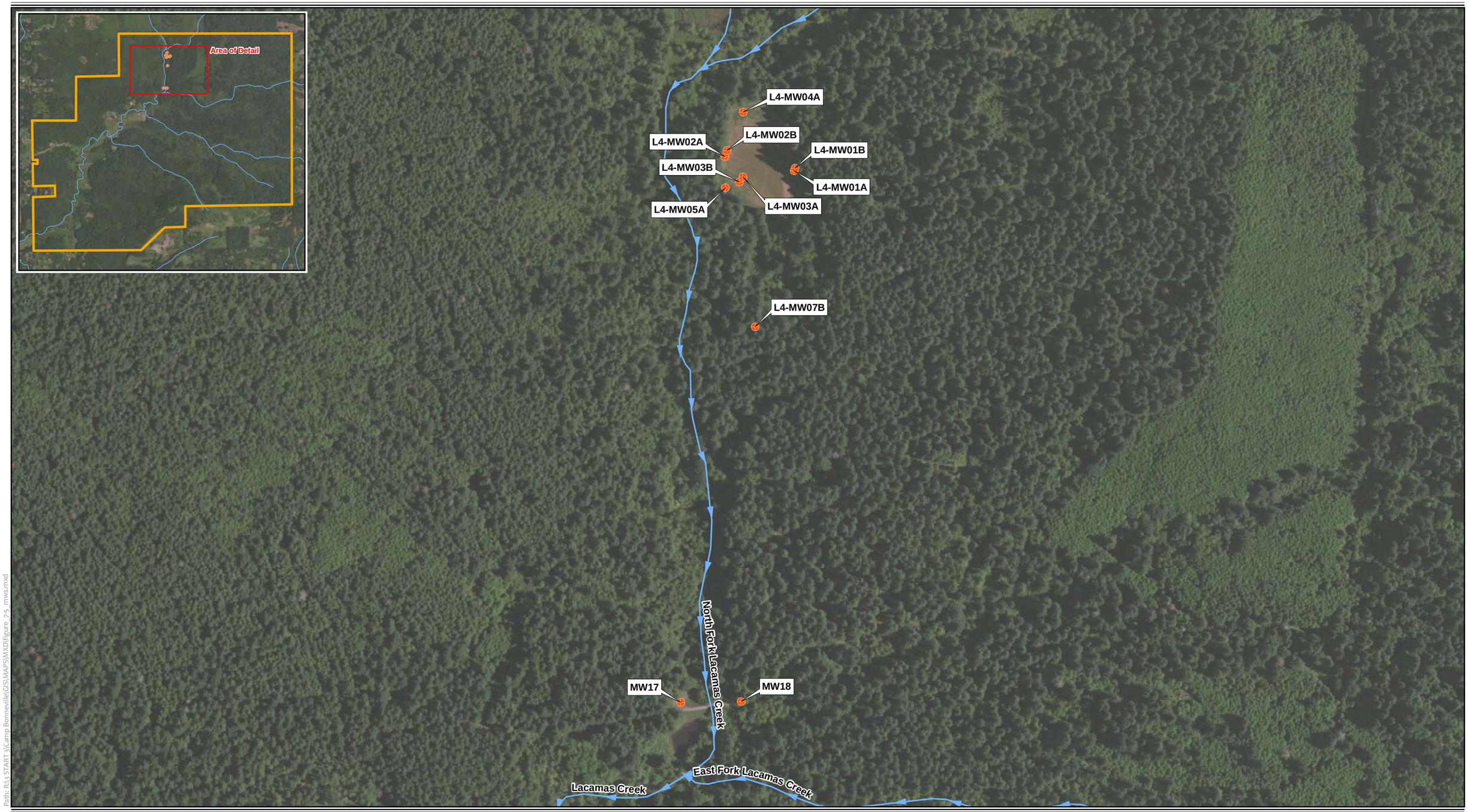

0 250 500 750 1,000 Feet

Monitoring Well Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-5_mws.mxd

Figure 7-5
Existing Montoring Well Sample Locations

Vancouver, Washington

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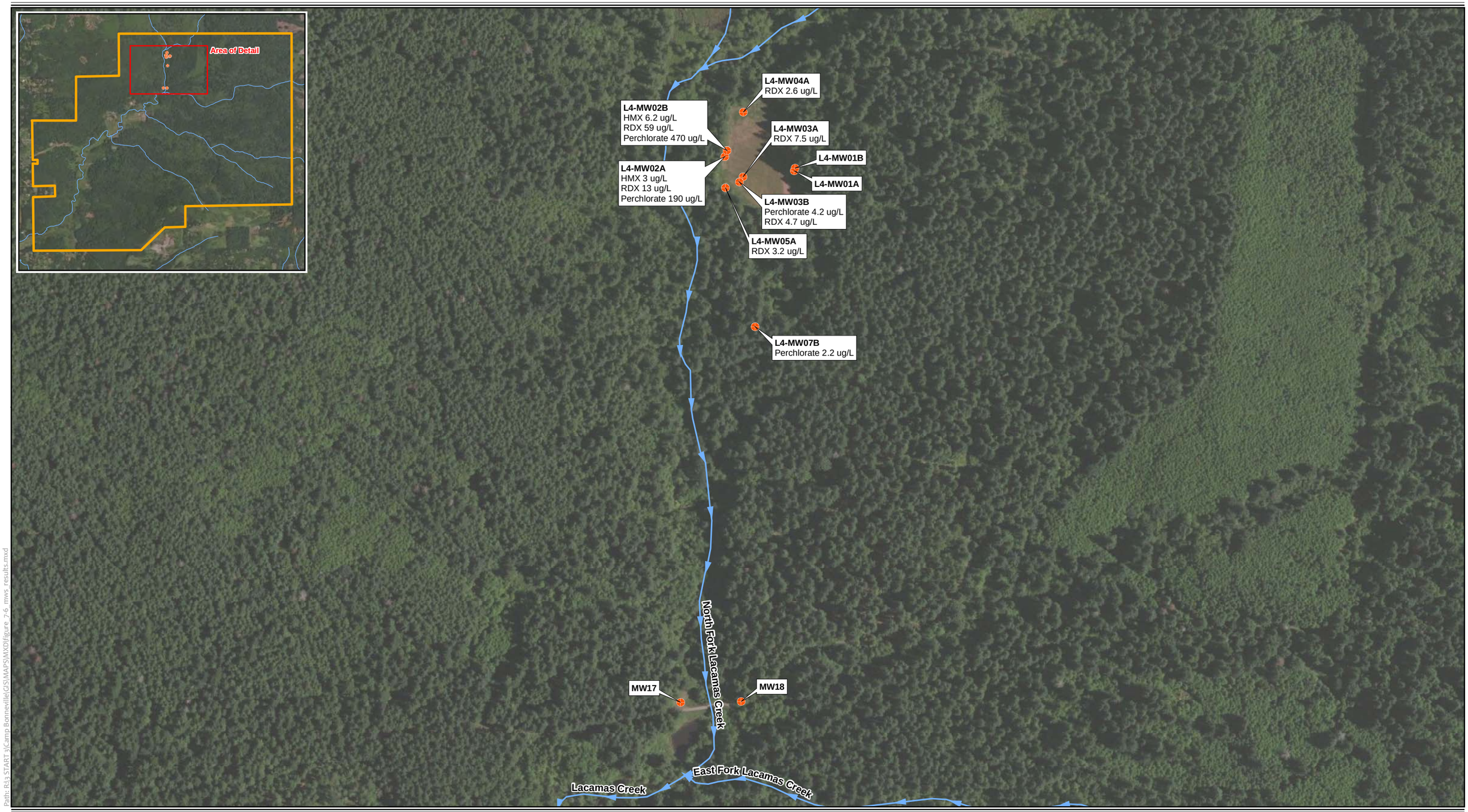

Path: R:\3_START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-6_mws_results.mxd

0 250 500 750 1,000 Feet

Monitoring Well Sample Result

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-6
Existing Montoring Well Elevated Concentrations

Vancouver, Washington

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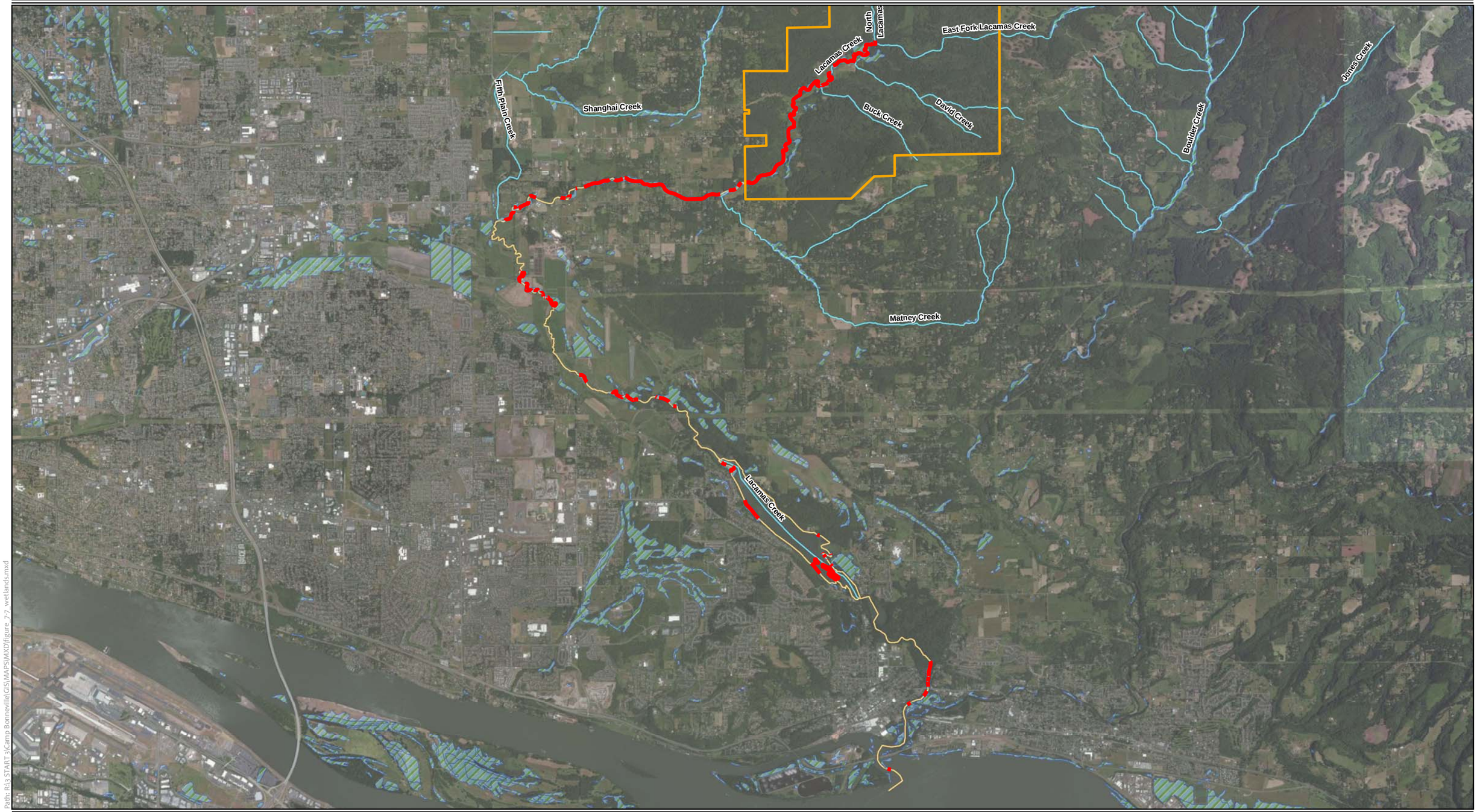

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-7_wetlands.mxd

0 0.5 1 1.5 2 2.5 Miles

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

- Regional Streams
- 15 mile TDL (Target Distance Limit)
- Wetlands within 15 mile TDL
- Wetlands
- Camp Bonneville Boundary

Figure 7-7
Lacamas Creek Wetlands

Vancouver, Washington

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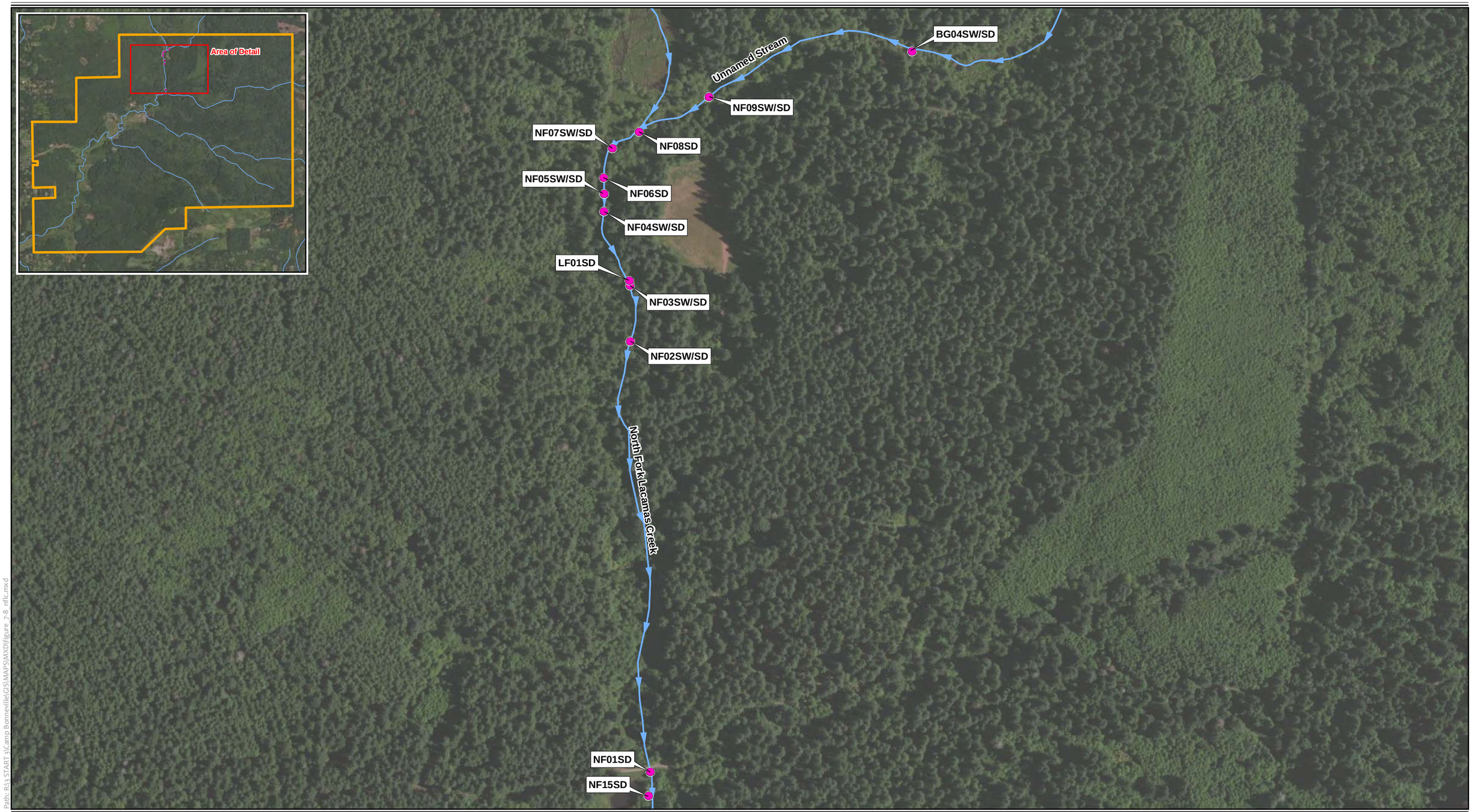

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-8_nflc.mxd

0 250 500 750 1,000 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-8
North Fork Lackamas Creek
Sample Locations

Vancouver, Washington

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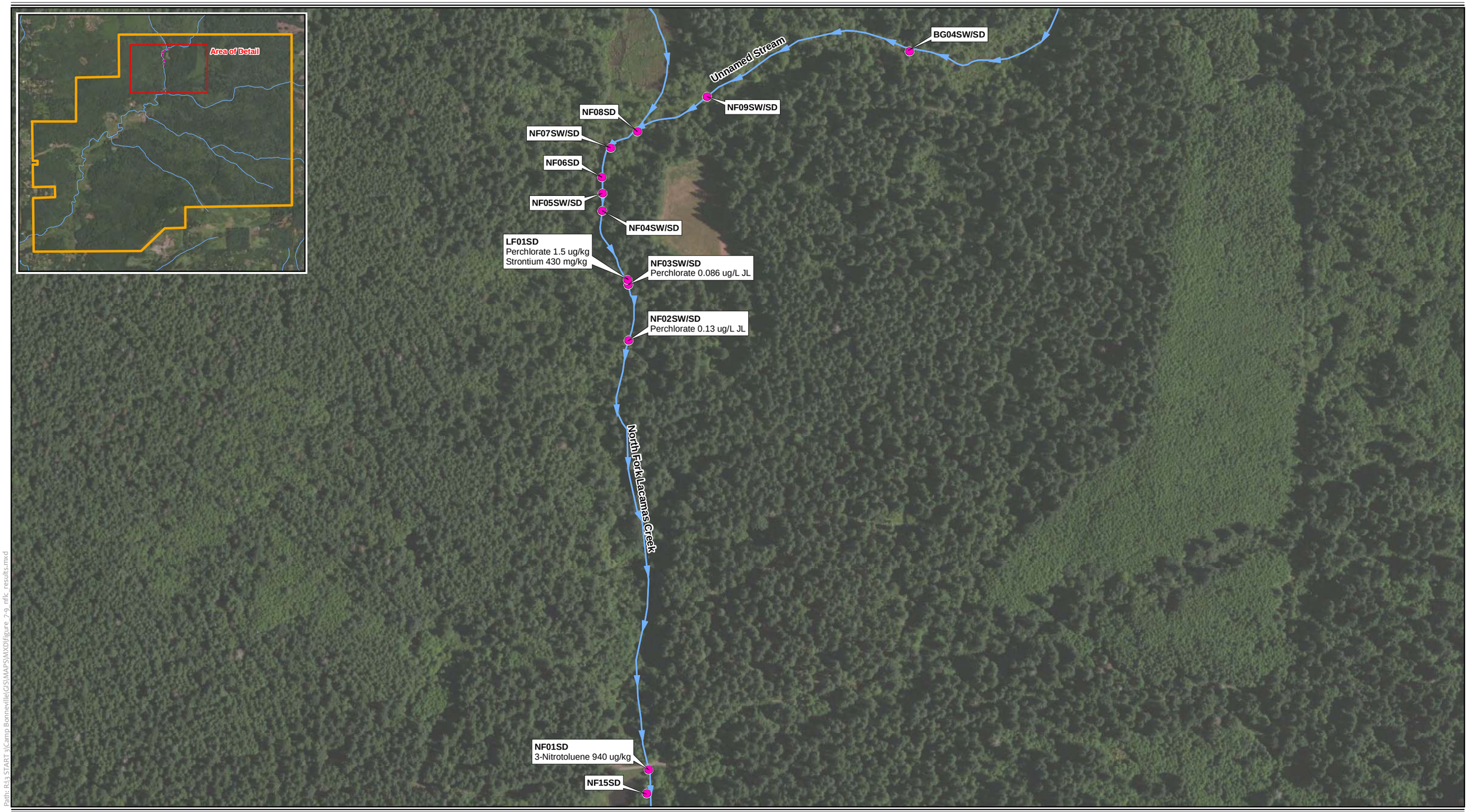

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-9_nfic_results.mxd

0 250 500 750 1,000 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-9
North Fork Lackamas Creek
Elevated Concentrations

Vancouver, Washington

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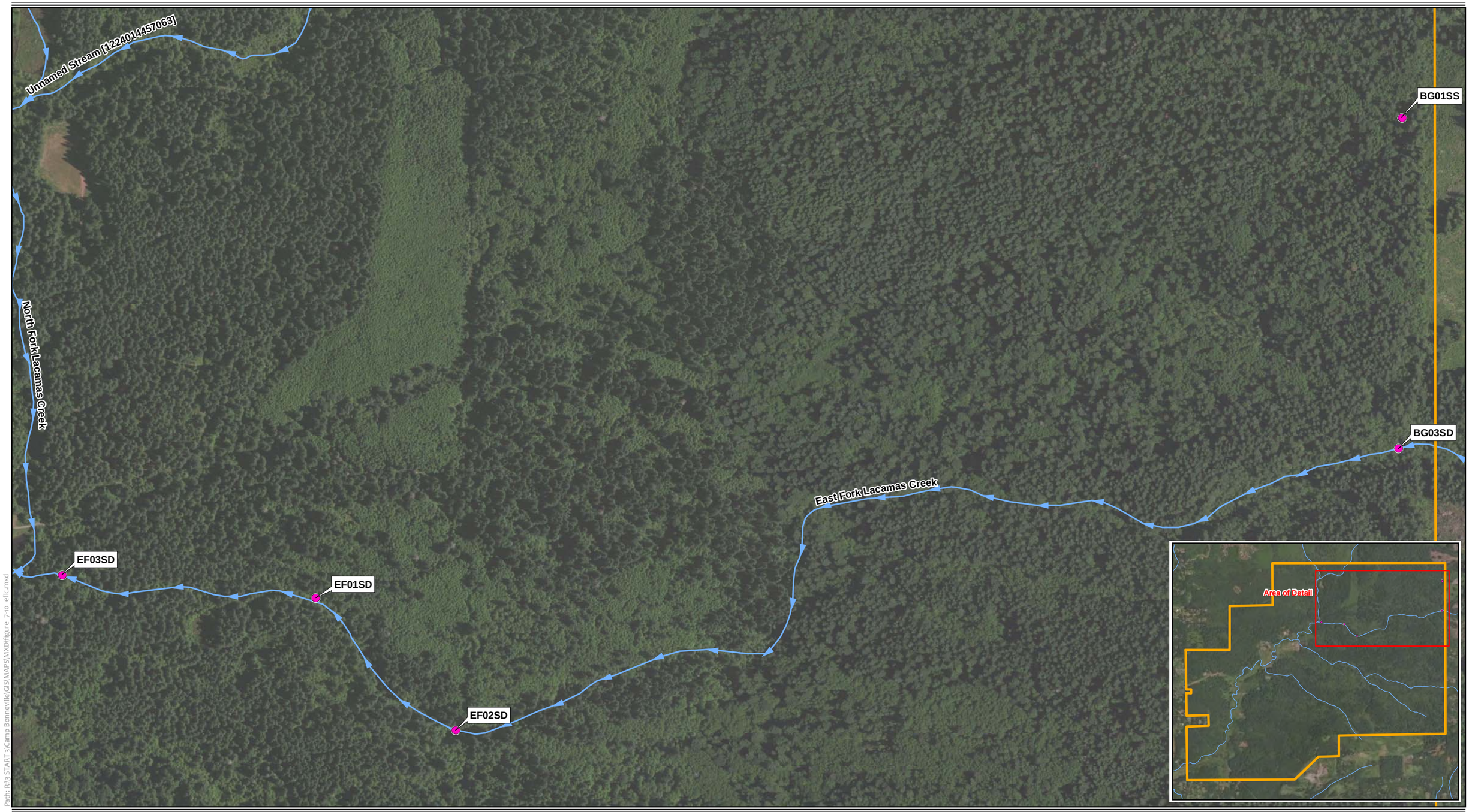

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-10_efic.mxd

0 250 500 750 1,000 1,250 1,500 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-10
East Fork Lackamas Creek
Sample Locations

Vancouver, Washington

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Path: R:\3_START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-11_bc.mxd

0 250 500 750 1,000 1,250 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-11
Buck Creek Sample Locations

Vancouver, Washington

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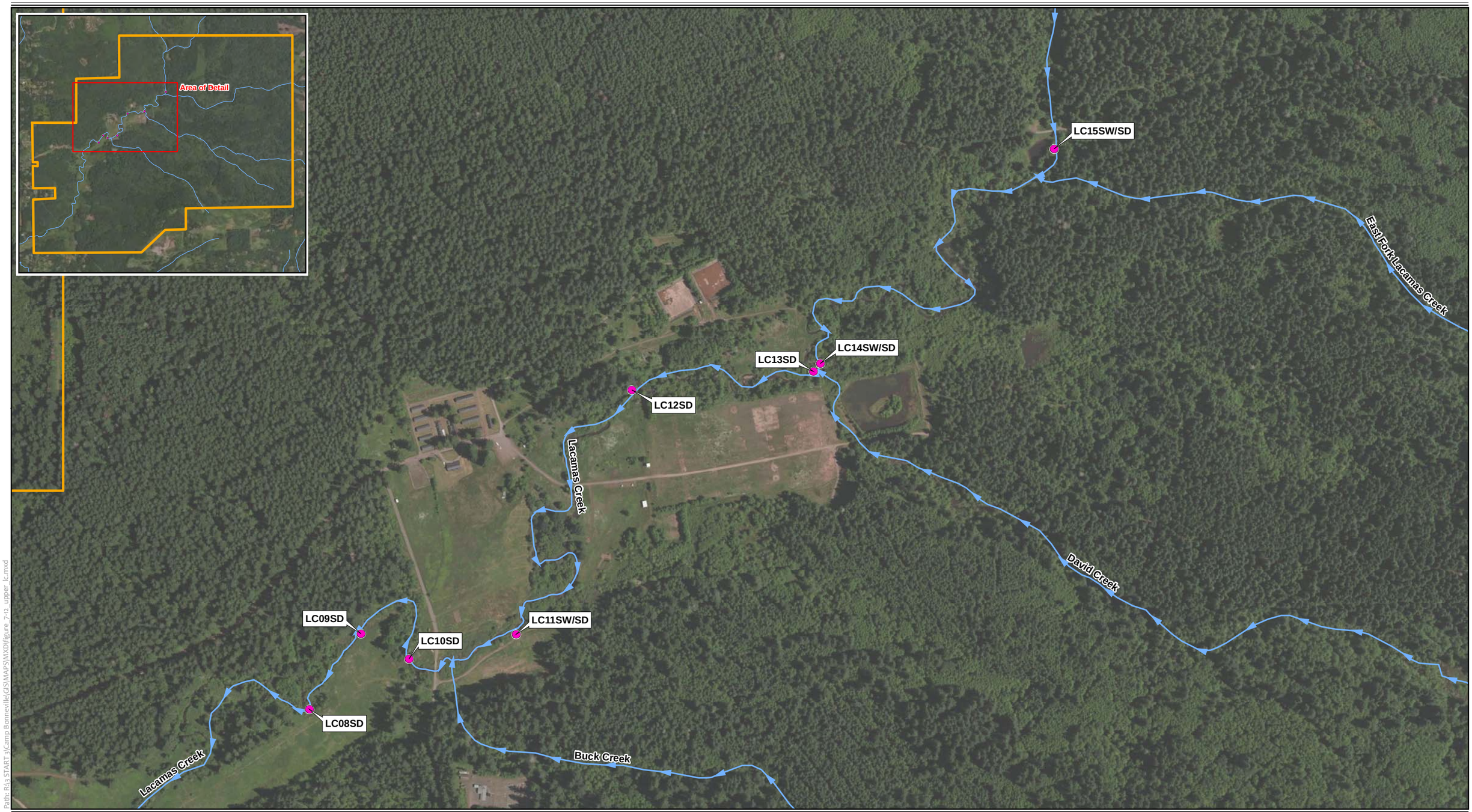

Path: R:\3.START\Camp Bonneville\GIS\MAPS\MXD\figure_7-12_upper_lc.mxd

0 250 500 750 1,000 1,250 1,500 Feet

Sample Location

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-12
Upper Lacamas Creek Sample Locations

Vancouver, Washington

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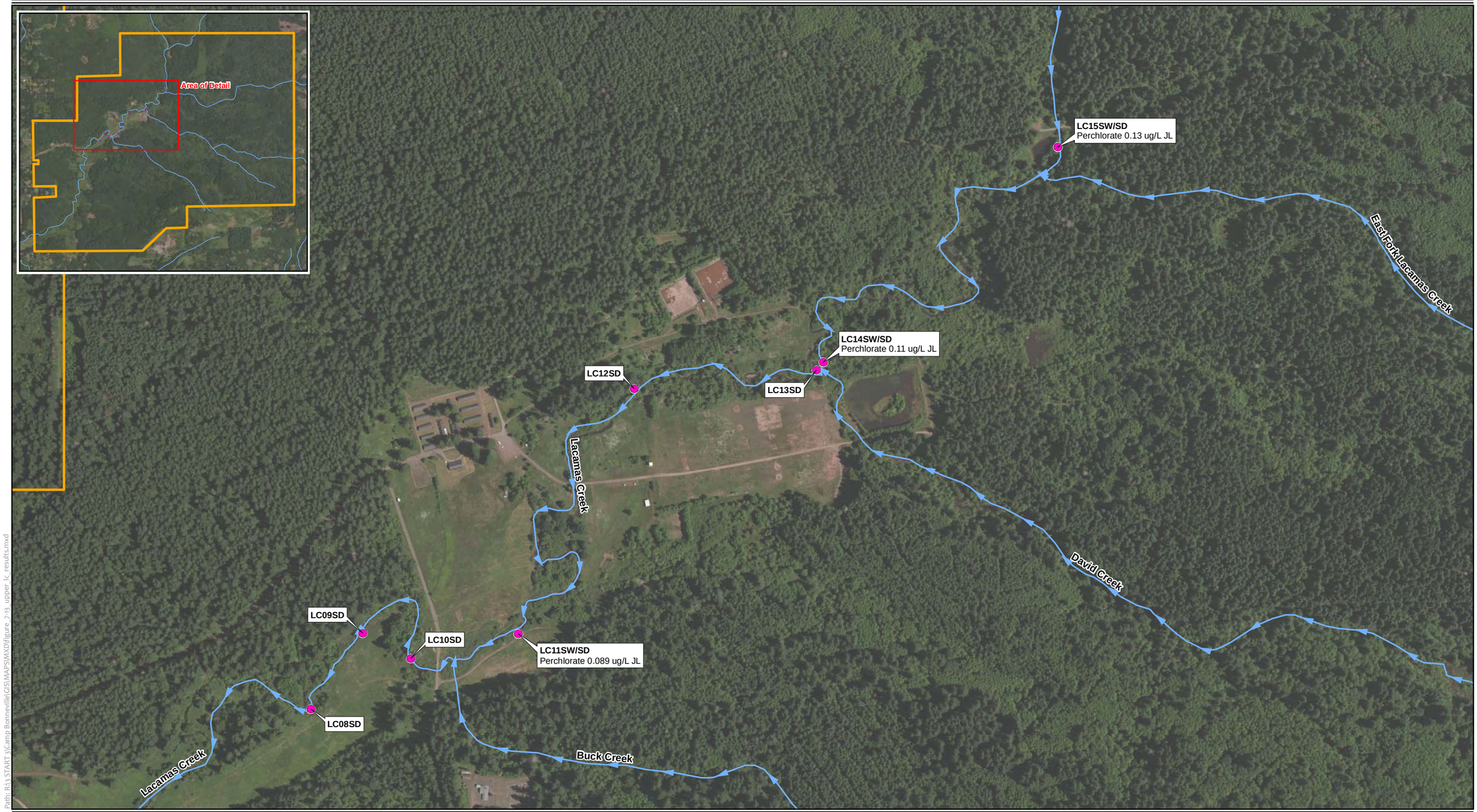

Path: R:\3_START\Camp Bonneville\GIS\MAPS\MXD\figure_7-13_upper_lc_results.mxd

0 250 500 750 1,000 1,250 1,500 Feet

Sample Result

Regional Streams

Camp Bonneville Boundary

ecology and environment, inc.
Global Specialists in the Environment

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-13
Upper Lacamas Creek
Elevated Concentrations

Vancouver, Washington

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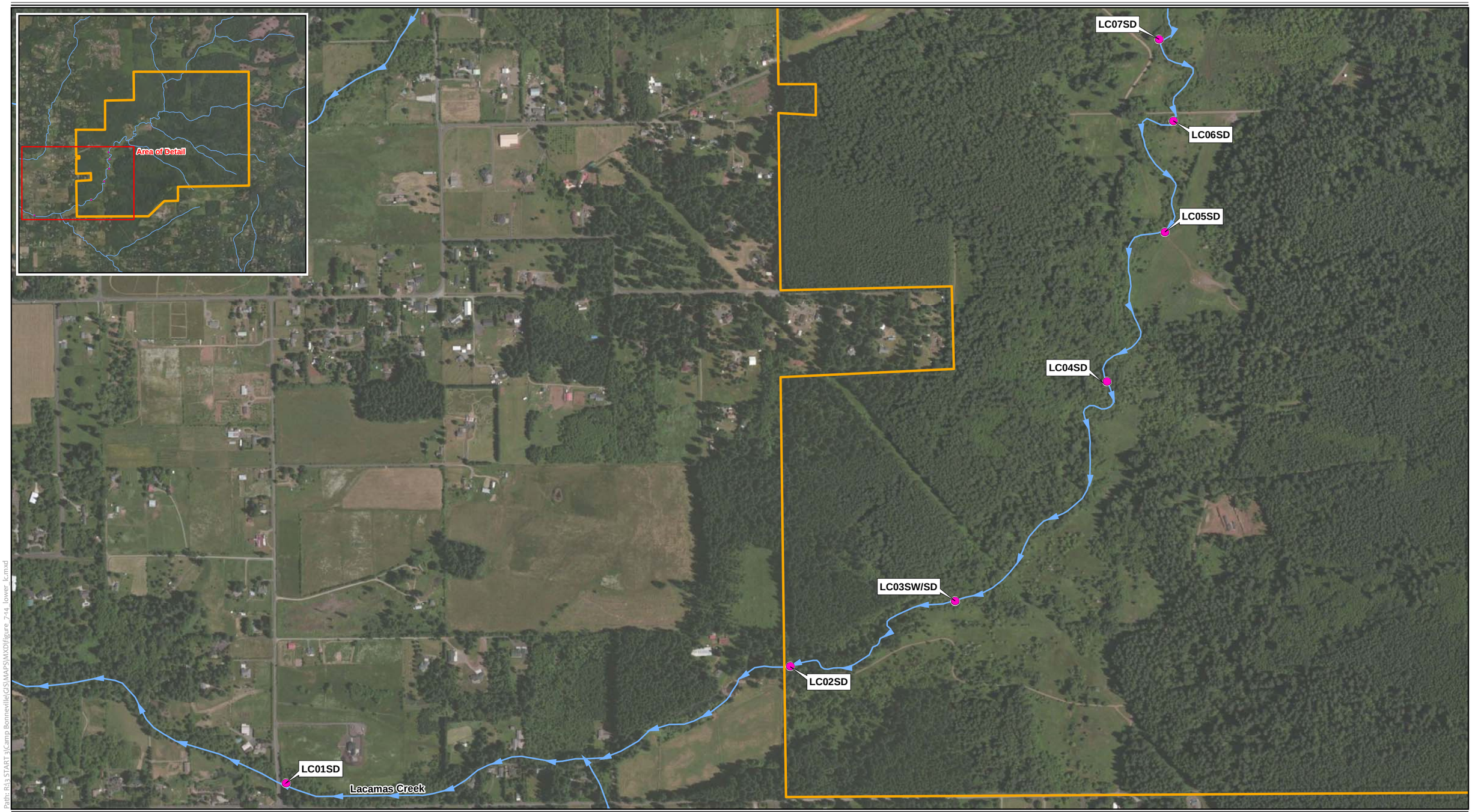

Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-14_lower_lc.mxd

0 250 500 750 1,000 1,250 1,500 1,750 2,000 Feet

ecology and environment, inc.
Global Specialists in the Environment

Sample Location

Regional Streams

Camp Bonneville Boundary

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-14
Lower Lacamas Creek
Sample Locations

Vancouver, Washington

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Path: R:\3 START 3\Camp Bonneville\GIS\MAPS\MXD\figure_7-15_lower_lc_results.mxd

0 250 500 750 1,000 1,250 1,500 1,750 2,000 Feet

ecology and environment, inc.
Global Specialists in the Environment

Sample Result

Regional Streams

Camp Bonneville Boundary

Source: National Wetlands Inventory - U.S. Fish and Wildlife Service (2011), Image - Microsoft Virtual Earth (2009)

Figure 7-15
Lower Lacamas Creek
Elevated Concentrations

Vancouver, Washington

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A Preliminary Assessment Petition

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PUBLIC PETITION FOR PRELIMINARY ASSESSMENT

Elin Miller, Regional Administrator
Michelle Pirzadeh, Acting Regional Administrator
United States Environmental Protection Agency, Region X
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

February 3, 2009

Fax: 206-553-1809
206-553-1234

Under the authority of CERCLA Section 105 (d), as amended, the petitioner,

(Name) : Dvija Michael Bertish, Rosemere Neighborhood Association, Columbia Riverkeeper

(Address) : Box 61471, Vancouver WA, 98666

We hereby request that Region X of the United States Environmental Protection Agency conduct a preliminary assessment of the known and suspected release of a hazardous substances, pollutants, or contaminants at the following location:

Camp Bonneville, Former US Military Installation, Clark County, WA (just outside Vancouver, WA)

Petitioners are affected by the [release (or) threatened release] because: Camp Bonneville, a surplus military property, is the subject of a dirty transfer from the US Dept. of Defense (DoD), to Clark County Government, via a non-profit "nature conservancy" known as the Bonneville Conservation, Restoration and Renewal Team (BCRRT). The property is currently under a cleanup program with supervision by Washington State Dept. of Ecology. EPA Region X staff are very familiar with the issues (both known and unknown) at the site. EPA was formerly involved with the clean-up project, but in an extremely rare occurrence, EPA opted out of the project in July 2003 citing a lack of adequate site assessment and a lack of collaboration on the US Army's part. Given various circumstances that have occurred since 2003, members of the public firmly believe that this project requires EPA to re-engage and list this site on the National Priorities List to achieve a higher level of oversight and to ensure public health and safety. As a former member of the Camp Bonneville Restoration Advisory Board, the petitioner is very concerned about ongoing groundwater contamination that has not been successfully mitigated. Landfill 4 was evacuated – military ordnance and great amounts of soil were removed and clean fill replaced. Ecology stated clearly that post evacuation increases in groundwater contaminant levels would indicate additional (unidentified) sources. Ammonium perchlorate concentrations have increased to above 500 ppb, and there are additional concerns with TCE, and RDX. RDX has a 100 year lifespan in the environment. The groundwater contamination plume abuts and flows toward Lacamas Creek, a salmon bearing stream that feeds into Lacamas Lake, and then into the Columbia River. Lacamas Creek flows through the heart of Camp Bonneville, including the Central Valley Floor where new pollutant discoveries have been made since the project ensued. The surrounding residents all use well water as their potable water supply, however the water on site is unsafe for human consumption. The site exists within the EPA designated Troutdale Sole Source Aquifer System, and petitioners are concerned that federal dollars being expended on this project are not being used to sufficiently protect against further damage to the vulnerable aquifer system and offsite migration of contamination. Since there is a direct federal funding nexus to the project, the petitioners request EPA to invoke its jurisdiction citing Sole Source Aquifer designation in order to evaluate these concerns, as there appears to have been insufficient containment and monitoring (placement of monitoring wells).

Faulty site characterization has long been a problem on this project, and since clean-up activity began, there have been at least 9+ new Area's of Concern (AOC) identified. The new AOCs include new firing points, burial

pits and practice ranges. Despite public comments regarding the probability of 155 mm Howitzer's being armed and fired on site, officials denied this concern, only to discover and detonate a Howitzer in the Central Target Impact Area in May of 2007. The find was near existing residential neighborhoods that were apparently built directly over the firing fans for this kind of projectile. Petitioners understand that the Army Corps of Engineers and/or the Dept. of Defense advised neighboring residences on the periphery of the site not to dig a pond or drive stakes into the ground on their own properties, however, there has been no additional planning to evaluate this public safety concern. In a January 12, 2009 letter from Baker Engineering & Energy (subcontractor) to BCRRT, Ecology's comments on the Draft Cleanup Action Plan include: "It is apparent from MEC data collected at the CVF [Central Valley Floor] that MEC types and distributions as well as their corresponding Explosive Hazard Rankings developed for Maneuver and Training areas need to be re-evaluated. The findings completely discredit the prevailing concept in the RI/FS that maneuver areas have negligible explosion hazard risks." Ecology also states: "Based on current available field data it is obvious that the selected cleanup actions for Maneuver areas, especially within the Regional Park, fall short of protectiveness in terms oflong-term effectiveness. A more protective action should take into account surface contamination, and in some areas, subsurface contamination as well." In response to Ecology's concerns, BCRRT staff seems to indicate that risk from new anomalies is "unlikey," and that more empirical data is required to determine if the threat is real. The public insists that the project is well beyond the need to prove whether the threat is real or valid. Various parties of record were denied the opportunity to offer scoping comments on the supplemental RI/FS. To date, the public has not seen a supplemental RI/FS to offer public comment, even though cleanup activity is presumably still underway. Petitioners voiced concern through the RI/FS process that the site was inadequately characterized, and that such data gaps would elevate risk assessment for the intended re-use of the site as a public park and overnight campground, but these concerns were ignored or rebuffed by officials running the project.

In a January 31, 2009 Columbian Article [Army Contests Camp Bonneville Costs; Contractor defends dubious expenses, including large bar tabs], the BCRRT contractor, Mike Gage, states that BCRRT "[has]found several things on-site that we believe are Army-retained conditions that they did not disclose to us." It has now been publicly acknowledged by the contractor that the federal funds budgeted to this project are insufficient to achieve cleanup standards necessary for the intended re-use, and the contractor will be seeking additional federal funding to cover the data gaps that were pointed out by EPA and the public prior to the inception of this project. The Columbian article continues with descriptions of misappropriated federal funds from the project expense records, a lack of oversight between Clark County and the contractor, and the contractor claiming that the project is a private contract that allows him to spend federal cleanup dollars as he so chooses without oversight. In published responses to the Columbian Article, the public perceives these developments as project mismanagement, collusion, and greed.

It is important for EPA to list this site on the National Priorities List simply because the public needs better federal oversight to ensure that the clean-up standards are achieved for optimum risk assessment to protect the public health and safety on this project. Superfund listing would provide additional oversight and would require de-listing prior to release of the site for re-use implementation. The petitioners firmly believe this layer of protection is necessary due to unmitigated circumstances at the site. Clark County officials have openly stated that conditions on this site allow for an "acceptable risk" for the intended re-use as a public park, a position that many people from the public vehemently oppose. Institutional controls call for MEC to remain on site in perpetuity, to be cordoned off by a three strand barbed wire fence adjacent to planned public recreation facilities. Many members of the public have argued that Camp Bonneville is unsuitable for a public park and that they would never bring their children to the site. This public perception is detrimental to the public's interest in this project, especially in light of financial shortfalls currently forecast. The EPA would be better suited to manage additional federal resources and what's left of the current operating budget since financial

oversight and accountability are lacking. It appears that Ecology is in need of assistance to bring clean-up standards to bear under CERCLA and MTCA regulations given the new discoveries.

Given that Camp Bonneville is a precedent setting project that sets an example for other military clean-ups of its kind, it is imperative that EPA help to establish improved protocols in order to protect other communities around the nation from experiencing the depth of confusion and largesse experienced on the ground in Clark County. The protocols noted in a Dept. of Defense/EPA document entitled "Management Principals for Implementing Response Actions at Closed, Transferring, or Transferred Ranges," clearly outline intended practices, including collaboration between EPA and DoD, that have been absent from Camp Bonneville's active clean-up. The petitioners hope that EPA can re-energize these much needed protocols and apply them with due diligence to Camp Bonneville's restoration efforts.

Type or characteristics of the substance(s) involved: Ammonium Perchlorate, Trichloroethane, Dichloroethene, Cyclotrimethylenetrinitramine (RDX), HMX, Lead, Chromium, Mercury and others. An extensive list of Militarized Ordnance including mortars, missiles, grenades, chemical warfare agents, and unknown contaminants located in new burial pits. Potential for radioactive materials.

Nature and history of any activities that have occurred regarding the release/threatened release: The sources of contamination are military landfills, target impact areas, firing ranges, burial pits and open burn pits, and documented groundwater contamination.

Federal, State and local authorities you have contacted about the release/threatened release and the response, if any: Washington State Dept. of Ecology , Barry Rogowski, Tim Nord, Ben Forson, Greg Johnson, Dawn Hooper; Martha Lentz, Sole Source Program, EPA Region X; Jonnie Hyde, Clark County Health Dept; Nancy Harney and Harry Craig, EPA Region X; Steve Stuart and Marc Boldt, Clark County Commissioners. Bill Barron, Clark County Administrator. Bill O'Donnell, US Dept. of Defense, Pentagon. Katherine Hanks, Environmental Health Scientist, Agency for Toxic Substances and Disease Registry; Jeroen Kok, Clark County Parks and Recreation; Pete Capell and Jerry Barnett, Clark County Public Works; Mike Gage, BCRRT Contractor; Taylor Aalvik and Nathan Reynolds, Cowlitz Tribe; Ed Marshman, FBI Portland, OR; Vancouver Fire Department District 5; Washington Department of Natural Resources; Camas/Washougal/Woodland Veterans of Foreign Wars and Veterans Administration Land Acquisitions, Willamette Cemetery Portland, OR; Gary Lucas, Clark County Sheriff; Department of Toxic Substances Bureau, San Francisco; Earl Blumenauer, Oregon Congressman; Brian Baird, Washington Congressman; Patty Murray and Maria Cantwell, Washington Senators; Governor Christine Gregoire, Washington.

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B

Washington State Department of Ecology Camp Bonneville Military Reservation Fact Sheet

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Proposed Amended Consent Decree Available for Public Review and Comment

Ecology Wants Your Input!

The Department of Ecology (Ecology) is asking for your comments on the proposed Amended Prospective Purchaser Consent Decree (Decree) for the Camp Bonneville Military Reservation Site. The purpose of this fact sheet is to provide background information about Camp Bonneville, information about the amendment to the Decree, and how you can submit your comments.

Camp Bonneville is located five miles northeast of the city of Vancouver, in Clark County, WA (see map on page 4).

You are invited to comment on the following document:

- **Amended Prospective Purchaser Consent Decree (Decree)**

Ecology will accept comments from *October 14 to November 17, 2011*. See the box on the right for details about where to review documents and submit comments. A public hearing will be held if request by at least 10 persons is received by Ecology during the comment period. Requests can be made to the Ecology Site Manager, Ben Forson.

Site Background

Camp Bonneville consists of almost 4,000 acres of forested land previously owned by the U.S. Army and leased from the State Department of Natural Resources. It was used from 1910 to 1995 for firing range practice. During that time, military munitions were stored and/or used at the Site including artillery ammunition, mortar ammunition, air-launched rockets, shoulder-fired rockets, guided missiles, bombs, land mines, practice grenades, fuzes, and small arms ammunition. The camp was officially closed in 1995 and since then, investigations have been ongoing to characterize the contamination from the munitions and other hazardous substances and to develop a plan for re-using the Site once it is cleaned up.

Comments Invited

October 14 through November 17, 2011

Submit comments and technical questions to:

Ben Forson - Site Manager
WA Department of Ecology
Toxics Cleanup Program
P.O. Box 47600
Olympia, WA 98504-7600
Phone: (360) 407-7227
E-mail: bfor461@ecy.wa.gov

Document Review Locations

Washington State University Vancouver Library

14204 NE Salmon Creek Avenue
Vancouver, WA
Phone: (360) 546-9680

WA Department of Ecology Headquarters

300 Desmond Drive SE
Lacey, WA 98503

By appointment only:
Contact Carol Dorn
Carol.Dorn@ecy.wa.gov or
(360) 407-7224

Ecology's Toxics Cleanup Website

https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=11670

Facility Site ID #: 69965472

In 2003, Ecology issued an Enforcement Order under the state's cleanup law to the Army for Camp Bonneville cleanup. In 2006, the Site underwent an Early Transfer Process, transferring the facility ownership to Clark County and temporarily to the Bonneville Conservation Restoration and Renewal Team (BCRRT) to manage the cleanup. The BCRRT maintained temporary ownership of the facility until 2010 while it investigated contamination and conducted cleanup. BCRRT's work on the Site has been concluded. Ownership is proposed to be transferred back to Clark County. The Amended Decree describes the county's responsibility for implementing the Cleanup Action Plans for Camp Bonneville. Cleanup will continue to be funded by the U.S. Army.

Ecology will determine when the facility meets state cleanup requirements, and the Site will then be used as a park and wilderness conservation area managed by Clark County.

Amended Prospective Purchaser Consent Decree

The amended Decree will replace the previous 2006 Prospective Purchaser Consent Decree (Decree). The Decree signed in March 2006 is a legal document between Ecology, the Bonneville Conservation Restoration and Renewal Team (BCRRT) and Clark County. The Decree outlined the process and schedule for cleanup activities at the Camp Bonneville Site, and transferred the land owned by the U.S. Army to Clark County. An Environmental Services Cooperative Agreement grant allowed the Army to pay for cleanup at the Site, conducted by the BCRRT and Clark County.

Under the amended Decree, BCRRT will no longer be named in the decree and Clark County takes responsibility for performing cleanup at the Site. Cleanup will continue to be funded by the U.S. Army.

The amended Decree also provides an updated schedule and more detailed descriptions of work to be performed (see status section below). Cleanup is anticipated to continue for an additional five to seven years.

What Contamination Has Been Found at the Site?

Soil contaminants include petroleum products, lead, pesticides, and volatile organic chemicals. Soil and groundwater contaminants include volatile organic chemicals and explosive chemicals, such as perchlorate and RDX. Unexploded ordnance– and munitions debris have also been found at various locations. For more details regarding the contamination visit the Ecology website listed on page one.

What Is the Status of Cleanup?

The Army began investigations and cleanup activities at the camp in 1995, and Ecology has provided oversight for investigations and cleanup activities since 2003. The Site has been divided into five Remedial Action Units (RAUs), based upon the contamination. The type of contamination and current status of investigations and cleanup at each RAU are summarized below.

RAU 1 – Hazardous Waste
Status: *Complete*

- An independent cleanup action was completed prior to issuance of the Enforcement Order.
- A Cleanup Action Plan (CAP) documented the cleanup process.
- In 2008, Ecology issued a "No Further Action" determination.

RAU 2A – Munitions (small arms ranges)
Status: *In progress*

- Cleanup work at nineteen of twenty-one small arms ranges has been completed.
- Draft and final cleanup work plans for the remaining two arms ranges will be submitted to Ecology that propose an amendment to the existing Cleanup Action Plan (CAP) regarding approaches for addressing lead contamination in the soil.
- After cleanup is complete, a final Site cleanup action report will be submitted.

RAU 2B – Munitions (disposal)
Status: *Complete*

- Soil and groundwater investigations have been completed and monitoring wells have been installed.
- A final Site investigation report has been submitted.
- In 2009, Ecology issued a "No Further Action" determination.

RAU 2C – Munitions/Solid Waste (disposal)
Status: *In progress*

- An Interim Action Work Plan for landfill and contaminated soil removal was approved by Ecology and an interim removal action for contaminated soil has been completed.
- Groundwater investigations are on-going.
- A Remedial Investigation/Feasibility Study (RI/FS) Report and CAP/Long-term Monitoring Plan with Contingency Plan will be prepared and submitted for public comment.

RAU 3 – Unexploded ordnance
Status: *In progress*

- A draft CAP has undergone public review and comment and was finalized by Ecology in 2009.
- Cleanup will be conducted in four phases; for each phase, draft and final work plans will be developed.
- Final Site cleanup action reports for each phase will be submitted to Ecology after cleanup has been completed.

What Happens Next?

Once the public comment period ends on November 17, 2011 Ecology will review and consider all comments on the proposed Decree. Cleanup documents may be modified based on your comments. The Public Participation Plan for this Site has more information about the cleanup process and how you can get involved.

Ecology will notify you about future cleanup work and public comment periods. The next anticipated public comment period will be for the RI/FS and draft CAP for RAU 2C – munitions/solid waste disposal area. This review is anticipated in spring 2012.

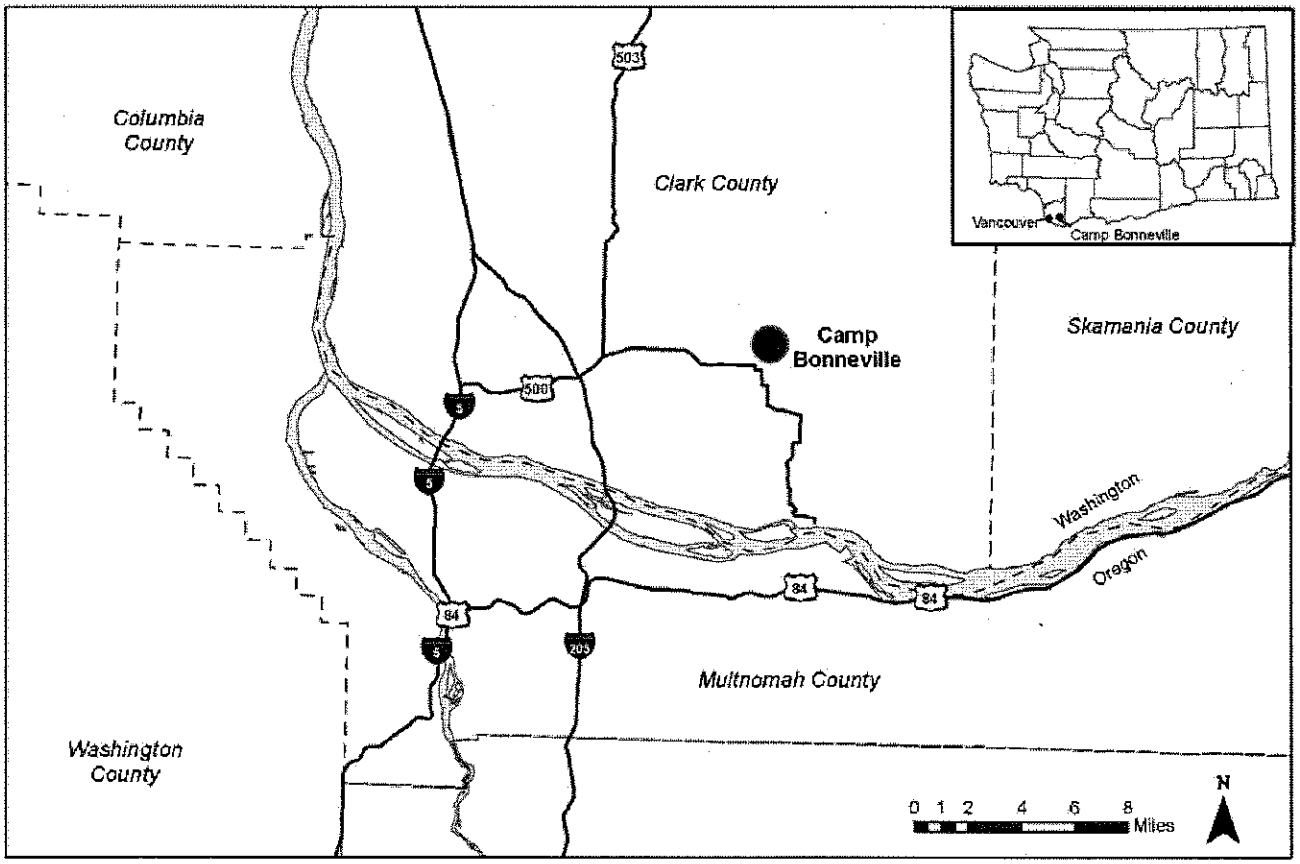
For information about other Ecology public comment periods, meetings, and other events, please visit Ecology's public events calendar at: http://apps.ecy.wa.gov/pubcalendar/calendar.asp.

What can you do?

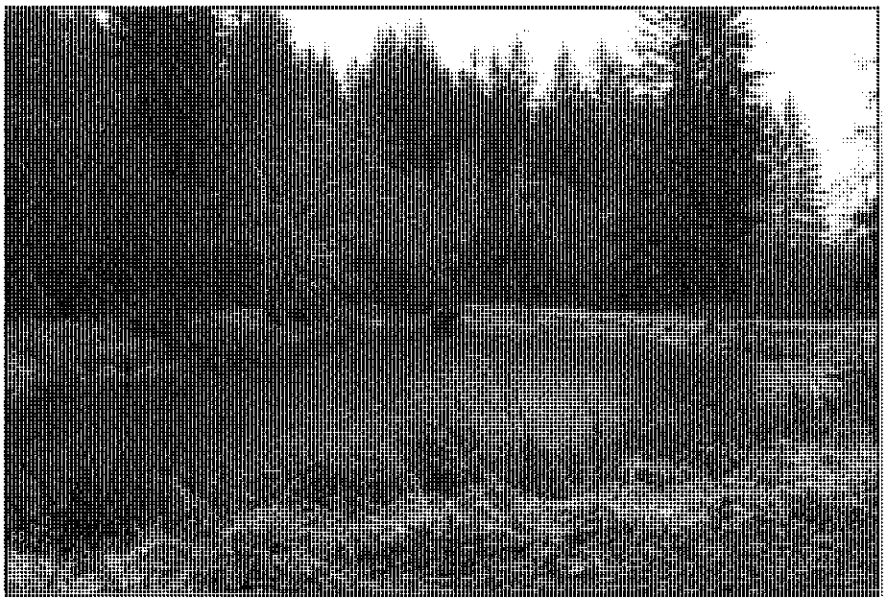
1. Read about the cleanup in this handout.
2. To get more detailed information, review the supporting documents at the locations listed on page one.
3. Write down your comments and questions. Send them to the Department of Ecology at the address shown on page one.

We appreciate your comments and concerns.
Thank you.

Camp Bonneville Military Reservation



The Camp Bonneville Military Reservation is located approximately five miles northeast of Vancouver, Washington and 15 miles northeast of Portland, Oregon.



The Camp Bonneville Military Reservation consists of almost 4,000 acres of forested land.

DEPARTMENT OF
ECOLOGY
State of Washington
Toxics Cleanup Program
Attn: Carol Perez
PO Box 47600
Olympia, WA 98504-7600

Camp Bonneville Military Reservation, Clark County, WA

Ecology Seeks Public Comment on proposed Amended Prospective Purchaser Consent Decree

Public Comment Period:
October 14 to November 17, 2011

Facility Site ID #: 69965472

Help with other formats?

If you need this document in a format for the visually impaired, call the Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

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C Field Sampling Forms and Logs

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SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/18/11 TIME: 10:42 SAMPLER: ~~Derek Pulvino~~ Bryan Cecko (BC)

GPS LOCATION: latitude 45° 42.391608 longitude -122° 23.943192

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
B601SD	11204343	JDQA3		X	X	X	X	X	X
Date shipped	5/18/11 5/19/11	COC Number	10-4097213-051811-0003 BNA, VOC 10-4097213-051811-0004 Nitro TAL						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
Surface/ Sediment	Saturated	Brown dark brown	~~Silt~~ Brown well sorted silt trace Sand w/organic matter (plants)	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
10:42	S-SW	DP	Shoreside sampling location at waterline- had likely been below water level (stream) yesterday

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: 0933 SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° 42.391608 longitude -122 23.943192

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
BG01SB	11204301	JDQ51	x	x	x	x	x	x	x
Date shipped	5/17/11 5/19/11	COC Number	10-4097213-051711-0003-VOC/SVOC 10-4097213-051811-0004-Nitro, TAL						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
2.6	Moist	Med Brown	Clay rich, minor gravel	N

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
		EL	Sample BG01SB @ Auger hole; note this is the background location

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/18/11 TIME: 11:09 SAMPLER: Bryan Ciecko

GPS LOCATION: latitude 45° 42.391608 longitude -122° 23.943192

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
BQ01GW	11204800	JDQ50			X	X	X	X	X
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 BNA, VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Purged clear brown sediment	groundwater collected w/ peristaltic from directly w/in hand auger dug hole	None

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
11:13	S-SW	DP	Auger hole sampled from and gw sample jars

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

Note: Sample collected ~~from~~ BC from open borehole.

Note: 1039 calibrate Horiba U-52 pH: 3.95 (4.0); Cond 4.43 mS/cm (4.45 mS/cm) Turb 0.0 NTU (0.0 NTU) Cal soln from Fieldtenvironmental; Lot # 0271-16 Exp: 10/1/12 Horiba ~~Serial #:~~ BC HGS#: TOKTJEXP

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond ~~(MS/cm)~~ mS/cm	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW
1045	10.46	4.93	0.057	38.8	202	8.9	17-inch
1048	10.07	5.03	0.034	30.7	201	8.79	"
1051	9.72	5.04	0.029	27.8	197	8.78	"
1054	9.51	5.04	0.027	22.8	196	8.76	"
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/20/11 TIME: 1511 SAMPLER: Bryan ~~Cieka~~ Ciecko

GPS LOCATION: latitude 45.70459361 longitude -122.4028211

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
BG02GW	11204302	JDQ52	X		X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
~~L4~~ BC				

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	well L4-MW01A unique ID AEL599	None

WELL MEASUREMENT

L4-MW01A AEL 599 Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
BG02GW	16.22	top of casing	30.17 16.22 13.95	2	+ 14-feet - ~~7 feet~~	~7-gallons

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1518	N	BC	Sample BG02GW (MS/MSD) and well L4 MW01A

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW	gal
14:09	10.60	5.31	0.03	0.0	291	10.15	17.28	0
1415	10.69	5.25	0.030	0.0	295	7.76	17.53	1
1419	10.48	5.44	0.030	0.0	297	7.60	17.70	2
1425	10.48	5.44	0.028	0.0	292	7.49	17.81	3
1430	10.69	5.26	0.028	0.0	301	7.45	19.19	4
1434	10.78	5.37	0.028	0.0	306	7.40	19.42	5
1439	10.79	5.34	0.027	0.0	309	7.46	20.26	6
1444	11.0	5.49	0.028	0.0	308	7.28	20.26	7
FINAL								

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

Ø669

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-20-11 TIME: ~~1511~~ 1654 SAMPLER: ~~Bryan Cicala~~ Derek Pulvino

GPS LOCATION: latitude 45.70461909 longitude -122.4028063

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
~~BG01GW~~ BG03GW	~~JDQ54~~ 11204303	JDQ54	X	~~X~~	X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	Sampled using low flow technique unique ID: AGL482	no odor

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4-MW01B →	12.19	TOIC	55	2"	43'	21.5

Their ID

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

[signature]

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

liter → l

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW	PV (gal)
~~1526~~	~~18.07~~	~~5.76~~	~~0.025~~	~~0.0~~	~~271~~	~~10.50~~	~~12.18~~	~~0~~
1543	16.08	5.95	0.029	0.0	264	8.02	12.31	0
1548	14.75	5.84	0.029	0.0	267	7.88	12.36	1
1551	12.96	5.93	0.028	0.0	266	7.86	12.39	2
1556	13.22	5.96	0.028	0.0	266	~~7.8~~ 7.58	12.40	3
1600	13.81	5.97	0.027	0.0	267	7.29	12.40	4
1604	14.43	5.92	0.026	0.0	270	6.79	12.43	5
FINAL								

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/16/11 TIME: 11:40 SAMPLER: Derek Purwino

GPS LOCATION: latitude 45° 42.339794 longitude -122 24.180451

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF01SB	11204307 ~~LF01SB~~	JD Q57		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003 VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
1' 6"	Moist	Med Brown	Sandy ~~Silt~~ Clay	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
12:00	Down	DP	LF01SB Sample
12:01	Down	DP	Sample Location
12:02	W	DP	LF01SB Sample Location w/ Respect to creek

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

2.1 μR/hr x 1
Ludlum Model 192 Survey Meter

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/16/11 TIME: 12:35 SAMPLER: Derek Pulvino

GPS LOCATION: latitude 45° 42.336353 longitude -122° 24.195048

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF02SB	11204309 ~~LF02SB~~	JDQ59		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003 VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
2 ft	Saturated	Med Brown	Clay w/ Sand	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
12:45	Down	DP	LF02SB Sample
12:46	W	DP	LF02SB Auger hole for sample
12:47	W	DP	LF02SB Auger hole w/ respect to creek

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

2.0 – 2.5 μR/hr x 1
Ludlum Model 192
Survey Meter

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/16/11 TIME: 14:03 SAMPLER: Bryan Cieko

GPS LOCATION: latitude 45° 42.327283 longitude -122° 24.201943

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF03SB	11204311 ~~LF03SB~~	JDQ61		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003-VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
1.8 ft	Damp	Med Reddish Brown		No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
14:15	W	BC	Sample LF03SB w/ creek in background @ sample hole

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

1.7-2.2 μR/hr
Ludlum Model 192
Survey Meter

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/16/11 TIME: 14:32 SAMPLER: B. Geeko

GPS LOCATION: latitude 45° 42.313318 longitude -122° 24.199082

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF04SB	~~LF04SB~~ 112043153 (RV)	JDQ63 (RV)		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003-VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
1.6 ft	Saturated	Medium Brown	Fine Sand w/ Some Gravel and Clay	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
14:45	E	BC	Sample LF04SB at Auger Hole Location

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/16/11 TIME: 15:05 SAMPLER: Derek Pulvino

GPS LOCATION: latitude 45° 42.298260 longitude -122° 24.203746

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF05SB	11204315 ~~LF05SB~~	JDQ65		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003-VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
2.3 ft	Moist	Med Brown	Fine Sand w/ Clay trace pebbles	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
15:30	NW	EL	Sample LF05SB @ Auger hole Location

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

Ludlum 192 Survey Meter
2 μR/hr

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/16/11 TIME: 15:34 SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° 42.288282 longitude -122° 24.203134

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF06SB	1120431 ~~LF06SB~~	JDQ67		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003-VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
1.8 ft	Moist	Med Brown	Sm Pebbles ~15%, Fine Sand w/ Clay	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
15:45	S	EL	Sample LF06SB next to Auger hole

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

Ludlum 192 Survey Meter
2-25 μR/hr

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: 10:52 SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° ~~42.240330~~ 42.266641 longitude -122° 24. ~~157971~~ 199207

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF07SB	11204319	JDQ69		x	x	x	x	x	x
Date shipped	5/17/11	COC Number	10-4097213-051711-0003-VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
1.4ft	Saturated	Med Brown	Trace small gravel, sand fine to medium	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
11:00	Down	EL	Sample LF07SB @ Auger Hole ~8 ft above Creek; on boulders, potential drainage from hillside
	West	EL	Creek @ this location on bedrock

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: 11:32 SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° 42.263947 longitude -122° 24.189054

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF08 SB	11204322	JDQ72		X	X	X	X	X	X
Date shipped	5/17/11	COC Number	10-4097213-051711-0003 - VOC/SVOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
0.7ft	Saturated	Med Brown	Fine Sand w/ Gravel, little to no clay	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
11:35	Down	EL	Sample LF08 SB @ Auger Hole location
11:36	West	EL	Sample LF08 SB w/ Creek in background Below Landfill shallow area on boulders appears to be ravine filled in w/ accumulation water may be perched

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: 1343 SAMPLER: Derek

GPS LOCATION: latitude 45° 42.257510 longitude -122 24. ~~108~~ 183116

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF99SB	11204323	JDQ73		X	X	X	X	X	X
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 BNA, VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
0.3ft	Wet	Med Brown		

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
	North	DF	Sample LF09SB @ Augen Hole; Note hillside water flowing out @ surface

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: _____ SAMPLER: _____

GPS LOCATION: latitude _____ longitude _____

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF09SB									
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
			Sample LF09SB @ Auger hole location

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

_____
Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: _____ SAMPLER: _____

GPS LOCATION: latitude 45° 42.248322 longitude -122° 24.168158

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF10SB	No Sample								
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
		EL	Refusal in 4 holes at ~2.5ft. Note approx 8-ft down from sample location

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: _____ SAMPLER: _____

GPS LOCATION: latitude 45° 42.240330 longitude -122° 24.157971

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF11SB									
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
2.6ft	Dry	No Sample		

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
	South	EL	Location LF11SB no sample @ 3.0ft hit weathered bedrock not wet
	South	EL	Downstream from LF11SB location

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: ~~13:51~~ (RM) ~~11:51~~ 15:11 (RM) SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° 42.345663 longitude -122° 24.159926

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF12SB	1120~~239~~ 329	JDQ79		X	X	X	X	X	X
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 BNA, VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
2.1 ft	Wet	Med Brown	Fine to Med Sand, gravel, clay	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
11:59	North	EL	Sample LF12SB @ Auger Hole; note on small island type area just below what may be push off from landfill

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: 15:38 SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° 42.349439 longitude -122° 24.142390

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF13SB	11204331	JDQ81		x	x	x	x	x	x
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 BNA, VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
1.6	Moist	Dark Brown	Fine to Med Sand w/ Clay Trace Gravel	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
15:45	Down	EL	Sample LF13SB on small island just below what may be push off from landfill, sheen noted on water coming out of ground
15:46	Down	EL	Sample LF13SB @ Auger Hole

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

Rad Reading ~ 2 μR/hr

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: 15:58 SAMPLER: Erin Lynch

GPS LOCATION: latitude 45° 42.356354 longitude -122° 24.126739

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF14SB	11204333	JDQ83		X	X	X	X	X	X
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 BNA; VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
2.3 ft	Wet	Med Brown	Fine to Med Sand w/ Clay, Small Gravel trace	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
16:05	Down	EL	Sample LF14SB @ Auger Hole less than 50 ft or so from bridge

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

Ludlum
3 to 3.5 μR/hr

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-18-11 TIME: 1540 SAMPLER: Andy McDonald

GPS LOCATION: latitude 45° 42.339794 longitude -122° 24.180451

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LFO1GW	11204306	JDQ56			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
translucent Lt Brn	Parameters not collected; well point does not produce enough water.	no

sample collected ~ 6' from edge of creek ~ 14" deep. collected through screen from geoprobe.

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

~~* only collected 2-1L ambers, 1-250mL poly (Field Filtered) and 2-40 oz VOAs w/HCl~~ BC

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1615	NW	BC	Sample LFO1GW (in Bucket) w/ Lacamas Ck in bkgd.

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

BC Andrew McDonald

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-19-11 TIME: 0945 SAMPLER: Andy McDonald

GPS LOCATION: latitude 45° 42.336353 longitude -122° 24.195048

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF02GW	11204308	JDQ58			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Translucent lt Brn	sample collected from open borehole w/ Geoprobe Screen.	no

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
0949	NE	BC	Sample LF02GW and pump setup

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Andy McDonald
Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Turb sensor does not appear to be working

Time	Temp (F°/C)°	pH	Cond ~~(Ms/m)~~ mS/cm	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW
0919	7.71	6.29	~~0.63~~ (EC) 0.063	0.0 ?	113	2.75	—
0923	7.97	6.24	0.064	—	95	3.35	—
0926	7.87	6.17	0.060	800	92	2.66	—
0929	7.81	6.17	0.044	647	95	3.88	
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/19/11 TIME: 09:50 - begin purging SAMPLER: Derek Pulvino

09:56 - begin sample collection

GPS LOCATION: latitude 45° 42.327283 longitude -122° 24.201943

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF03GW	11204310	JDQ60			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Tan/brown sediment	Sampled from auger hole through geoprobe screen directly to sample container.	None noted

Clear water after ± 3min pumping

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
~~09~~ 10:03	E-NE	DP	Sample jars/bottles, sample point peristaltic looking towards landfill
10:05	W-SW	DP	Same - looking towards creek

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM - Horriba = 3 hours 5 min fuss

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond ~~(Ms/m)~~ ms/cm	Turb (NTU)	ORP	DO (mg/L)	DTW
09:50	8.81	5.58	0.030	—	136	6.59	
09:51	8.85	5.46	0.030	—	149	6.05	
09:52	8.88	5.41	0.030	—	156	5.80	
09:53	8.92	5.37	0.030	—	165	5.72	
09:54	8.95	5.34	0.030	800 (flushing)	172	4.84	
09:55	8.98	5.34	0.030	800	174	4.95	
09:56	9.01	5.34	0.030	800	176	4.90	
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-19-11 TIME: 1025 SAMPLER: Andy McDonald

GPS LOCATION: latitude 45° 42.313318 longitude -122° 24.199082

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF04GW	11204312	JDQ62			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
very lt Brn	sample collected w/geopump screen in open borehole	no

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1043	W	BC	LF04GW Pump 3, Sample bottles

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Andy McDonald
Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	mS/cm Cond ~~(Ms/m)~~	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW
1005	8.76	4.95	0.023	—	215	6.37	—
1008	8.76	4.89	0.023	800+	222	~~6.26~~ 6.26	—
1011	8.76	4.95	0.024	586	225	6.29	—
1014	8.74	4.90	0.023	800+	234	6.26	—
1017	8.77	4.89	0.023	800+	239	6.30	—
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/19/11 TIME: 1455 SAMPLER: ~~Derek Rubino~~ Alan Jensen (BC)

GPS LOCATION: latitude 45° 42.298260 longitude -122°. 24.203746

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF05GW	11204314	JDQ64			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
H Brn to clear	Sample collected from geoprobe screen in open borehole	~~ND~~

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1535	W	AJ	Sample LF05GW

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

Note - 11:10 - 3 attempts at pumping south hole was not effective screen plugs w/silt after slurry/water reaches - using geoprobe screen - not driven past bottom of auger hole - After driving geo probe point additional 6" - still insufficient production starter ~~pumping~~ attempts ± 11:20 stopped @ 11:25

1430 return to re-attempt sampling location

1435 fill 1-250mL HDPE (Field Filter)

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters

1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-19-11 TIME: 1135 SAMPLER: Andy McDaniel

GPS LOCATION: latitude 45° 42.288282 longitude -122 24.203134

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF06GW	11204316	JDQ66			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
lt Brown	sample collected w/ geoprobe screen in open borehole	N

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
114W						

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
	SW	BC	Sample LF06GW w/ Pump & Screen.

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Andrew McDaniel
Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond ~~(Ms/m)~~ mS/cm	Turb (NTU)	ORP (mV)	DO (mg/L)	DTW
1106	9.24	5.14	0.025	760	258	6.11	—
1109	9.12	5.17	0.025	256	265	5.88	—
1112	9.08	5.16	0.025	~~268~~ 120	269	5.79	—
1115	9.16	5.18	0.025	63.8	277	5.69	—
1118	9.08	5.13	0.025	47.2	275	5.62	—
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/19/11 TIME: Begin Purging - 11:55, Sample Begin - 12:06, finish 12:20 SAMPLER: Derek Pulvino

GPS LOCATION: latitude 45° 42.266641 longitude -122° 24.199207

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF07GW	11204318	JDQ68			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Light tan sediment	- Sampled from hole - fines poured by hand - peristaltic through geoprobe screen	No

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
12:20	east	DP	Sample collection hole w/ screen and peristaltic toward landfill

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM 11.55 5 hours 5 minut

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond ~~(Ms/m)~~ ms/cm	Turb (NTU)	ORP	DO (mg/L)	DTW
:58	10.62	4.94	0.026	~~0.2~~	285	4.93	
59	10.46	4.95	0.026	—	288	4.74	
:00	10.32	4.95	0.026	—	286	4.62	
01	10.27	5.01	0.026	—	287	4.59	
:02	10.27	5.02	0.026	—	287	4.52	
03	10.23	5.02	0.026	—	287	4.52	
04	10.20	5.04	0.026	—	287	4.38	
05	10.17	5.06	0.026	619	286	4.43	
:08	10.10	5.11	0.026	403	286	4.51	
FINAL :10	10.07	5.09	0.026	391	288	4.42	→ Sample

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/18/11 5/19/11 TIME: 15:38 08:55 SAMPLER: Derek Pulvino

GPS LOCATION: latitude 45° 42.345663 longitude -122° 24.159926

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF12 GW	11204328	JDQ78			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Brown sediment	Auger to ± 1.7 feet, drove geoprobe screen to 5-1.0 foot deeper - Sampled from screen - slow production	None noted

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

- 1-250mL & 2-1L filled 5/18/11 - started @ 15:38 finished @ ± 16:28

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW
15:42	13.72	5.87	0.058	791	149	3.31	
	low productivity - parameters collected after 250 ml						
	only collected once						
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

Sample sheet 2 of 2 for sample locale

DATE: 5/19/11 TIME: 08:55 SAMPLER: Derek Fulvimo, Alan Jensen

GPS LOCATION: latitude longitude

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF12GW									
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Slight brown sediment	water sample collected from geoprobe screen.	None noted

2 voa, 1 amber, and .5 of second amber @ 08:55

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
09:05	NE	DP	2 ambers 2 voa's and 1 Poly sampled 5/19/11

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

2 voa's collected in AM - after purging ± .25 l into amber samples collected after screen sat in hole overnight - 250 ml and 2 ambers filled 5/18/11

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW
	Not remeasured – low water						
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-18 TIME: 1415 SAMPLER: B. Clecka

GPS LOCATION: latitude 45° 42.349439 longitude -122° 24.142390

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF13GW	11204330	JDQ80			X	X	X	X	X
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Lt Brn	muddy but cleared up after a while	—

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1427 ~~1556~~	S	BC	Sample LF13GW incl bottles and tubing/pump.

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond ~~(Ms/m)~~ mS/cm	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW
1358	13.70	6.04	0.029	800+	187	3.83	—
1401	12.36	5.59	0.026	800+	220	3.93	—
1405	12.72	5.36	0.024	612	212	4.21	—
1408	12.17	5.29	0.024	355	216	4.23	—
1411	11.95	5.16	0.025	268	213	4.12	—
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/11/11 TIME: ~~2:55~~ 14:55 SAMPLER: Derek Pulvino

GPS LOCATION: latitude 45° 42.356354 longitude -122° 24.126739

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF14 GW ~~SB~~	11204332	JDQ82			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Brown sediment	Sample collected directly from hole all screens tried had been clogging	None noted

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
NA						

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
15:20	NW	DP	Sample jars and auger hole, w/ geoprobe well screen - screen not used for sampling

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

- Attempted sampling - several times sample collected after hole sat open for ± 2.5 hours

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW
2:55	14.33	5.12	0.020	0.0	214	4.93	
—	Given limited productivity did not continue parameter						
	readings						
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-19-11 TIME: 1410 SAMPLER: Bryan Cicco

GPS LOCATION: latitude 45.704216178740 longitude 122.40301990800

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LF15 GW	11204334	JDQ84			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
lt brn-clear	collected from geoprobe screen in open borehole	No

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
	S/SW	BC	Sample LF15 GW Bottles & Pump + tubing

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	~~14~~ 12	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (mS/cm) ~~(Ms/m)~~	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW
1353	15.27	5.19	0.031	~~[illegible]~~ 684	284	6.83	—
1356	10.90	5.21	0.034	657	284	660	—
1359	10.36	5.19	0.034	469	286	5.63	—
1402	10.36	5.24	0.033	351	285	5.65	—
1405	10.33	5.24	0.033	169	287	5.54	
1408							
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/17/11 TIME: _____ SAMPLER: Erin Lynch

GPS LOCATION: latitude _____ longitude _____

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
Seep	NA	NA		X					
Date shipped	NA	COC Number	NA						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

_____
Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/18/11 TIME: 0911 SAMPLER: D. Pulvino

GPS LOCATION: latitude 45.704211 longitude -122.403041

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
PP01SD	11204327	JDQ77		x	x	x	x	x	x
Date shipped	5/18/11	COC Number	10-4097213-051811-0003 BNA, VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
0.6	saturated	med brown	sand w/ small gravel	no

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
0911	S	RM	Location PP01SD w/ LF01SD on right

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Sampler Signature

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/18/11 TIME: 0855 SAMPLER: D. Pulvino

GPS LOCATION: latitude 45° 42.252291' longitude -122° 24.181950'

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
LFD1SD	11204326	JDQ76			x	x	x	x	x
Date shipped	5/18/11	COC Number	10 - 4097213-051811-0003 BNA,VOC						

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?
0.6	Moist	Med brown	sand w/ some clay	No

WATER SAMPLING INFORMATION

Color	Description	Odor?

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
0855	S	RN	sample LFD1SD

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			**water regular**	5	1	1	2
soil MS/MSD	4	1	1	9			**water MS/MSD**	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

collected @ location of seep sample collected on 5/17

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW
FINAL							

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters

1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: ~~5-19-11~~ 5-20-11 TIME: 1000 SAMPLER: Bryan Cieko

GPS LOCATION: latitude 45.704427 longitude -122.403810

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW01GW	11204336	JDQ86			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	at well L4-MW05A	None ~~Noted~~ Noted

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
LF4-MW0~~8~~5B	23.10 (at start)	top of monument cap	36.63	2"	~13'	~6.5 gal

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
10:02	S	BC	Sample MW01GW at well L4 MW05A.

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

*unique well ID AGL467
Calculated purge volume = 6.36 gallons (water column ≈13' x .163 gal/ft x 3)

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (mS/cm) ~~(Ms/m)~~	Turb (NTU)	ORP (mV)	DO (mg/L)	DTW	Purge volume (Liters)*
0857	6.98	6.20	0.035	0.0	271	8.26	23.10	0
0905	8.16	5.73	0.035	0.0	274	7.63	25.35	2
0909	8.28	5.49	0.033	0.0	283 ~~283~~	7.18	26.72	4
0913	8.38	5.36	0.033	0.0	284	6.81	27.02	6
0917	8.56	5.33	0.32	0.0	288	6.76	27.65	8
0922	8.69	5.34	0.033	0.0	282	6.61	27.95	10
0926	8.76	5.34	0.032	0.0	291	6.70	28.1	12
0931	8.87	5.30	0.033	0.0	294	6.59	28.2	14
0936	8.98	~~5.40~~ 5.30	0.032	0.0	293	6.54	28.28	16
0942 ~~FINAL~~	9.10	5.31	0.032	0.0	285	6.56	28.32	18

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/20/11 TIME: Start Sample 12:20PM SAMPLER: Bryan Ciechan

GPS LOCATION: latitude 45.70448358 longitude -122.4036102

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW02GW	11204337	JDQ87			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	Sample collected from L4 MW03B Unique ID AGL484	N

WELL MEASUREMENT

=L4MW03B Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
MW02GW	~~61.85~~ 26.08		61.85 26.08 25.77	2	~26'	13 gal

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
12:25	East	DP	Samples and well

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

Time	Temp(C)	pH	Cond (mS/cm)	Turb (NTU)	ORP	DO (mg/L)	DTW (ft)	Purge vol. (Liters)
1156	10.08	5.83	0.052	0.0	276	6.58	37.70	36
1202	10.04	5.79	0.053	0.0	278	7.01	38.20	40
12:12	10.12	5.80	0.053	0.0	276	7.06	38.35	45
12:20	10.16	5.86	0.052	0.0	274	6.67	38.32	48

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F° (C)°)	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW	
10:35	10.07	5.56	0.044	0.0	278	5.92	26.08	
10:40	10.10	5.53	0.041	0.0	279	6.50	30.40	3l
10:46	10.01	5.62	0.044	0.0	278	6.84	33.31	6l
10:51	9.98	5.68	0.047	0.0	281	6.67	34.19	9l
10:57	10.09	5.75	0.051	0.0	278	6.08	NM	12l
11:05	10.01	5.70	0.048	0.0	279	6.48	NM	15l
11:20	11.10	5.91	0.061	0.0	275	7.59	31.81	18l
11:31	10.08	5.61	0.049	0.0	282	6.71	34.95	21l
11:38	10.04	5.63	0.048	0.00	283	6.96	36.58	26
~~FINAL~~	10.08	5.73	0.051	0.00	282	7.12	37.94	30l

Continued above in "Sample Location Diagram"

VOLUME OF WATER IN CASING

Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-20-11 TIME: 13:35 SAMPLER: Bryan Clark

GPS LOCATION: latitude 45.70453441 longitude -122.4035562

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW03GW	11204338	JDQ88			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	well L4-MW03A, unique well #: AGL466	None observed

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4-MW03A	29.12	TOC	~49'	2"	20'	10 gal

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
13:40	E-NE	DP	Sample Jars - wellhead
±1	"	"	w/all bottles

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (mS/cm) ~~(Ms/m)~~	Turb (NTU)	(mV) ORP	DO (mg/L)	ft TOIC DTW	Purge vol (gal)
1249	11.15	5.46	0.025	0.0	271	8.46	32.45	.5
1254	10.47	5.33	0.025	0.0	280	7.73	33.21	1.5
1258	10.33	5.23	0.026	0.0	289	7.47	33.92	2.5
13:01	10.33	5.17	0.026	0.0	297	7.49	34.18	3.5
13:06	10.30	5.25	0.026	0.0	300	7.35	34.57	4.5
13:10	10.34	5.21	0.025	0.0	304	7.34	34.85	5.5
1314	10.48	5.32	0.025	0.0	298	7.04	34.96	6.5
1319	10.69	5.31	0.025	0.0	298	7.06	35.12	7.5
13:22	10.40	5.24	0.025	0.0	304	7.28	35.20	8.5
FINAL 13:27	10.35	5.28	0.025	0.0	307	7.29	35.49	9.5

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5-20-11 TIME: 1700 SAMPLER: Bryan Clecker

GPS LOCATION: latitude 45.70474025 longitude -122.4038167

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW04GW	11204339	JDQ89			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	used Dedicated pumps unique ID AEL600	N

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4-MW02A	24.80	Casing	40.21	2	15.41	~7.7 gal

24.80

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1718	W	BC	Sample MW04GW

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond mS/cm ~~(Ms/m)~~	Turb (NTU)	ORP	DO (mg/L)	DTW	PU (gal)
1623	12.51	5.4	0.068	0.0	286	10.0	24.80	0
1627	10.53	5.24	0.057	0.0	302	8.36	26.32	1
1632	10.45	5.23	0.051	0.0	307	8.01	26.38	2
1637	10.36	5.20	0.051	0.0	314	8.06	26.43	3
1642	10.27	5.18	0.052	0.0	322	8.09	26.68	4
1646	10.27	5.17	0.051	0.0	325	7.86	26.78	5
1650	10.25	5.15	0.050	0.0	329	7.90	26.84	6
1654	10.19	5.17	0.049	0.0	330	7.90	26.90	7
1658	10.18	5.10	0.049	0.0	336	7.81	26.92	8
FINAL								

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/20/11 TIME: 1820 (Start @ 17:29) SAMPLER: Bryan Cvecko

GPS LOCATION: latitude 45.70518696 longitude -122.4035444

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW05GW	1124340	JDQ90			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	well L4-MW04A uniqueID: AGL465	none

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4-MW04A ~~MW05GW~~	27.31	TOIC	46.4	2"	~19'	9.5 gal

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
1634	NW	BC	Sample MW05GW at well L4-MW04A

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW	purge (gal)
1729	10.94	5.73	0.019	0.0	~~319~~ 291	8.21	27.31	0
1735	9.54	5.70	0.019	0.0	297	6.96	31.45	1
1739	9.52	5.70	0.019	0.0	298	6.98	33.88	2
1743	9.48	5.72	0.018	0.0	296	6.98	35.08	3
1748	9.54	5.72	0.018	0.0	298	7.25	36.8	4
1753	9.50	5.70	0.018	0.0	299	7.28	37.94	5
1758	9.53	5.74	0.018	0.0	298	7.19	38.51	6
1803	9.57	5.74	0.018	0.0	298	6.88	39.06	7
1808	9.71	5.86	0.018	0.0	302	6.70	39.04	8
~~FINAL~~ 1813	9.67	5.69	0.019	0.0	292	6.86	39.11	9
1818	9.67	5.68	0.019	0.0	295	6.81	39.13	10

VOLUME OF WATER IN CASING

Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/21/11 TIME: Start @ 8:32 Sample Start 11:44 end 11:58 SAMPLER: ~~Bryan Cieko~~ Derek Pulvino

GPS LOCATION: latitude 45.70480313 longitude -122.4037844

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW06GW	11204341	JDQ91			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
	PBS well LYMW02B - DOE Tag AGL-483 clear	N

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4-MW02B	30.89	TOIC	75	2"	45	22.5

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
12:03	W	DP	Sample bottles and well monument

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

Time	Temp	pH	Cond	Turb	ORP	DO	DTW	Purge - gal
11:07	9.90	5.86	0.063	0.0	114	0.60	58.23	16.0
11:16	9.96	5.88	0.064	0.0	115	0.68	58.96	17.5
11:29	9.94	5.93	0.067	0.0	102	0.30	59.29	19
11:37	—	—	—	—	—	—	59.32	22.5
11:44	—	—	—	—	—	—	59.55	22.0

No Meter

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (mS/cm) ~~(Ms/m)~~	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW	Purge (gal)
0914	9.69	6.20	0.073	0.0	195	2.25	30.7	0
0926	9.72	5.98	0.035	0.0	205	2.07	36.11	1
0937	9.78	6.02	0.039	0.0	195	2.23	40.15	2.25
0946	9.72	6.07	0.043	0.0	170	2.55	45.36	3.5
0956	9.75	6.13	0.047	0.0	152	2.21	49.28	3.75 Lump 5.25
10:07	9.75	6.07	0.051	0.0	141	2.04	53.19	7.0 Lump 7.2
10:16	9.82	6.18	0.057	0.0	123	0.86	54.33	8.5
10:27	9.83	5.92	0.058	0.0	125	0.72	55.98	10
10:35	9.91	6.13	0.059	0.0	111	0.84	57.45	11.5
~~FINAL~~ 10:49	9.87	6.09	0.085	0.0	105	0.15	54.55	13
10:57	9.88	5.88	0.062	0.0	107	0.14	56.72	14.5

Changed quick connect

turned off truck

VOLUME OF WATER IN CASING

Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/21/11 TIME: 1315 SAMPLER: [illegible]

GPS LOCATION: latitude 45.699250 longitude -122.404511

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW07GW	11204342	JDQ92			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	used peristaltic pump & Low-flow methods to collect sample.	No

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
MW-17	10.16	TOIC	17.17	2"		

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

water level = 10.16

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

[illegible]
Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (mS/cm) ~~(Ms/m)~~	Turb (NTU)	ORP (mV)	DO (mg/L)	DTW	Purg (L.ks)
1142	11.08	6.34	0.210	0.0	82	7.10	10.16	Ø
1145	10.54	6.94	0.210	0.0	70	6.58	10.97	1
1148	10.90	7.24	0.206	0.0	74	6.07	11.17	2
1153	11.37	7.50	0.205	0.0	75	5.32	11.40	3
1158	11.56	7.57	0.207	0.0	81	5.17	11.59	4
1203	11.74	7.53	0.210	0.0	87	4.67	11.88	5
1207	11.73	7.52	0.210	0.0	92	4.06	12.05	6
1213	11.08	7.51	0.215	0.0	96	4.24	12.25	7
1218	10.91	7.64	0.218	0.0	92	4.15	12.47	8
FINAL								

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

Arrive: 12:21

DATE: 5/21/11 TIME: Sample collection 13:15 end - 13:30 SAMPLER: Derek Pulvino

GPS LOCATION: latitude 45.70302462 longitude -122.4034001

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW08GW	M1204349	JDQ93			X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	Sampled L4MW07B	None

WELL MEASUREMENT

WDOE = AHA 310 Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4MW07B	38.75	top of cap	58.00	2	19.25	≈ 9.6 gals

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
13:32	West	DP	Sample bottles @ well

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)?	pH	Cond (Ms/m)	Turb (NTU)	ORP	DO (mg/L)	DTW	gal
12:35	8.91	7.15	0.040	0.0	137	6.83	38.75	0
12:40	8.70	6.16	0.038	0.0	148	6.02	39.47	1
12:47	8.55	5.99	0.038	0.0	169	6.19	39.87	2.5
12:50	8.56	5.99	0.038	0.0	170	6.21	39.93	3
12:55	8.55	5.92	0.037	0.0	176	6.15	39.95	4
12:57	8.54	5.93	0.037	0.0	179	6.16	39.98	5
13:01	8.53	5.92	0.037	0.0	180	6.26	39.95	6
13:06	8.50	5.91	0.037	0.0	185	6.27	39.99	7
13:10	8.51	5.87	0.037	0.0	189	6.35	40.00	8
FINAL	8.50	5.88	0.037	0.0	191	6.31	40.04	9.6

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE PHASE I

DATE: 5/21/11 TIME: 14:15 SAMPLER: Bryan Cieck

GPS LOCATION: latitude 45.699254 longitude -122.403641

SAMPLE COLLECTION SUMMARY:

Station Location	Sample Number	CLP Number	MS/MSD	F Perch	Perch	Nitros	SVOC	VOC	Metals
MW09GW	11204344	JDQ94		\	X	X	X	X	X
Date shipped		COC Number							

SOIL SAMPLING INFORMATION

Sample Depth	Moisture	Color	Description	Odor?

WATER SAMPLING INFORMATION

Color	Description	Odor?
Clear	Sampled using existing bladder pump unique well # ALB251	no

WELL MEASUREMENT

Well ID	Depth to water (DTW)	Measure Point (top of casing or ground)	Total Depth of Well (TD)	Diameter of Well	Water Column (TD – DTW)	Required Purge Volume
L4-MW18	11.19	TOIC	22.60	2"	11.49	6 gal

SAMPLE PHOTOGRAPHS

Time	Dir	Initials	Description
14:31	N	DP	Sample bottles @ Wellhead

QC SAMPLE INFORMATION

Equipment	Metals	Nitros	VOC	SVOC	Perch	F Perch

SAMPLE CONTAINERS

	8 oz	4 oz.	2 oz	Cores				1 L Amber	1 L Poly	250 mL poly	40 mL
soil regular	4	1	1	3			water regular	5	1	1	2
soil MS/MSD	4	1	1	9			water MS/MSD	14	2	2	6

Sampler Signature

SAMPLE LOCATION DIAGRAM

PURGING/WATER QUALITY PARAMETERS

Time	Temp (F°/C)°	pH	Cond (mS/cm) ~~(Ms/m)~~	Turb (NTU)	(mV) ORP	DO (mg/L)	DTW	Purge (Gal)
1352	9.77	6.39	0.138	0.0	187	9.62	11.19	0
1357	9.23	6.60	0.140	0.0	178	9.48	12.75	1
1401	9.17	6.38	0.141	0.0	191	8.0	13.05	2
1404	9.13	6.39	0.141	0.0	193	7.93	13.03	3
1407	9.11	6.40	0.141	0.0	195	7.99	13.06	4
1410	9.10	6.37	0.144	0.0	195	8.29	13.04	5
1413	9.13	6.41	0.144	0.0	195	8.41	13.04	6
FINAL								

VOLUME OF WATER IN CASING			
Casing Diameter (inches)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth
2	0.163	0.0218	2.024
4	0.653	0.0873	8.11
8	2.611	0.3491	32.43
12	5.81	0.7767	65.97

1 Cubic Foot = 7.48 gallons or 28.32 liters
1 Gallon = 3.785 liters or 0.1337 cubic feet

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: BG01SD

Date: 08-26-11 Time: 09:40 Sampler: Andy Mc Donald

GPS Location: Latitude: 45° 41' 02.0" Longitude: 122° 22' 59.2"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	saturated	reddish brown	silty clay w/trace sand	N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
001	09:40	S	BG01SD location
002	09:53	DN	BG01SD
003	09:53	DN	BG01SD

Additional Notes:

David Creek 20 feet from CITA fence, outside

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344621	J8L03			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: BG02SD

Date: 08-26-11 Time: 10:15 Sampler: Andy McDonald

GPS Location: Latitude: 45° 41' 04.5" Longitude: 122° 23' 28.8"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	saturated	reddish brown	silty clay and med grain sand	N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
4	10:14	S	beaver ponds
5	10:15	E	BG02SD
6	10:20	DN	BG02SD

Additional Notes:

At boundary fence, series of beaver ponds. BG02SD taken downstream of beaver ponds, at headwater of Buck Creek, outside CITA

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344625	J8LP7			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: BG 03 SD

Date: 08-26-11 Time: 12:48 Sampler: Andy McDonald

GPS Location: Latitude: 45° 42' 02.4" Longitude: 122° 22' 24.3"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	saturated	mud brown	silty sand and gravel	N

ASSOCIATED SOURCE: _____

NUM.	TIME	DIR	DESCRIPTION
11	12:46	E	East Fork Lacamas Creek, upstream
12	12:54	DN	BG03SD

Additional Notes:

East Fork Lacamas Creek, 50 ft west of boundary fence

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344636	J8L18			X	X	X	X	X		

Recorder Signature: [signature]

Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: B604SD SW

Date: 8-26-11 Time: 16:10 Sampler: Brad Martin

GPS Location: Latitude: 45.706538 Longitude: -122.399036

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
N/A	—	Clear		N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1805	16:10	E	Photo of surface H_2O samples

Additional Notes:

NORTH FORK LACAMAS

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344645 11344646	J8L27	J8L28		X	X	X			X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: B604SD

Date: 8/26/16 Time: 16:05 Sampler: MARK Z

GPS Location: Latitude: 45.706538 Longitude: -122.39036

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST	DK BROWN	SILT, CLAY, TRACE OF ORGANICS	N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1804	16:05	E	PHOT SAMPLE B604SD

Additional Notes:

NORTH FORK LACAMAS

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113446 47	J8L29			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: BG01SS

Date: 08-26-11 Time: 11:30 Sampler: Andy McDonald

GPS Location: Latitude: 45° 42' 19.3" Longitude: 122° 22' 23.9"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	Med brown	SILTY loam	N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
7	11:38	DN	BG01SS
8	11:39	SE	BG01SS location east ~~side~~ of road, upgradient of road

Additional Notes:

BG01SS location is upgradient of road ~ 50 feet

SAMPLE PROCESSING:

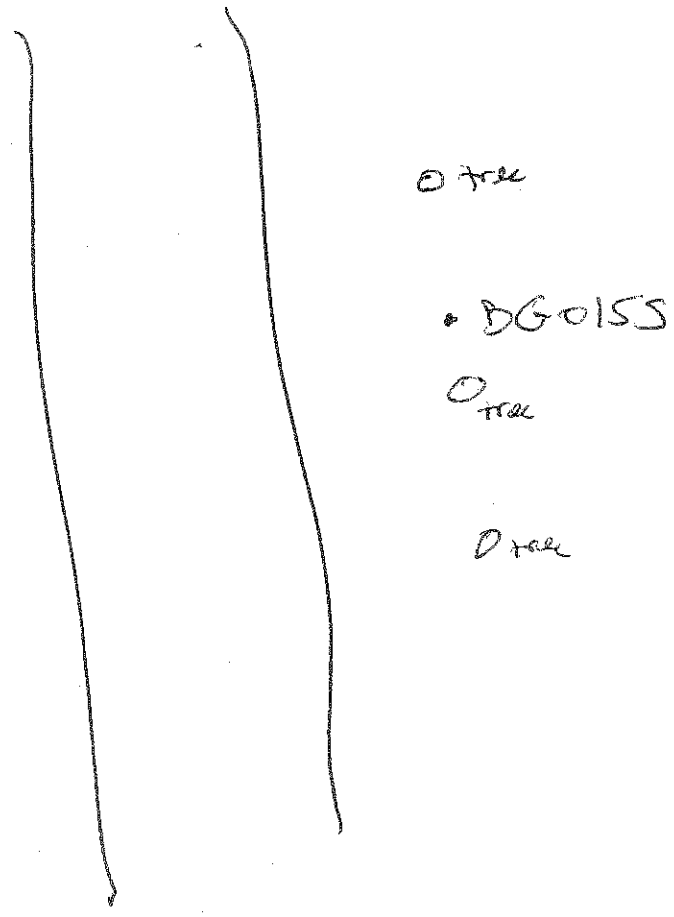
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
1134432	J8L14			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT01SS

Date: 8/24/11 Time: 10:07 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69586118 N Longitude: 122.39642063 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST ~~DAMP~~ BHM 8/24	MED. BROWN	SILTY LOAM SOME GRAVEL	N

ASSOCIATED SOURCE: CITA ALONG FENCE ON NORTH (FENCE NORTH ROAD)

NUM.	TIME	DIR	DESCRIPTION
000	10:19	S	SAMPLE CT01SS

Additional Notes:

VERY LITTLE UNDERBRUSH WAS OBSERVED COMPARED W/ NEARBY AREAS.

SAMPLE PROCESSING:

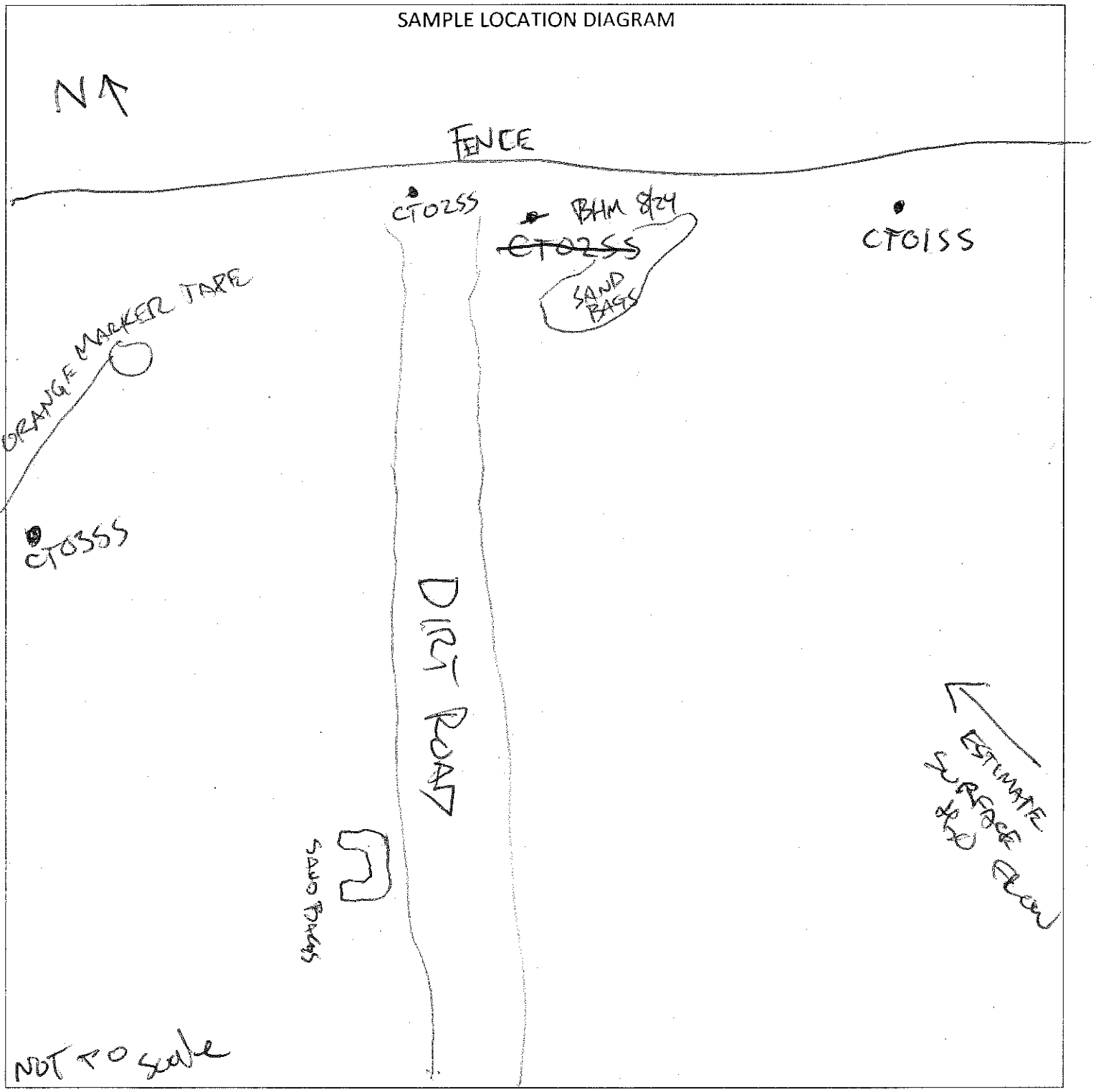
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344556	J8KR8			X	X	X				

Recorder Signature: [signature]

Sample Signature: A. McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CTO2SS

Date: 8/24/4 Time: 10:26 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69570400 N Longitude: 122.39674784 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST DAMP	MED BROWN	SILTY LOAM	N

ASSOCIATED SOURCE: CITA NEAR NORTH FENCE ROAD

NUM.	TIME	DIR	DESCRIPTION
0002	10:34	W	SAMPLE CTO2SS

Additional Notes:

SAMPLE COLLECTED BELOW SANDBAGS INDICATED AS DETONATION AREA. VERY LITTLE UNDERBRUSH OBSERVED IN AREA COMPARED TO NEARBY.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344557	J8KR9			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE CTO155
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT03SS

Date: 8/24/11 Time: 10:46 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69576909 N Longitude: ~~122.3971276~~ 122.39718232 W BHM 8/23

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	BROWN	SANDY SILT	N

ASSOCIATED SOURCE: CITA (NEAR NORTH FENCE ROAD)

NUM.	TIME	DIR	DESCRIPTION
0003	10:50	W	SAMPLE CT03SS
0004	10:54	N	VIEW DOWNHILL IN CITA TOWARDS NORTH FENCE RD.
0005	10:59	N	VIEW DOWNHILL IN CITA TOWARDS NORTH FENCE RD. w/ WHITE BOARD

Additional Notes:

VERY LITTLE UNDERBRUSH OBSERVED COMPARED TO NEARBY AREAS.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344558	J8K50			X	X	X				

Recorder Signature: [signature]

Sample Signature: A. McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE CTO155
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CTO4SS

Date: 8/24/11 Time: 11:17 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69560355 N Longitude: 122.39688940 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST	MED. ~~SA~~ BROWN BKM 8/23	SANDY SILT	N

ASSOCIATED SOURCE: CITA (NEAR CITA RD)

NUM.	TIME	DIR	DESCRIPTION
0006	11:22	N	SAMPLE CTO4SS

Additional Notes:

GPS LOCATION POINT WAS ATTAINABLE W/ TRIMBLE GEOXH (A60805)

SAMPLE PROCESSING:

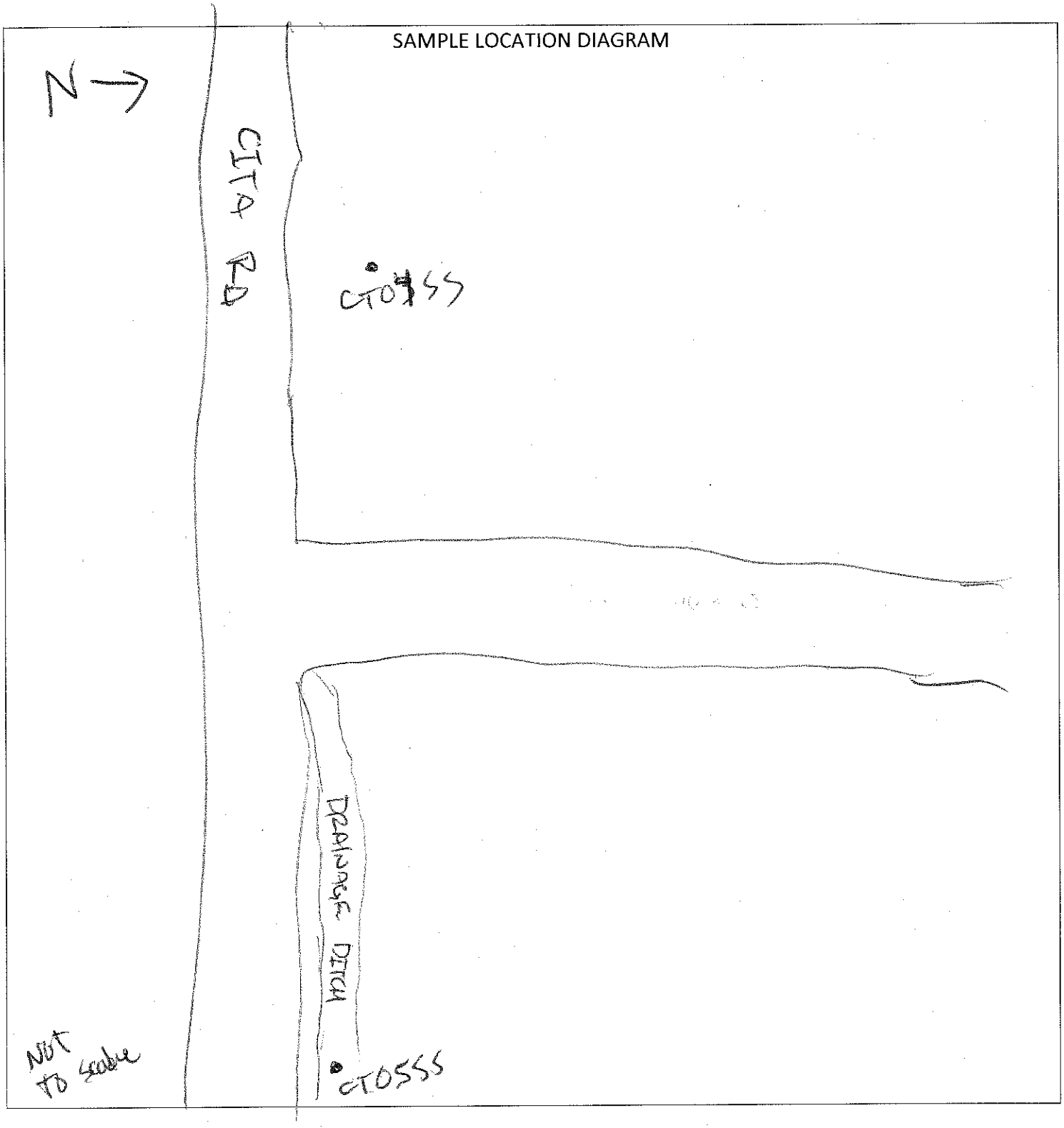
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344559	J8KS1			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT05SS

Date: 8/24/4 Time: 11:40 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69560355 N Longitude: 122.39688940 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST	MED BROWN	SANDY SILT	N

ASSOCIATED SOURCE: CITA (NEAR CITA RD)

NUM.	TIME	DIR	DESCRIPTION
0007	11:44	N	SAMPLE CT05SS

Additional Notes:

COLLECTED FROM DRAINAGE DITCH THAT IS POSSIBLE OVERLAND PATHWAY NEAR SUSPECTED FORMER TARGET.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344560	J8KS2			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
CT0455
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CTD65S

Date: 8/22/11 Time: 13:20 Sampler: A. MacDonald

GPS Location: Latitude: 45.69198209N Longitude: 122.38970150W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	BROWN	SILT W/ SMALL AMT. OF GRAVEL.	N

ASSOCIATED SOURCE: CITA

NUM.	TIME	DIR	DESCRIPTION
0008	13:26	S	SAMPLE CTD65S

Additional Notes:

METAL FRAGMENT LOCATED NEAR SAMPLE POINT. SANDBAGS FROM PREVIOUS DETONATION NEARBY.

SAMPLE PROCESSING:

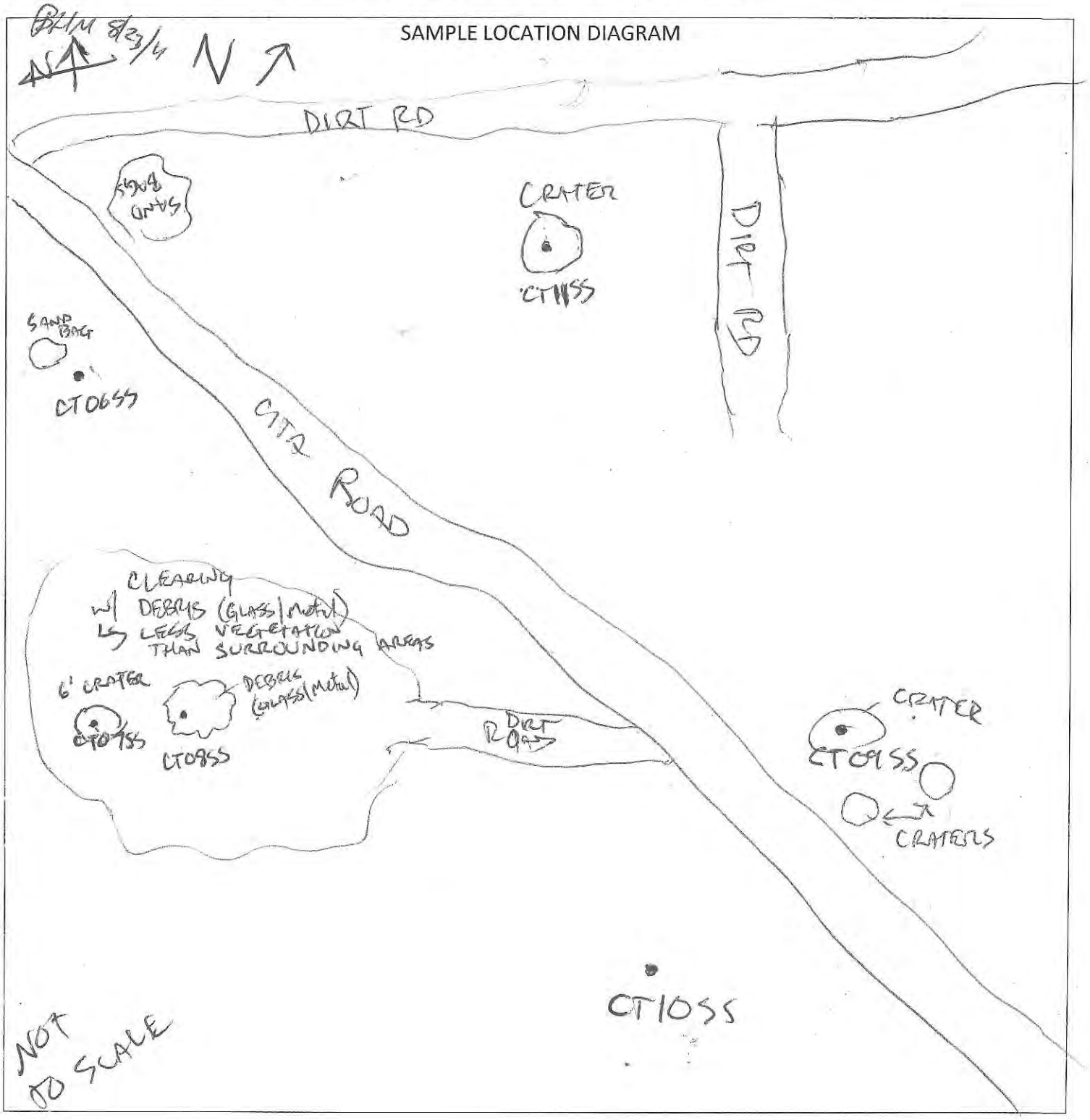
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344561	J8KS3			X	X	X				

Recorder Signature: [illegible]

Sample Signature: A. McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT075S

Date: 8/24/11 Time: 13:50 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69199626N Longitude: 122.38970539W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	~~BLM~~ 8/24/11 COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	~~BT~~ LT BROWN	SILTY LOAM W/ GRAVEL	N

ASSOCIATED SOURCE: CITA

NUM.	TIME	DIR	DESCRIPTION
0009	13:52	E	SAMPLE CT075S

Additional Notes:

SAMPLE WAS COLLECTED FROM CENTER OF 6-7' IMPACT CRATER. AREA SURROUNDING SAMPLE POINT WAS LACKING UNDERBRUSH COMPARED TO SURROUNDING AREA.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344570	J8KT2			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
CT0655
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT08SS

Date: 8/24/11 Time: 14:05 Sampler: A. MACDONALD

GPS Location: Latitude: 45.~~6910~~ 69096873 N Longitude: 122.38965797W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED BRN	SILT W/ GRAVEL. GLASS FRAG OBSERVED	N

ASSOCIATED SOURCE: CITA.

NUM.	TIME	DIR	DESCRIPTION
0010	14:10	E	SAMPLE CT08SS

Additional Notes:

SAMPLE COLLECTED FROM MIDDLE OF DEBRIS (GLASS/METAL) AREA. UXO SPECIALIST ID'D AREA AS A TARGET THAT WAS DESTROYED.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344571	J8KT3			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
CTO655
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT09SS

Date: 8/24 Time: 14:25 Sampler: A. MACDONALD.

GPS Location: Latitude: 45.69096186 N Longitude: 122.389621815 W
UNABLE TO MARK W/ ~~FE~~ BAM GPS DATA POINT. 8/24/11

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED BROWN	SILT	N

ASSOCIATED SOURCE: CITA

NUM.	TIME	DIR	DESCRIPTION
0011	14:28	N	SAMPLE CT09SS

Additional Notes:

A SMALL PIECE OF METAL FRAG. WAS UNEARTHED IN SHALLOW SOIL 3 FT. DOWNGRADIENT OF THE CRATER, SAMPLE WAS COLLECTED FROM MIDDLE OF 4' IMPACT CRATER.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344564	J8K56			X	X	X				

Recorder Signature: [signature]

Sample Signature: A. McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
CT0655
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT10SS

Date: 8/24/11 Time: 14:42 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69177359 N Longitude: 122.38837864 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED. BRN	SILT	N

ASSOCIATED SOURCE: CITA

NUM.	TIME	DIR	DESCRIPTION
0012	1446	S	SAMPLE CT10SS
0013	1446	S	SAMPLE CT10SS

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344565	J8K57			X	X	X				

Recorder Signature: [illegible]

Sample Signature: A. MacDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
CT0655
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: CT11SS

Date: 8/24/11 Time: 15:13 Sampler: A. MACDONALD

GPS Location: Latitude: 45.69405861 N Longitude: 122.39294098 W

UNABLE TO DATA LOG GPS LOCATION.

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	MOIST	BROWN	SILT & GRAVEL & PEAT	N

ASSOCIATED SOURCE: CITA

NUM.	TIME	DIR	DESCRIPTION
0014	1519	W	SAMPLE CT11SS

Additional Notes:

SAMPLE COLLECT FROM INSIDE IMPACT CRATER. METAL FRAG WAS OBSERVED IN CRATER. TM DIRECTED US TO SAMPLE FROM CRATER AT NEWLY DISCOVERED IMPACT AREA.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344566	J8K58			X	X	X				

Recorder Signature: [signature]

Sample Signature: A. McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
CT 0655
MAP

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB01SS

Date: 8-22-11 Time: 16:30 Sampler: ~~Andy McDonald~~ Mark Zawistoski (RN)

GPS Location: Latitude: 45 40 34.517 N Longitude: 122 25 38.010 W *

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	LT BRWN	SILTY SANDY LOAM w/ 5% GRAVEL	

ASSOCIATED SOURCE: OBOD Area 3

NUM.	TIME	DIR	DESCRIPTION
15	16:06	S	OB01SS crater, with standing water
16	16:06	S	Crater, zoomed in
17	16:36	D	OB01SS
19	16:38	W	monitoring well north of OB01SS crater

Additional Notes:

8 foot deep crater, 30 feet diameter, standing water in the bottom

* GPS coordinates - satellite reception spotty, may not be accurate

SAMPLE PROCESSING:

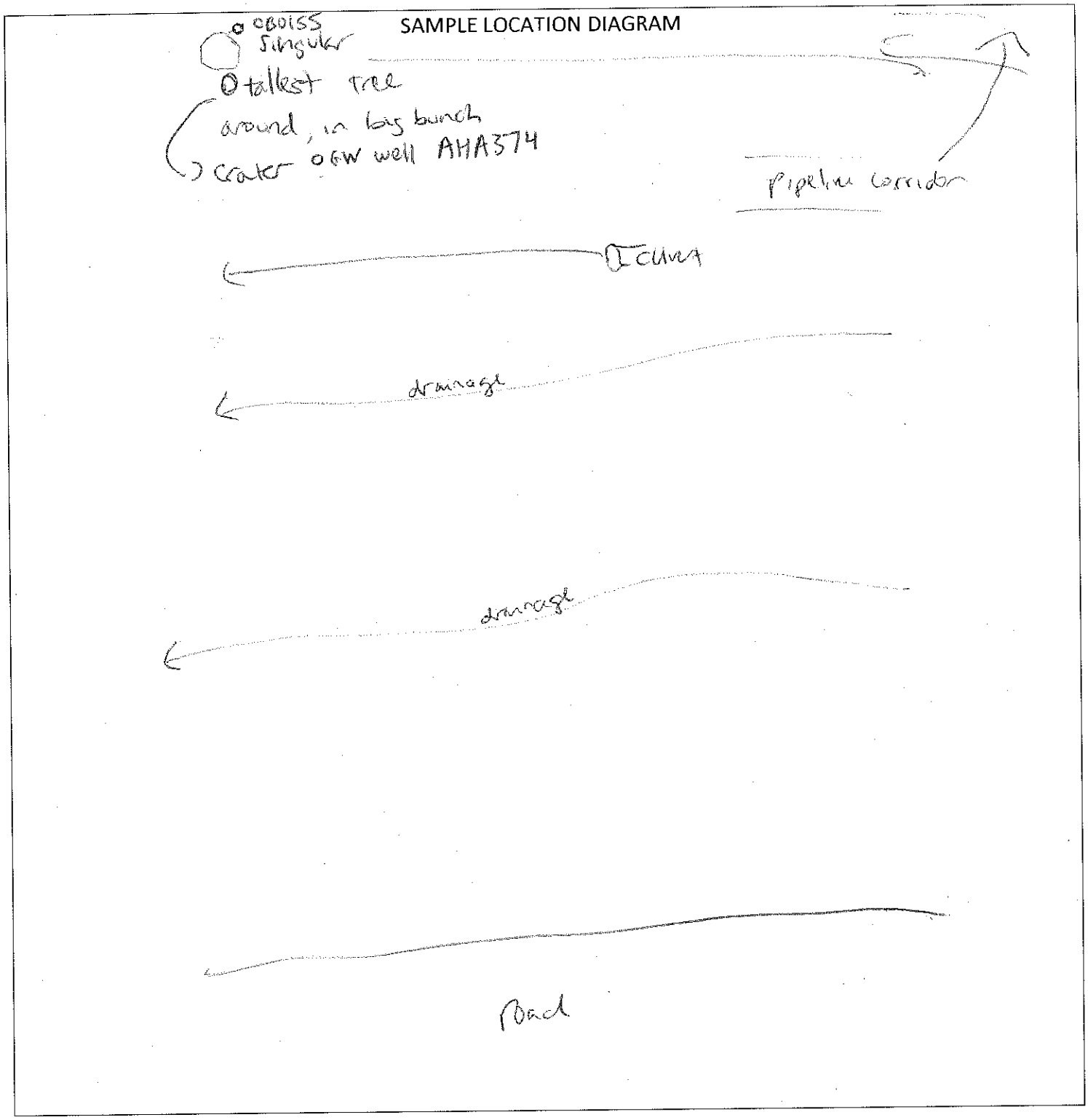
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344516	J8KM8			X	X	X				

Recorder Signature: [signature]

Sample Signature: Andrew McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB0255

Date: 8/23/11 Time: 13:45 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 40 34.559 N Longitude: 122 25 37.934 W

↳ GPS POINT IS 20 FT NORTHWEST OF SAMPLE LOCATION

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0"-6"	MOIST	REDDISH BROWN	CLAY / SILT	N

ASSOCIATED SOURCE: CRATER OB/OD AREA 3

NUM.	TIME	DIR	DESCRIPTION
0007	13:47	S/DOWN	SAMPLE JAR, MIXING BOWL, WHITEBOARD (OB0255)

Additional Notes:

NONE.

SAMPLE PROCESSING:

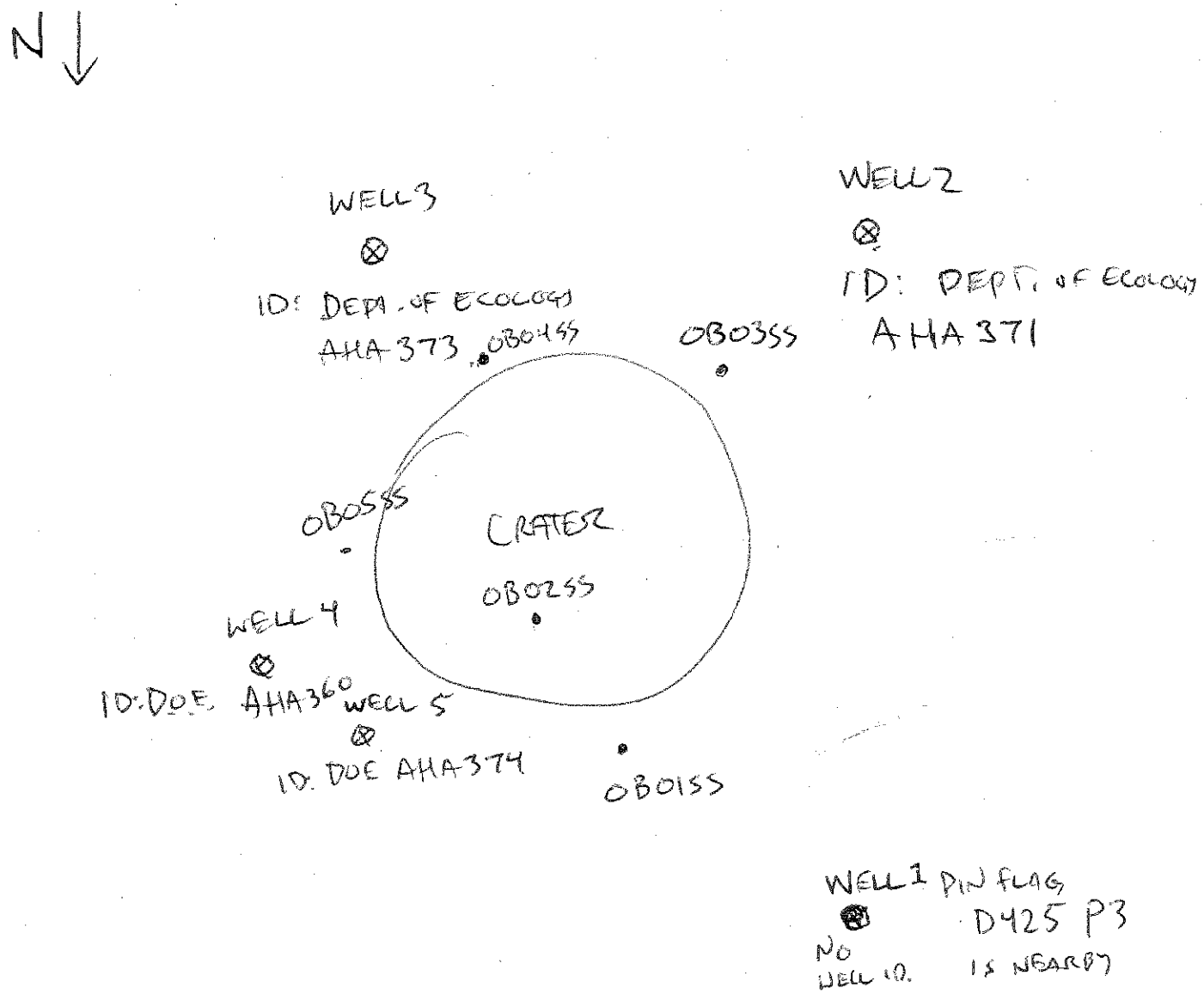
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344537	J8KP9			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB0355

Date: 8/23/11 Time: 13:58 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 40 34.608 N Longitude: 122 ~~40~~ 25 37.304 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0"-6"	DRY	MED. BROWN	SILTY SAND LOAM, SOME CLAY	N

ASSOCIATED SOURCE: CRATER OB/OD AREA 3

NUM.	TIME	DIR	DESCRIPTION
0008	14:03	N/DOWN	SAMPLE JAR, MIXING BOWL, WHITEBOARD (OB0355)

Additional Notes:

NONE

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344540	J8KQ2			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB0455

Date: 8/23/14 Time: 14:10 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 40 33 861N Longitude: 122 25 37 763W

↳ GPS POINT IS APPROX. 30 FT SOUTHEAST OF SAMPLE PT.
GPS POINT IS OVER WELL 3

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	~~DS~~ DRY	MED. BROWN	~~SANDY SILTY~~ SILTY SANDY LOAM BHM 8/23/14	N

ASSOCIATED SOURCE: CRATER OB/OD AREA 3

NUM.	TIME	DIR	DESCRIPTION
0009	14:16	WEST	SAMPLE JARS, MIXING BOWLS, WHITEBOARD (OB0455) BHM 8/23/14

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344542	J8KQ4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB0SSS

Date: 8/23/11 Time: 14:25 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 40 34 080 N Longitude: 122 25 37.606 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED. BROWN	SILTY SANDY LOAM	N

ASSOCIATED SOURCE: CRATER OB/OD AREA 3

NUM.	TIME	DIR	DESCRIPTION
0010	14:30	S/DOWN	SAMPLE JARS, MIXING BOWL, WHITEBOARD (OB0SSS)

Additional Notes:

NONE

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344544	J8KQ6			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB06SS

Date: 8/24/11 Time: 1342 Sampler: Ada Hamilton

GPS Location: Latitude: 45.693074 Longitude: -122.397353

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	moist	Brown	Silty loam trace fine gravel	no

ASSOCIATED SOURCE: OB/OD Area 2

NUM.	TIME	DIR	DESCRIPTION
1753	1342	DM	Sample OB06SS

Additional Notes:

Sample collected approx 125' North of gate to Central Impact Area ≈ 15' W of Fence

SAMPLE PROCESSING:

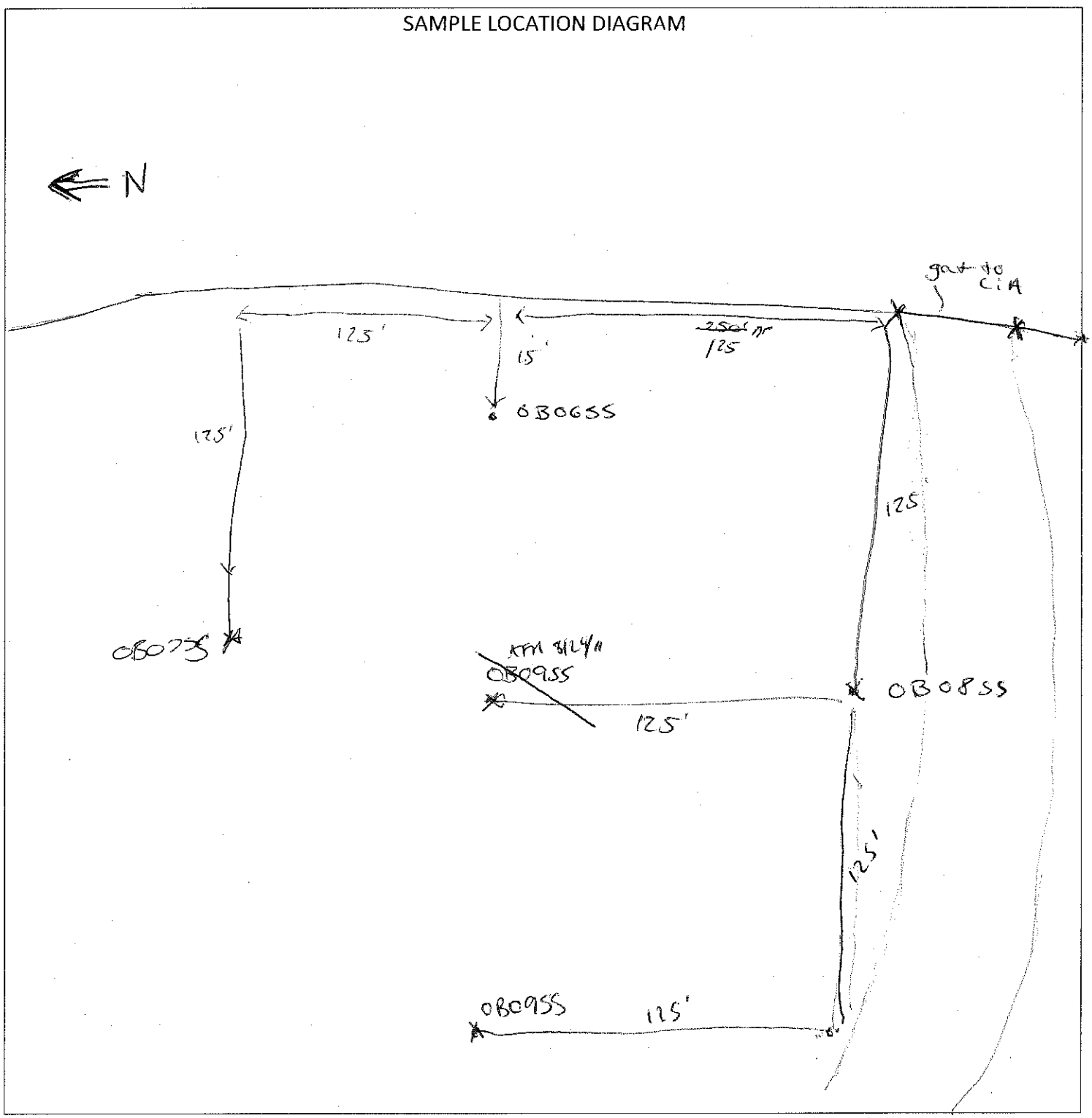
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344562	J8K54			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB07SS

Date: 8/24/11 Time: 1415 Sampler: ADA HAMILTON

GPS Location: Latitude: 45.693423 Longitude: -122.39777

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	moist	DK Brown	Silty loam, organics	no

ASSOCIATED SOURCE: OB/OD Area 2

NUM.	TIME	DIR	DESCRIPTION
1753	1415		Sample OB07SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344563	J8K55			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB0855

Date: 8/24/11 Time: 1443 Sampler: Adda Hamilton

GPS Location: Latitude: ~~45.692~~ 45.692821 Longitude: -122.39778

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Moist	Brown ~~Dk~~	Silty loam w/ gravel	no

ASSOCIATED SOURCE: OB/OD Area ~~#2~~

NUM.	TIME	DIR	DESCRIPTION
1755	1443	DM	Sample + location OB0855

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344567	J8K59			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OB09SS

Date: 8/24/11 Time: 1510 Sampler: Adia Hamilton

GPS Location: Latitude: 45.692936 Longitude: -122.39824

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Dark Brown	Silty loam w/ Fine gravel	no

ASSOCIATED SOURCE: OB/OD Area 2

NUM.	TIME	DIR	DESCRIPTION
1756	1510	DH	Sample OB09SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344568	J8KT0			X	X	X				

Recorder Signature: [illegible]

Sample Signature: [illegible]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR01SS

Date: 8-23-11 Time: 9:01 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691579 Longitude: -122.414874

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Lt. Brown	Silt w/ fine gravel	No

ASSOCIATED SOURCE: 1000" Range

NUM.	TIME	DIR	DESCRIPTION
1708	9:01		Photo Sample Location
1709	9:01		Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

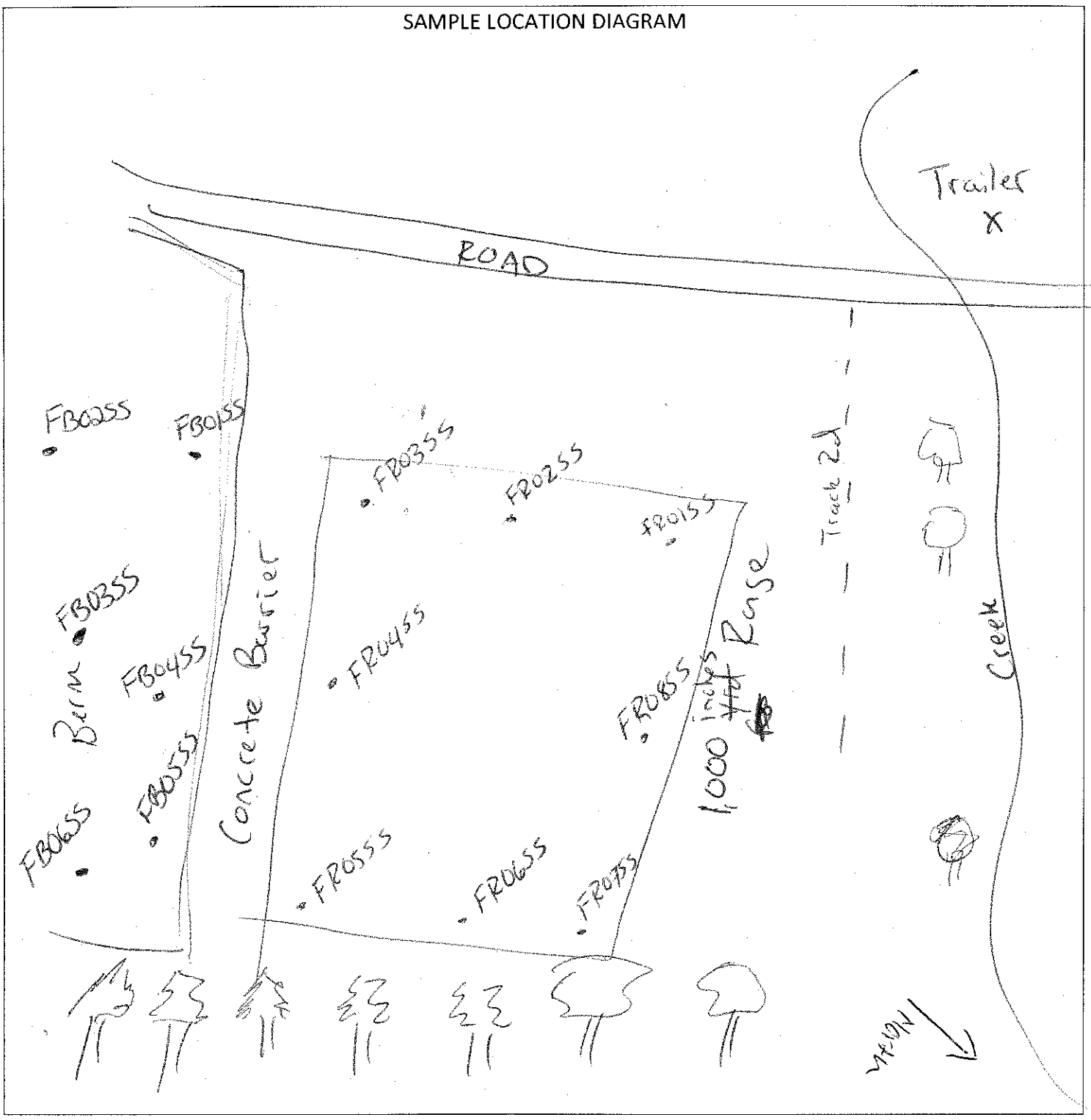
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344518	J8KN0			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR02SS

Date: 8-23-11 Time: 09:13 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691427 Longitude: -122.414819

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Lt. Brown	Silt w/ fine gravel	No

ASSOCIATED SOURCE: 1000" Range

NUM.	TIME	DIR	DESCRIPTION
1710	9:13		Sample Location Photo
1711	9:13		Sample Jars Photo

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344519	J8KN1			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR035S

Date: 8-23-11 Time: 09:22 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691228 Longitude: -122.414629

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Moist	Brown	Silt w/ Clay (trace fine gravel)	No

ASSOCIATED SOURCE: 1000" Range

NUM.	TIME	DIR	DESCRIPTION
1712	9:22		Photo Sample Location
1713	9:22		Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344520	J8KN2		X	X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR045S

Date: 8-23-11 Time: 09:30 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691333 Longitude: -122.414327

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Brown	Silt	No

ASSOCIATED SOURCE: 1000 " Range

NUM.	TIME	DIR	DESCRIPTION
1714			Photo Sample Location
1715			Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344521	J8KN3			X	X	X				

Recorder Signature: [illegible]

Sample Signature: [illegible]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FROSSS

Date: 8-23-11 Time: 9:41 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691458 Longitude: -122.413882

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	Lt. Brown		No

ASSOCIATED SOURCE: 1000 " Range

NUM.	TIME	DIR	DESCRIPTION
1716			Sample Location Photo
1717			Sample Jars Photo

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344522	J8KN4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR06SS

Date: 8-23-11 Time: 9:50 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691669 Longitude: -122.414034

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Dark Brown	Silt	No

ASSOCIATED SOURCE: 1000" Range

NUM.	TIME	DIR	DESCRIPTION
1718			Photo Sample Location
1719			Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344523	J8KN5			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR075S

Date: 8-23-11 Time: 09:55 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691897 Longitude: -122.414170

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Lt. Brown	Silt w/ fine gravel	No

ASSOCIATED SOURCE: 1000" Rage

NUM.	TIME	DIR	DESCRIPTION
1720			Photo Sample Location
1721			Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344525	J8KN7			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR085S

Date: 8-23-11 Time: 10:05 Sampler: Jeff M7 Fetters

GPS Location: Latitude: 45.691772 Longitude: -122.414457

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Brown	Silt w/ fine gravel	No

ASSOCIATED SOURCE: 1000" Range

NUM.	TIME	DIR	DESCRIPTION
1722			Photo Sample Location
1723			Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344526	J8KN8			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR09SS

Date: 8/23/11 Time: 1345 Sampler: Mark Z

GPS Location: Latitude: 45.690487 Longitude: -122.418854

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	lt brown	Silty loam w/ fine gravel	no

ASSOCIATED SOURCE: M203 Range

NUM.	TIME	DIR	DESCRIPTION
1736	1345	Dn	Sample location FR09SS
1737	↓	Dn	Sample FR09SS

Additional Notes:

Sample collection begenning ≈ 100yd from Berm/Firing line

SAMPLE PROCESSING:

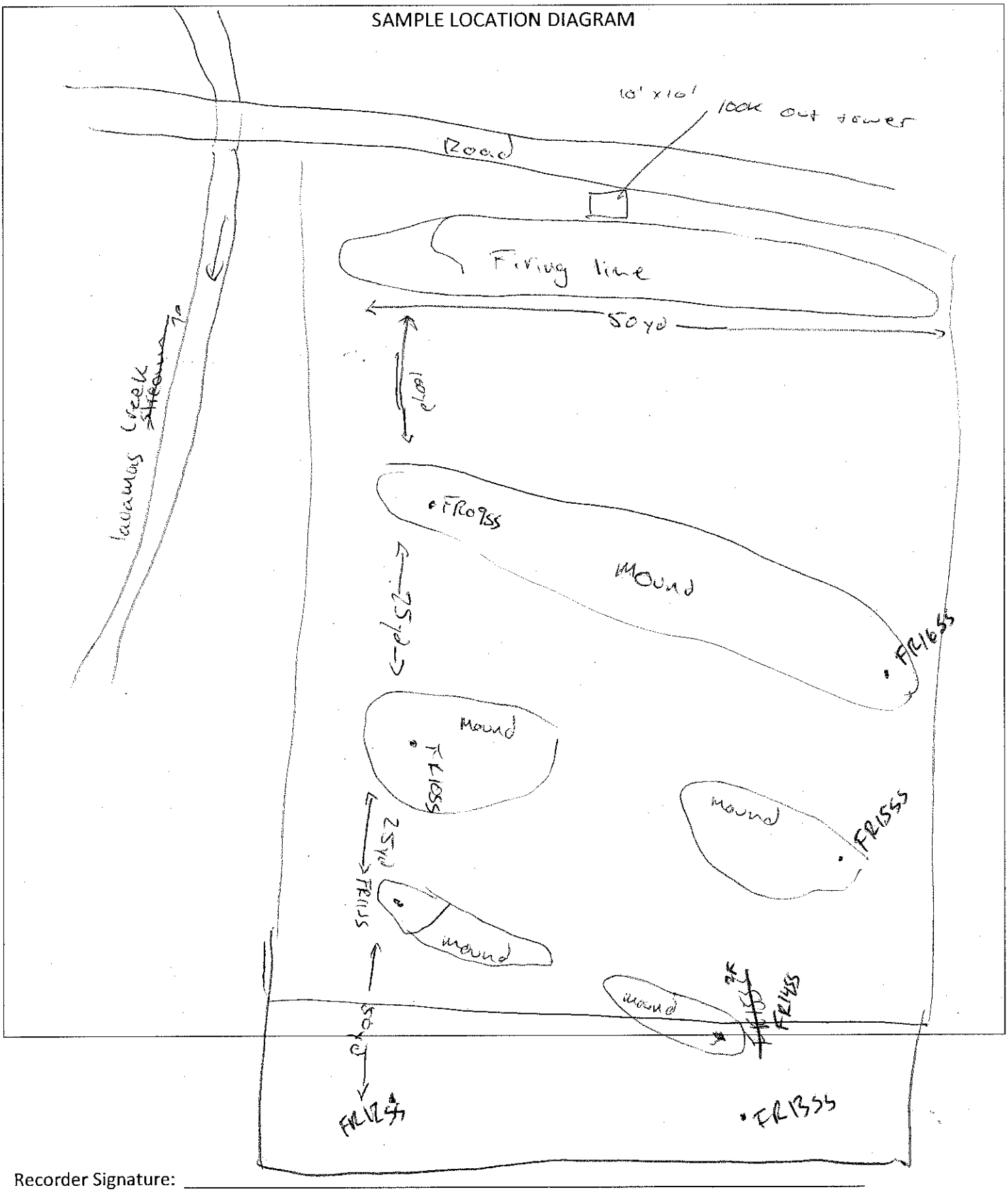
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344539	J8KQ1			X	X	X				

Recorder Signature: [illegible]

Sample Signature: [illegible]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FRIOSS

Date: 8/22/11 Time: 1408 Sampler: M. Z.

GPS Location: Latitude: 45.690323 ~~45.690487~~ mt Longitude: -122.419193

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	lt brown	Silty loam w/ sand + Fing gravel	N/O

ASSOCIATED SOURCE: M203 Range

NUM.	TIME	DIR	DESCRIPTION
1738	1408	ON	Sample location FRIOSS
1739	↓	↓	Sample FRIOSS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344541	J8KQ3			X	X	X				

Recorder Signature:

Sample Signature: Mark Z

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR11SS

Date: 8/23/11 Time: 1417 Sampler: Mark Z.

GPS Location: Latitude: 45.690122 Longitude: -122.419517

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	Light Grayish Brown	Silty loam	N

ASSOCIATED SOURCE: M203 Range

NUM.	TIME	DIR	DESCRIPTION
1740	1417	DN	Sample location FR11SS
1741	1417	DN	Sample FR11SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344543	J8KQ5			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: ~~FR13~~ FR12SS

Date: 8/23/11 Time: 1428 Sampler: Mark Z.

GPS Location: Latitude: 45.689651 Longitude: -122.420649

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	DRY	H. grayish Brown	Silty loam	M

ASSOCIATED SOURCE: M203 Range

NUM.	TIME	DIR	DESCRIPTION
1742	1428	DN	Sample location FR12SS
1743	1428	DN	Sample FR12SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344545	J8KQ7			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR135S

Date: 8/23/11 Time: 1440 Sampler: Mark Z

GPS Location: Latitude: 45.689356 Longitude: -122.420526

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	lt. gray-sn Brown	Silty loam	N

ASSOCIATED SOURCE: M203 Range

NUM.	TIME	DIR	DESCRIPTION
1743	1440	DM	Sample location FR135S
1744	1440	DM	Sample FR135S

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344546	J8KQ8			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR145S

Date: 8/23/11 Time: 14:52 Sampler: Mark Z

GPS Location: Latitude: 45.689592 Longitude: -122.420066

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	grayish brown	Silty loam w/ Fine gravel	N

ASSOCIATED SOURCE: M203 Range

NUM.	TIME	DIR	DESCRIPTION
1746	1452	DM	Sample location FR145S
~~1745~~ 1747	1452	DM	Sample FR145S

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344547	J8KQ9			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FR155S

Date: 8/23/11 Time: 1509 Sampler: MORKZ

GPS Location: Latitude: 45.689814 Longitude: -122.419441

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	DRY	Grayish Brown	Silty loam	no

ASSOCIATED SOURCE: M 203 Range

NUM.	TIME	DIR	DESCRIPTION
1748	1509	DM	Sample location FR155S
1749	1509	DM	Sample FR155S

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344548	J8KR0			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FRIGSS

Date: 8/23/11 Time: 1525 Sampler: MONK Z

GPS Location: Latitude: 45.690024 Longitude: -122.418821

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	grayish Brown	Silty loam, no gravel	no

ASSOCIATED SOURCE: M203 range

NUM.	TIME	DIR	DESCRIPTION
1750	1525	DIY	Sample location FRIGSS
1751	↓	↓	Sample FRIGSS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344549	J8KR1			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP01SS

Date: 08-22-11 Time: 11:45 Sampler: Andy McDonald

GPS Location: Latitude: 45 40 28 559 N Longitude: 122 25 40 852 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	DRY	LT BRWN	SILTY ~~AND PEAT~~ KGM 8/22/11 LOAM	N

ASSOCIATED SOURCE: Artillery Position 7

NUM.	TIME	DIR	DESCRIPTION
001	11:45	W	FP01SS sample location
002	11:45	S	Artillery Position 7, facing South

Additional Notes:

Artillery Position 7, clearing surrounded on 2 sides by roads

SAMPLE PROCESSING:

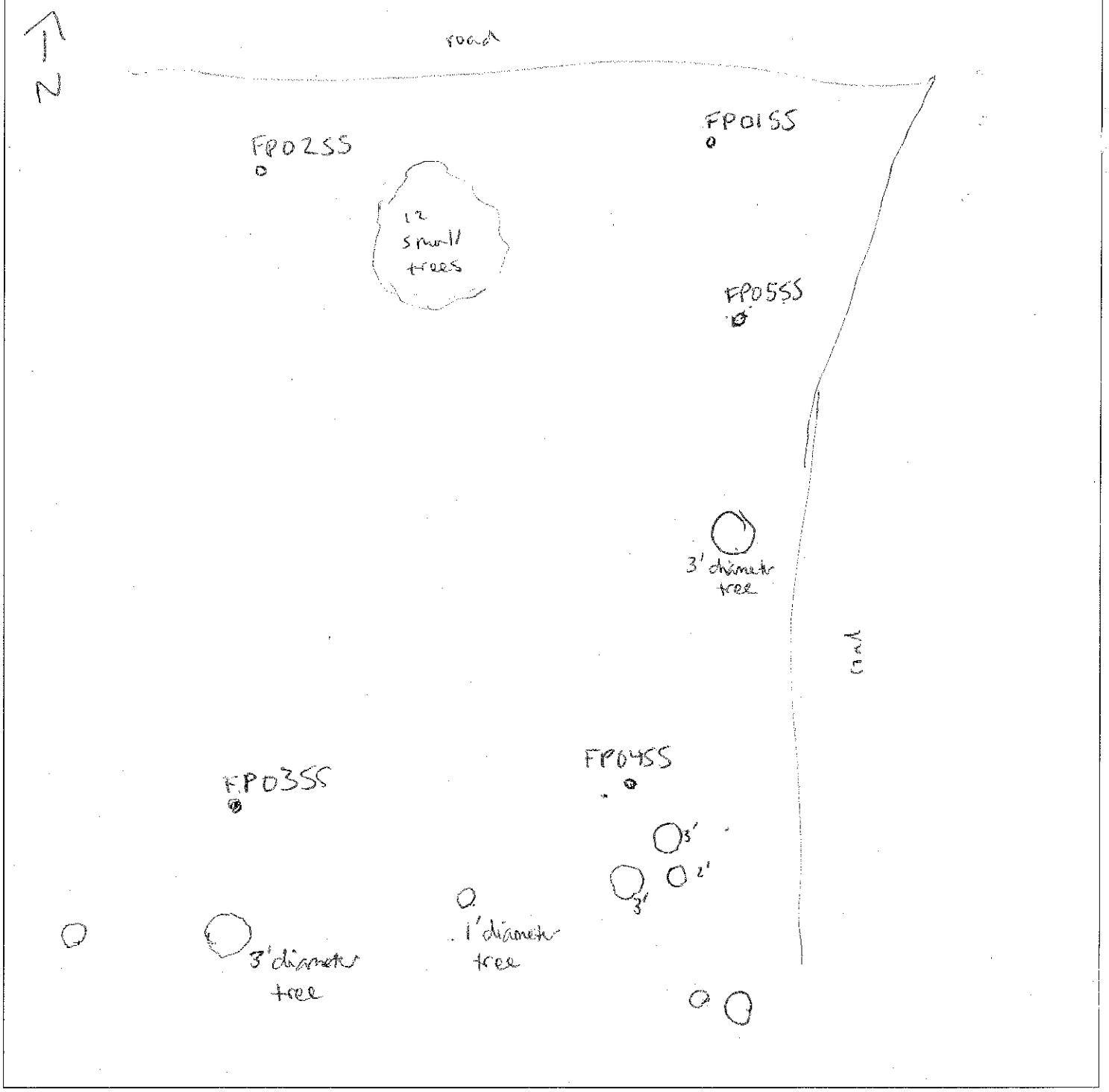
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344500	J8KL2		X	X	X	X				

Recorder Signature: [signature]

Sample Signature: Andrew McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP0255

Date: 08-22-11 Time: 13:05 Sampler: Andy McDonald

GPS Location: Latitude: 45 40 28.772 N Longitude: 122 25 42.131 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	DRY	LT BRWN	SILTY ~~AND PEAT~~ LOAM	N

ASSOCIATED SOURCE: Artillery Position 7

NUM.	TIME	DIR	DESCRIPTION
6	13:04	W	PP0255 location
7	13:07	S	PP0255 facing south

Additional Notes:

See FP01 SS for sample location diagram

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113544501	MJ8KL3			X	X	X				

Recorder Signature: [signature]

Sample Signature: Andrew McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP03SS

Date: 08-22-11 Time: 13:30 Sampler: Andy McDonald

GPS Location: Latitude: 45 40 27.834 N Longitude: 122 25 42.127 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	SLIGHTLY MOIST	LT BRWN	SILTY ~~PEAT~~ LOAM	N

ASSOCIATED SOURCE: Artillery Position 7

NUM.	TIME	DIR	DESCRIPTION
8	~~W~~ 13:35	W	FP03SS location
9	~~W~~ 13:35	W	FP03SS location
10	~~S~~ 13:36	S	FP03SS facing south

Additional Notes:

munitions debris discovered at sample location, 2" below surface

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344502	MJKL4			X	X	X				

Recorder Signature: [signature]

Sample Signature: Andrew McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP04SS

Date: 08-22-11 Time: 14:05 Sampler: Andy McDonald

GPS Location: Latitude: 45 40 27.685 N Longitude: 122 25 41.300 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	LT BRWN	SILTY LOAM	N

ASSOCIATED SOURCE: Artillery Position 7

NUM.	TIME	DIR	DESCRIPTION
11	14:03	E	FP04SS
12	14:04	S	FP04SS, facing south

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344503	MJ8KL5			X	X	X				

Recorder Signature: [illegible]

Sample Signature: Andrew McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP05SS

Date: 08-22-11 Time: 14:30 Sampler: Andrey McDonald

GPS Location: Latitude: 45 40 28 236 N Longitude: 122 25 40 917 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	LT BRWN	SILTY LOAM	N

ASSOCIATED SOURCE: Artillery Position 7

NUM.	TIME	DIR	DESCRIPTION
13	14:26	N	FP05SS
14	14:26	S	FP05SS facing South

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344504	MJ8KL6			X	X	X				

Recorder Signature: [illegible]

Sample Signature: Andrew McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP06SS

Date: 8/23/11 Time: 09:46 Sampler: ADA HAMILTON

GPS Location: Latitude: 45° 40' 31.707 N Longitude: 122° 25' 34.898 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
~~5~~ BHM 8/23/11 0"-6"	~~[illegible]~~ BHM 8/23/11 DRY	BROWN / LT. GRAY	SOIL IS HOMOGENOUS, NO ROCKS, DRY, SILTY, SAND, COMM	N

ASSOCIATED SOURCE: ARTILLERY POSITION 6

NUM.	TIME	DIR	DESCRIPTION
0001	09:58	DOWN/E	SAMPLE JARS, SAMPLE BOWL, WHITE BOARD (FP06SS)

Additional Notes:

NONE.

SAMPLE PROCESSING:

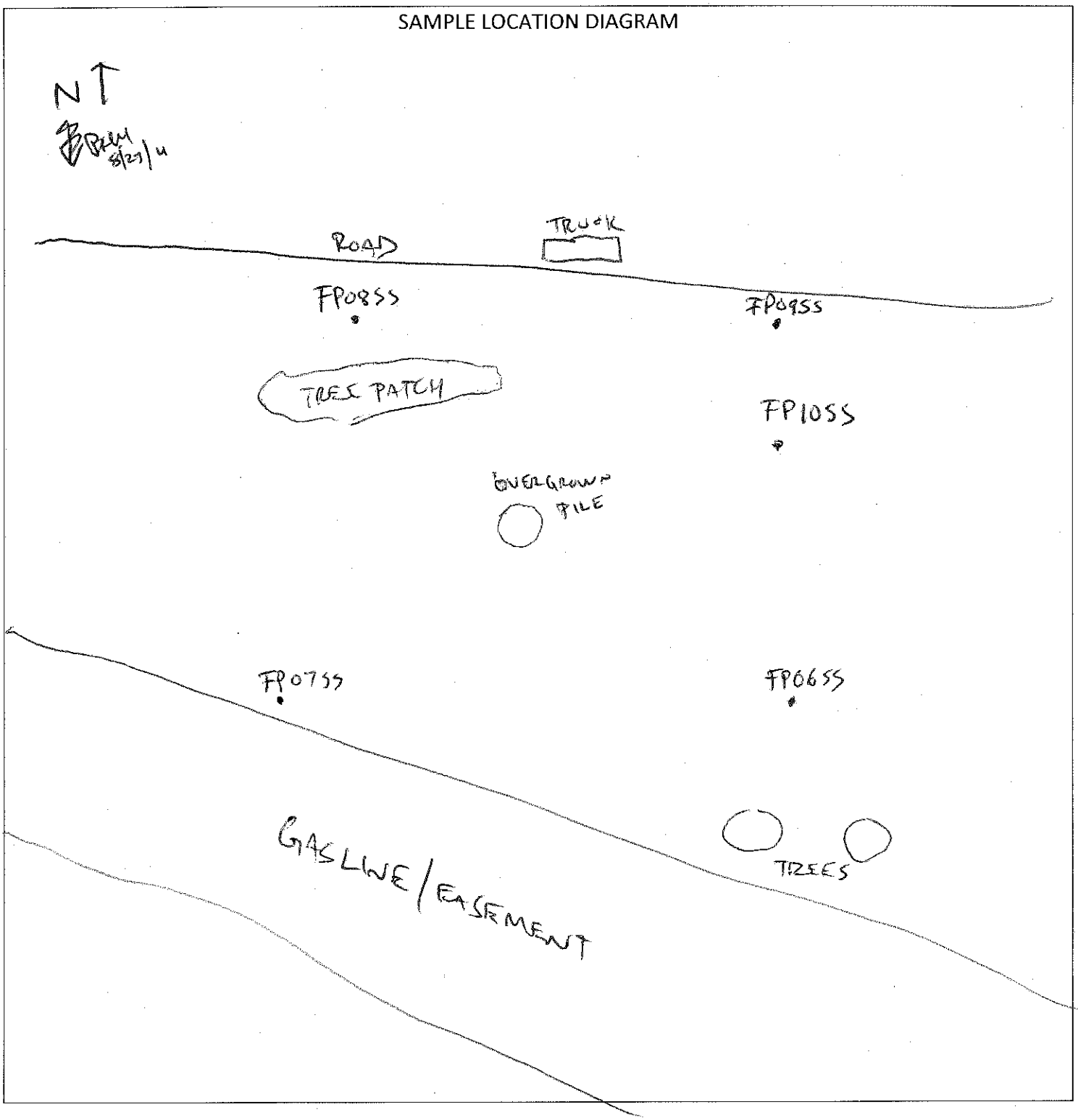
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344524	J8KN6			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP07SS

Date: 8/23/11 Time: 10:05 Sampler: ADA HAMILTON

GPS Location: Latitude: 45° 40' 30.830" N Longitude: ~~122~~ BHM 8/23/11 122° 25' 33.049" W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0'-6"	MOIST	BROWN/LT. GREY	SILTY LOAM	N

ASSOCIATED SOURCE: ARTILLERY POSITION 6

NUM.	TIME	DIR	DESCRIPTION
0002	10:18	DOWN/SOUTH	SAMPLE JARS, COLLECTION BOWL, WHITEBOARD (FP07SS)

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344527	J8KN9			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

FP0655

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP08SS

Date: 8/23/11 Time: 10:30 Sampler: ADA HAMILTON

GPS Location: Latitude: 45° 40' 28.440" N Longitude: 122° 25' 34.203 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0"-6"	DRY	BROWN	SILTY, SANDY LOAM	N

ASSOCIATED SOURCE: ARTILLERY ~~RANGE~~ BHM 8/23/11 POSITION 6

NUM.	TIME	DIR	DESCRIPTION
0003	10:28	DOWN/E	SAMPLE JARS, COLLECTION BOWL, WHITEBOARD (FP08SS)

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344528	J8KP0			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

FP0655

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP09SS

Date: 8/23/11 Time: 10:53 Sampler: ADA HAMILTON

GPS Location: Latitude: 45° 40' 28.633 N Longitude: 122° 25' 36.132 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0"-6"	DRY	LT. BROWN RUST/REDDISH	SILT W/ CLAY	N

ASSOCIATED SOURCE: ARTILLERY POSITION 6

NUM.	TIME	DIR	DESCRIPTION
0004	11:02	DOWN/WST.	SAMPLE JARS, MIXING BOWL, WHITEBOARD (FP09SS)

Additional Notes:

~~0004~~ NONE.
BFPM 8/23/11

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344530	J8KP2			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE MAP

FP06SS

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FPLOSS

Date: 8/23/11 Time: 11:09 Sampler: ADA HAMILTON

GPS Location: Latitude: 45° 40' 29.827 N Longitude: 122° 25' 35.898 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	LT. BROWN	SILTY LOAM	N

ASSOCIATED SOURCE: ARTILLERY POSITION #6

NUM.	TIME	DIR	DESCRIPTION
0005	11:17	DOWN/N	SAMPLE JARS, MIXING BOWL, WHITEBOARD (FPLOSS)

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344532	J8KP4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE FP0655.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP11SS

Date: 8/23/11 Time: 15:36 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 41 09.190N Longitude: 122 25 27.062 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED. BRN	SILTY LOAM	N

ASSOCIATED SOURCE: ~~FIRING~~ ARTILLERY POSITION 5
BHM 8/23

NUM.	TIME	DIR	DESCRIPTION
0011	15:36	N	SAMPLE FP11SS

Additional Notes:

SAMPLE PROCESSING:

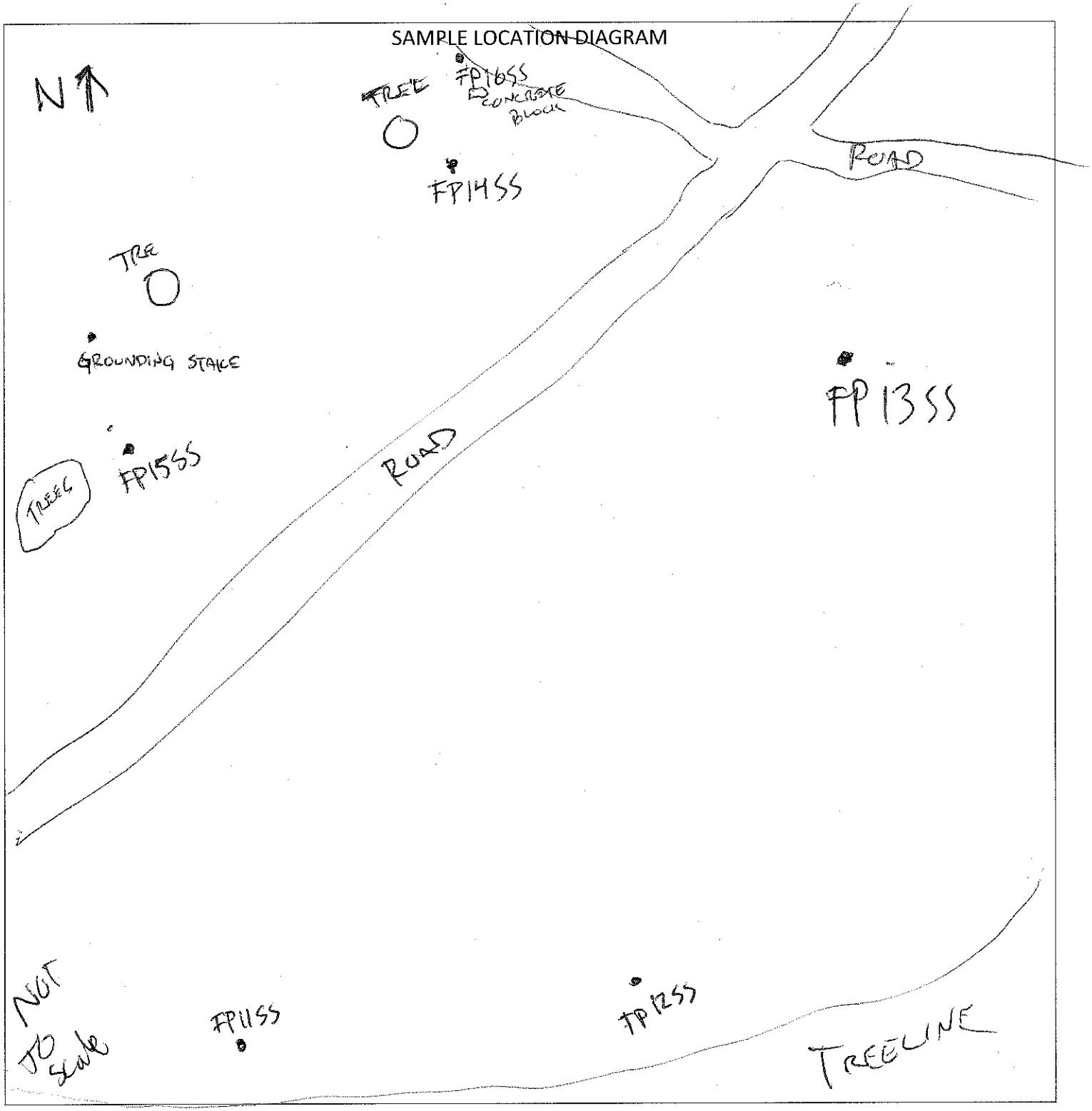
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344550	J8KR2			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP12SS

Date: 8/23/11 Time: 15:47 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 41 10.675 N Longitude: 122 25 26 611 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED. BROWN	SILTY LOAM w/ little gravel	N

ASSOCIATED SOURCE: ~~FIRING~~ ARTILLERY POSITION S

NUM.	TIME	DIR	DESCRIPTION
0012	15:50	EAST	SAMPLE FP12SS

Additional Notes:

NONE

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344551	J8KR3			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE FP11SS.
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP13SS

Date: 8/23/11 Time: 15:58 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 41 11.624 N Longitude: 122.25 27 084 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED. BROWN	SILTY LOAM	N

ASSOCIATED SOURCE: ~~FIRING~~ ARTILLERY POSITION 5

NUM.	TIME	DIR	DESCRIPTION
0013		N	SAMPLE FP13SS

Additional Notes:

NONE

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344552	J8KR4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE FP11SS
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP14SS

Date: 8/23/14 Time: 16:16 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 41 11.611N Longitude: 122.25 31.414W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED BRWN	SILTY LOAM	N

ASSOCIATED SOURCE: ~~FRINGE~~ ARTILLERY POSITION 5

NUM.	TIME	DIR	DESCRIPTION
0014	16:21	W	SAMPLE FP14SS

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344553	J8KR5			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE FP 11 SS MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP15SS

Date: 8/23/11 Time: 16:33 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 41 09.604 N Longitude: 122 25 30.152 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED. BROWN	SILTY BRN	N

ASSOCIATED SOURCE: ~~FIRING~~ ARTILLERY POSITION 5

NUM.	TIME	DIR	DESCRIPTION
0015	16:42	W	SAMPLE FP15SS

Additional Notes:

NONE.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344554	J8KR6			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE FP115 SMAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FP16SS

Date: 8/23/11 Time: 17:02 Sampler: ADA HAMILTON

GPS Location: Latitude: 45 41 12.393 N Longitude: 122 25 32.459 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	DRY	MED. BROWN	POORLY SORTED SILTY SANDY LOAM W/ 20 ¼-2 in gravel	N

ASSOCIATED SOURCE: ~~FIRING~~ ARTILLERY POSITION 5 / MORTAR TARGET

NUM.	TIME	DIR	DESCRIPTION
0017	17:19	W/DOWN	SAMPLE FP16SS
0018	17:21	S	STOKES MORTAR TARGET (CONCRETE) W/ SAMPLE FP16SS IN BACKGROUND
0019	17:24	E	STOKES MORTAR TARGET (CONCRETE) W/ MARSH-LIKE VEGETATION IN BACKGROUND
0020	17:25	E	VIEW FROM FIRING POSITION 5 TO CITA

Additional Notes:

~~NONE,~~ BHM 8/23 THIS SAMPLE WAS ORIGINALLY ASSOCIATED W/ FIRING POSITION 1 / MORTAR RANGE. EPA TM CHANGED SAMPLE ASSIGNMENT TO FIRING POSITION 5. ALL ~~FIRIN~~ BHM OTHER FIRING POSITION 1 / MORTAR TARGET SAMPLES WERE NOT COLLECTED PER EPA TM.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344555	J8KR7			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FB01SS

Date: 8-23-11 Time: 10:55 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691173 Longitude: -122.414630

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Reddish Brown	Silt: Clay mix	No

ASSOCIATED SOURCE: 1000" range Firing bank

NUM.	TIME	DIR	DESCRIPTION
1724			Sample Loc. Photo
1725			Sample Jars Photo

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344529	J8KP1			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

Sample locations are on Sample Form FR0155

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FB025S

Date: 8-23-11 Time: 11:00 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691154 Longitude: -122.414550

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Dk Brown	Clay & Silt w/ fine gravel	No

ASSOCIATED SOURCE: 1000" Firing bank

NUM.	TIME	DIR	DESCRIPTION
1726			Photo Samp Loc
1727			Photo Samp Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344531	J8KP3			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FB0355

Date: 8-23-11 Time: 11:09 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691236 Longitude: -122.414297

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Brown	Clay : Silt	No

ASSOCIATED SOURCE: 1000" Firing bank

NUM.	TIME	DIR	DESCRIPTION
1728			Photo Samp Loc.
1729			Photo Samp Sos

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344533	J8KP5			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FB0455

Date: 8-23-11 Time: 11:18 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691301 Longitude: -122.414187

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	Lt. Brown	Silt w/ very fine gravel	No

ASSOCIATED SOURCE: 1000" Firing bank

NUM.	TIME	DIR	DESCRIPTION
1730			Photo Sample Location
1731			Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344534	J8KP6			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FBOSSS

Date: 8-23-11 Time: 11:26 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691379 Longitude: -122.413968

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Brown	Silt w/ fine gravel	No

ASSOCIATED SOURCE: 1000" Firing bank

NUM.	TIME	DIR	DESCRIPTION
1732			Photo Sample Location
1733			Photo Sample Sars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344535	J8KP7			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: FB06SS

Date: 8-23 Time: 11:33 Sampler: Jeff Fetters

GPS Location: Latitude: 45.691375 Longitude: -122.413967

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Brown	Siltly Loam trace of fine gravel organics	No

ASSOCIATED SOURCE: 1000" Firing bank

NUM.	TIME	DIR	DESCRIPTION
1734			Photo Sample Location
1735			Photo Sample Jars

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344538	J8KQ0			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU01SD

Date: 8/22/11 Time: 1427 Sampler: MZ.

GPS Location: Latitude: 45.695706 Longitude: -122.406057

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	wet	Brown	Silt coarse sand	No

ASSOCIATED SOURCE: Pop up Pond

NUM.	TIME	DIR	DESCRIPTION
1668	1426	DM	Sample location ~~S~~ PU01SD
1669	1427	DM	Sample PU01SD
1670	1427	DM	Sample PU01SD

Additional Notes:

SAMPLE PROCESSING:

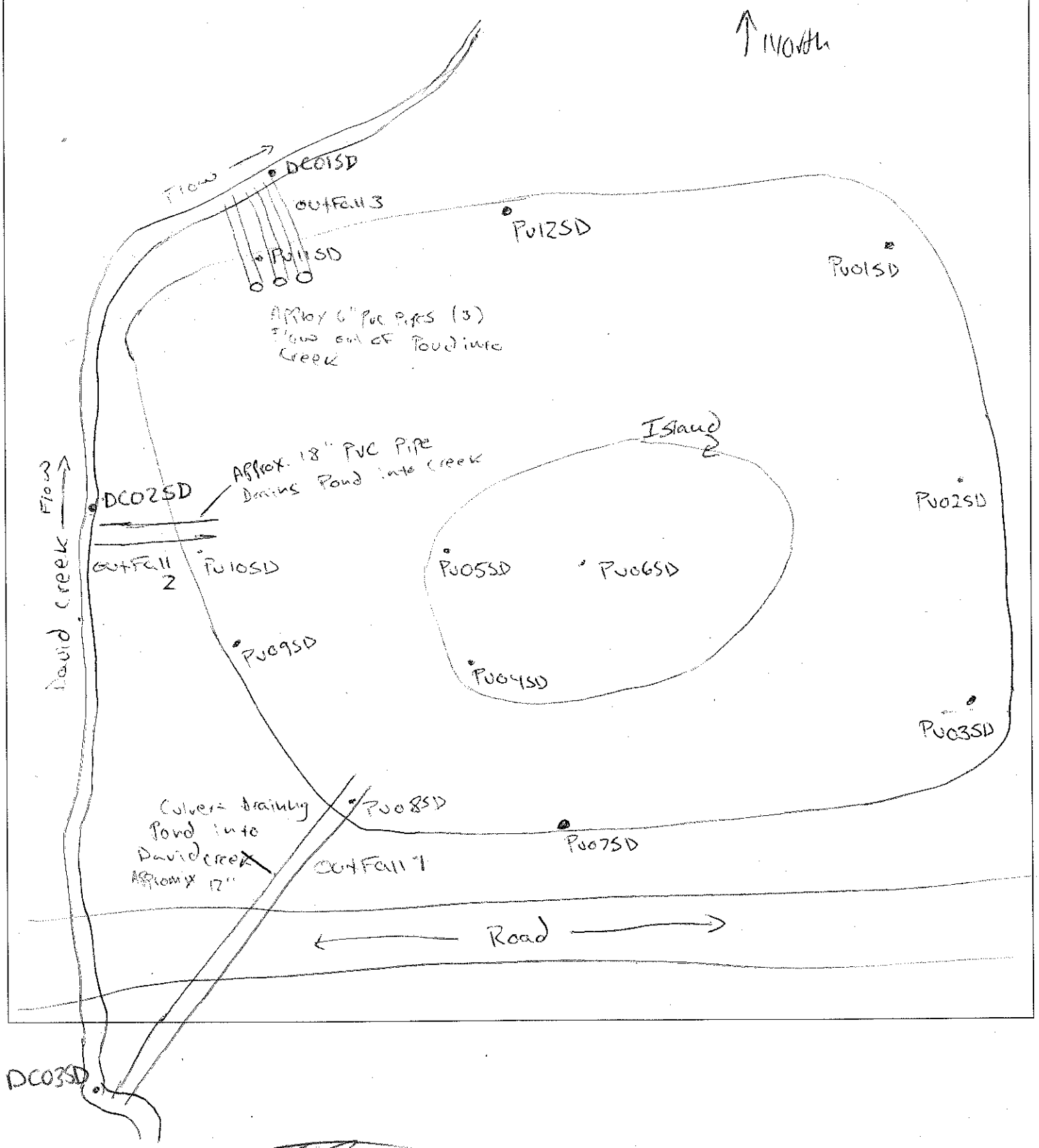
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
13344505	MJ8KL6	NA		X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU02SD

Date: 8/22/11 Time: 1430 Sampler: MZ

GPS Location: Latitude: 45.695706 Longitude: -122.406057

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Brown	Silty sand (coarse to fine	

ASSOCIATED SOURCE: Pop up Pond

NUM.	TIME	DIR	DESCRIPTION
1671	1430	DN	PU02SD sample location
1672	1448	DN	PU02SD sample
1673	1441	DN	Sample PU02SD

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344506	MJ8KL8	NA		X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU035D

Date: 8/22/11 Time: 1446 Sampler: MZ

GPS Location: Latitude: 45.695151 Longitude: -122.405876

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	moist	Dk Brown	Silt w/ Sand	no

ASSOCIATED SOURCE: Pop up Pond

NUM.	TIME	DIR	DESCRIPTION
1674 ~~1441~~	1441	DN	Sample location PU035D
1675	1446	DN	
1676	1446	DN	Sample PU035D

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344507	MJ8KL9	NA		x	x	x				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU04SD

Date: 8/22/11 Time: 1458 Sampler: MZ

GPS Location: Latitude: 45.695091 Longitude: -122.406753

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Moist	Dk Brown	Silt w/ Sand	no

ASSOCIATED SOURCE: Pop up Pond island

NUM.	TIME	DIR	DESCRIPTION
1677	1458	DN	PU04SD sample location
1678	↓		↓
1679	↓		↓

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344508	MJ8KM0	NA		X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU05SD

Date: 8/22/11 Time: ~~1680~~ 1514 Sampler: MZ

GPS Location: Latitude: 45.695221 Longitude: -122.406843

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
~~6/11~~ 0-6"	moist	Dk Brown	Silt w/ sand	no

ASSOCIATED SOURCE: pop up pond island

NUM.	TIME	DIR	DESCRIPTION
1680	1514	DM	Sample location PU05SD
1681	↓	↓	Sample PU05SD
1682	↓	↓	Sample PU05SD

Additional Notes:

Photo 1684 Two water Exits from pop up pond, 1 = 18" pipe, 3 = 6" pipes, Drain to creek (David) PFES on David creek

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344509	MJ8KM1	NA		X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: P006SD

Date: 8/22/11 Time: 1533 Sampler: MZ

GPS Location: Latitude: 45.695244 Longitude: -122.406843

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Brown	hard compact Silt	

ASSOCIATED SOURCE: Pop up pond island

NUM.	TIME	DIR	DESCRIPTION
1683	1533	Down	Sample location P006SD
1685	↓	↓	↓
1686	↓	↓	↓

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
1134451Ø	MJBKM2			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU 07SD

Date: 8/22/11 Time: 16:12 Sampler: MZ

GPS Location: Latitude: 45.694864 Longitude: -122.406612

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	wet	Dk grayish brown Black mottling	Dk grayish brown w/ black mottling some gravel	no

ASSOCIATED SOURCE: Pop up Pond

NUM.	TIME	DIR	DESCRIPTION
1687	16:22	DM	Sample location PU07SD ~~Dk brown Silt, some grave, black mottling high organics~~
1688	↓	DM	
1689	↓	↓	

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344511	MJ8KM3			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU08SD

Date: 8/22/11 Time: 1635 Sampler: MZ

GPS Location: Latitude: 45.694785 Longitude: -122.406987

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Dk Brown	Silt w/gravel	

ASSOCIATED SOURCE: Pop up pond outfall 1

NUM.	TIME	DIR	DESCRIPTION
1690	1635		Sample location PU08SD, channel from pond to creek
1691	↓		Sample PU08SD
1692	↓		Sample PU08SD

Additional Notes:

Photos 1693: looking SW at culvert that is located in SW corner of PU pond PPE-10 creek
Photo 1694: looking NE toward pond from sample point PU08SD

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344512	MJ8KM4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: P009SD

Date: 8/11/11 Time: 1648 Sampler: MZ

GPS Location: Latitude: 45.695028 Longitude: -122.407196

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	wet	Brown	silt w/ sand some gravel	No

ASSOCIATED SOURCE: Pop up Pond

NUM.	TIME	DIR	DESCRIPTION
1695	1648	DN	Sample location P009SD
1696	↓	↓	
1697			

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344513	MJ8KM5			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU10SD

Date: 8/22/11 Time: 1658 Sampler: MZ

GPS Location: Latitude: 45.695288 Longitude: -122.407471

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	wet	Brown	Sandy Silt, w/ gravel (Fine)	no

ASSOCIATED SOURCE: Pop up Pond outfall 2

NUM.	TIME	DIR	DESCRIPTION
1698	1658	DM	Sample location, near ≈ 18" white PVC pipe provides out flow to Pop-up Pond, to creek
1699	↓	↓	
1700	↓	↓	

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344514	MJ8KM6			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PU11SD

Date: 8/22/11 Time: 1708 Sampler: MZ

GPS Location: Latitude: 45.695441 Longitude: -122.407433

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	wet	light ~~grayish brown~~	Silty clay w/ sand & gravel	no

ASSOCIATED SOURCE: Pop up Pond

NUM.	TIME	DIR	DESCRIPTION
1701	1708	DM	Sample location PU10SD
1702	↓	↓	Sample PU01SD
1703	↓	↓	↓

Additional Notes:

Photo 1704 3 outlet Pipes and 18" outlet pipe (NE)

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344515	MJ8KM7			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: P012SD

Date: 8/22/11 Time: 1722 Sampler: MZ

GPS Location: Latitude: 45.695622 Longitude: -122.407105

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	wet	light brown	sandy silt w/gravel	no

ASSOCIATED SOURCE: Popup Pond outfall 3

NUM.	TIME	DIR	DESCRIPTION
1705	1722	DN	Sample location P012SD
1706	↓	↓	Sample P012SD
1707	↓	↓	↓

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344517	MJ8KM9			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: Pt01SS

Date: 8/24/11 Time: 1416 Sampler: ~~Ada~~ AdA

GPS Location: Latitude: 45.695534 Longitude: -122.403597

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	grayish brown	Silty loam	no

ASSOCIATED SOURCE: Pop up target East

NUM.	TIME	DIR	DESCRIPTION
1757	1416	DM	Sample location + Sample Pt01SS

Additional Notes:

Pt01SS = 24-29 XRF point
- high ammounts of Small Arms bullets near Sample loc.

SAMPLE PROCESSING:

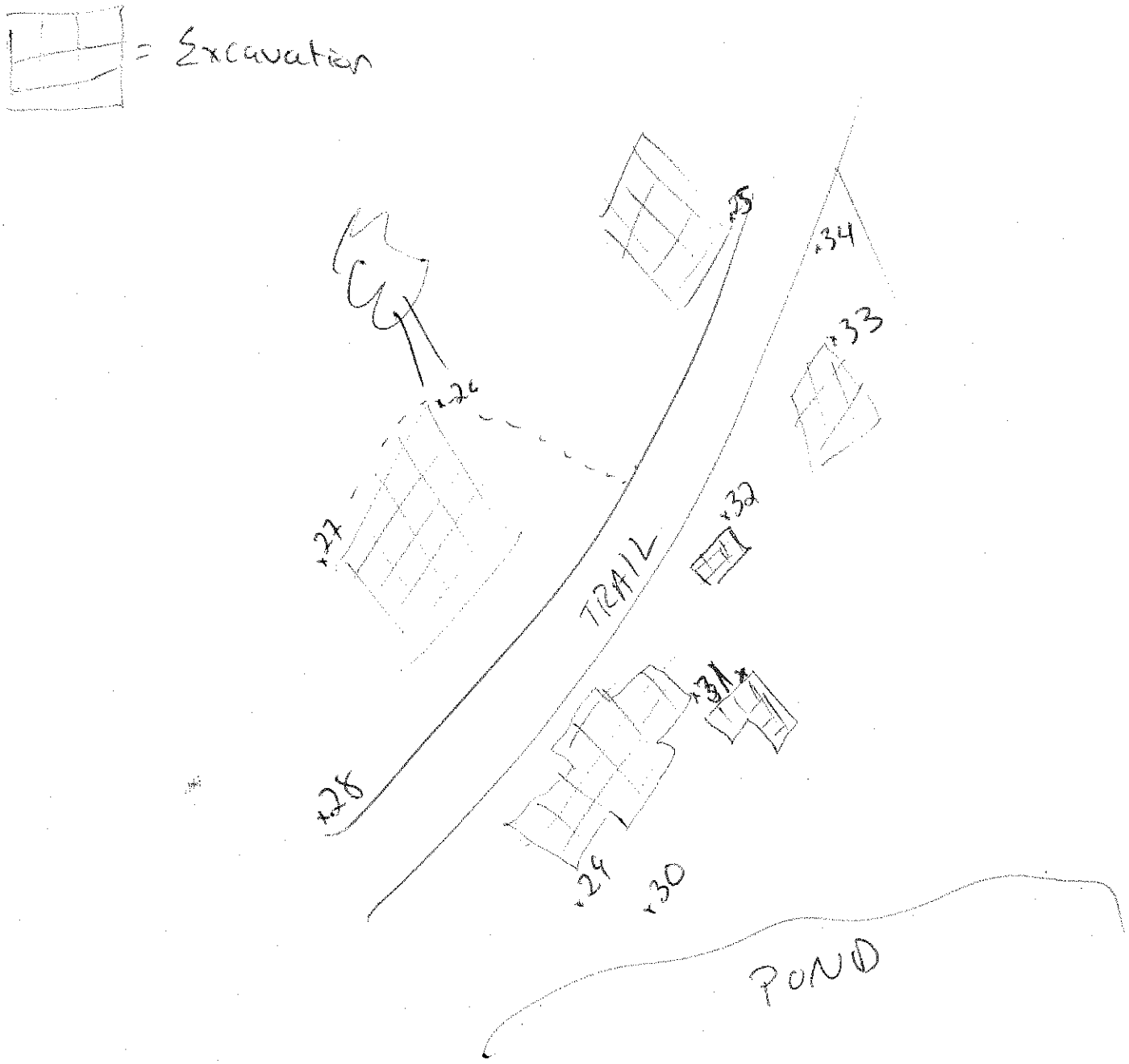
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344572	J8KT4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT02SS

Date: 8/24/11 Time: 1630 Sampler: Ada

GPS Location: Latitude: 45.695558 Longitude: -122.403782

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	light grayish brown	Silty loam	NO

ASSOCIATED SOURCE: Pop up target East

NUM.	TIME	DIR	DESCRIPTION
1758	1630	DN	Sample PT02SS

Additional Notes:

30 cal bullet found in hole
PT02SS = XRF location ~~24-37~~ 24-31

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344573	J8KT5			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT035S

Date: 8/24/11 Time: 1640 Sampler: ADA

GPS Location: Latitude: 45.695465 Longitude: -122.403925

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Brown	Silty/loam Trace Fine gravel	NO

ASSOCIATED SOURCE: Popup target East

NUM.	TIME	DIR	DESCRIPTION
1759	1640	DM	Sample location PT035S

Additional Notes:

PT035S = XRF location 24-32

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344575	J8KT7			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT0455

Date: 8/24/11 Time: 1655 Sampler: Ada

GPS Location: Latitude: 45.695321 Longitude: -122.404130

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Moist	Dk Brown	Silty loam	no

ASSOCIATED SOURCE: Pop up target East

NUM.	TIME	DIR	DESCRIPTION
1780	1655	DM	Sample PT0455

Additional Notes:

PT0455 = XRF Point 24-25
Bullet found in hole

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344576	J8KT8			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT05SS

Date: 8/24/11 Time: 1708 Sampler: Ada

GPS Location: Latitude: 45-695255 Longitude: -122.404703

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	grayish brown	Silty loam	no

ASSOCIATED SOURCE: Pop up target East

NUM.	TIME	DIR	DESCRIPTION
178	1708	DH	Sample PT05SS

Additional Notes:

PT05SS = XRF location 24-34

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344579	J8KW1			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT06SS

Date: 8/24/11 Time: 1720 Sampler: Ada

GPS Location: Latitude: 45.695312 Longitude: 122.404958

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	grayish brown	Silty loam	no

ASSOCIATED SOURCE: Pop up target East

NUM.	TIME	DIR	DESCRIPTION
1762	1720	DN	sample location PT06SS

Additional Notes:

~~Pt~~ = 7"
PT06SS = XRF location 24-20

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344577	J8KT9			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT07SS

Date: 8/24/11 Time: 17:23 Sampler: ANDY MACDONALD

GPS Location: Latitude: 45.695346 Longitude: 122.405073

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	LT. BROWN	SANDY SILTY LOAM	N

ASSOCIATED SOURCE: POP UP TARGET EAST

NUM.	TIME	DIR	DESCRIPTION
0028	17:26	E	SAMPLE PT07SS
~~00~~ BMA 8/23			

Additional Notes:

EPA XRF 24-21

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344578	J8KW0			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT08SS

Date: 8/27/11 Time: 1730 Sampler: Hda

GPS Location: Latitude: 45.695428 Longitude: 122.405021

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	grayish brown	Silty loam	no

ASSOCIATED SOURCE: Pop up target East

NUM.	TIME	DIR	DESCRIPTION
1763	1730	DM	Sample location PT08SS

Additional Notes:

PT08SS = XRF location 24-23

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344583	J8KW5			X	X	X				

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT09SS

Date: 8/24/4 Time: 17:36 Sampler: ANDY MACDONALD

GPS Location: Latitude: 45.695612 Longitude: 122.404987

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	MED BROWN	SILTY LOAM	N

ASSOCIATED SOURCE: POP UP TARGET EAST

NUM.	TIME	DIR	DESCRIPTION
002	17:34 ~~17:42~~ BHM 8/23/14	N	SAMPLE PT09SS

Additional Notes:

EPA RRF 24-22

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344580	J8KW2			X	X	X				

Recorder Signature: [signature]

Sample Signature: Andrew MacDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT10SS

Date: 8/24/11 Time: 1805 Sampler: Ada

GPS Location: Latitude: 45.694578 Longitude: -122.467573

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	Brown	Silty loam	no

ASSOCIATED SOURCE: 1000yd Range

NUM.	TIME	DIR	DESCRIPTION
1764	1805	DN	Sample location PT10SS

Additional Notes:

PT10SS = XRF location 24-19

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344581	J8KW3			X	X	X				

Recorder Signature: [signature]

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT1155

Date: 8/24/14 Time: 18:03 Sampler: ANDY MACDONALD

GPS Location: Latitude: 45.694246 Longitude: -122.407480

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	DRY	LT. BRN	SANDY SILTY LOAM	N

ASSOCIATED SOURCE: ~~POP UP TARGET EAST~~ BHM S/2 1/4 1000 yd. range

NUM.	TIME	DIR	DESCRIPTION
0033		E	SAMPLE PT1155

Additional Notes:

EPA XRF 24-9. NO GROWTH OF VEGETATION FOR AT LEAST 6 FT. IN ALL DIRECTIONS.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344582	J8KW4			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT125S

Date: 8/25/11 Time: 0905 Sampler: Brad m

GPS Location: Latitude: 45.694793 Longitude: -122.407957

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	light tan/Brown	Silty loam w/gravel coarse to Fine	no

ASSOCIATED SOURCE: 1000 yd Range

NUM.	TIME	DIR	DESCRIPTION
1765	0905	SE	Soil Removal area near PT125S
1766	0905	DM	Sample of PT125S

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344584	J8KW6			X	X	X				

Recorder Signature: [signature]

Sample Signature: M. Martin

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT 13 SS

Date: 8/25/11 Time: 0915 Sampler: Brad M.

GPS Location: Latitude: 45.695031 Longitude: -122.407987

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Dry	light brown	Silty loam, w/clay	no

ASSOCIATED SOURCE: 1000 yd Range

NUM.	TIME	DIR	DESCRIPTION
1767	0915	DIY	Sample PT13SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344585	J8KW7			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT 14 SS

Date: 8/24/11 Time: 0924 Sampler: Braden

GPS Location: Latitude: 45.695331 Longitude: -122.408445

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	Lt. brown	Silty loam	no

ASSOCIATED SOURCE: 1000 yd Range

NUM.	TIME	DIR	DESCRIPTION
1768 ~~1767~~	0924	DM	Sample PT 14 SS
~~1768~~ 1769	0924	DM	Soil Removal area around POP of target + Sample PT14SS
1770	↓	W	Soil Removal b/t PT14SS + PT15SS
1771	↓	W	"

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344586	J8KW8			X	X	X				

Recorder Signature: [signature]

Sample Signature: D. Martin

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT 15 SS

Date: 8/24/11 Time: 0935 Sampler: Brad m

GPS Location: Latitude: 45.695146 Longitude: -122.409755

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	Brown	Silty loam	

ASSOCIATED SOURCE: 1000yd Range

NUM.	TIME	DIR	DESCRIPTION
1772	0935	DM	Sample PT15SS

Additional Notes:

PT 15 SS = XRF location ~~24-25~~ 24-15

Soil has been scraped approx 12' on all sides of popup target base 6 to 8" indepth

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344587	J8KW9			X	X	X				

Recorder Signature: [illegible]

Sample Signature: B. Matt

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT 1655

Date: 8/25/11 Time: 0940 Sampler: Bradun.

GPS Location: Latitude: 45.694366 Longitude: -122.410261

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	Lt Brown	Silty loam	no

ASSOCIATED SOURCE: 1000yd Range

NUM.	TIME	DIR	DESCRIPTION
1773	0940	DH	Sample PT1655

Additional Notes:

Soil Removed ≈ 12' ~~diameter~~ Radius around pop up target.
Appears to be same for all pop up targets

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344588	J8KX0			X	X	X				

Recorder Signature: [illegible]

Sample Signature: [illegible]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT 17 SS

Date: 8/25/4 Time: 0945 Sampler: Brad m

GPS Location: Latitude: 45.694763 Longitude: -122.408255

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	H brown	Silty loam w/ trace Fine grave organics present, Blocky	

ASSOCIATED SOURCE: 1000 yd Range

NUM.	TIME	DIR	DESCRIPTION
1774	0945	DN	Sample PT 17 SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344589	J8KX1			X	X	X				

Recorder Signature: [signature]

Sample Signature: M. Martin

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: PT18SS

Date: 8/25/11 Time: 0952 Sampler: Brad m

GPS Location: Latitude: 45.694218 Longitude: -122.408248

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Dry	LH. Brown	Silty loam, Trace Fine gravel	no

ASSOCIATED SOURCE: 1000yd Range

NUM.	TIME	DIR	DESCRIPTION
1775	0952	DM	Sample PT18SS

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344590	J8KX2			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

STATION ID	READING #	An	As	Pb
	~~3~~ mz 4		<14	49
	~~5~~		<8	<9
	~~6~~		<6	<7
	~~7~~		<9	<9
	mz ~~8~~ 9		<10	<11
	10		<11	12
	11		<10	12
	12		<11	13
	~~13~~		<11	<11
	~~14~~		<11	<12
	~~15~~		<11	<12
	~~16~~		<11	<12
	17		<14	38
	18		<13	23
	19		<21	158
	20		<18	82
	21		<21	155
	24-4 ~~22~~ nf		<10	<11
	24-5 ~~23~~ nf ~~5 24~~		<15	56

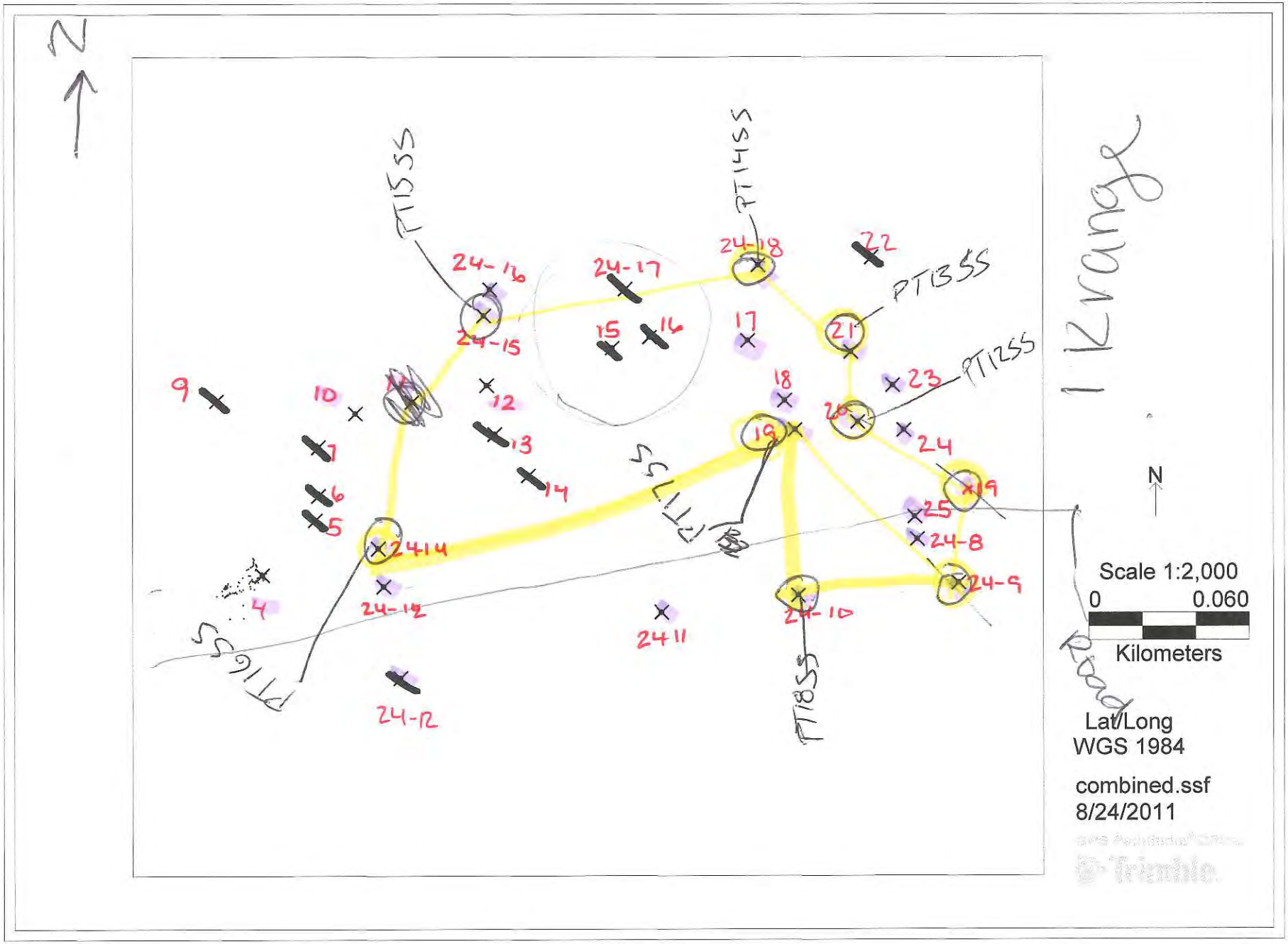
(2)

STATION ID	READING #	An	As	Pb
	#~~24~~ 24-6		<13	22
	#~~25~~ 24-7		<12	23
	#~~26~~ 24-8		<13	23
	24-9		<26	284
	24-10		<11	15
	24-11		<10	12
	~~24-12~~		<16	<11
	24-13		<9	17
	24-14		<13	52
	24-15		<13	26
	24-16		<11	17
	~~24-17~~		<11	<12
	24-18		<17	85
↑ 1000 yd Avg	24-19		<15	78
↓ back Area	24-20		<10	297
	24-21		<23	295
	24-22		<12	76
	24-23		<12	41
	24-24		<20	<70

3

STATION ID	READING #	An	As	Pb
	24-25		<20	211
	24-26		<9	13
	24-27		<10	19
	24-28		<10	16
	24-29		<15	1353
	24-30		<12	42
	24-31		<36	607
	24-32		<35	573
	24-33		<15	64
	24-34		<23	250

41-1353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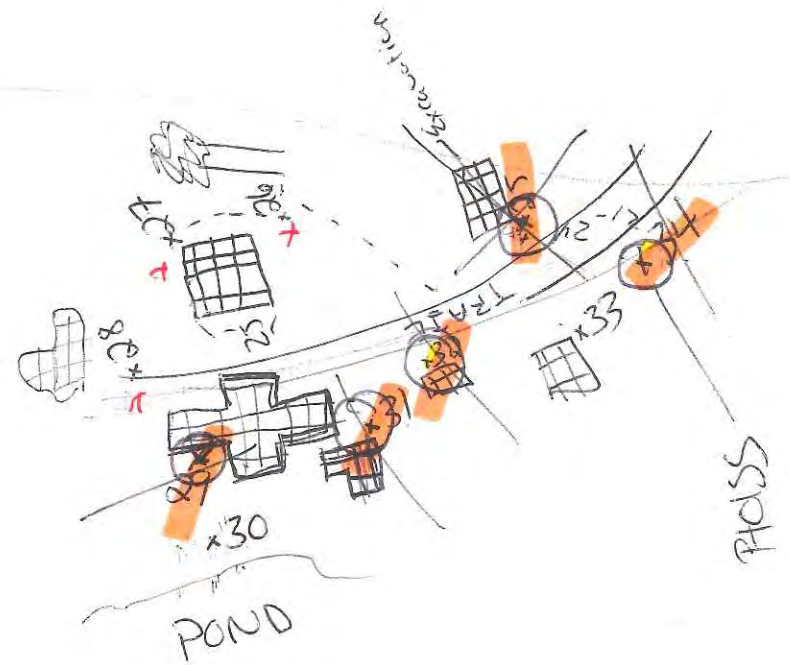
combined.ssf
8/24/2011

15-155

20 — PT06SS
21 —
22
23



East
Range

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: OPOISS

Date: 8/23/11 Time: 11:35 Sampler: ADA HAMILTON

GPS Location: Latitude: 45°40'33.331 N Longitude: 122°25'41.828 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0"-6"	MOIST	BROWN	SOFT CLAY, SILT	N

ASSOCIATED SOURCE: OVERLAND PATHWAY DITCH ~~OP/OB AREA 3~~ Artillery Position 6 (RN)

NUM.	TIME	DIR	DESCRIPTION
0006	11:39	DOWN/N	SAMPLE JARS, MIXING BOWL, WHITEBOARD (OPOISS)

Additional Notes:

NONE,

SAMPLE PROCESSING:

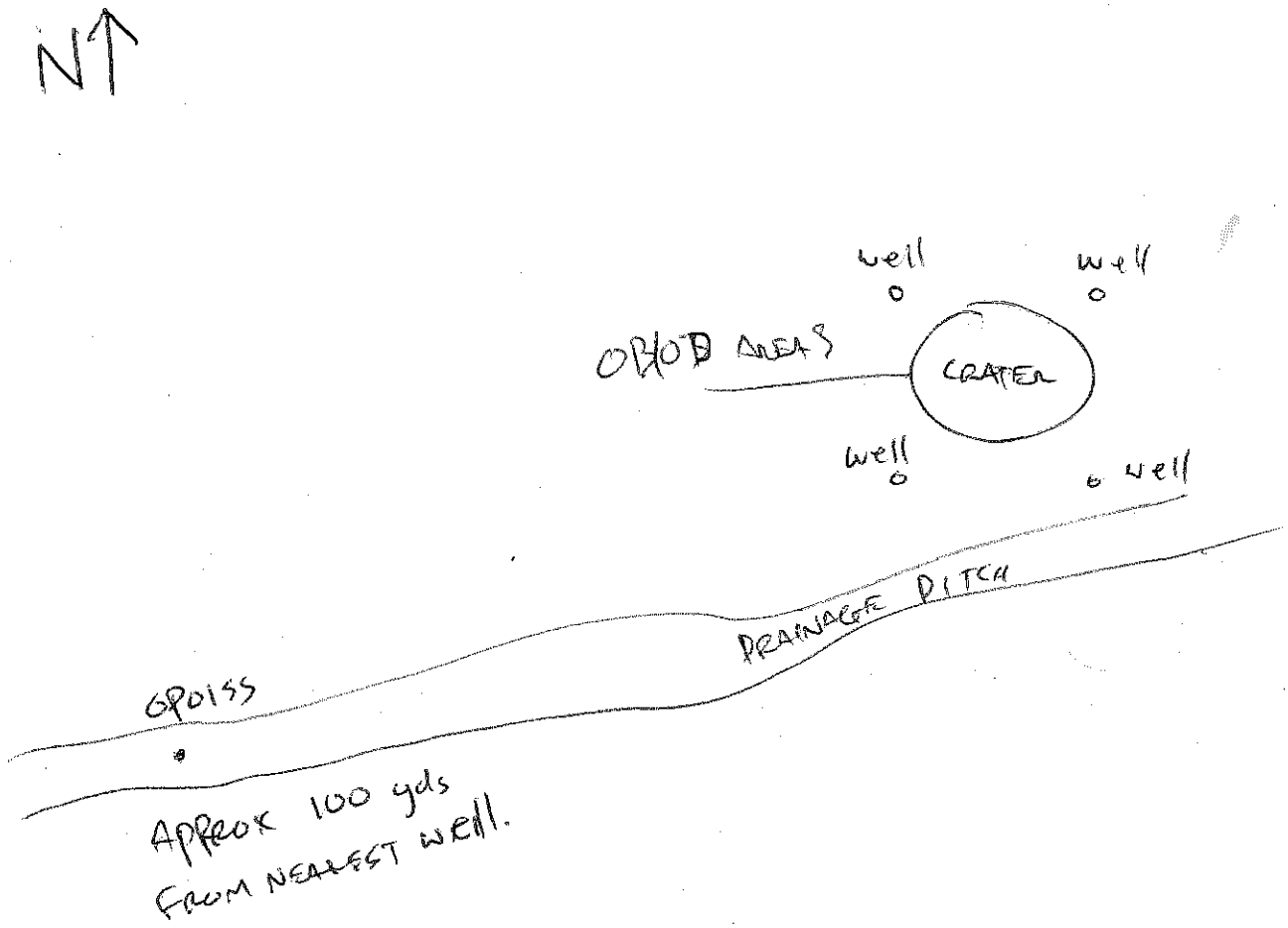
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344536	J8KP8			X	X	X				

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF01SD

Date: 8/25/11 Time: 17:24 Sampler: JEFF FETTERS

GPS Location: Latitude: 45° 41' 57.8" Longitude: 122° 24' 10.8"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	SAT	DARK BROWN	SILTY SAND, TRACE GRAVEL, ORGANICS	N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1987	17:24	E	SAMPLE NF01SD

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344618	JBLΦΦ			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF02SW

Date: 8-26-11 Time: 9:48 Sampler: Brad Martin

GPS Location: Latitude: 45.703593 Longitude: -122.402745

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
N/A		CLEAR		N

ASSOCIATED SOURCE: Landfill #4 ~~OB/OD 1~~ MZ

NUM.	TIME	DIR	DESCRIPTION
1788			Photo of Water Samples

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344622 11344623	J8L04	J8L05		X	X	X			X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF02SD

Date: 8-26-11 Time: 9:50 Sampler: Brad Martin

GPS Location: Latitude: 45.703593 Longitude: -122.402745

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Saturated	Dark Brown	small to med. size gravel, abundant silt and sand. Trace of organics	

ASSOCIATED SOURCE: ~~OB/ODOT~~ MZ Landfill 4

NUM.	TIME	DIR	DESCRIPTION
1789			Photo of sediment samples

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344624	J8L06			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF03SW

Date: 8-26-11 Time: 10:32 Sampler: Brad Martin

GPS Location: Latitude: 45.704209 Longitude: -122.403102

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
N/A				N

ASSOCIATED SOURCE: Landfill 4 ~~OB/OD~~ MZ

NUM.	TIME	DIR	DESCRIPTION
1790			Photo of Water Samples

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113446276 113446287	J8L08	J8L09		X	X	X			X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF03SD

Date: 8/26/14 Time: 10:34 Sampler: MARK Z.

GPS Location: Latitude: 45.704209 Longitude: -122.403102

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST	MED. BROWN	SAND/SILT	N

ASSOCIATED SOURCE: LANDFILL #4 / ~~08/00~~ 1 MZ

NUM.	TIME	DIR	DESCRIPTION
1791	10:50	E	SAMPLE NF03SD
1792	10:51	E	SAMPLE NF03SD w/ SEEP LOCATION

Additional Notes:

SAMPLE CO-LOCATED w/ SEEP (FROM PHASE 1)

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344628	J8L14			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF04SW

Date: 8-26-11 Time: 11:50 Sampler: Brad M

GPS Location: Latitude: 45.704956 mz Longitude: -122.403378

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
N/A				No

ASSOCIATED SOURCE: LANDFILL 4

NUM.	TIME	DIR	DESCRIPTION
1794	12:14	E	SAMPLE NF04SW

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344629 11344630	J8L11	J8L12		X	X	X			X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF04SD

Date: 8/26/14 Time: 12:00 Sampler: MARK 2

GPS Location: Latitude: 45.704956 Longitude: -122.403378

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	MOIST/ SATURATE	MED BROWN	SILT, SAND GRAVEL	N

ASSOCIATED SOURCE: LANDFILL 4

NUM.	TIME	DIR	DESCRIPTION
1793	12:15	E	SAMPLE NF04SD

Additional Notes:

COLLECTED PARALLEL TO 2B, 2A MONITORING WELLS

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344631	J8L13			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF05SW

Date: 8-26-11 Time: 12:29 Sampler: B. Munson

GPS Location: Latitude: 45.705196 Longitude: -122.403982

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
N/A		Clear		N

ASSOCIATED SOURCE: Landfill #4

NUM.	TIME	DIR	DESCRIPTION
1795	12:38	E	

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113446 33 113446 34	J8L15	J8L16		X	X	X			X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF05SD

Date: 8/26/11 Time: 12:35 Sampler: MARK Z.

GPS Location: Latitude: 45.705196 Longitude: 122.403982

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	SAT.	BROWN	SILT, SAND	N

ASSOCIATED SOURCE: LANDFILL 4

NUM.	TIME	DIR	DESCRIPTION
1796	12:39	E	SAMAPLE NF05SD

Additional Notes:

COLLECTED ON EAST EDGE OF STREAM.

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344635	JSL17			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF06SD

Date: 8/26/14 Time: 14:00 Sampler: MARK. Z

GPS Location: Latitude: 45.705293 Longitude: -122.403468

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST	BRN.	SANDY SILTY	N

ASSOCIATED SOURCE: LANDFILL 4

NUM.	TIME	DIR	DESCRIPTION
1797		E	SAMPLE NF06SD

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344637	J8L19			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF07SW

Date: 8-26-11 Time: 14:29 Sampler: Brad M.

GPS Location: Latitude: 45.705588 Longitude: -122.403341

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
		Clear		N

ASSOCIATED SOURCE: Landfill #4

NUM.	TIME	DIR	DESCRIPTION
1799	2:31	E	Photo of water samples

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344638 11344640 39	JSL20	MJSL22		X	X	X			X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF075D

Date: 8-26-11 Time: 1[illegible]-22 Sampler: B. Martin

GPS Location: Latitude: 45.705588 Longitude: -122.403341

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Very Saturated	Brown	Sandy, silty, fine grain, small to med gravel (Eastern Bank)	

ASSOCIATED SOURCE: Landfill #4

NUM.	TIME	DIR	DESCRIPTION
1798	2:14	E	Photo of Sediment Samples

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113E44LHG (PN)	J8L22			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF08SD

Date: 8-26 Time: 14:56 Sampler: Brad M.

GPS Location: Latitude: 45.705752 Longitude: -122.402956

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	Brown	Sandy, Silty, sm. gravel	N

ASSOCIATED SOURCE: Landfill #4

NUM.	TIME	DIR	DESCRIPTION
1800	2:59	E	Photo of ~~Soil~~ SED Samples

Additional Notes:

Confluence of stream and wetland drainage ditch

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344641	J8L23			X	X	X	X	X	X	X

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF09SW

Date: 8-26-11 Time: 15:40 Sampler: Brad M.

GPS Location: Latitude: 45.706015 Longitude: -122.401849

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
N/A		Clear		N

ASSOCIATED SOURCE: Landfill #4

NUM.	TIME	DIR	DESCRIPTION
1803		E	Photo of Water Samples

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344642 11344643	J8L24	J8L25	SVOC VOC X	X	X	X			X	X

Recorder Signature: Mark [illegible]

Sample Signature: [illegible]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: NF 09 SD

Date: 8/26/14 Time: 15:31 Sampler: MARK Z.

GPS Location: Latitude: 45.706015 Longitude: -122.401849

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	MOIST	REDDISH/ BROWN	SILT, CLAY	N

ASSOCIATED SOURCE: LANDFILL 4

NUM.	TIME	DIR	DESCRIPTION
1802		S	SAMPLE NF09SD

Additional Notes:

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344644	J8L26		X	X	X	X	X	X	X	X

Recorder Signature: B. Mutto

Sample Signature: Mark Z

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: EF01SD

Date: 8/24/11 Time: 15:59 Sampler: A. MacDonald

GPS Location: Latitude: 45.69822952 N Longitude: 122.39686540 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	SAT.	MED BROWN RUSTY	SAND, small gravel	N

ASSOCIATED SOURCE: ECTA (EAST FORK LACAMAS CREEK)

NUM.	TIME	DIR	DESCRIPTION
0020	1607	E	SAMPLE EF01SD

Additional Notes:

SAMPLE COLLECTED UPSTREAM OF DIRT ROAD CROSSING. LESS THAN 10 CFS

SAMPLE PROCESSING:

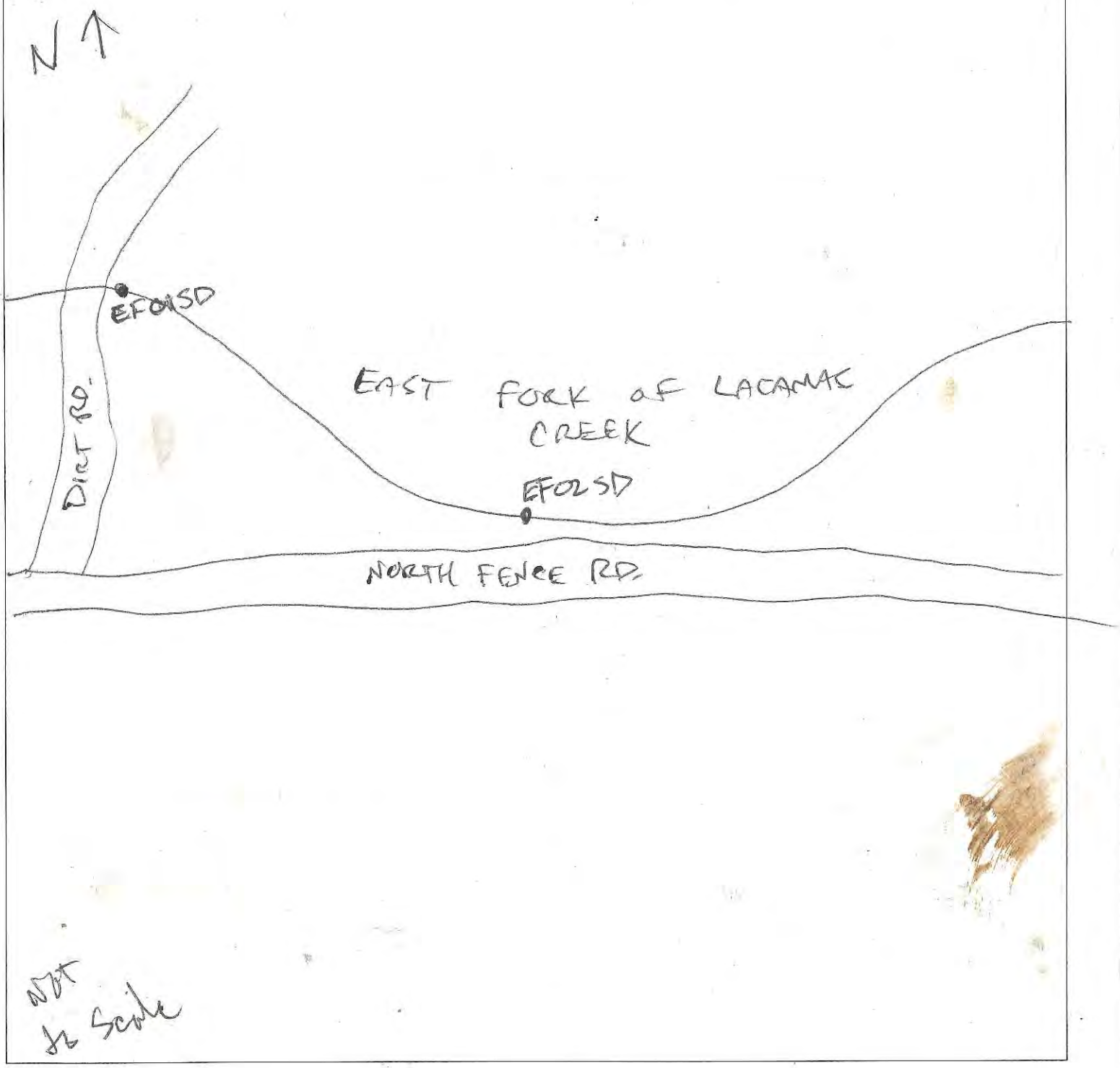
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113445669	J8KT1			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: EF02SD

Date: 8/24/4 Time: 16:40 Sampler: A. MACDONALD

GPS Location: Latitude: 45.6953123N Longitude: 122.3938558W
UNABLE TO CAPTURE GPS DATA POINT.

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	SAT.	MED BROWN/ RED	SMALL ~~GRAV~~ BLM 8/23 to LARGE GRAVEL (1in) SAND.	N

ASSOCIATED SOURCE: CITA (IN EAST FORK LACAMAS CRK)

NUM.	TIME	DIR	DESCRIPTION
0024	16:55	N	SAMPLE EF02SD

Additional Notes:

SAMPLER HAD TOO RETRIEVE MORE SEDIMENT AND MIX AGAIN TO FINISH 4OZ & 8OZ JAR MARKED W/ A "*"

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344574	J8KT6			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

SEE
EF0251
MAP.

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: EF03SD

Date: 8/25/11 Time: 1650 Sampler: Brad m.

GPS Location: Latitude: 45° 41' 57.9" Longitude: 122° 24' 07.9"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	Brown	~~Sand~~ gravelly Sand, trace silt gr med to Fine, R-A, Sud med to coarse	NO

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1786	1650	DM	

Additional Notes:

Sample collected ~~110~~ 100' up from confluence of lac. creek

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344617	J8K29			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: DC01SD

Date: 08-25-11 Time: 16:30 Sampler: Andy McDonald

GPS Location: Latitude: 45.695531 Longitude: 122.407507

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Saturated	med brown	coarse sand w/ gravel	N

ASSOCIATED SOURCE: Pop-Up pond

NUM.	TIME	DIR	DESCRIPTION
158	16:33	SE	downstream from DC01SD
159	16:40	SE	outfall pipes
160	16:41		~~outfall pipes draining into David Creek~~ DC01SD
161	16:42	SE	outfall pipes draining into David Creek

Additional Notes:

< 10 cfs
location where outfall comes into David Creek

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344615	J8627			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

Sample locations are on sample form PU01SD

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: DC02SD

Date: 08-25-11 Time: 16:50 Sampler: Andy McDonald

GPS Location: Latitude: 45.695209 Longitude: 122.407634

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	saturated	grayish brown	soft clay, 10% gravel, trace sand	N

ASSOCIATED SOURCE: Pop-Up Pond

NUM.	TIME	DIR	DESCRIPTION
162	16:59	SE	outfall to David Creek
163	17:10	DN	DC02SD

Additional Notes:

Sample locations are on sample form PU01SD

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344616	J8KZ8			X	X	X	X	X		

Recorder Signature: [illegible]

Sample Signature: A McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: DC03SD

Date: 08-25-11 Time: 17:27 Sampler: Ada Hamilton

GPS Location: Latitude: 45.694704684 Longitude: 122.407089

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Saturated	Med Brown Red Brown	Clay w/ sand and gravel	N

ASSOCIATED SOURCE: Pop-Up Pond

NUM.	TIME	DIR	DESCRIPTION

Additional Notes:

Located where culvert enters david creek South of the road. Located next to monitoring well AHA369.

Sample location is on sample form PU01SD

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344619	J8L01		X	X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: DC04SD

Date: 8-25 Time: 17:48 Sampler: Ada Hamilton

GPS Location: Latitude: 45.92172 Longitude: -122.397115

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Saturated	Reddish Brown	Gravel & Sand	

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
167	17:57		Photo Sample Jars
168	17:57		Overview of Stream Photo

Additional Notes:

20' from fence

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344620	J8L02			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: BC01SD

Date: 8/25/11 Time: 1435 Sampler: Brad m

GPS Location: Latitude: 45° 41' 27.2" Longitude: 122° 24' 58.0"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	Brown	Silty Sand w/gravel, Trace clay	no

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1781	1435	DN	Sample BC01SD

Additional Notes:

Sample collected up Stream of Road

SAMPLE PROCESSING:

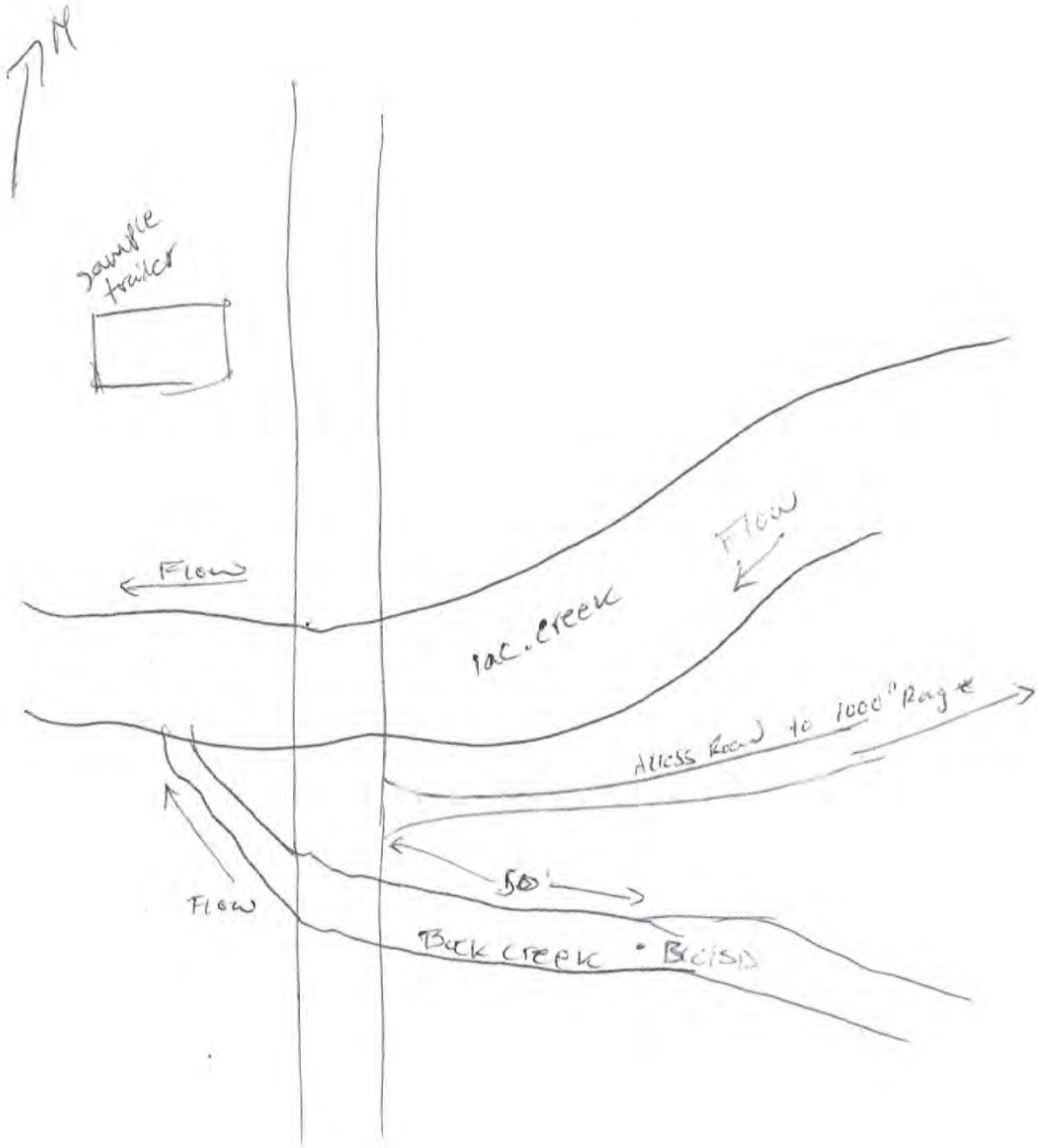
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113446023	J8KY5			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC01SD

Date: 08-25-11 Time: 10:00 Sampler: Andy McDonald

GPS Location: Latitude: 45.67267755 Longitude: 122.4~~5~~4 mz 982015 W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 – 6"	saturated	MED BRWN/ REDDISH BRWN	MED COARSE GRAIN SAND W/GRAVEL	N

ASSOCIATED SOURCE: Down stream of site boundary

NUM.	TIME	DIR	DESCRIPTION
1	09:42	S	Bridge @ 217th, looking towards 68th
2	10:03	W	Lacamas Creek facing west
3	10:04	W	LC01SD

Additional Notes:

60 ft from 217th Bridge, east of bridge, near north bank of Lacamas Creek

SAMPLE PROCESSING:

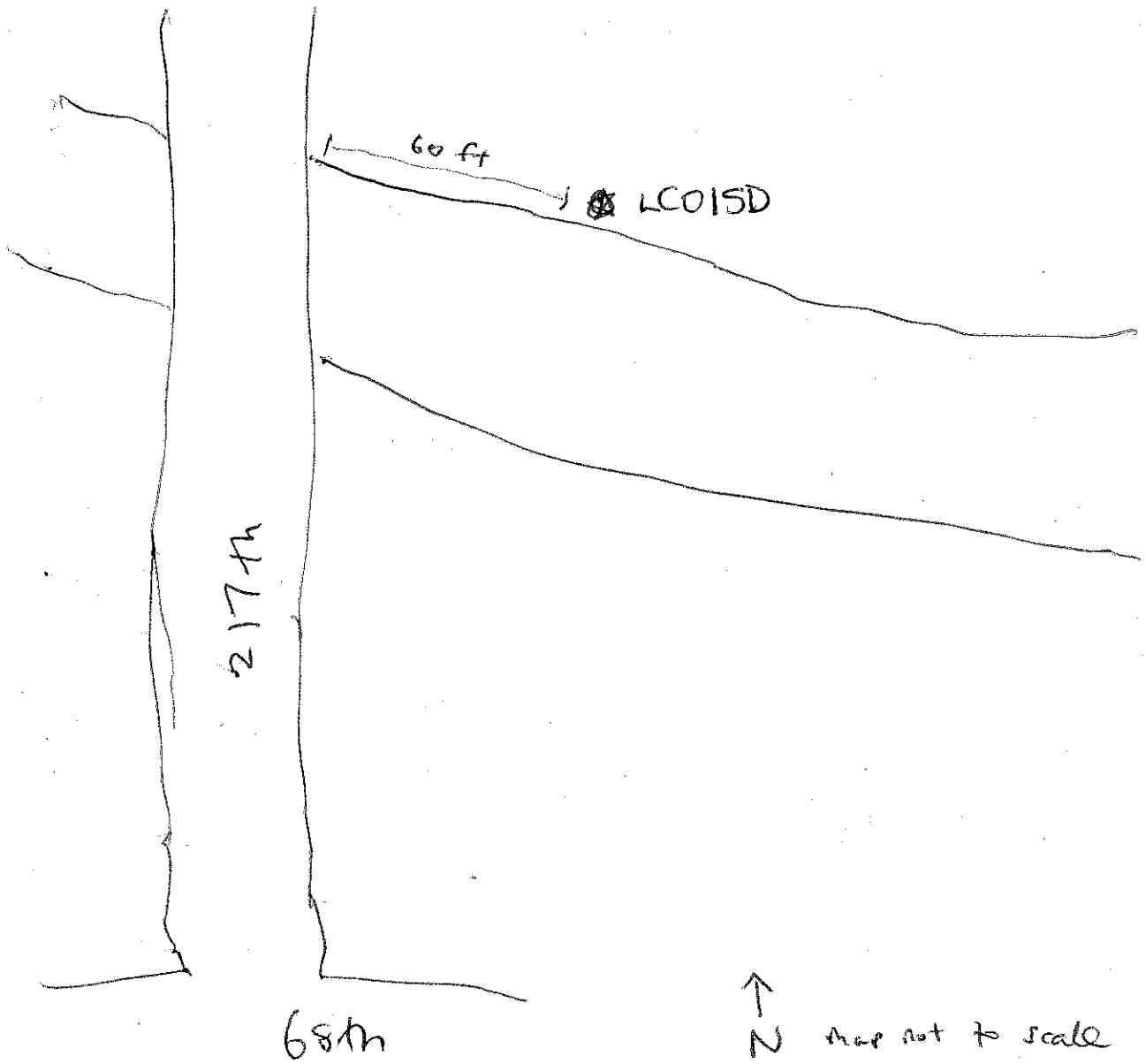
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344591	J8KX3			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: A. McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC02SD

Date: 8/25/11 Time: 1050 Sampler: Brad M

GPS Location: Latitude: 45° 40' 29.869 Longitude: 122° 26' 03.956"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	grayish Brown	Silty Sand (UF) Some clay	no

ASSOCIATED SOURCE: Lacamas creek Sample

NUM.	TIME	DIR	DESCRIPTION
1776	1050	DM	Sample LC02SD

Additional Notes:

Sample collected at South side of Le creek ~33 From Fence line

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344592	J8KX4			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC03SDW

Date: 08-25-11 Time: 10:50 Sampler: Andy McDonald

GPS Location: Latitude: 45.67646107° N Longitude: 122.42942078° W

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
~~0-6 AFM~~			surface water	

ASSOCIATED SOURCE: OB OD Area 3, Artillery Pos 6+7

NUM.	TIME	DIR	DESCRIPTION
04	10:51	E	LC03SW
05	10:52	E	LC03SW/LC03SD upstream

Additional Notes:

at confluence of drainage ditch and Lackamas Creek

est. ~~fot~~ (RM) flow = <10 cfs

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344593	J8KX5	MJ8KX6		X	X	X				
11344594	~~MJ8KX6~~ (RM)									

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC03SD

Date: 08-25-11 Time: 11:00 Sampler: Andy McDonald

GPS Location: Latitude: See LC03SW Longitude: See LC03SW

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Saturated	med brwn	Poorly sorted gravelly med coarse-grained SAND	N

ASSOCIATED SOURCE: OB/OD Area 3

NUM.	TIME	DIR	DESCRIPTION
6	11:03	E	LC03SD

Additional Notes:

Co-located with LC03SW, see sample form for LC03SW

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344595	J8KX7			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: A McDonald

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC04SD

Date: 08-25-11 Time: 12:17 Sampler: Andy McDonald

GPS Location: Latitude: 45.681099 Longitude: 122.42487

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	saturated	med brwn	med-fine grained sand w/ gravel 1/4 - 3/4"	

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
07	12:12	S	LC04SD location, downstream
08	12:25	S	LC04SD

Additional Notes:

<10 cfs

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344596	J8KX8			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: ~~LC045D~~ LC055D

Date: 8/25/11 Time: 1150 Sampler: Brad M.

GPS Location: Latitude: 45 41 03485 (trimble) 45 41 3.7 (garmin) Longitude: 122 25 22.605 (trimble) 122 25 23.1 (garmin)

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	Saturated	Brown	Sandy gravel w/silt gravel, Rounded course to Fine Sand F-med mostly med.	NO

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1777	1150	DM	Sample LC055D

Additional Notes:

Sample near mid channel

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344597	J8KX9			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC06SD

Date: ~~1305~~ 8/25/11 Time: 1305 Sampler: Brad m

GPS Location: Latitude: 45 41 12.01 Longitude: 122.25 21.6

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6" ~~0-6m~~	Saturated	grayish Brown	Silty Sand Sand - med	no

ASSOCIATED SOURCE: Artillery position 5

NUM.	TIME	DIR	DESCRIPTION
~~1305~~ ~~1711~~			
1778	1305	DM	Sample location LC06SD

Additional Notes:

Sample collected ≈ 75' down River From Bridge

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344598	J8KY0			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC07SD

Date: 8/25/11 Time: 1328 Sampler: Brad m

GPS Location: Latitude: 45 41' 18.3 Longitude: ~~122° 25' 25.~~ 122° 25' 23.1"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	Brown	Silty sand, sand Fine	no

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1779	1328	DM	Sample LC07SD

Additional Notes:

Sample collected From west side of Creek

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344599	58KY1			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC08SD

Date: 08-25-11 Time: 13:25 Sampler: Andy McDonald

GPS Location: Latitude: 45.690726 Longitude: 122.418982

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	saturated	med brwn	Gravelly sand	N

ASSOCIATED SOURCE: M203 HE Grenade Range Target

NUM.	TIME	DIR	DESCRIPTION
13	13:15	N	LC08SD ~~Downstream~~ area from M203 HE
14	13:23	S	LC08SD downstream
15	13:28	S	LC08SD

Additional Notes:

< 10 cfs

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344600	58KY2			X	X	X	X	X		

nature: [signature]

ature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC09SD

Date: 08-25-11 Time: 13:43 Sampler: Andy McDonald

GPS Location: Latitude: 45.691859 Longitude: 122.417858

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	saturated	med brown	Medium grain sand w/some silt	N

ASSOCIATED SOURCE: ~~M203 HE Grenade Range Target~~ XPH

NUM.	TIME	DIR	DESCRIPTION
16	13:46	NE	upstream from LC09SD
17	13:51	DN	LC09SD

Additional Notes:

<10 cfs

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344601	58KY3			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC10SD

Date: 8/25/11 Time: 1421 Sampler: Brad m.

GPS Location: Latitude: 45° 41' 29.3" Longitude: 122° 25' 00.6"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	Brown	Silty Sand (med. Sand)	No

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1780	1421	DN	Sample LC10SD

Additional Notes:

Down Stream of Bridge & Buck creek (
collected East side of Lac. creek
approx. 30' down stream

SAMPLE PROCESSING:

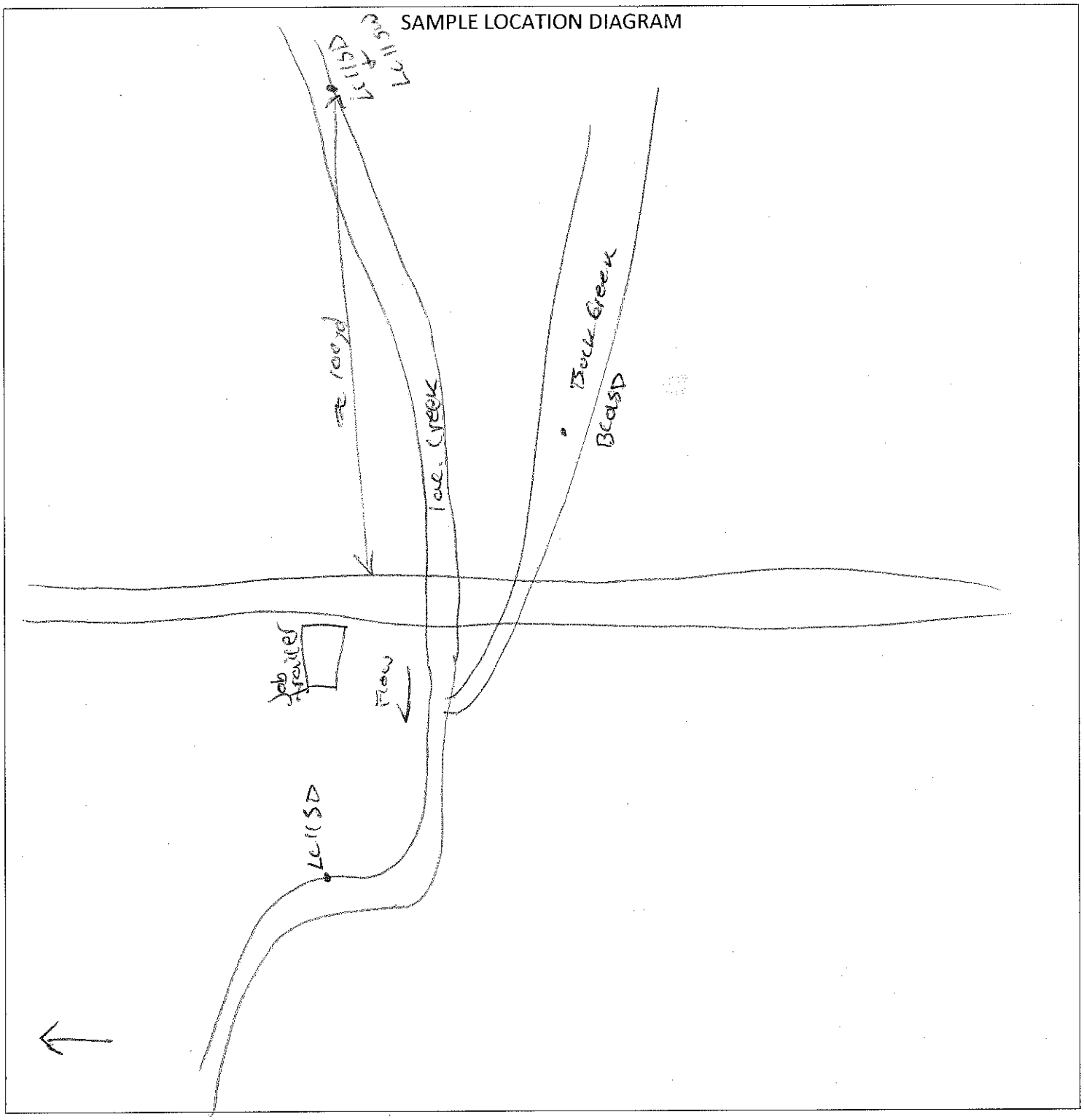
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344602	58K44			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: ~~LCW~~ LC11SW

Date: 8/25/11 Time: ~~1512~~ 1455 Sampler: Brad m

GPS Location: Latitude: 45° 41' 30.6 Longitude: 122° 24' 52.3

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
—	—	Clear	Surface water	

ASSOCIATED SOURCE: _____

NUM.	TIME	DIR	DESCRIPTION
1783	1512	bn	Sample LC11SW

Additional Notes:

water sample co-located w/ LC11SD
Sample is MS/MSD

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
113444605 113444606	J8KY7	MJ8KY8		X	X	X				

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC11SD

Date: 8/25/14 Time: ~~1455~~ 1512 Sampler: Brad M.

GPS Location: Latitude: 45° 41' 30.6" Longitude: 122° 24' 52.3"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	Saturated	Brown	Sandy Silt, med-Fine Sand, trace Clay, high organics	no

ASSOCIATED SOURCE: 1000 inch range

NUM.	TIME	DIR	DESCRIPTION
1782	1455		Sample LC11SD

Additional Notes:

LC11SD = MS/MSD, co-located w/ LC11SW

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344607	58K49			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: B. [signature]

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC12SD

Date: 08-25-11 Time: 14:30 Sampler: Andy McDonald

GPS Location: Latitude: 45.695498 Longitude: 122.412001

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6"	saturated	Med brown	SILTY SAND MED GRAIN	

ASSOCIATED SOURCE: 1000 Yard Range

NUM.	TIME	DIR	DESCRIPTION
18	14:31	E	upstream from LC12SD
19	14:33	DN	LC12 SD

Additional Notes:

<10 cfs

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344604	58K46			X	X	X	X	X		

Recorder Signature: [signature]

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC13SD

Date: 08-25-11 Time: 15:30 Sampler: Andy McDonald

GPS Location: Latitude: 45.695757 Longitude: 122.4080986

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	saturated	med brown	silty sand and gravel	

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
			Downstream of confluence w/ David Creek

Additional Notes:

50 ft downstream of confluence w/ David Creek west bank – blue sheen observed. Sample was collected near sheen. Sheen was approximately 8"x2".

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344608	58K20		X	X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC14SW

Date: 08-25-11 Time: 15:45 Sampler: Ada Hamilton

GPS Location: Latitude: 45.695877 Longitude: 122.407948

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
~~0~~ - 4m			surface water	N

ASSOCIATED SOURCE: _____

NUM.	TIME	DIR	DESCRIPTION
24	15:56		LC14SW
25	16:03		location of LC14SW and LC14SD
	~~16~~		

Additional Notes:

<10 cfs

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344609	58K21	MJ8K22		X	X	X				
11344610										

Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC14SD

Date: 08-25-11 Time: 15:50 Sampler: Andy McDonald

GPS Location: Latitude: 45.695877 ~~See LC14SW~~ Longitude: 122.407948 ~~See LC14SW~~

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0 - 6"	saturated	med brown	silty sand and gravel	N

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
26	16:05		LC14S~~W~~D

Additional Notes:

See LC14SW, colocated

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344611	58K23			X	X	X	X	X		

Recorder Signature:

Sample Signature:

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LL15SW

Date: 8/25/11 Time: 1625 Sampler: Brad m

GPS Location: Latitude: 45° 41' 56.7" Longitude: 122° 24' 10.4"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
—	—	Clear	Surface water lac creek	No

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
~~1783~~ 1784	1625	OTH	Sample LL15SW

Additional Notes:

Co-located w/ LL15SD
Collected = 50' down stream from culvert

SAMPLE PROCESSING:

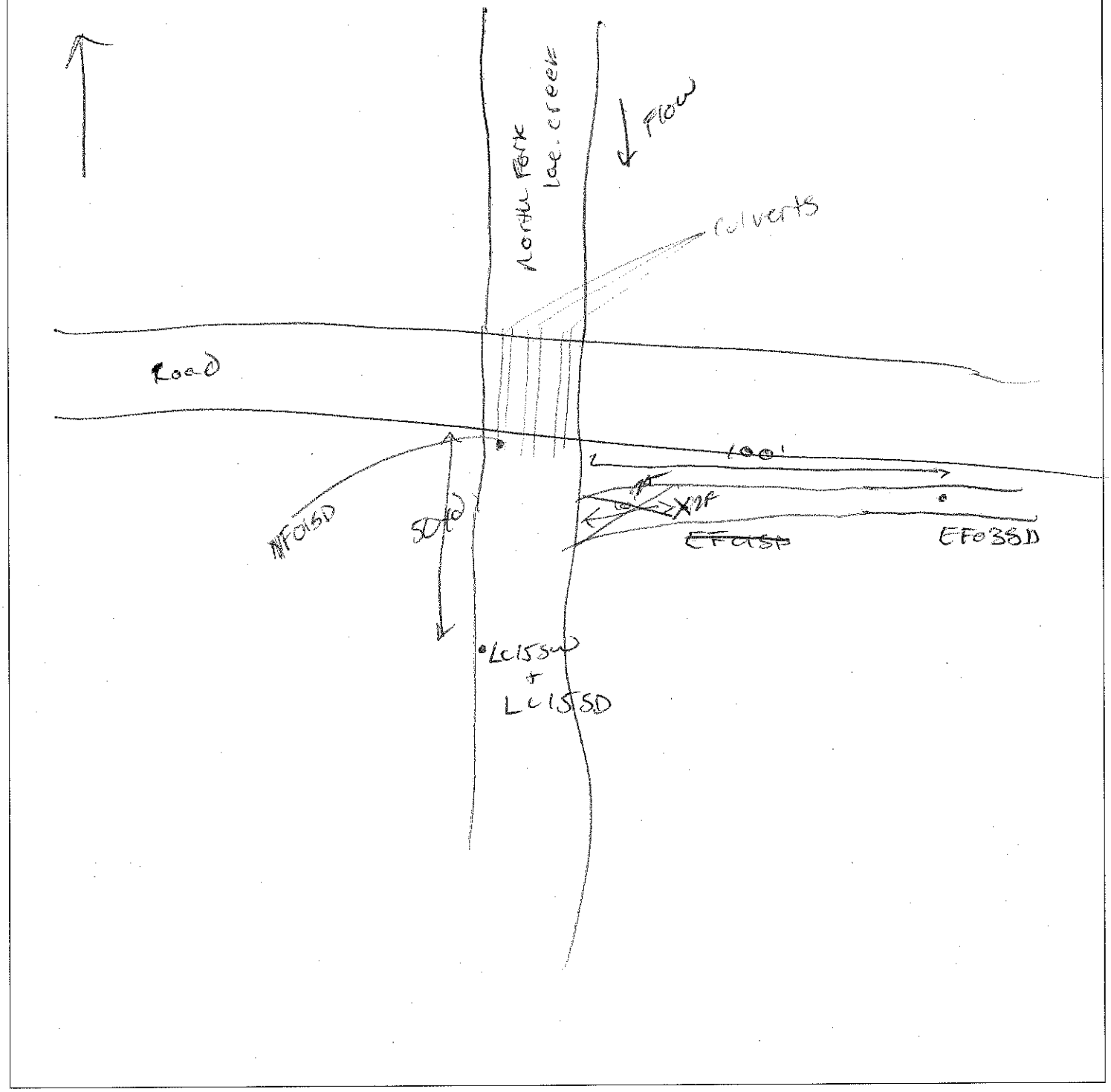
EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344612	58K24	MJ8K25		X	X	X				
11344613										

Recorder Signature:

Sample Signature: B. Matthews

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

SAMPLE LOCATION DIAGRAM



Recorder Signature: _____

Sample Signature: _____

SAMPLE COLLECTION FORM
CAMP BONNEVILLE EXPANDED SITE INSPECTION – PHASE II

Station Location: LC15SD

Date: 8/25/11 Time: 1630 Sampler: Brad m

GPS Location: Latitude: 45° 41' 56.7" Longitude: 122° 24' 10.4"

SAMPLE DESCRIPTION:

DEPTH	MOISTURE	COLOR	SAMPLE DESCRIPTION	ODOR?
0-6	moist	Dk brown	Sand w/ Fine gravel Sand: med - coarse, gravel Fine	no

ASSOCIATED SOURCE:

NUM.	TIME	DIR	DESCRIPTION
1785	1630	DM	sample LC15SD

Additional Notes:

colocated w ~~LC15S~~
LC15SW

SAMPLE PROCESSING:

EPA ID	CLP ID	CLP ID (FILTERED)	MS/MSD	NITRO	TAL	PER	GS	TOC	SVOC	VOC
11344614	J8KZ6			X	X	X	X	X		

Recorder Signature:

Sample Signature:

0
0.5
1
Miles
NE 68TH ST
NE 68TH ST
NE 68TH ST
0
200
400
Feet
N

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D Photographic Documentation

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CAMP BONNEVILLE
Vancouver, Washington

TDD Number: 10-03-0010
Photographed by: Renee Nordeen (RN), Derek Pulvino (DP)
Bryan Ciecko (BC), Erin Lynch (EL), Alan Jensen (AJ)

Photo 1 LF01SB sample.

Direction: Down *Date: 5/16/11* *Time: 12:00* *Taken by: DP*

Photo 2 LF01SB sample location.

Direction: Down *Date: 5/16/11* *Time: 12:01* *Taken by: DP*

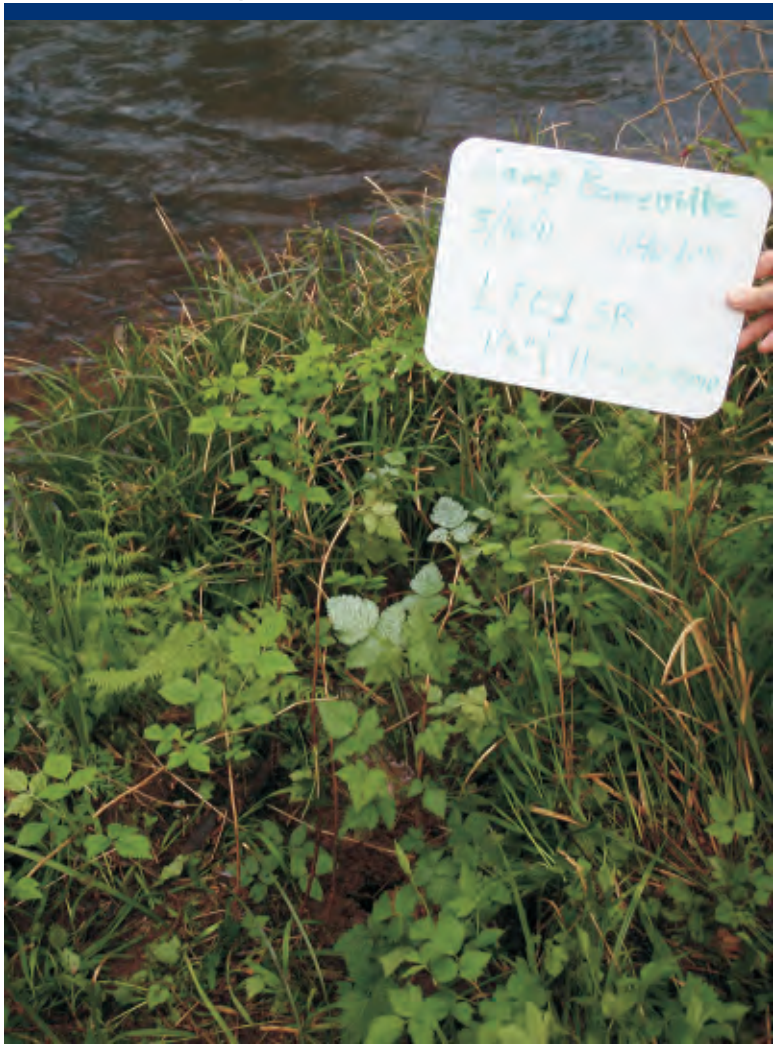

Photo 3 LF01SB sample location with respect to creek.

Direction: West *Date: 5/16/11* *Time: 12:02* *Taken by: DP*

Photo 4 LF02SB sample.

Direction: Down *Date: 5/16/11* *Time: 12:45* *Taken by: EP*

Photo 5 LF02SB auger hole for sample.

Direction: West *Date: 5/16/11* *Time: 12:46* *Taken by: DP*

Photo 7 Sample LF03SB with creek in background at sample hole.

Direction: West *Date: 5/16/11* *Time: 14:15* *Taken by: BC*

Photo 6 LF02SB auger hole with respect to creek.

Direction: West *Date: 5/16/11* *Time: 12:47* *Taken by: DP*

Photo 8 Sample LF04SB at auger hole location.

Direction: East *Date: 5/16/11* *Time: 14:45* *Taken by: BC*

Photo 9 Sample LF05SB at auger hole location.

Direction: Northwest *Date: 5/16/11* *Time: 15:30* *Taken by: EL*

Photo 10 Sample LF06SB next to auger hole.

Direction: South *Date: 5/16/11* *Time: 15:45* *Taken by: EL*

Photo 11 Refusal in 4 holes at approximately 2.5 feet. Note: approximately 8 feet down from sample location.

Direction: Down *Date: 5/16/11* *Time: 15:34* *Taken by: EL*

Photo 12 Sample BG01SB at auger hole. Note: this is the background location.

Direction: Down *Date: 5/17/11* *Time: 09:33* *Taken by: EL*

Photo 13 Sample LF07SB at auger hole approximately 8 feet above creek; on boulders, potential drainage from hillside.

Direction: Down *Date: 5/17/11* *Time: 11:00* *Taken by: EL*

Photo 14 Creek at this location on bedrock.

Direction: *West* *Date: 5/17/11* *Time:* *Taken by: EL*

Photo 15 Sample LF08SB at auger hole location.

Direction: *Down* *Date: 5/17/11* *Time: 11:35* *Taken by: EL*

Photo 16 Sample LF08SB with creek in background below landfill. Shallow area on boulders appears to be ravine filled in with alluvium. Water may be perched.

Direction: *West* *Date: 5/17/11* *Time: 11:36* *Taken by: EL*

Photo 17 Location LF11SB. No sample at 3 ft. hit. Weathered bedrock; not wet.

Direction: *South* *Date: 5/17/11* *Time: 12:21* *Taken by: EL*

Photo 18 Downstream from LF11SB location.

Direction: *South* *Date: 5/17/11* *Time:* *Taken by: EL*

Photo 19

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 21

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 20

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 22

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 23

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 24 Sample LF09SB at auger hole. Note: hillside water flowing out at surface.

Direction: *North* *Date: 5/17/11* *Time: 13:43* *Taken by: DP*

Photo 25 Sample LF09SB at auger hole location.

Direction: *Date: 5/17/11* *Time:* *Taken by: DP*

Photo 26

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 27

Direction: *Date: 5/17/11* *Time:* *Taken by:*

Photo 28 Sample LF12SB at auger hole. Note: on small island type area just below what may be pushed off from landfill.

Direction: *North* *Date: 5/17/11* *Time: 11:59* *Taken by: EL*

Photo 30 Sample LF13SB at auger hole.

Direction: *Down* *Date: 5/17/11* *Time: 15:46* *Taken by: EL*

Photo 29 Sample LF13SB on small island just below what may be push off from landfill; sheen noted on water coming out of ground.

Direction: *Down* *Date: 5/17/11* *Time: 15:45* *Taken by: EL*

Photo 31 Sample LF14SB at auger hole less than 50 feet or so from bridge.

Direction: Down *Date: 5/17/11* *Time: 16:05* *Taken by: EL*

Photo 32 Sample LF01SD.

Direction: South *Date: 5/18/11* *Time: 08:55* *Taken by: RN*

Photo 33 Location PP01SD with LF01SD on right.

Direction: South *Date: 5/18/11* *Time: 09:11* *Taken by: RN*

Photo 34 Shoreside sampling location at waterline (likely been below water level (stream) previous day).

Direction: South-Southwest *Date: 5/18/11* *Time: 10:42* *Taken by: DP*

Photo 35

Direction:	*Date: 5/18/11*	*Time:*	*Taken by:*

Photo 36 Auger hole sampled from and groundwater sample jars.

Direction: *South-Southwest*	*Date: 5/18/11*	*Time: 11:13*	*Taken by: DP*

Photo 37

Direction: *Date: 5/18/11* *Time:* *Taken by:*

Photo 38 Sample LF13GW including bottles and tubing with pump.

Direction: *South* *Date: 5/18/11* *Time: 14:27* *Taken by: BC*

Photo 39

Direction: *Date: 5/18/11* *Time:* *Taken by:*

Photo 40 Sample jars and auger hole with geoprobe well screen (not used for sampling).

Direction: *Northwest* *Date: 5/18/11* *Time: 15:20* *Taken by: DP*

Photo 41 Sample LF01GW (in bucket) with Lacamas Creek in background.

Direction: *Date: 5/18/11* *Time:* *Taken by:*

Photo 42 2 ambers, 2 VOAs, and 1 poly sampled.

Direction: *Northeast* *Date: 5/18/11* *Time: 09:05* *Taken by: DP*

Photo 43

Direction: *Date: 5/18/11* *Time:* *Taken by:*

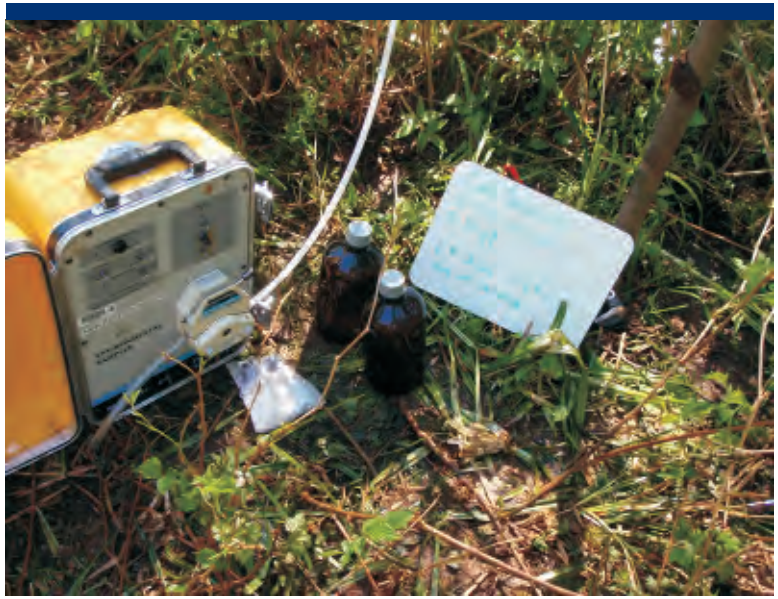

Photo 44

Direction: *Date: 5/19/11* *Time:* *Taken by:*

Photo 45 Sample LF02GW and pump setup.

Direction: *Northeast* *Date: 5/19/11* *Time: 09:49* *Taken by: BC*

Photo 46 Sample jars/bottles. Sample point peristaltic looking towards landfill.

Direction: *East-Northeast* *Date: 5/19/11* *Time: 10:03* *Taken by: DP*

Photo 47 Sample jars/bottles. Sample point peristaltic looking towards creek.

Direction: West-Southwest Date: 5/19/11 Time: 10:05 Taken by: DP

Photo 49 Sample LF06GW with pump and screen.

Direction: Southwest Date: 5/19/11 Time: 11:35 Taken by: BC

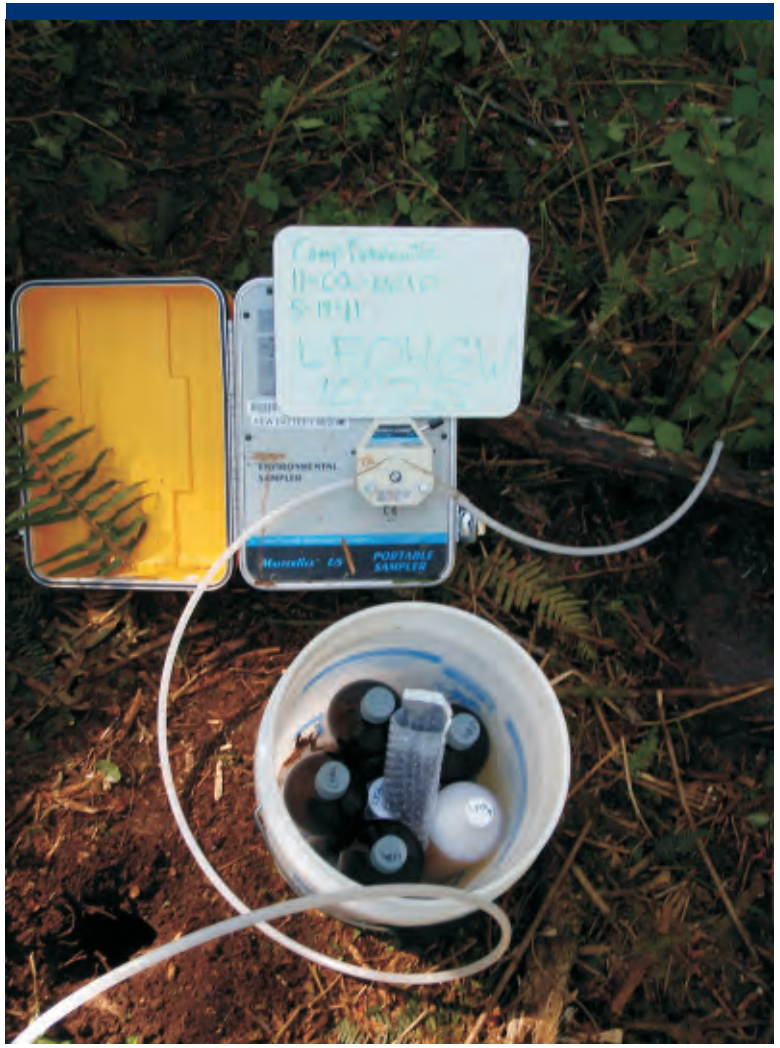

Photo 48 LF04GW pump and sample bottles.

Direction: West Date: 5/19/11 Time: 10:43 Taken by: BC

Photo 50 Sample collection hole with screen and permutate toward landfill.

Direction: East *Date: 5/19/11* *Time: 12:20* *Taken by: DP*

Photo 51 Sample LF15GW bottles and pump and tubing.

Direction: South-Southwest *Date: 5/19/11* *Time: 14:10* *Taken by: BC*

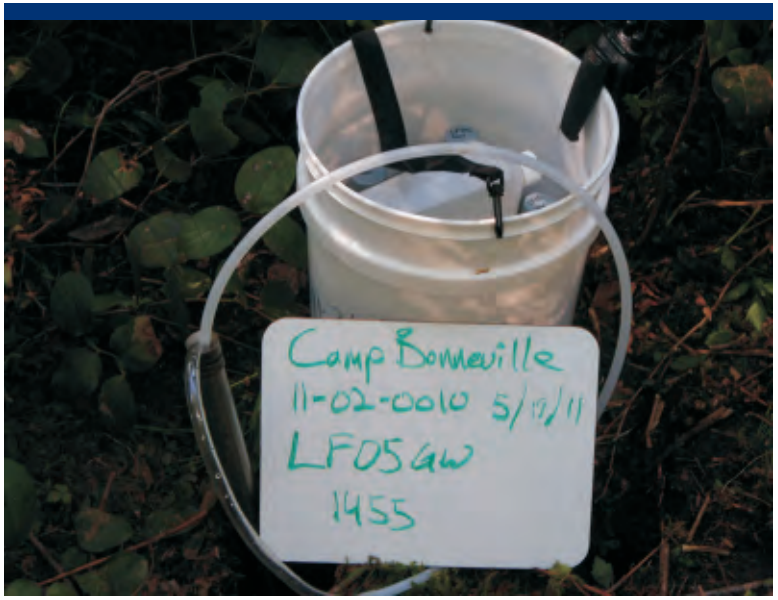

Photo 52 Sample LF05GW.

Direction: West *Date: 5/19/11* *Time: 15:35* *Taken by: AJ*

Photo 53 Sample MW01GW at well L4-MW05A.

Direction: South *Date: 5/20/11* *Time: 10:02* *Taken by: BC*

Photo 54 Samples and well.

Direction: East *Date: 5/20/11* *Time: 12:25* *Taken by: BC*

Photo 55 Sample jars and well head.

Direction: East-Northeast *Date: 5/20/11* *Time: 13:40* *Taken by: DP*

Photo 56 With all bottles.

Direction: East-Northeast *Date: 5/20/11* *Time: 13:40* *Taken by: DP*

Photo 57 Sample BG02GW (MS/MSD) and well L4-MW01A.

Direction: North *Date: 5/20/11* *Time: 15:18* *Taken by: BC*

Photo 58

Direction:	Date: 5/20/11	Time:	Taken by:

Photo 59 Sample MW04GW.

Direction: West	Date: 5/20/11	Time: 17:18	Taken by: BC

Photo 60 Sample MW05GW at well L4-MW04A.

Direction: Northwest	Date: 5/20/11	Time: 18:34	Taken by: BC

Photo 61 Sample bottles and well monument.

Direction: West	Date: 5/21/11	Time: 12:03	Taken by: DP

Photo 62

Direction: *Date: 5/21/11* *Time:* *Taken by:*

Photo 63 Sample bottles at well.

Direction: West *Date: 5/21/11* *Time: 13:32* *Taken by: DP*

Photo 64 Sample bottles at wellhead.

Direction: North *Date: 5/21/11* *Time: 14:31* *Taken by: DP*

Photo 1 Sample location BG01SD.

Direction: South *Date: 8/26/11* *Time: 09:40* *Taken by: AH*

Photo 2 Sample BG01SD.

Direction: Down *Date: 8/26/11* *Time: 09:53* *Taken by: AH*

Photo 3 Sample BG01SD.

Direction: Down *Date: 8/26/11* *Time: 09:53* *Taken by: AH*

Photo 4 Beaver ponds.

Direction: South *Date: 8/26/11* *Time: 10:14* *Taken by: AH*

Photo 5 Sample location BG02SD.

Direction: East *Date: 8/26/11* *Time: 10:15* *Taken by: AH*

Photo 6 Sample BG02SD.

Direction: Down *Date: 8/26/11* *Time: 10:20* *Taken by: AH*

Photo 7 Sample BG01SS.

Direction: Down *Date: 8/26/11* *Time: 11:38* *Taken by: AH*

Photo 8 BG01SS location east of road, upgradient of road.

Direction: East *Date: 8/26/11* *Time: 11:39* *Taken by: AH*

Photo 9 East Fork Lacamas Creek, upstream.

Direction: East *Date: 8/26/11* *Time: 12:46* *Taken by: AH*

Photo 10 Sample BG03SD.

Direction: Down *Date: 8/26/11* *Time: 12:54* *Taken by: AH*

Photo 11 Sample BG04SD.

Direction: East *Date: 8/26/11* *Time: 16:05* *Taken by: BM*

Photo 12 Sample BG04SW.

Direction: East *Date: 8/26/11* *Time: 16:10* *Taken by: MZ*

Photo 1 Sample CT01SS.

Direction: South *Date: 8/24/11* *Time: 10:19* *Taken by: BM*

Photo 2 Sample CT02SS.

Direction: West *Date: 8/24/11* *Time: 10:34* *Taken by: BM*

Photo 3 Sample CT03SS.

Direction: West *Date: 8/24/11* *Time: 10:50* *Taken by: BM*

Photo 4 View downhill in CITA towards north fence road.

Direction: North *Date: 8/24/11* *Time: 10:54* *Taken by: BM*

Photo 5 View downhill in CITA towards north fence road (with white board).

Direction: *North* *Date: 8/24/11* *Time: 10:59* *Taken by: BM*

Photo 6 Sample CT04SS.

Direction: *North* *Date: 8/24/11* *Time: 11:22* *Taken by: BM*

Photo 7 Sample CT05SS.

Direction: *North* *Date: 8/24/11* *Time: 11:44* *Taken by: BM*

Photo 8 Sample CT06SS.

Direction: *South* *Date: 8/24/11* *Time: 13:26* *Taken by: BM*

Photo 9 Sample CT07SS.

Direction: East *Date: 8/24/11* *Time: 13:52* *Taken by: BM*

Photo 10 Sample CT08SS.

Direction: East *Date: 8/24/11* *Time: 14:10* *Taken by: BM*

Photo 11 Sample CT09SS.

Direction: North *Date: 8/24/11* *Time: 14:28* *Taken by: BM*

Photo 12 Sample CT10SS.

Direction: South *Date: 8/24/11* *Time: 14:46* *Taken by: BM*

Photo 13 Sample CT10SS.

Direction: South *Date: 8/24/11* *Time: 14:46* *Taken by: BM*

Photo 14 Sample CT11SS.

Direction: West *Date: 8/24/11* *Time: 15:19* *Taken by: BM*

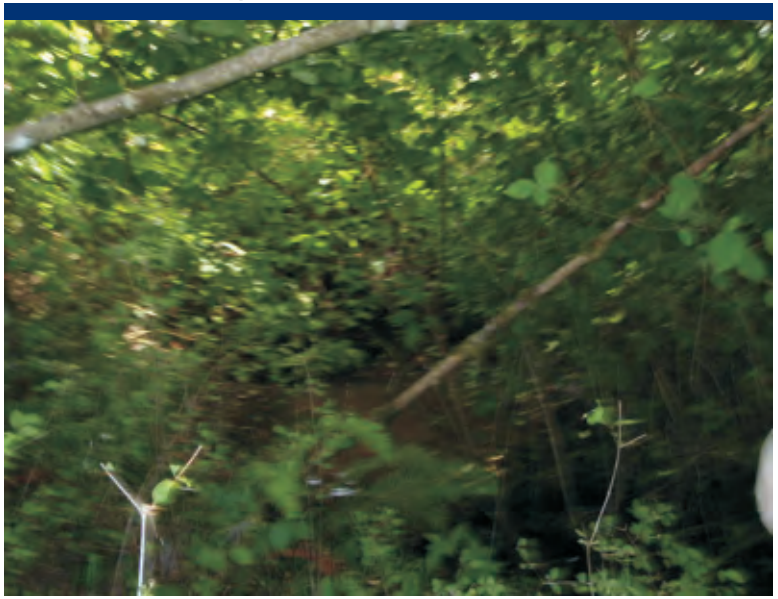

Photo 1 OB01SS crater, with standing water.

Direction: South *Date: 8/22/11* *Time: 16:06* *Taken by: AH*

Photo 2 Crater (zoomed in).

Direction: South *Date: 8/22/11* *Time: 16:06* *Taken by: AH*

Photo 3 Sample OB01SS.

Direction: Down *Date: 8/22/11* *Time: 16:36* *Taken by: AH*

Photo 4 Monitoring well north of OB01SS crater.

Direction: West *Date: 8/22/11* *Time: 16:38* *Taken by: AH*

Photo 5 Sample OB02SS.

Direction: South/Down Date: 8/23/11 Time: 13:47 Taken by: BM

Photo 6 Sample OB03SS.

Direction: North/Down Date: 8/23/11 Time: 14:03 Taken by: BM

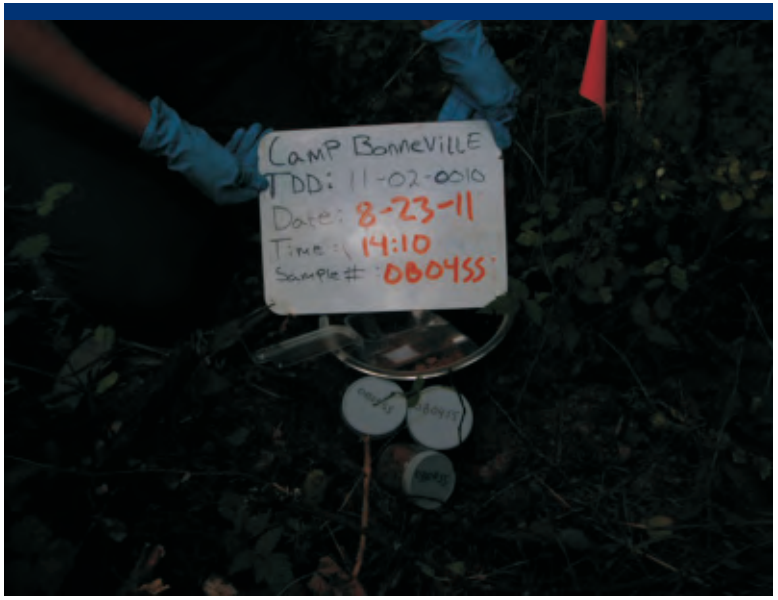

Photo 7 Sample OB04SS.

Direction: West/Down Date: 8/23/11 Time: 14:16 Taken by: BM

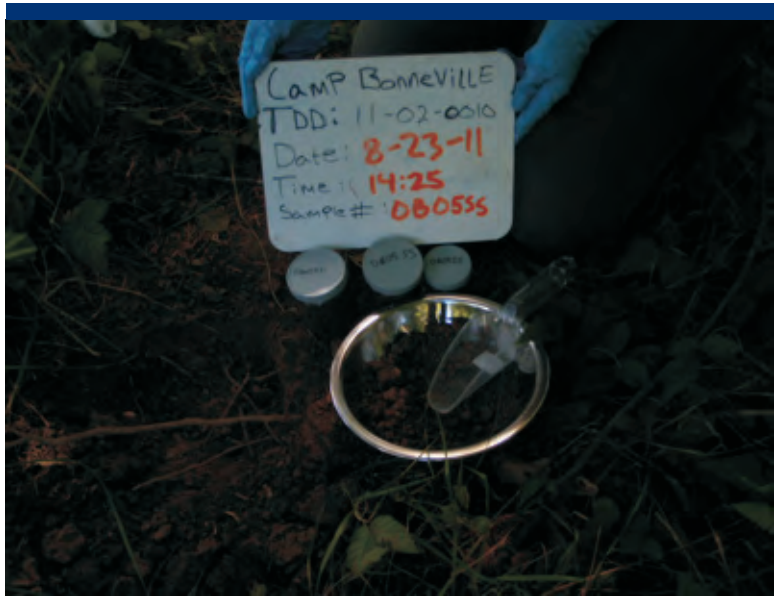

Photo 8 Sample OB05SS.

Direction: South/Down Date: 8/23/11 Time: 14:30 Taken by: BM

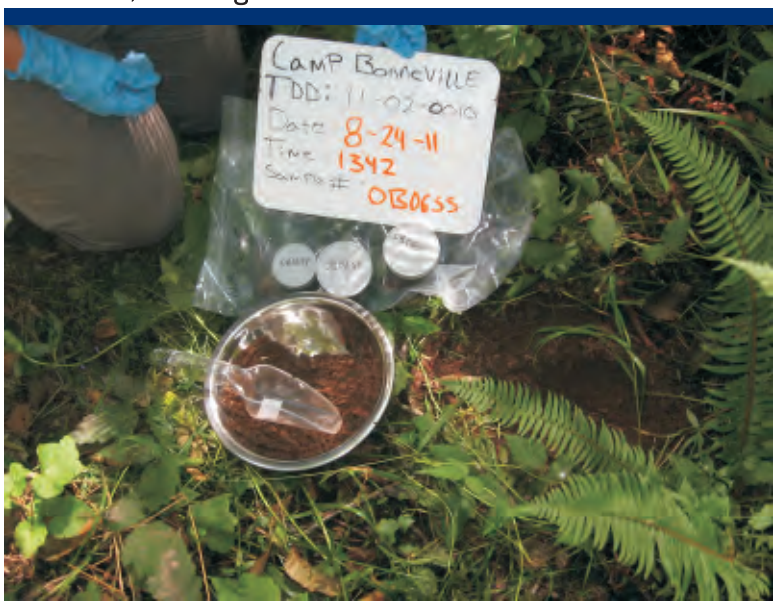

Photo 9 Sample OB06SS.

Direction: Down *Date: 8/24/11* *Time: 13:42* *Taken by: JF*

Photo 10 Sample OB07SS.

Direction: Down *Date: 8/24/11* *Time: 14:15* *Taken by: JF*

Photo 11 Sample and location OB08SS.

Direction: Down *Date: 8/24/11* *Time: 14:43* *Taken by: JF*

Photo 12 Sample OB09SS.

Direction: Down *Date: 8/24/11* *Time: 15:10* *Taken by: JF*

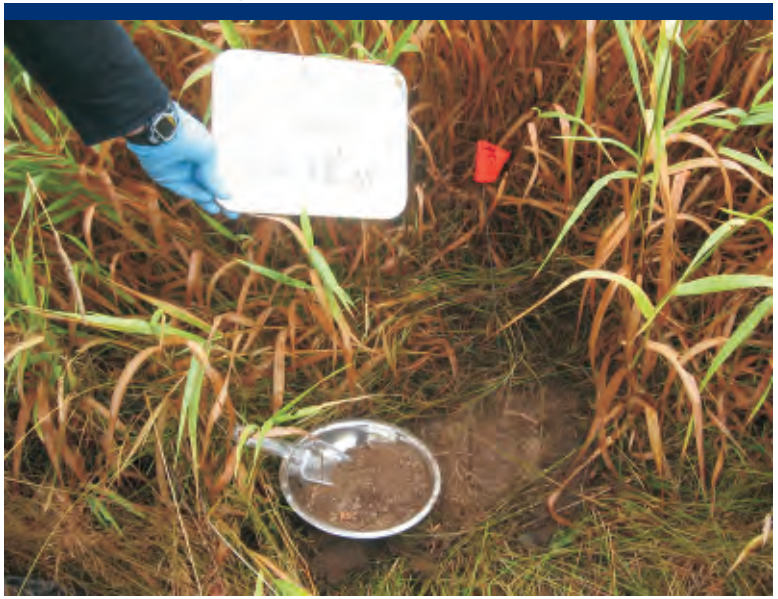

Photo 1 Sample location FR01SS.

Direction: Down *Date: 8/23/11* *Time: 09:01* *Taken by: MZ*

Photo 2 Sample FR01SS.

Direction: Down *Date: 8/23/11* *Time: 09:01* *Taken by: MZ*

Photo 3 Sample location FR02SS.

Direction: Down *Date: 8/23/11* *Time: 09:13* *Taken by: MZ*

Photo 4 Sample FR02SS.

Direction: Down *Date: 8/23/11* *Time: 09:13* *Taken by: MZ*

Photo 5 Sample location FR03SS.

Direction: Down *Date: 8/23/11* *Time: 09:22* *Taken by: MZ*

Photo 6 Sample FR03SS.

Direction: Down *Date: 8/23/11* *Time: 09:22* *Taken by: MZ*

Photo 7 Sample location FR04SS.

Direction: Down	Date: 8/23/11	Time: 09:30	Taken by: MZ

Photo 8 Sample FR04SS.

Direction: Down	Date: 8/23/11	Time: 09:30	Taken by: MZ

Photo 9 Sample location FR05SS.

Direction: Down	Date: 8/23/11	Time: 09:41	Taken by: MZ

Photo 10 Sample FR05SS.

Direction: Down	Date: 8/23/11	Time: 09:41	Taken by: MZ

Photo 11 Sample location FR06SS.

Direction: Down	*Date: 8/23/11*	*Time: 09:50*	*Taken by: MZ*

Photo 12 Sample FR06SS.

Direction: Down	*Date: 8/23/11*	*Time: 09:50*	*Taken by: MZ*

Photo 13 Sample location FR07SS.

Direction: Down	*Date: 8/23/11*	*Time: 09:55*	*Taken by: MZ*

Photo 14 Sample FR07SS.

Direction: Down	*Date: 8/23/11*	*Time: 09:55*	*Taken by: MZ*

Photo 15 Sample location FR08SS.

Direction: Down	Date: 8/23/11	Time: 10:05	Taken by: MZ

Photo 16 Sample FR08SS.

Direction: Down	Date: 8/23/11	Time: 10:05	Taken by: MZ

Photo 17 Sample location FR09SS.

Direction: Down	Date: 8/23/11	Time: 13:45	Taken by: JF

Photo 18 Sample FR09SS.

Direction: Down	Date: 8/23/11	Time: 13:45	Taken by: JF

Photo 19 Sample location FR10SS.

Direction: Down	*Date: 8/22/11*	*Time: 14:08*	*Taken by: JF*

Photo 20 Sample FR10SS.

Direction: Down	*Date: 8/22/11*	*Time: 14:08*	*Taken by: JF*

Photo 21 Sample location FR11SS.

Direction: Down	*Date: 8/23/11*	*Time: 14:17*	*Taken by: JF*

Photo 22 Sample FR11SS.

Direction: Down	*Date: 8/23/11*	*Time: 14:17*	*Taken by: JF*

Photo 23 Sample location FR12SS.

Direction: Down *Date: 8/23/11* *Time: 14:28* *Taken by: JF*

Photo 24 Sample FR12SS.

Direction: Down *Date: 8/23/11* *Time: 14:28* *Taken by: JF*

Photo 25 Sample location FR13SS.

Direction: Down *Date: 8/23/11* *Time: 14:40* *Taken by: JF*

Photo 26 Sample FR13SS.

Direction: Down *Date: 8/23/11* *Time: 14:40* *Taken by: JF*

Photo 27 Sample location FR14SS.

Direction: Down *Date: 8/23/11* *Time: 14:52* *Taken by: JF*

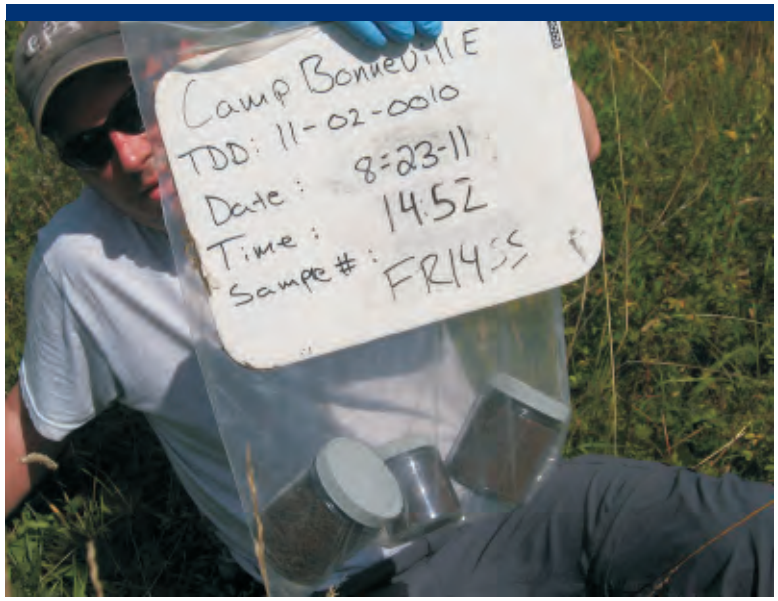

Photo 28 Sample FR14SS.

Direction: Down *Date: 8/23/11* *Time: 14:52* *Taken by: JF*

Photo 29 Sample location FR15SS.

Direction: Down *Date: 8/23/11* *Time: 15:09* *Taken by: JF*

Photo 30 Sample FR15SS.

Direction: Down *Date: 8/23/11* *Time: 15:09* *Taken by: JF*

Photo 31 Sample location FR16SS.

Direction: Down *Date: 8/23/11* *Time: 15:25* *Taken by: JF*

Photo 32 Sample FR16SS.

Direction: Down *Date: 8/23/11* *Time: 15:25* *Taken by: JF*

Photo 1 Sample location FP01SS.

Direction: West *Date: 8/22/11* *Time: 11:45* *Taken by: AH*

Photo 2 Artillery position 7.

Direction: South *Date: 8/22/11* *Time: 11:45* *Taken by: AH*

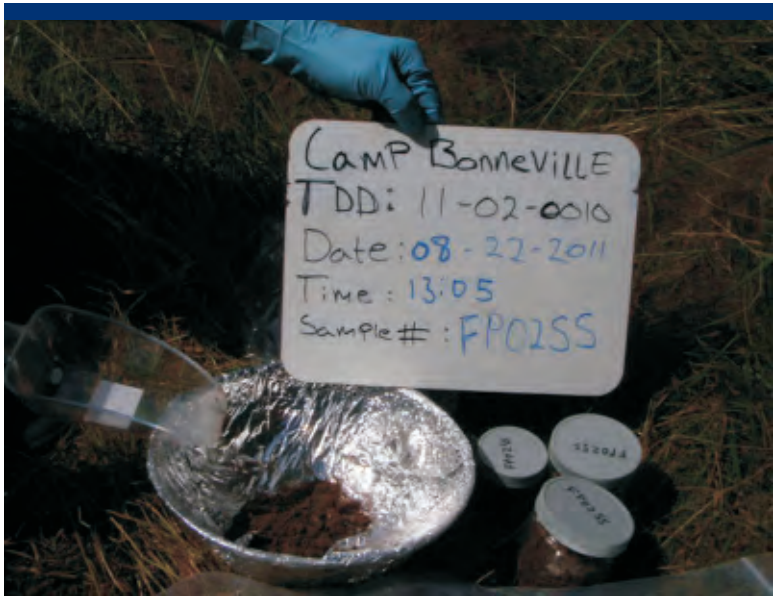

Photo 3 Sample FP02SS.

Direction: West *Date: 8/22/11* *Time: 13:04* *Taken by: AH*

Photo 4 Sample location FP02SS.

Direction: South *Date: 8/22/11* *Time: 13:07* *Taken by: AH*

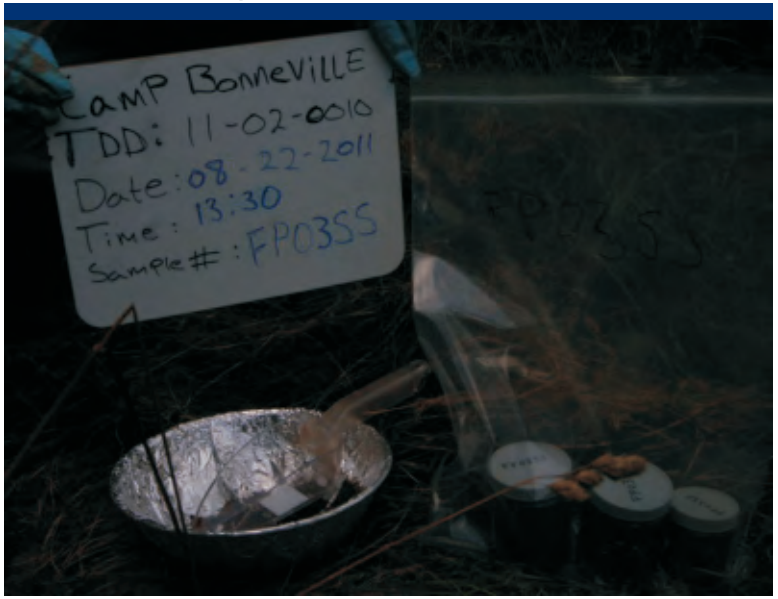

Photo 5 Sample FP03SS.

Direction: West *Date: 8/22/11* *Time: 13:35* *Taken by: AH*

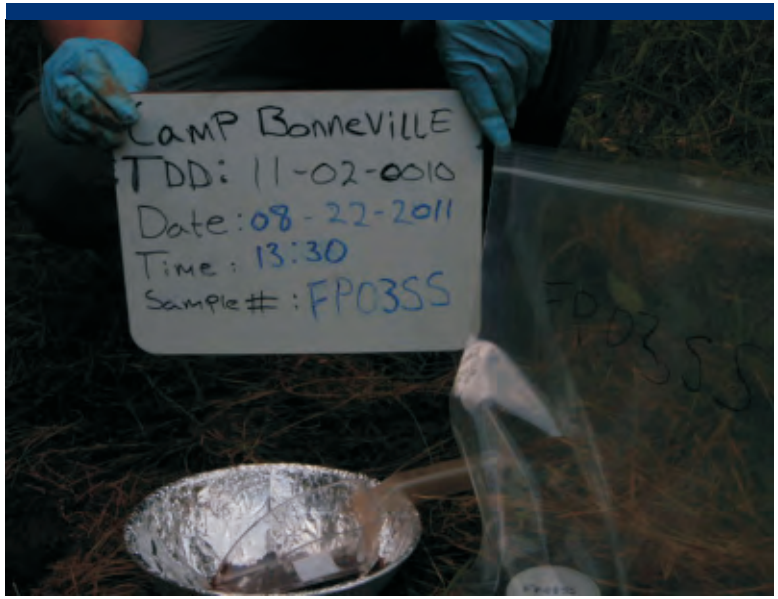

Photo 6 Sample FP03SS.

Direction: West *Date: 8/22/11* *Time: 13:35* *Taken by: AH*

Photo 7 Sample location FP03SS.

Direction: South *Date: 8/22/11* *Time: 13:36* *Taken by: AH*

Photo 8 Sample FP04SS.

Direction: East *Date: 8/22/11* *Time: 14:03* *Taken by: AH*

Photo 9 Sample location FP04SS.

Direction: South *Date: 8/22/11* *Time: 14:04* *Taken by: AH*

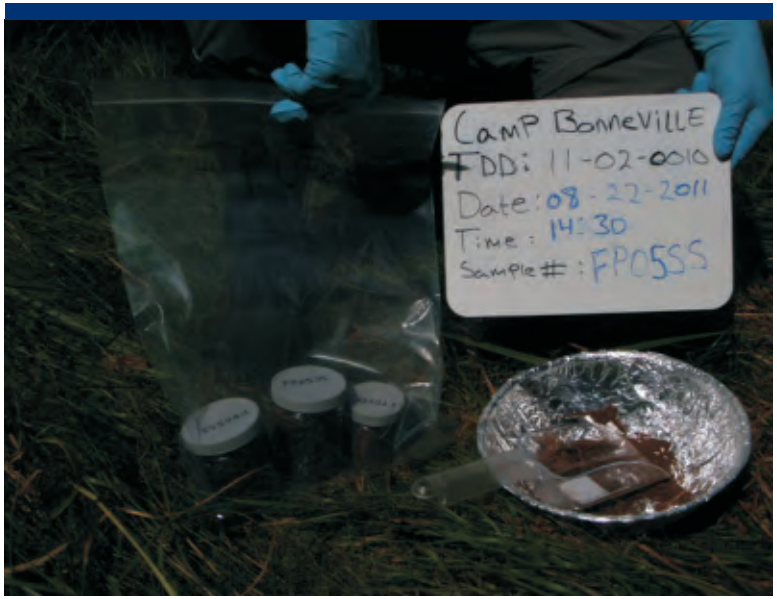

Photo 10 Sample FP05SS.

Direction: North *Date: 8/22/11* *Time: 14:26* *Taken by: AH*

Photo 11 Sample location FP05SS.

Direction: South *Date: 8/22/11* *Time: 14:26* *Taken by: AH*

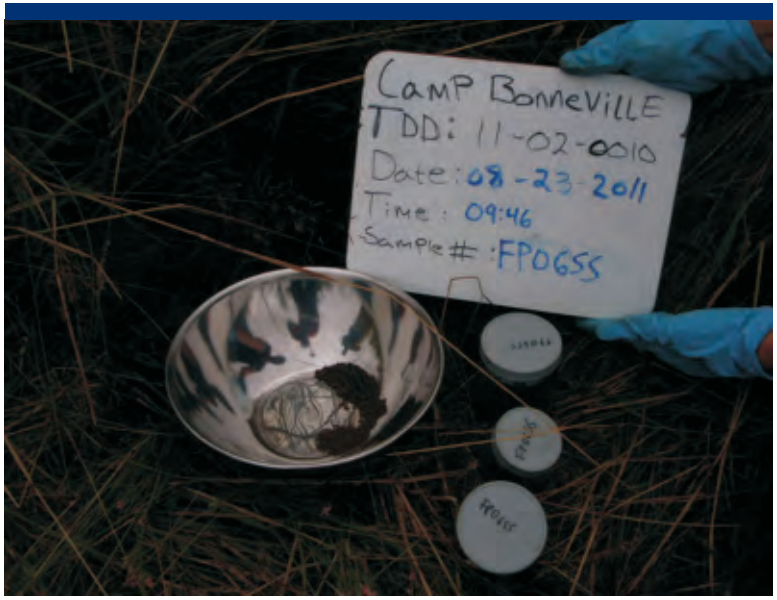

Photo 12 Sample FP06SS.

Direction: East/Down *Date: 8/23/11* *Time: 09:58* *Taken by: BM*

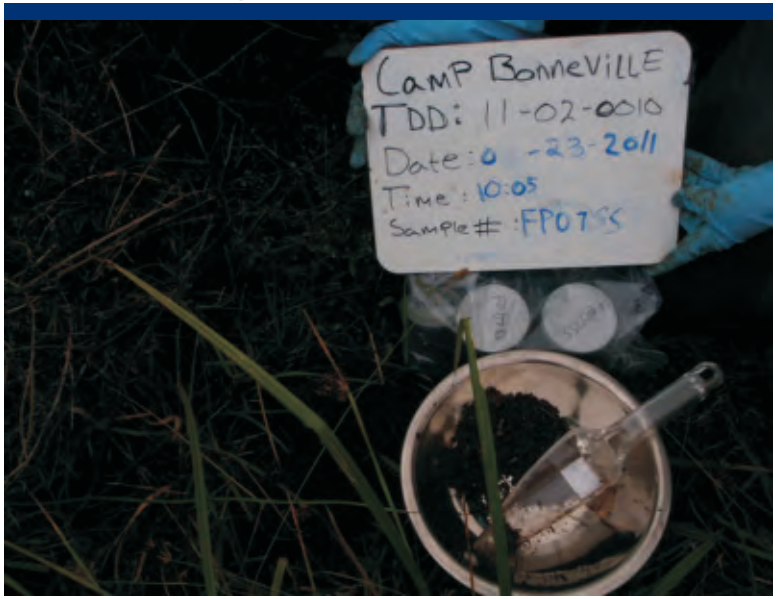

Photo 13 Sample FP07SS.

Direction: South/Down Date: 8/23/11 Time: 10:18 Taken by: BM

Photo 14 Sample FP08SS.

Direction: East/Down Date: 8/23/11 Time: 10:28 Taken by: BM

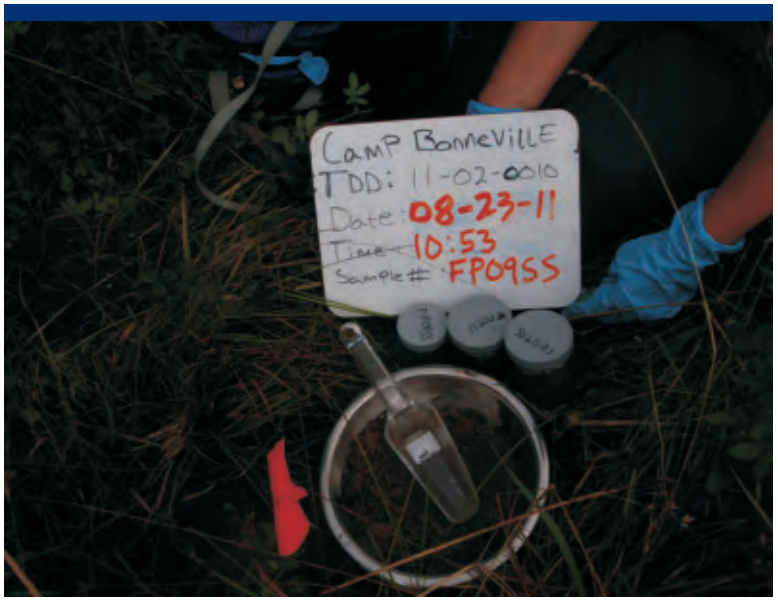

Photo 15 Sample FP09SS.

Direction: West/Down Date: 8/23/11 Time: 11:02 Taken by: BM

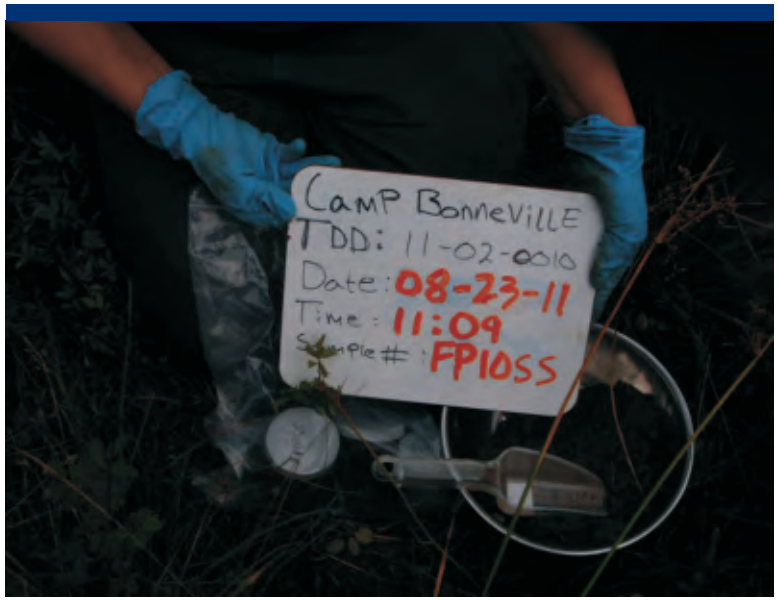

Photo 16 Sample FP10SS.

Direction: North/Down Date: 8/23/11 Time: 11:17 Taken by: BM

Photo 17 Sample FP11SS.

Direction: West *Date: 8/23/11* *Time: 15:36* *Taken by: BM*

Photo 18 Sample FP12SS.

Direction: East *Date: 8/23/11* *Time: 15:50* *Taken by: BM*

Photo 19 Sample FP13SS.

Direction: North *Date: 8/23/11* *Time: 15:58* *Taken by: BM*

Photo 20 Sample FP14SS.

Direction: West *Date: 8/23/11* *Time: 16:21* *Taken by: BM*

Photo 21 Sample FP15SS.

Direction: West *Date: 8/23/11* *Time: 16:42* *Taken by: BM*

Photo 22 Sample FP16SS.

Direction: West/Down *Date: 8/23/11* *Time: 17:19* *Taken by: BM*

Photo 23 Stokes Mortar Target (concrete) with sample FP16SS in background.

Direction: South *Date: 8/23/11* *Time: 17:21* *Taken by: BM*

Photo 24 Stokes Mortar Target (concrete) with marsh-like vegetation in background.

Direction: East *Date: 8/23/11* *Time: 17:21* *Taken by: BM*

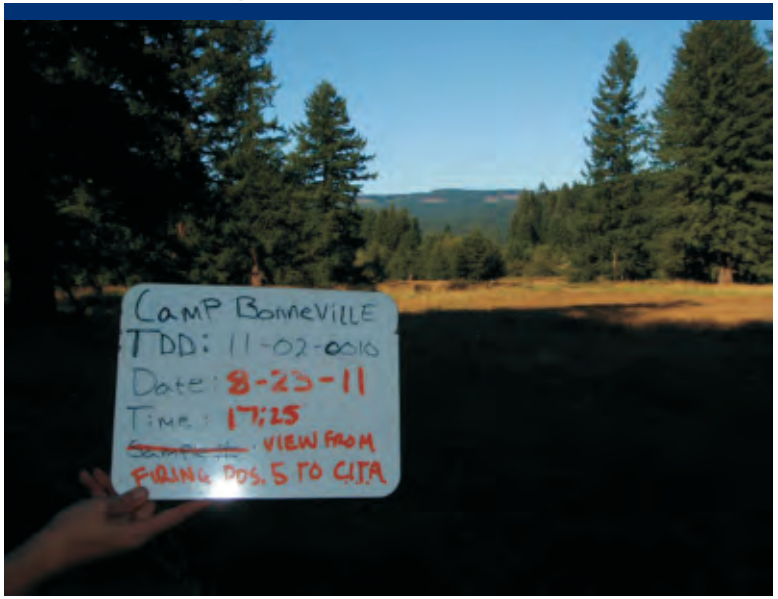

Photo 25 View from Firing Positions to CITA.

Direction: East	*Date: 8/23/11*	*Time: 17:25*	*Taken by: BM*

Photo 1 Sample location FB01SS.

Direction: Down *Date: 8/23/11* *Time: 10:55* *Taken by: MZ*

Photo 2 Sample FB01SS.

Direction: Down *Date: 8/23/11* *Time: 10:55* *Taken by: MZ*

Photo 3 Sample location FB02SS.

Direction: Down *Date: 8/23/11* *Time: 11:00* *Taken by: MZ*

Photo 4 Sample FB02SS.

Direction: Down *Date: 8/23/11* *Time: 11:00* *Taken by: MZ*

Photo 5 Sample location FB03SS.

Direction: Down *Date: 8/23/11* *Time: 11:09* *Taken by: MZ*

Photo 6 Sample FB03SS.

Direction: Down *Date: 8/23/11* *Time: 11:09* *Taken by: MZ*

Photo 7 Sample location FB04SS.

Direction: Down *Date: 8/23/11* *Time: 11:18* *Taken by: MZ*

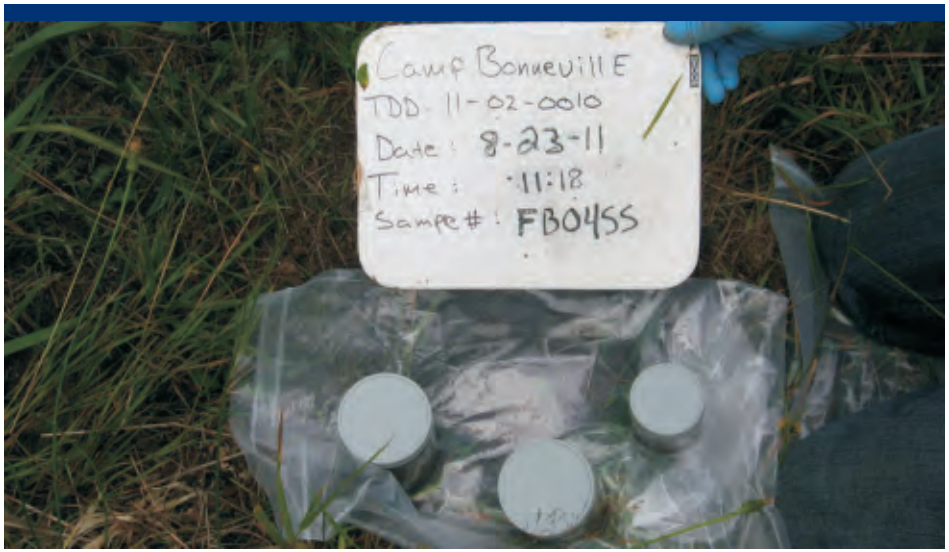

Photo 8 Sample FB04SS.

Direction: Down *Date: 8/23/11* *Time: 11:18* *Taken by: MZ*

Photo 9 Sample location FB05SS.

Direction: Down *Date: 8/23/11* *Time: 11:26* *Taken by: MZ*

Photo 10 Sample FB05SS.

Direction: Down *Date: 8/23/11* *Time: 11:26* *Taken by: MZ*

Photo 11 Sample location FB06SS.

Direction: Down *Date: 8/23/11* *Time: 11:33* *Taken by: MZ*

Photo 12 Sample FB06SS.

Direction: Down *Date: 8/23/11* *Time: 11:33* *Taken by: MZ*

Photo 1 Sample location PU01SD.

Direction: Down *Date: 8/22/11* *Time: 14:26* *Taken by: JF*

Photo 2 Sample PU01SD.

Direction: Down *Date: 8/22/11* *Time: 14:27* *Taken by: JF*

Photo 3 Sample PU01SD.

Direction: Down *Date: 8/22/11* *Time: 14:27* *Taken by: JF*

Photo 4 Sample location PU02SD.

Direction: Down *Date: 8/22/11* *Time: 14:30* *Taken by: JF*

Photo 5 Sample PU02SD.

Direction: Down Date: 8/22/11 Time: 14:48 Taken by: JF

Photo 6 Sample PU02SD.

Direction: Down Date: 8/22/11 Time: 14:41 Taken by: JF

Photo 7 Sample location PU03SD.

Direction: Down Date: 8/22/11 Time: 14:41 Taken by: JF

Photo 8 Sample PU03SD.

Direction: Down Date: 8/22/11 Time: 14:46 Taken by: JF

Photo 9 Sample PU03SD.

Direction: Down *Date: 8/22/11* *Time: 14:46* *Taken by: JF*

Photo 10 Sample location PU04SD.

Direction: Down *Date: 8/22/11* *Time: 14:58* *Taken by: JF*

Photo 11 Sample PU04SD.

Direction: Down *Date: 8/22/11* *Time: 14:58* *Taken by: JF*

Photo 12 Sample PU04SD.

Direction: Down *Date: 8/22/11* *Time: 14:58* *Taken by: JF*

Photo 13 Sample location PU05SD.

Direction: Down *Date: 8/22/11* *Time: 15:14* *Taken by: JF*

Photo 14 Sample PU05SD.

Direction: Down *Date: 8/22/11* *Time: 15:14* *Taken by: JF*

Photo 15 Sample PU05SD.

Direction: Down *Date: 8/22/11* *Time: 15:14* *Taken by: JF*

Photo 16 Sample location PU06SD.

Direction: Down *Date: 8/22/11* *Time: 15:33* *Taken by: JF*

Photo 17 Two water exits from pop-up pond (1~18" pipe, 3~6" pipes). Drain to creek (David), PPEs on David Creek.

Direction: *Date: 8/22/11* *Time:* *Taken by: JF*

Photo 18 Sample PU06SD.

Direction: *Down* *Date: 8/22/11* *Time: 15:33* *Taken by: JF*

Photo 19 Sample PU06SD.

Direction: *Down* *Date: 8/22/11* *Time: 15:33* *Taken by: JF*

Photo 20 Sample location PU07SD.

Direction: *Down* *Date: 8/22/11* *Time: 16:22* *Taken by: JF*

Photo 21 Sample PU07SD.

Direction: Down *Date: 8/22/11* *Time: 16:22* *Taken by: JF*

Photo 22 Sample PU07SD.

Direction: Down *Date: 8/22/11* *Time: 16:22* *Taken by: JF*

Photo 23 Sample location PU08SD. Channel pond to creek.

Direction: Down *Date: 8/22/11* *Time: 16:35* *Taken by: JF*

Photo 24 Sample PU08SD.

Direction: Down *Date: 8/22/11* *Time: 16:35* *Taken by: JF*

Photo 25 Sample PU08SD.

Direction: *Date: 8/22/11* *Time: 16:35* *Taken by: JF*

Photo 26 Looking southwest at culvert that is located in southwest corner of Pop-up Pond (PPE to creek).

Direction: *Southwest* *Date: 8/22/11* *Time:* *Taken by: JF*

Photo 27 Looking northeast toward pond from sample point PU08SD.

Direction: *Northeast* *Date: 8/22/11* *Time:* *Taken by: JF*

Photo 28 Sample location PU09SD.

Direction: *Down* *Date: 8/22/11* *Time: 16:48* *Taken by: JF*

Photo 29 Sample PU09SD.

Direction: Down *Date: 8/22/11* *Time: 16:48* *Taken by: JF*

Photo 30 Sample PU09SD.

Direction: Down *Date: 8/22/11* *Time: 16:48* *Taken by: JF*

Photo 31 Sample location PU10SD, near ~18" white PVC pipe. Provides out flow to Pop-up Pond to creek.

Direction: Down *Date: 8/22/11* *Time: 16:58* *Taken by: JF*

Photo 32 Sample PU10SD.

Direction: Down *Date: 8/22/11* *Time: 16:58* *Taken by: JF*

Photo 33 Sample PU10SD.

Direction: Down *Date: 8/22/11* *Time: 16:58* *Taken by: JF*

Photo 34 Sample location PU11SD.

Direction: Down *Date: 8/22/11* *Time: 17:08* *Taken by: JF*

Photo 35 Sample PU11SD.

Direction: Down *Date: 8/22/11* *Time: 17:08* *Taken by: JF*

Photo 36 Sample PU11SD.

Direction: Down *Date: 8/22/11* *Time: 17:08* *Taken by: JF*

Photo 37 Three outlet pipes and 18" outlet pipe.

Direction: Northeast *Date: 8/22/11* *Time:* *Taken by: JF*

Photo 38 Sample location PU12SD.

Direction: Down *Date: 8/22/11* *Time: 17:22* *Taken by: JF*

Photo 39 Sample PU12SD.

Direction: Down *Date: 8/22/11* *Time: 17:22* *Taken by: JF*

Photo 40 Sample PU12SD.

Direction: Down *Date: 8/22/11* *Time: 17:22* *Taken by: JF*

Photo 1 Sample location and sample PT01SS.

Direction: Down Date: 8/24/11 Time: 14:16 Taken by: JF

Photo 2 Sample PT02SS.

Direction: Down Date: 8/24/11 Time: 16:30 Taken by: JF

Photo 3 Sample location and sample PT03SS.

Direction: Down Date: 8/24/11 Time: 16:40 Taken by: JF

Photo 4 Sample PT04SS.

Direction: Down Date: 8/24/11 Time: 16:55 Taken by: JF

Photo 5 Sample PT05SS.

Direction: Down Date: 8/24/11 Time: 17:08 Taken by: JF

Photo 6 Sample location and sample PT06SS.

Direction: Down Date: 8/24/11 Time: 17:20 Taken by: JF

Photo 7 Sample PT07SS.

Direction: East Date: 8/24/11 Time: 17:26 Taken by: BM

Photo 8 Sample location and sample PT08SS.

Direction: Down Date: 8/24/11 Time: 17:30 Taken by: JF

Photo 9 Sample PT09SS.

Direction: North *Date: 8/24/11* *Time: 17:59* *Taken by: BM*

Photo 10 Sample location and sample PT10SS.

Direction: Down *Date: 8/24/11* *Time: 18:05* *Taken by: JF*

Photo 11 Sample PT11SS.

Direction: East *Date: 8/24/11* *Time: 18:03* *Taken by: BM*

Photo 12 Soil removal area near PT12SS.

Direction: Southeast *Date: 8/25/11* *Time: 09:05* *Taken by: JF*

Photo 13 Sample PT12SS.

Direction: Down *Date: 8/25/11* *Time: 09:05* *Taken by: JF*

Photo 14 Sample PT13SS.

Direction: Down *Date: 8/25/11* *Time: 09:15* *Taken by: JF*

Photo 15 Sample PT14SS.

Direction: Down *Date: 8/25/11* *Time: 09:24* *Taken by: JF*

Photo 16 Soil removal area around pop-up target and sample PT14SS.

Direction: Down *Date: 8/25/11* *Time: 09:24* *Taken by: JF*

Photo 17 Soil removal between PT14SS and PT15SS.

Direction: West *Date: 8/25/11* *Time: 09:24* *Taken by: JF*

Photo 18 Soil removal between PT14SS and PT15SS.

Direction: West *Date: 8/25/11* *Time: 09:24* *Taken by: JF*

Photo 19 Sample PT15SS.

Direction: Down *Date: 8/25/11* *Time: 09:35* *Taken by: JF*

Photo 20 Sample PT16SS.

Direction: Down *Date: 8/25/11* *Time: 09:40* *Taken by: JF*

Photo 21 Sample PT17SS.

Direction: Down *Date: 8/25/11* *Time: 09:45* *Taken by: JF*

Photo 22 Sample PT18SS.

Direction: Down *Date: 8/25/11* *Time: 09:52* *Taken by: JF*

Photo 1 Sample OP01SS.

Direction: North/Down Date: 8/23/11 Time: 11:34 Taken by: BM

Photo 2 Sample BC01SD.

Direction: Down Date: 8/25/11 Time: 14:35 Taken by: JF

Photo 1 Sample NF01SD.

Direction: East *Date: 8/25/11* *Time: 17:24* *Taken by: BM*

Photo 2 Sample NF01SW.

Direction: Down *Date: 8/26/11* *Time: 09:48* *Taken by: MZ*

Photo 3 Sample NF02SD.

Direction: Down *Date: 8/26/11* *Time: 09:50* *Taken by: MZ*

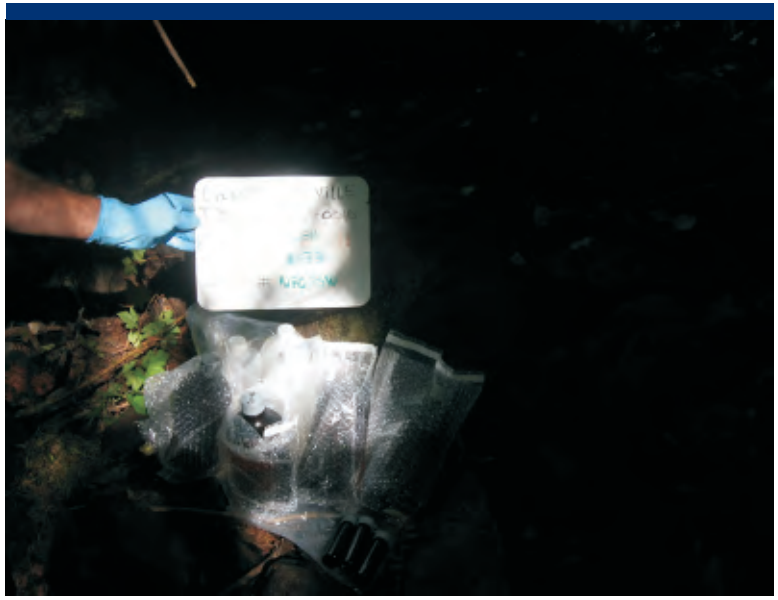

Photo 4 Sample NF03SW.

Direction: Down *Date: 8/26/11* *Time: 10:32* *Taken by: MZ*

Photo 5 Sample NF03SD.

Direction: East *Date: 8/26/11* *Time: 10:50* *Taken by: BM*

Photo 6 Sample NF03SD with seep location.

Direction: East *Date: 8/26/11* *Time: 10:51* *Taken by: BM*

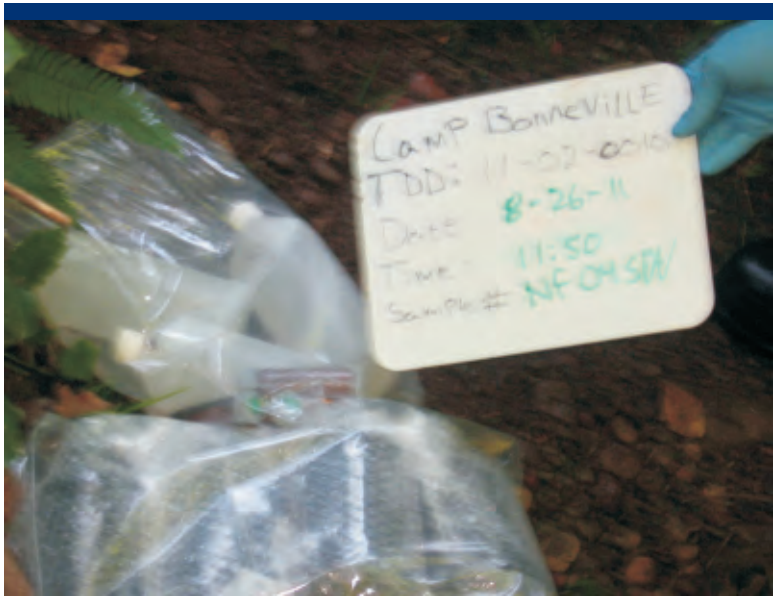

Photo 7 Sample NF04SW.

Direction: East *Date: 8/26/11* *Time: 12:14* *Taken by: MZ*

Photo 8 Sample NF04SD.

Direction: East *Date: 8/26/11* *Time: 12:15* *Taken by: BM*

Photo 9 Sample NF05SW.

Direction: East *Date: 8/26/11* *Time: 12:38* *Taken by: MZ*

Photo 10 Sample NF05SD.

Direction: East *Date: 8/26/11* *Time: 12:39* *Taken by: BM*

Photo 11 Sample NF06SD.

Direction: East *Date: 8/26/11* *Time: 14:00* *Taken by: BM*

Photo 12 Sample NF07SD.

Direction: East *Date: 8/26/11* *Time: 14:22* *Taken by: MZ*

Photo 13 Sample NF07SW.

Direction: East *Date: 8/26/11* *Time: 14:31* *Taken by: MZ*

Photo 14 Sample NF08SD.

Direction: East *Date: 8/26/11* *Time: 14:59* *Taken by: MZ*

Photo 15 Sample NF09SD.

Direction: East *Date: 8/26/11* *Time: 15:31* *Taken by: BM*

Photo 16 Sample NF09SW.

Direction: East *Date: 8/26/11* *Time: 15:40* *Taken by: MZ*

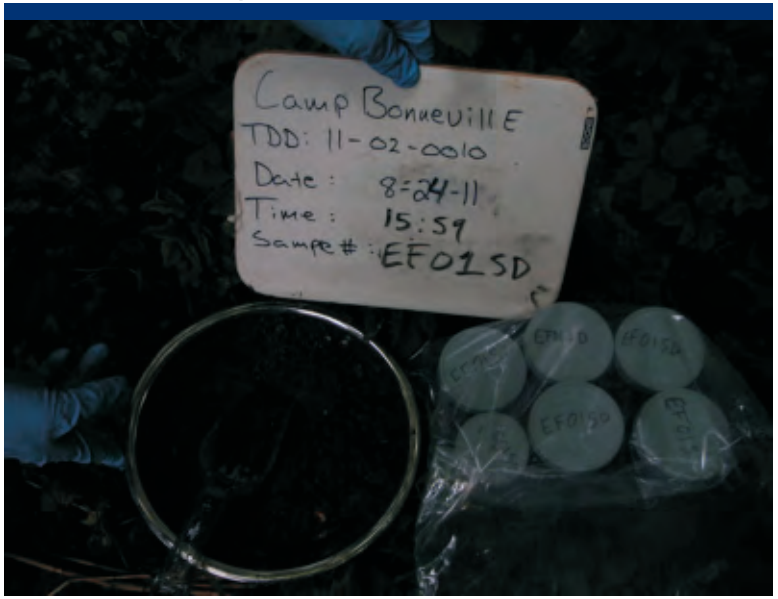

Photo 1 Sample EF01SD.

Direction: East *Date: 8/24/11* *Time: 16:07* *Taken by: BM*

Photo 2 Sample EF02SD.

Direction: North *Date: 8/24/11* *Time: 16:55* *Taken by: BM*

Photo 3 Sample EF03SD.

Direction: Down *Date: 8/25/11* *Time: 16:50* *Taken by: JF*

Photo 1 Downstream from sample DC01SD.

Direction: Southeast *Date: 8/25/11* *Time: 16:33* *Taken by: BM*

Photo 2 Outfall pipes.

Direction: Southeast *Date: 8/25/11* *Time: 16:40* *Taken by: BM*

Photo 3 Sample DC01SD.

Direction: Down *Date: 8/25/11* *Time: 16:41* *Taken by: BM*

Photo 4 Outfall pipes draining into David Creek.

Direction: Southeast *Date: 8/25/11* *Time: 16:42* *Taken by: BM*

Photo 5 Outfall to David Creek.

Direction: Southeast Date: 8/25/11 Time: 16:59 Taken by: BM

Photo 6 Sample DC02SD.

Direction: Down Date: 8/25/11 Time: 17:10 Taken by: BM

Photo 7 Sample DC03SD.

Direction: Down Date: 8/25/11 Time: 17:27 Taken by: AM

Photo 8 Sample DC04SD.

Direction: Down Date: 8/25/11 Time: 17:57 Taken by: MZ

Photo 9 Overview of stream.

Direction:	*Date: 8/25/11*	*Time: 17:57*	*Taken by: BM*

Photo 1 Bridge at 217th street, looking towards 68th street.

Direction: South *Date: 8/25/11* *Time: 09:42* *Taken by: AH*

Photo 2 Lacamas creek facing west.

Direction: West *Date: 8/25/11* *Time: 10:03* *Taken by: AH*

Photo 3 Sample LC01SS.

Direction: West *Date: 8/25/11* *Time: 10:04* *Taken by: AH*

Photo 4 Sample LC02SD.

Direction: Down *Date: 8/25/11* *Time: 10:50* *Taken by: JF*

Photo 5 Sample LC03SW.

Direction: *East* *Date: 8/25/11* *Time: 10:51* *Taken by: AH*

Photo 6 Sample location LC03SW, sample location LC03SD upstream.

Direction: *East* *Date: 8/25/11* *Time: 10:52* *Taken by: AH*

Photo 7 Sample LC03SD.

Direction: *East* *Date: 8/25/11* *Time: 11:03* *Taken by: AH*

Photo 8 Sample location LC04SD, downstream.

Direction: South *Date: 8/25/11* *Time: 12:12* *Taken by: AH*

Photo 9 Sample LC04SD.

Direction: South *Date: 8/25/11* *Time: 12:25* *Taken by: AH*

Photo 10 Sample LC05SD.

Direction: Down *Date: 8/25/11* *Time: 11:50* *Taken by: JF*

Photo 11 Sample location and sample LC06SD.

Direction: Down *Date: 8/25/11* *Time: 13:05* *Taken by: JF*

Photo 12 Sample LC07SD.

Direction: Down *Date: 8/25/11* *Time: 13:28* *Taken by: JF*

Photo 13 Area from M203 Northeast.

Direction: West *Date: 8/25/11* *Time: 13:15* *Taken by: AH*

Photo 14 Sample LC08SD downstream.

Direction: South *Date: 8/25/11* *Time: 13:23* *Taken by: AH*

Photo 15 Sample LC08SD.

Direction: South *Date: 8/25/11* *Time: 13:28* *Taken by: AH*

Photo 16 Upstream from sample LC09SD.

Direction: Northeast *Date: 8/25/11* *Time: 13:46* *Taken by: AH*

Photo 17 Sample LC09SD.

Direction: Down *Date: 8/25/11* *Time: 13:51* *Taken by: AH*

Photo 18 Sample LC10SD.

Direction: Down *Date: 8/25/11* *Time: 14:21* *Taken by: JF*

Photo 19 Sample LC11SD.

Direction: Down *Date: 8/25/11* *Time: 14:55* *Taken by: JF*

Photo 20 Sample LC11SW.

Direction: Down *Date: 8/25/11* *Time: 15:12* *Taken by: JF*

Photo 21 Upstream from sample LC12SD.

Direction: East *Date: 8/25/11* *Time: 14:31* *Taken by: AH*

Photo 22 Sample LC12SD.

Direction: Down *Date: 8/25/11* *Time: 14:33* *Taken by: AH*

Photo 23 Downstream of confluence with David Creek.

Direction: *Date: 8/25/11* *Time: 15:30* *Taken by: AH*

Photo 24 Sample LC13SD.

Direction: Down *Date: 8/25/11* *Time: 15:30* *Taken by: AH*

Photo 25 Sample LC13SD.

Direction: Down *Date: 8/25/11* *Time: 15:30* *Taken by: AH*

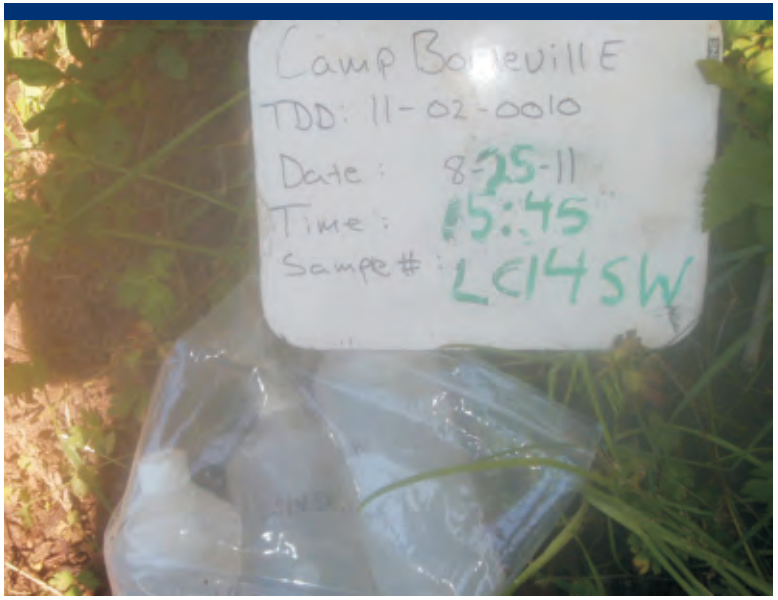

Photo 26 Sample LC14SW.

Direction: Down *Date: 8/25/11* *Time: 15:56* *Taken by: AH*

Photo 27 Location of LC14SW and LC14SD.

Direction: *Date: 8/25/11* *Time: 16:03* *Taken by: AH*

Photo 28 Sample LC14SD.

Direction: Down *Date: 8/25/11* *Time: 16:05* *Taken by: AH*

Photo 29 Sample LC15SW.

Direction: Down *Date: 8/25/11* *Time: 16:25* *Taken by: JF*

Photo 30 Sample LC15SD.

Direction: Down *Date: 8/25/11* *Time: 16:30* *Taken by: JF*

E TechLaw, Inc. Trip Reports

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101 Yesler Way, Suite 600
Seattle, WA 98104
(206) 577-3051
www.techlawinc.com

TO-004-10-10-0002-DCN1014

March 5, 2012

Ms. Monica Tonel
Task Order Project Officer
EPA Region 10
1200 6th Ave
M/S ECL-112
Seattle, WA 98101

Dear Ms. Tonel:

The following description of services provided in support of the Phase I Sampling and Analysis field work at Camp Bonneville, Clark County, Vancouver, Washington is submitted for your files. We will upload the final version to the Task Monitor's project file if so directed.

Anomaly avoidance was provided for the Ecology and Environment, Inc. (E&E) START-3 field team by Robert Bohn, our UXO specialist, from May 16 through May 20, 2011. Several foot trails were created using anomaly avoidance below the Camp Bonneville Landfill #4 site. The E&E field personnel were then safely escorted to 15 discrete sampling locations and one site background sample location; all support protocols were in compliance with Clark County requirements for UXO escorts. During this event approximately one dozen anomalies were detected and clearly marked, and the field team was briefed regarding potential hazards possibly associated with the anomalies.

One Schonstedt GA-52CX fluxgate magnetometer was rented for this effort, along with a weather forecast radio and one four wheel drive vehicle.

We appreciate this opportunity to assist EPA Region 10 on this Site Assessment project, and look forward to providing continued support. Should you have questions, please call me at (206) 577-3051.

Sincerely,

Steve Fuller
Program Manager

cc: Paul Swift, Site Assessment Lead

Tiffany Ban, Central Files Administrator

101 Yesler Way, Suite 600
Seattle, WA 98104
(206) 577-3051
www.techlawinc.com

TO-002-10-10-0002-DCN1102

September 7, 2011

Ms. Monica Tonel
START-3 Task Order Project Officer
EPA Region 10
1200 6th Ave, M/S ECL-112
Seattle, WA 98101

Re: Trip Report - Camp Bonneville Phase II UXO Support

Dear Ms. Tonel:

The following description of services provided in support of the Phase II Sampling and Analysis field work at Camp Bonneville, Clark County, Vancouver, WA. is submitted for your review/records.

Anomaly avoidance was provided for the Ecology and Environment, Inc. (E&E) field team by Tom Hall and Robert Bohn, our UXO specialists, over the dates of 8/ 22 through 8/26, 2011. Ten-hour work days were required to achieve objectives relative to the aggressive sampling plan schedule.

The UXO specialists used magnetometers to insure no anomalies were present along access paths and over 150 sample locations were screened following Clark County requirements for UXO escort providing this type of support. During the event, approximately 80 anomalies were encountered. These anomalies were not uniquely identified, since the specialists are not allowed to excavate or otherwise further characterize the material. The majority of the locations were in the stream bed or along the adjacent wetlands, so semi-permanent marking was not feasible. The anomalies that were identified included communications wire, some small-arms projectiles, and a large vehicle likely used for target practice.

Two Schonstedt GA-52CX fluxgate magnetometers were rented for this effort as well as one rental vehicle.

This deliverable is being forwarded to you through electronic mail (via the Internet) in Microsoft Word and Adobe Acrobat PDF formats. We appreciate this opportunity to assist EPA Region 10, and look forward to providing continued support. If you have any questions, please call me at (206) 577-3051.

Sincerely,

Steve Fuller
Program Manager

cc: Paul Swift, Site Assessment Lead
Tiffany Ban, Central Files Administrator

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F Chain-of-Custody Documentation

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USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/19/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:				1 [illegible] ~~1445~~ 1455 5/19/11	K Nelson 5/19/11 1455
Spill ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG01SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204301 (HNO3), 11204301 (Ice Only) (2)	BG01SB	S: 05/17/2011 09:33	--
BG01SD	Sediment/ Bryan Ciecko	G	NIT_ARO (21), TAL Metals (21)	11204343 (HNO3), 11204343 (Ice Only) (2)	BG01SD	S: 05/18/2011 10:42	--
LF01SB	Subsurface Soil/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204307 (Ice Only) (2)	LF01SB	S: 05/16/2011 11:40	--
LF01SD	Sediment/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204326 (Ice Only) (2)	LF01SD	S: 05/18/2011 08:55	--
LF02SB	Subsurface Soil/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204309 (Ice Only) (2)	LF02SB	S: 05/16/2011 12:35	--
LF03SB	Subsurface Soil/ Bryan Ciecko	G	NIT_ARO (21), TAL Metals (21)	11204311 (Ice Only) (2)	LF03SB	S: 05/16/2011 14:03	--

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: BG01SB	Additional Sampler Signature (s): [illegible] for E. Lynch	Chain Of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

NIT_ARO = Nitroaromatics, TAL Metals = TAL Metals

COC Number : 10-4097213-051811-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

REGION COPY

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/19/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 1455 5/19/11	[illegible] 5/19/11 1455
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG01GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21), TAL Metals (21)	11204300 (HNO3), 11204300 (Ice Only) (2)	BG01GW	S: 05/18/2011 11:09	--
LF13GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21), TAL Metals (21)	11204330 (HNO3), 11204330 (Ice Only) (2)	LF13GW	S: 05/18/2011 14:15	--
LF14GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204332 (HNO3), 11204332 (Ice Only) (2)	LF14GW	S: 05/18/2011 14:55	--

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

NIT_ARO = Nitroaromatics, TAL Metals = TAL Metals

COC Number : 10-4097213-051811-0005

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

(3)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/19/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:				1 [illegible] 1455 5/19/11	[illegible] 5/19/11 1455
Spill ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LF04SB	Subsurface Soil/ Bryan Ciecko	G	NIT_ARO (21), TAL Metals (21)	11204313 (Ice Only) (2)	LF04SB	S: 05/16/2011 14:32	--
LF05SB	Subsurface Soil/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204315 (Ice Only) (2)	LF05SB	S: 05/16/2011 15:05	--
LF06SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204317 (Ice Only) (2)	LF06SB	S: 05/16/2011 15:34	--
LF07SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204319 (Ice Only) (2)	LF07SB	S: 05/17/2011 10:52	--
LF08SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204322 (Ice Only) (2)	LF08SB	S: 05/17/2011 11:32	--
LF09SB	Subsurface Soil/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204323 (Ice Only) (2)	LF09SB	S: 05/17/2011 13:43	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** BG01SB	**Additional Sampler Signature (s):** [illegible] for E. Lynch	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics, TAL Metals = TAL Metals

COC Number : 10-4097213-051811-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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(4)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/19/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:				1 [illegible] 1455 5/19/11	[illegible] 5/19/11 1455
Spill ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LF12SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204329 (Ice Only) (2)	LF12SB	S: 05/17/2011 15:11	--
LF13SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204331 (Ice Only) (2)	LF13SB	S: 05/17/2011 15:38	--
LF14SB	Subsurface Soil/ Erin Lynch	G	NIT_ARO (21), TAL Metals (21)	11204333 (Ice Only) (2)	LF14SB	S: 05/17/2011 15:58	--
PP01SD	Sediment/ Derek Pulvino	G	NIT_ARO (21), TAL Metals (21)	11204327 (Ice Only) (2)	PP01SD	S: 05/18/2011 09:11	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** BG01SB	**Additional Sampler Signature (s):** [illegible] for E. Lynch	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics, TAL Metals = TAL Metals

COC Number : 10-4097213-051811-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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(5)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270 5 **R**
Client No:

Region:	10	Date Shipped:	5/19/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	FedEx		
Account Code:		Airbill:	8622 9488 1439	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 5/19/11-17:00	5/20/11 13:00
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LF01GW	Ground Water/ Andy McDonald	G	NIT_ARO (21)	11204306 (Ice Only) (2)	LF01GW	S: 05/18/2011 15:40	--
LF02GW	Ground Water/ Andy McDonald	G	NIT_ARO (21)	11204308 (Ice Only) (2)	LF02GW	S: 05/19/2011 09:45	--
LF03GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21)	11204310 (Ice Only) (2)	LF03GW	S: 05/19/2011 09:56	--
LF04GW	Ground Water/ Andy McDonald	G	NIT_ARO (21)	11204312 (Ice Only) (2)	LF04GW	S: 05/19/2011 10:25	--
LF12GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21)	11204328 (Ice Only) (2)	LF12GW	S: 05/19/2011 08:55	--

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-051911-0002

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

(6)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No: 6 **R**

Region:	10	Date Shipped:	5/23/2011
Project Code:	TEC-993A	Carrier Name:	Hand Delivery
Account Code:		Airbill:	NA
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747
Spill ID:			
Site Name / City/State:	Camp Bonneville Vancouver, WA		
Project Leader:	Renee Nordeen		
Action:	Expanded Site Investigation/RI		
Sampling Co:	Ecology & Environment, Inc.		

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	5/23/11 1600	[signature]	5/23/11 1600
2				
3				
4				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
MW08GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	~~11204343 (HNO3)~~ (1) 4349	MW08GW	S: 05/21/2011 13:30	–
MW09GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204344 (HNO3) (1)	MW09GW	S: 05/21/2011 14:15	–
RS01WT	Water/ Renee Nordeen	G	NIT_ARO (21), TAL Metals (21)	11204345 (HNO3), 11204345 (Ice Only) (3)	RS01WT	S: 05/21/2011 14:45	Rinsate
RS02WT	Water/ Renee Nordeen	G	TAL Metals (21)	11204305 (HNO3) (1)	RS02WT	S: 05/21/2011 14:55	Rinsate

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
Y	BG02GW, BG03GW	[signature] for BC + DP	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Shipment Iced?** _____

NIT_ARO = Nitroaromatics, TAL Metals = TAL Metals

Pg. 6 Corrected

COC Number : 10-4097213-052311-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	**Date Shipped:**	5/23/2011	**Chain of Custody Record**	**Sampler Signature:**
Project Code:	TEC-993A	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**	NA	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 5/23/11 1600	[illegible] 5/23/11 1600
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
MW08GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	11204343 (HNO3) (1)	MW08GW	S: 05/21/2011 13:30	--
MW09GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204344 (HNO3) (1)	MW09GW	S: 05/21/2011 14:15	--
RS01WT	Water/ Renee Nordeen	G	NIT_ARO (21), TAL Metals (21)	11204345 (HNO3), 11204345 (Ice Only) (3)	RS01WT	S: 05/21/2011 14:45	Rinsate
RS02WT	Water/ Renee Nordeen	G	TAL Metals (21)	11204305 (HNO3) (1)	RS02WT	S: 05/21/2011 14:55	Rinsate

Shipment for Case Complete? Y	**Sample (s) to be used for laboratory QC:** BG02GW, BG03GW	**Additional Sampler Signature (s):** [illegible] for BC + DP	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics, TAL Metals = TAL Metals

COC Number : 10-4097213-052311-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/23/2011	Chain of Custody Record	Sampler Signature: [illegible] for DP + BC
Project Code:	TEC-993A	Carrier Name:	Hand Delivery	Relinquished By (Date/Time)	Received By (Date/Time)
Account Code:		Airbill:	NA	1 [illegible] 5/23/11 1602	[illegible] 5/23/11 1602
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	
Spill ID:				3	
Site Name / City/State:	Camp Bonneville Vancouver, WA			4	
Project Leader:	Renee Nordeen				
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG03GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21)	11204303 (Ice Only) (6)	BG03GW	S: 05/20/2011 16:54	--
MW04GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204339 (Ice Only) (2)	MW04GW	S: 05/20/2011 17:00	--
MW05GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204340 (Ice Only) (2)	MW05GW	S: 05/20/2011 18:20	--

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: BG03GW	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-052111-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

REGION COPY

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	**Date Shipped:**	5/23/2011
Project Code:	TEC-993A	**Carrier Name:**	Hand Delivery
Account Code:		**Airbill:**	NA
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747
Spill ID:			
Site Name / City/State:	Camp Bonneville Vancouver, WA		
Project Leader:	Renee Nordeen		
Action:	Expanded Site Investigation/RI		
Sampling Co:	Ecology & Environment, Inc.		

Chain of Custody Record

Sampler Signature: Bvore for BC

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	alan Jensen	5/23/11 1605	K Nuest	5/23/11 1605
2				
3				
4				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG02GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204302 (Ice Only) (1) N6	BG02GW	S: 05/20/2011 15:11	--
MW02GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204337 (Ice Only) (1)	MW02GW	S: 05/20/2011 12:20	--
MW03GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204338 (Ice Only) (1)	MW03GW	S: 05/20/2011 13:35	--

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
N	BG02GW		

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Shipment Iced?** _____

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-052011-0004

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

(a)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/23/2010	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery	Relinquished By (Date/Time)	Received By (Date/Time)
Account Code:		Airbill:	NA	1 [illegible] 5/23/11 1600	[illegible]
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	5/23/11
Spill ID:				3	16:00
Site Name / City/State:	Camp Bonneville Vancouver, WA			4	
Project Leader:	Renee Nordeen				
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LF05GW	Ground Water/ Alan Jensen	G	NIT_ARO (21)	11204314 (Ice Only) (1)	LF05GW	S: 05/19/2011 14:55	--
LF06GW	Ground Water/ Andy McDonald	G	NIT_ARO (21)	11204316 (Ice Only) (1)	LF06GW	S: 05/19/2011 11:35	--
LF07GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21)	11204318 (Ice Only) (1)	LF07GW	S: 05/19/2011 12:07	--
LF15GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204334 (Ice Only) (1)	LF15GW	S: 05/19/2011 14:10	--
MW01GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204336 (Ice Only) (1)	MW01GW	S: 05/20/2011 10:00	--

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s): for AJ + AM	Chain Of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-052011-0002

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

4

(10)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	Date Shipped:	5/23/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery		
Account Code:		Airbill:	NA	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 5/23/11 1605	[illegible] 5/23/11 1605
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
MW06GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21)	11204341 (Ice Only) (1)	MW06GW	S: 05/21/2011 11:58	--
MW07GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204342 (Ice Only) (1)	MW07GW	S: 05/21/2011 13:15	--
MW08GW	Ground Water/ Derek Pulvino	G	NIT_ARO (21)	11204~~343~~ 49 (Ice Only) (1)	MW08GW	S: 05/21/2011 13:30	--
MW09GW	Ground Water/ Bryan Ciecko	G	NIT_ARO (21)	11204344 (Ice Only) (1)	MW09GW	S: 05/21/2011 14:15	--
RS02WT	Water/ Renee Nordeen	G	NIT_ARO (21)	11204305 (Ice Only) (1)	RS02WT	S: 05/21/2011 14:55	Rinsate

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** RNorden for DP+BC	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-052311-0002

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:
R

Region:	10	Date Shipped:	5/23/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery		
Account Code:		Airbill:	NA	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 5/23/11 1604	[illegible] 5/23/11 1604
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Vancouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LF01GW	Ground Water/ Andy McDonald	G	TAL Metals (21)	11204306 (HNO3) (1)	LF01GW	S: 05/18/2011 15:40	--
LF02GW	Ground Water/ Andy McDonald	G	TAL Metals (21)	11204308 (HNO3) (1)	LF02GW	S: 05/19/2011 09:45	--
LF03GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	11204310 (HNO3) (1)	LF03GW	S: 05/19/2011 09:56	--
LF04GW	Ground Water/ Andy McDonald	G	TAL Metals (21)	11204312 (HNO3) (1)	LF04GW	S: 05/19/2011 10:25	--
LF05GW	Ground Water/ Alan Jensen	G	TAL Metals (21)	11204314 (HNO3) (1)	LF05GW	S: 05/19/2011 14:55	--
LF06GW	Ground Water/ Andy McDonald	G	TAL Metals (21)	11204316 (HNO3) (1)	LF06GW	S: 05/19/2011 11:35	--

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
N		[illegible] for AMAJ	
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

TAL Metals = TAL Metals

COC Number : 10-4097213-052011-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

(12)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:

R

Region:	10	**Date Shipped:**	5/23/2011
Project Code:	TEC-993A	**Carrier Name:**	Hand Delivery
Account Code:		**Airbill:**	NA
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747
Spill ID:			
Site Name / City/State:	Camp Bonneville Vancouver, WA		
Project Leader:	Renee Nordeen		
Action:	Expanded Site Investigation/RI		
Sampling Co:	Ecology & Environment, Inc.		

Chain of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	5/23/11 1600	[signature]	
2				5/23/11
3				1600
4				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG02GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204302 (HNO3) (2)	BG02GW	S: 05/20/2011 15:11	--
BG03GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	11204303 (HNO3) (2)	BG03GW	S: 05/20/2011 16:54	--
MW04GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204339 (HNO3) (1)	MW04GW	S: 05/20/2011 17:00	--
MW05GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204340 (HNO3) (1)	MW05GW	S: 05/20/2011 18:20	--
MW06GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	11204341 (HNO3) (1)	MW06GW	S: 05/21/2011 11:58	--
MW07GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204342 (HNO3) (1)	MW07GW	S: 05/21/2011 13:15	--

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
Y	BG02GW, BG03GW	[signature] for BC/DP	

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Shipment Iced?** _____

TAL Metals = TAL Metals

COC Number : 10-4097213-052311-0003

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FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

Page 1 of 2

4

(13)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41270
Client No:
R

Region:	10	Date Shipped:	5/23/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993A	Carrier Name:	Hand Delivery	Relinquished By (Date/Time)	Received By (Date/Time)
Account Code:		Airbill:	NA	1 [illegible] 5/23/11 1604	[illegible]
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	5/23/11
Spill ID:				3	1604
Site Name / City/State:	Camp Bonneville Vancouver, WA			4	
Project Leader:	Renee Nordeen				
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology & Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LF07GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	11204318 (HNO3) (1)	LF07GW	S: 05/19/2011 12:07	--
LF12GW	Ground Water/ Derek Pulvino	G	TAL Metals (21)	11204328 (HNO3) (1)	LF12GW	S: 05/19/2011 08:55	--
LF15GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204334 (HNO3) (1)	LF15GW	S: 05/19/2011 14:10	--
MW01GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204336 (HNO3) (1)	MW01GW	S: 05/20/2011 10:00	--
MW02GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204337 (HNO3) (1)	MW02GW	S: 05/20/2011 12:20	--
MW03GW	Ground Water/ Bryan Ciecko	G	TAL Metals (21)	11204338 (HNO3) (1)	MW03GW	S: 05/20/2011 13:35	--

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s): [illegible]	Chain Of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced?

TAL Metals = TAL Metals

COC Number : 10-4097213-052011-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

CORRECTIVE ACTION NOTICE

Project Name:	Camp Bonneville Phase I	Date Received:	5/19/2011
Project Code:	TEC-993A	Sampling Agency	E&E
Account Code:	11T10P302DD2C10ZZLA00	Sampler(s):	Renee Nordeen
Project Officer:	Monica Tonel		
Phone:	206-553-0323	Recorder:	Renee Nordeen

Sample Numbers: **11204300,01,07,09,11,13,15,17,19,22,23,26,27,29,30,31,32,33,43**

2	**Number of shipping containers received**
0	**Number of shipping containers received with errors**
2	**Number of chains of custody received**
0	**Number of chains of custody received with errors**

# Containers	Description of Shipment/Chain of Custody Container Issues Noted:
0	Shipping Container - Addressed incorrectly (must be addressed to 'Sample Custodian')
0	Shipping Container - Samples improperly packed for shipment
0	Shipping Container - Cooler Return information not provided
0	Custody Seals - Shipping Container received with seals missing/broken
0	Chain of Custody - Missing/Outdated Form
0	Chain of Custody - Missing/Incorrect chain of custody header information

19	**Number of samples received in this shipment**
3	**Number of samples received with critical and/or non-critical errors**
0	**Number of samples received with critical errors**

# Samples	Description of Shipment/Chain of Custody/Sample Container Issues Noted:
0	Chain of Custody - Missing/Incorrect EPA numbers
0	Chain of Custody - No analysis/Incorrect analysis listed for received samples
0	Chain of Custody - Samples listed not included in shipment
0	Unique Container ID* - Missing on COC and/or Not written on the container
3	Unique Container ID* - Incorrectly assigned ***See below***
0	Sample Container - Labels Missing/Damaged/Illegible
0	Sample Container - EPA Sample Numbers Missing/Incorrect
0	Custody Seals - Criminal Samples received with seals missing/broken
0	Sample Container - Received at elevated temperature (above 6°C)
0	Sample Container - Sample preservation requirements not met
0	Sample Container - Broken/Leaking
0	Sample Container- Insufficient sample volume and/or incorrect sample container
0	

* per Region 10 Sample Receiving SOP

Additional Information

The metals containers for water samples 11204300, 4330, 4332 were incorrectly labeled "B3" , but should have been labeled "B1". The labels were corrected at the lab.

Transmitted By: Karen Norton/ ESAT

Date: 5/20/2011

Original: File

RSCC Contact: Jennifer Crawford

Project Officer: Monica Tonel

Laboratory Director: Barry Pepich

Laboratory Staff: Gerald Dodo, Chris Pace, Carol Haines, Dave Dobb, Dan Jacobsen, Shirley Loughney, Edlin Limmer

cc: Renee Nordeen- E&E

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

CORRECTIVE ACTION NOTICE

Project Name:	Camp Bonneville Phase I	Date Received:	5/20/2011
Project Code:	TEC-993A	Sampling Agency	E&E
Account Code:	11T10P302DD2C10ZZLA00	Sampler(s):	Renee Nordeen
Project Officer:	Monica Tonel		
Phone:	206-553-0323	Recorder:	Renee Nordeen

Sample Numbers: **11204306,8,10,12,28**

1	**Number of shipping containers received**
0	**Number of shipping containers received with errors**
1	**Number of chains of custody received**
0	**Number of chains of custody received with errors**

# Containers	Description of Shipment/Chain of Custody Container Issues Noted:
0	Shipping Container - Addressed incorrectly (must be addressed to 'Sample Custodian')
0	Shipping Container - Samples improperly packed for shipment
0	Shipping Container - Cooler Return information not provided
0	Custody Seals - Custody Samples received with seals missing/broken
0	Chain of Custody - Missing/Outdated Form
0	Chain of Custody - Missing/Incorrect chain of custody header information

5	**Number of samples received in this shipment**
5	**Number of samples received with critical and/or non-critical errors**
0	**Number of samples received with critical errors**

# Samples	Description of Shipment/Chain of Custody/Sample Container Issues Noted:
0	Chain of Custody - Missing/Incorrect EPA numbers
0	Chain of Custody - No analysis/Incorrect analysis listed for received samples
0	Chain of Custody - Samples listed not included in shipment
0	Unique Container ID* - Missing on COC and/or Not written on the container
0	Unique Container ID* - Incorrectly assigned
0	Sample Container - Labels Missing/Damaged/Illegible
0	Sample Container - EPA Sample Numbers Missing/Incorrect
0	Custody Seals - Criminal Samples received with seals missing/broken
5	Sample Container - Received at elevated temperature (above 6°C) ***See Below***
0	Sample Container - Sample preservation requirements not met
0	Sample Container - Broken/Leaking
0	Sample Container- Insufficient sample volume and/or incorrect sample container
0	

* per Region 10 Sample Receiving SOP

Additional Information

The cooler arrived at 8C.

Transmitted By: Karen Norton/ ESAT

Date: 5/20/2011

Original: File

RSCC Contact: Jennifer Crawford

Project Officer: Monica Tonel

Laboratory Director: Barry Pepich

Laboratory Staff: Gerald Dodo, Chris Pace, Carol Haines, Dave Dobb, Dan Jacobsen, Shirley Loughney, Edlin Limmer

cc: Renee Nordeen- E&E

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

CORRECTIVE ACTION NOTICE

Project Name:	Camp Bonneville Phase I	Date Received:	5/23/2011
Project Code:	TEC-993A	Sampling Agency	E&E
Account Code:	11T10P302DD2C10ZZLA00	Sampler(s):	Renee Nordeen, Derek Pulvino, Bryan Cieko
Project Officer:	Monica Tonel		
Phone:	206-553-0323	Recorder:	Renee Nordeen

Sample Numbers: **11204302,3,5,6,8,10,12,14,16,18,28,34,36-45**

6	**Number of shipping containers received**
0	**Number of shipping containers received with errors**
8	**Number of chains of custody received**
0	**Number of chains of custody received with errors**

# Containers	Description of Shipment/Chain of Custody Container Issues Noted:
0	Shipping Container - Addressed incorrectly (must be addressed to 'Sample Custodian')
0	Shipping Container - Samples improperly packed for shipment
0	Shipping Container - Cooler Return information not provided
0	Custody Seals - Custody Samples received with seals missing/broken
0	Chain of Custody - Missing/Outdated Form
0	Chain of Custody - Missing/Incorrect chain of custody header information

22	**Number of samples received in this shipment**
2	**Number of samples received with critical and/or non-critical errors**
0	**Number of samples received with critical errors**

# Samples	Description of Shipment/Chain of Custody/Sample Container Issues Noted:
1	Chain of Custody - Missing/Incorrect EPA numbers
0	Chain of Custody - No analysis/Incorrect analysis listed for received samples
0	Chain of Custody - Samples listed not included in shipment
0	Unique Container ID* - Missing on COC and/or Not written on the container
0	Unique Container ID* - Incorrectly assigned
0	Sample Container - Labels Missing/Damaged/Illegible
2	Sample Container - EPA Sample Numbers Missing/Incorrect ***See Below**
0	Custody Seals - Criminal Samples received with seals missing/broken
0	Sample Container - Received at elevated temperature (above 6°C)
0	Sample Container - Sample preservation requirements not met
0	Sample Container - Broken/Leaking
0	Sample Container- Insufficient sample volume and/or incorrect sample container
0	

* per Region 10 Sample Receiving SOP

Additional Information

*****Sample number 11204343 was assigned to a soil sample on 5/18, as well as a water sample on 5/21. Samples with different matrices and/or different sample collection dates cannot have the same sample number. The water sample (MW08GW) will now be assigned 11204349. Changes were made to copies of the chains of custody and the sample containers.**

***** Sample number 11204302 for Nitroaromatics had the following issues:**

Container ID codes N2-N6 were incorrectly labeled 11024302 (transposed week number), should be 11204302.

Container N6 was also labeled with the incorrect sequence number (11024303). After verifying the station location, and collection date/time, it was determined to be 11204302.

Transmitted By: Karen Norton/ ESAT

Date: 5/25/2011

Original: File

RSCC Contact: Jennifer Crawford

Project Officer: Monica Tonel

Laboratory Director: Barry Pepich

Laboratory Staff: Gerald Dodo, Chris Pace, Carol Haines, Dave Dobb, Dan Jacobsen, Shirley Loughney, Edlin Limmer

cc: Renee Nordeen- E&E

USEPA Contract Laboratory Program
Generic Chain of Custody

4.2 FP
NP 5/21

Case No: 41270
DAS No:
SDG No:
L

Date Shipped: 5/19/2011	**Chain Of Custody Record**	**Sampler Signature:**	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8623 0310 7196	**Relinquished By (Date/Time)**	**Received By (Date/Time)**	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 5/19/11-1730	Cathy Crumble 5/20/11 9:12	Transfer To:
	2 Cathy Crumble 5/20/11 1400	[illegible] 5/21/11 0930	Lab Contract No:
	3		Unit Price:
	4		

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
BG01GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204300 (Ice Only) (1)	BG01GW	S: 05/18/2011 11:09		
BG01SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204301 (Ice Only) (1)	BG01SB	S: 05/17/2011 09:33		
BG01SD	Sediment/ Bryan Ciecko	G	Perch (21)	11204343 (Ice Only) (1)	BG01SD	S: 05/18/2011 10:42		
LF01GW	Ground Water/ Andy McDonald	G	Perch (21)	11204306 (Ice Only) (1)	LF01GW	S: 05/18/2011 15:40		
LF01SB	Subsurface Soil/ Derek Pulvino	G	Perch (21)	11204307 (Ice Only) (1)	LF01SB	S: 05/16/2011 11:40		
LF01SD	Sediment/ Derek Pulvino	G	Perch (21)	11204326 (Ice Only) (1)	LF01SD	S: 05/18/2011 08:55		
LF02GW	Ground Water/ Andy McDonald	G	Perch (21)	11204308 (Ice Only) (1)	LF02GW	S: 05/19/2011 09:45		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** BG01SB	**Additional Sampler Signature (s):** [illegible] Andrew McDonald	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

Cooler TB Dig IR cor 0.8 unc 0.8 #2
Cooler Dsc by phone @ Lab
Wet Packs / Packing other
w/Co FedEx Express Saver

COC Number : 10-4097213-051911-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41270
DAS No:
SDG No:
L

Date Shipped: 5/19/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:
Airbill No: 8623 0310 7196	1 5/19/11 17:20	Cathy Crumble 5/20/11 9:40	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2 Cathy Crumble 5/20/11 16:10	5/21/11 0938	Transfer To:
	3		Lab Contract No:
	4		Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
LF02SB	Subsurface Soil/ Derek Pulvino	G	Perch (21)	11204309 (Ice Only) (1)	LF02SB	S: 05/16/2011 12:35		
LF03GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204310 (Ice Only) (1)	LF03GW	S: 05/19/2011 09:56		
LF03SB	Subsurface Soil/ Bryan Ciecko	G	Perch (21)	11204311 (Ice Only) (1)	LF03SB	S: 05/16/2011 14:03		
LF04GW	Ground Water/ Andy McDonald	G	Perch (21)	11204312 (Ice Only) (1)	LF04GW	S: 05/19/2011 10:25		
LF04SB	Subsurface Soil/ Bryan Ciecko	G	Perch (21)	11204313 (Ice Only) (1)	LF04SB	S: 05/16/2011 14:32		
LF05GW	Ground Water/ Alan Jensen	G	Perch (21)	11204314 (Ice Only) (1)	LF05GW	S: 05/19/2011 14:55		
LF05SB	Subsurface Soil/ Derek Pulvino	G	Perch (21)	11204315 (Ice Only) (1)	LF05SB	S: 05/16/2011 15:05		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** BG01SB	**Additional Sampler Signature (s):** Alan Jensen, Andrew McDonald	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

COC Number : 10-4097213-051911-0006

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41270
DAS No:
SDG No:
L

Date Shipped: 5/19/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8623 0310 7196	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 5/19/11 17:00	5/20/11 9:40	Transfer To:
	2 5/20/11 16:00	5/21/11 0930	Lab Contract No:
	3		Unit Price:
	4		

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
LF06GW	Ground Water/ Andy McDonald	G	Perch (21)	11204316 (Ice Only) (1)	LF06GW	S: 05/19/2011 11:35		
LF06SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204317 (Ice Only) (1)	LF06SB	S: 05/16/2011 15:34		
LF07GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204318 (Ice Only) (1)	LF07GW	S: 05/19/2011 12:07		
LF07SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204319 (Ice Only) (1)	LF07SB	S: 05/17/2011 10:52		
LF08SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204322 (Ice Only) (1)	LF08SB	S: 05/17/2011 11:32		
LF09SB	Subsurface Soil/ Derek Pulvino	G	Perch (21)	11204323 (Ice Only) (1)	LF09SB	S: 05/17/2011 13:43		
LF12GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204328 (Ice Only) (1)	LF12GW	S: 05/19/2011 08:55		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** BG01SB	**Additional Sampler Signature (s):** Andrew McDonald	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___
Perch = Perchlorate				

COC Number : 10-4097213-051911-0006

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41270
DAS No:
SDG No:
L

Date Shipped:	5/19/2011	**Chain Of Custody Record**	Sampler Signature:
Carrier Name:	FedEx		
Airbill No:	8623 0310 7196	Relinquished By (Date/Time)	Received By (Date/Time)
Shipped to:	Test America 5755 8th Street East Tacoma WA 98424	1 5/19/11 17:20	Cathy Gamble 5/20/11 9:45
		2 Cathy Gamble 5/20/11 10:00	Jim Paul 5/21/11 0930
		3	
		4	

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
LF12SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204329 (Ice Only) (1)	LF12SB	S: 05/17/2011 15:11		
LF13GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204330 (Ice Only) (1)	LF13GW	S: 05/18/2011 14:15		
LF13SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204331 (Ice Only) (1)	LF13SB	S: 05/17/2011 15:38		
LF14GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204332 (Ice Only) (1)	LF14GW	S: 05/18/2011 14:55		
LF14SB	Subsurface Soil/ Erin Lynch	G	Perch (21)	11204333 (Ice Only) (1)	LF14SB	S: 05/17/2011 15:58		
LF15GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204334 (Ice Only) (1)	LF15GW	S: 05/19/2011 14:10		
PP01SD	Sediment/ Derek Pulvino	G	Perch (21)	11204327 (Ice Only) (1)	PP01SD	S: 05/18/2011 09:11		

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: BG01SB	Additional Sampler Signature (s): Allen Terry, Eugene McDonald	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Analysis Key: Perch = Perchlorate	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? ___	Shipment Iced? ___

COC Number : 10-4097213-051911-0006

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

5.6 (R) 2C 5/24

Case No: 41270
DAS No:
SDG No:

L

Date Shipped: 5/23/2011
Carrier Name: Hand Delivery
Airbill No:
Shipped to: Test America
5755 8th Street East
Tacoma WA 98424

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5/23/11 1455	Cathy Gamble	5/23/11 1455
2 Cathy Gamble	5/23/11 1455	[signature]	5/24/11 0980
3			
4			

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
BG02GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204302 (Ice Only) (2)	BG02GW	S: 05/20/2011 15:11		
BG03GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204303 (Ice Only) (2)	BG03GW	S: 05/20/2011 16:54		
MW01GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204336 (Ice Only) (1)	MW01GW	S: 05/20/2011 10:00		
MW02GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204337 (Ice Only) (1)	MW02GW	S: 05/20/2011 12:20		
MW03GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204338 (Ice Only) (1)	MW03GW	S: 05/20/2011 13:35		
MW04GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204339 (Ice Only) (1)	MW04GW	S: 05/20/2011 17:00		
MW05GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204340 (Ice Only) (1)	MW05GW	S: 05/20/2011 18:20		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	BG02GW, BG03GW	[signature] for BC/DD		

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** ___ **Shipment Iced?** ___

Perch = Perchlorate

COC Number : 10-4097213-052311-0004

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41270
DAS No:
SDG No:

L

Date Shipped: 5/23/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: Hand Delivery			Lab Contract No:
Airbill No:	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1		Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY: SAMPLE No	FOR LAB USE ONLY: Sample Condition On Receipt
MW06GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204341 (Ice Only) (1)	MW06GW	S: 05/21/2011 11:58		
MW07GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204342 (Ice Only) (1)	MW07GW	S: 05/21/2011 13:15		
MW08GW	Ground Water/ Derek Pulvino	G	Perch (21)	11204343 (Ice Only) (1)	MW08GW	S: 05/21/2011 13:30		
MW09GW	Ground Water/ Bryan Ciecko	G	Perch (21)	11204344 (Ice Only) (1)	MW09GW	S: 05/21/2011 14:15		
RS01WT	Water/ Renee Nordeen	G	Perch (21)	11204345 (Ice Only) (1)	RS01WT	S: 05/21/2011 14:45		
RS02WT	Water/ Renee Nordeen	G	Perch (21)	11204305 (Ice Only) (1)	RS02WT	S: 05/21/2011 14:55		

Shipment for Case Complete? Y	**Sample (s) to be used for laboratory QC:** BG02GW, BG03GW	**Additional Sampler Signature (s):** Brian Fox BC/DP	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**	
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B		**Custody Seal Intact?** ___	**Shipment Iced?** ___

COC Number : 10-4097213-052311-0004

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ51

L

Date Shipped: 5/17/2011
Carrier Name: FedEx
Airbill No: 8656 1491 5135
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	5/17/11-1700		
2			
3			
4			5/18/11 10:25

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ51	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204301 (Ice Only) (11)	BG01SB	S: 05/17/2011 09:33	S-4022.01	
JDQ57	Subsurface Soil/ Derek Pulvino	G	BNA (21), VOA (21)	11204307 (Ice Only) (5)	LF01SB	S: 05/16/2011 11:40	.02	
JDQ59	Subsurface Soil/ Derek Pulvino	G	BNA (21), VOA (21)	11204309 (Ice Only) (5)	LF02SB	S: 05/16/2011 12:35	.03	
JDQ61	Subsurface Soil/ Bryan Ciecko	G	BNA (21), VOA (21)	11204311 (Ice Only) (5)	LF03SB	S: 05/16/2011 14:03	.04	
JDQ63	Subsurface Soil/ Bryan Ciecko	G	BNA (21), VOA (21)	11204313 (Ice Only) (5)	LF04SB	S: 05/16/2011 14:32	.05	
JDQ65	Subsurface Soil/ Derek Pulvino	G	BNA (21), VOA (21)	11204315 (Ice Only) (5)	LF05SB	S: 05/16/2011 15:05	.06	
JDQ67	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204317 ~~(HCL)~~ Ice Only, 11204317 (Ice Only) (5) RN	LF06SB	S: 05/16/2011 15:34	.07	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	JDQ51		3.1°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051711-0003

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ51

L

Date Shipped:	5/17/2011	Chain Of Custody Record	Sampler Signature:
Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)
Airbill No:	8656 1491 5135	1 5-17-11/1700	
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	2	
		3	
		4	5/18/11 10:05

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ69	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204319 (Ice Only) (5)	LF07SB	S: 05/17/2011 10:52		S-4022.08
JDQ72	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204322 (Ice Only) (5)	LF08SB	S: 05/17/2011 11:32		.09
JDQ96	Water/ Renee Nordeen	G	VOA (21)	11204346 (HCL) (2)	TB01WT	S: 05/16/2011 10:20		

ORIGINAL
Case: 41270 SDG: JDQ51
Episode: S-4022 init/date: NLH 5/18/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	JDQ51	Brown	3.1°C	
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B		Custody Seal Intact? Y Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051711-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ51

L

Date Shipped:	5/18/2011	Chain Of Custody Record	Sampler Signature:
Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)
Airbill No:	8656 1491 4893	1 RVora 5/18/11/1700	
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	2	
		3	
		4	Quendalle 5/19/11 10:15

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ50	Ground Water/ Bryan Ciecko	G	BNA (21), VOA (21)	11204300 (HCL), 11204300 (Ice Only) (4)	BG01GW	S: 05/18/2011 11:09		
JDQ73	Subsurface Soil/ Derek Pulvino	G	BNA (21), VOA (21)	11204323 (HCL), 11204323 (Ice Only) (5)	LF09SB	S: 05/17/2011 13:43		S-4028.01
JDQ76	Sediment/ Derek Pulvino	G	BNA (21), VOA (21)	11204326 (HCL), 11204326 (Ice Only) (5)	LF01SD	S: 05/18/2011 08:55		.02
JDQ77	Sediment/ Derek Pulvino	G	BNA (21), VOA (21)	11204327 (HCL), 11204327 (Ice Only) (5)	PP01SD	S: 05/18/2011 09:11		.03
JDQ79	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204329 (HCL), 11204329 (Ice Only) (5)	LF12SB	S: 05/17/2011 15:11		.04
JDQ80	Ground Water/ Bryan Ciecko	G	VOA (21)	11204330 (HCL) (2)	LF13GW	S: 05/18/2011 14:15		
JDQ81	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204331 (Ice Only) (5)	LF13SB	S: 05/17/2011 15:38		S-4028.05

ORIGINAL
Case: 41270 SDG: JDQ51
Episode: S-4028 init/date: 5/19/11

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s): RVora	Cooler Temperature Upon Receipt: 2.4°C	Chain of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051811-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

LABORATORY COPY

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ51 **L**

Date Shipped: 5/18/2011
Carrier Name: FedEx
Airbill No: 8656 1491 4893
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 Brord	5/18/11/1700		
2			
3			
4		Aundra Noe	5/19/11 10:15

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ83	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204333 (HCL), 11204333 (Ice Only) (5)	LF14SB	S: 05/17/2011 15:58		S-4028.06
JDQ97	Water/ Renee Nordeen	G	VOA (21)	11204347 (HCL) (2)	TB02WT	S: 05/18/2011 10:20		
JDQA3	Sediment/ Bryan Ciecko	G	BNA (21), VOA (21)	11204343 (Ice Only) (5)	BG01SD	S: 05/18/2011 10:42		S-4028.07 Pr

ORIGINAL
Case 41270 SDG JDQ51
Episode: S-4028 init/date: NH 5/19/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		Brord	2.4°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051811-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

LABORATORY COPY

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Page 2 of 2

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ52 **L**

Date Shipped: 5/23/2011
Carrier Name: FedEx
Airbill No: 8656 1491 4952
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5/23/11 1300		
2			
3			
4		[signature]	5/24/11 10.25

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ52	Ground Water/ Bryan Ciecko	G	VOA (21)	11204302 (HCL) (6)	BG02GW	S: 05/20/2011 15:11		S-4035.01
JDQ54	Ground Water/ Derek Pulvino	G	VOA (21)	11204303 (HCL) (6)	BG03GW	S: 05/20/2011 16:54		
JDQ55	Water/ Renee Nordeen	G	VOA (21)	11204305 (HCL) (2)	RS02WT	S: 05/21/2011 14:55		
JDQ56	Ground Water/ Andy McDonald	G	VOA (21)	11204306 (HCL) (2)	LF01GW	S: 05/18/2011 15:40		
JDQ58	Ground Water/ Andy McDonald	G	VOA (21)	11204308 (HCL) (2)	LF02GW	S: 05/19/2011 09:45		
JDQ60	Ground Water/ Derek Pulvino	G	VOA (21)	11204310 (HCL) (2)	LF03GW	S: 05/19/2011 09:56		
JDQ62	Ground Water/ Andy McDonald	G	VOA (21)	11204312 (HCL) (2)	LF04GW	S: 05/19/2011 10:25		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	JDQ52, JDQ54	BC, DP, AM, AJ [signature] for	2.4°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

VOA = CLP TCL Volatiles

ORIGINAL
Case: 41270 SDG: JDQ96
Episode: S-4034 init/date: NLH 5/24/11

COC Number : 10-4097213-052311-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ52

L

Date Shipped:	5/23/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 4952
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5/23/11 1300		
2			
3			
4		[signature]	5/24/11 10:25

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ87	Ground Water/ Bryan Ciecko	G	VOA (21)	11204337 (HCL) (2)	MW02GW	S: 05/20/2011 12:20	S-4035.02	
JDQ88	Ground Water/ Bryan Ciecko	G	VOA (21)	11204338 (HCL) (2)	MW03GW	S: 05/20/2011 13:35	.03	
JDQ89	Ground Water/ Bryan Ciecko	G	VOA (21)	11204339 (HCL) (2)	MW04GW	S: 05/20/2011 17:00	.04	
JDQ90	Ground Water/ Bryan Ciecko	G	VOA (21)	11204340 (HCL) (2)	MW05GW	S: 05/20/2011 18:20	.05	
JDQ91	Ground Water/ Derek Pulvino	G	VOA (21)	11204341 (HCL) (2)	MW06GW	S: 05/21/2011 11:58	.06	
JDQ92	Ground Water/ Bryan Ciecko	G	VOA (21)	11204342 (HCL) (2)	MW07GW	S: 05/21/2011 13:15	.07	
JDQ93	Ground Water/ Derek Pulvino	G	VOA (21)	11204343 (HCL) (2)	MW08GW	S: 05/21/2011 13:30	.08	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	JDQ52, JDQ54	AM, AJ, BC, DP [signature] for	2.4°C	

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

VOA = CLP TCL Volatiles

COC Number : 10-4097213-052311-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ52 **L**

Date Shipped: 5/23/2011	**Chain Of Custody Record**	Sampler Signature: BVoza for BC	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No: EPW11031
Airbill No: 8656 1491 4920	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 BVoza 5/23/11 1300		Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4	Quadia Jha 5/24/11 10:25	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ52	Ground Water/ Bryan Ciecko	G	BNA (21)	11204302 (Ice Only) (6)	BG02GW	S: 05/20/2011 15:11	S-4035.01	
JDQ87	Ground Water/ Bryan Ciecko	G	BNA (21)	11204337 (Ice Only) (2)	MW02GW	S: 05/20/2011 12:20	.02	
JDQ88	Ground Water/ Bryan Ciecko	G	BNA (21)	11204338 (Ice Only) (2)	MW03GW	S: 05/20/2011 13:35	.03	

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** JDQ52	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:** 4.6°C	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** N	**Shipment Iced?** Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-052011-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ52 **L**

Date Shipped:	5/23/2011	Chain Of Custody Record	Sampler Signature: B Vorgan for BC	For Lab Use Only	
Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:	EPW11031
Airbill No:	8656 1491 4930	1 B Vorgan 5/23 11:1300		Unit Price:	
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	2		Transfer To:	
		3		Lab Contract No:	
		4	Sundra Nx 5/24/11 10:25	Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ54	Ground Water/ Derek Pulvino	G	BNA (21)	11204303 (Ice Only) (6)	BG03GW	S: 05/20/2011 16:54		
JDQ86	Ground Water/ Bryan Ciecko	G	BNA (21)	11204336 (Ice Only) (2)	MW01GW	S: 05/20/2011 10:00		
JDQ89	Ground Water/ Bryan Ciecko	G	BNA (21)	11204339 (Ice Only) (2)	MW04GW	S: 05/20/2011 17:00		S-4035.04

ORIGINAL
Case 41270 SDG JDQ96
Episode S-4034 init/date NN 5/24/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :	
N	JDQ54		2.5°C		
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B		Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-052011-0006

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ52

L

Date Shipped:	5/23/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 4941
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5/23/11 13:00		
2			
3			
4		[signature]	5/24/11 10:25

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ55	Water/ Renee Nordeen	G	BNA (21)	11204305 (Ice Only) (2)	RS02WT	S: 05/21/2011 14:55		
JDQ90	Ground Water/ Bryan Ciecko	G	BNA (21)	11204340 (Ice Only) (2)	MW05GW	S: 05/20/2011 18:20		S-4035.05
JDQ91	Ground Water/ Derek Pulvino	G	BNA (21)	11204341 (Ice Only) (2)	MW06GW	S: 05/21/2011 11:58		.06
JDQ92	Ground Water/ Bryan Ciecko	G	BNA (21)	11204342 (Ice Only) (2)	MW07GW	S: 05/21/2011 13:15		.07
JDQ93	Ground Water/ Derek Pulvino	G	BNA (21)	11204343 (Ice Only) (2)	MW08GW	S: 05/21/2011 13:30		.08 Prison 507
JDQ94	Ground Water/ Bryan Ciecko	G	BNA (21)	11204344 (Ice Only) (2)	MW09GW	S: 05/21/2011 14:15		
JDQ95	Water/ Renee Nordeen	G	BNA (21)	11204345 (Ice Only) (2)	RS01WT	S: 05/21/2011 14:45		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature] for DP+BC	2.7°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

BNA = CLP TCL Semivolatiles

ORIGINAL
Case: 41270 SDG: JDQ96
Episode: S-4034 init/date: NH 5/24/11

COC Number : 10-4097213-052311-0001

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped: 5/17/2011
Carrier Name: FedEx
Airbill No: 8656 1491 5135
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5-17-11/1700		
2			
3			
4		[signature]	5/18/11 10:05

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ69	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204319 (Ice Only) (5)	LF07SB	S: 05/17/2011 10:52		
JDQ72	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204322 (Ice Only) (5)	LF08SB	S: 05/17/2011 11:32		
JDQ96	Water/ Renee Nordeen	G	VOA (21)	11204346 (HCL) (2)	TB01WT	S: 05/16/2011 10:20		S-4023.01 1st Sp Spec

ORIGINAL
Case 41270 SDG JDQ51
Episode S-4022 init/date: NLK 5/18/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	JDQ51	[signature] Brown	3.1°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051711-0003

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96 **L**

Date Shipped: 5/18/2011
Carrier Name: FedEx
Airbill No: 8656 1491 4893
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 RVora	5/18/11 1700		
2			
3			
4		[signature]	5/19/11 10:15

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ50	Ground Water/ Bryan Ciecko	G	BNA (21), VOA (21)	11204300 (HCL), 11204300 (Ice Only) (4)	BG01GW	S: 05/18/2011 11:09		S-4029.01
JDQ73	Subsurface Soil/ Derek Pulvino	G	BNA (21), VOA (21)	11204323 (HCL), 11204323 (Ice Only) (5)	LF09SB	S: 05/17/2011 13:43		
JDQ76	Sediment/ Derek Pulvino	G	BNA (21), VOA (21)	11204326 (HCL), 11204326 (Ice Only) (5)	LF01SD	S: 05/18/2011 08:55		
JDQ77	Sediment/ Derek Pulvino	G	BNA (21), VOA (21)	11204327 (HCL), 11204327 (Ice Only) (5)	PP01SD	S: 05/18/2011 09:11		
JDQ79	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204329 (HCL), 11204329 (Ice Only) (5)	LF12SB	S: 05/17/2011 15:11		
JDQ80	Ground Water/ Bryan Ciecko	G	VOA (21)	11204330 (HCL) (2)	LF13GW	S: 05/18/2011 14:15		S-4029.02
JDQ81	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204331 (Ice Only) (5)	LF13SB	S: 05/17/2011 15:38		

ORIGINAL
Case 41270 SDG JDQ51
Episode S-4028 init/date NH 5/19/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature] RVora	2.4 °C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051811-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96 **L**

Date Shipped: 5/18/2011
Carrier Name: FedEx
Airbill No: 8656 1491 4893
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 Brad	5/18/11/1700		
2			
3			
4		Andrea Roe	5/19/11 10:15

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ83	Subsurface Soil/ Erin Lynch	G	BNA (21), VOA (21)	11204333 (HCL), 11204333 (Ice Only) (5)	LF14SB	S: 05/17/2011 15:58		
JDQ97	Water/ Renee Nordeen	G	VOA (21)	11204347 (HCL) (2)	TB02WT	S: 05/18/2011 10:20		
JDQA3	Sediment/ Bryan Ciecko	G	BNA (21), VOA (21)	11204343 (Ice Only) (5)	BG01SD	S: 05/18/2011 10:42		

S-4029.03

ORIGINAL
case 41270 SDG JDQ51
subcode S-4028 init/date NH 5/19/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		Brad	2.4°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

COC Number : 10-4097213-051811-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped:	5/19/2011	Chain Of Custody Record	Sampler Signature:
Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)
Airbill No:	8656 1491 4908	1 [illegible] 5/19/11 1700	
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	2	
		3	
		4	[illegible] 5/20/11 10:20

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ56	Ground Water/ Andy McDonald	G	BNA (21)	11204306 (Ice Only) (2)	LF01GW	S: 05/18/2011 15:40	S-4030-01	
JDQ58	Ground Water/ Andy McDonald	G	BNA (21)	11204308 (Ice Only) (2)	LF02GW	S: 05/19/2011 09:45	.02	
JDQ60	Ground Water/ Derek Pulvino	G	BNA (21)	11204310 (Ice Only) (2)	LF03GW	S: 05/19/2011 09:56	.03	
JDQ78	Ground Water/ Derek Pulvino	G	BNA (21)	11204328 (Ice Only) (2)	LF12GW	S: 05/19/2011 08:55	.04	
JDQ80	Ground Water/ Bryan Ciecko	G	BNA (21)	11204330 (Ice Only) (2)	LF13GW	S: 05/18/2011 14:15	.05	
JDQ82	Ground Water/ Derek Pulvino	G	BNA (21)	11204332 (Ice Only) (2)	LF14GW	S: 05/18/2011 14:55	.06	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		Andrew McDonald	2.4°	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-051911-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped: 5/23/2011
Carrier Name: FedEx
Airbill No: 8656 1491 4952
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5/23/11 1300		
2			
3			
4		[signature]	5/24/11 10:25

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ52	Ground Water/ Bryan Ciecko	G	VOA (21)	11204302 (HCL) (6)	BG02GW	S: 05/20/2011 15:11		
JDQ54	Ground Water/ Derek Pulvino	G	VOA (21)	11204303 (HCL) (6)	BG03GW	S: 05/20/2011 16:54	S-4034	.01
JDQ55	Water/ Renee Nordeen	G	VOA (21)	11204305 (HCL) (2)	RS02WT	S: 05/21/2011 14:55		.02
JDQ56	Ground Water/ Andy McDonald	G	VOA (21)	11204306 (HCL) (2)	LF01GW	S: 05/18/2011 15:40		.03
JDQ58	Ground Water/ Andy McDonald	G	VOA (21)	11204308 (HCL) (2)	LF02GW	S: 05/19/2011 09:45		.04
JDQ60	Ground Water/ Derek Pulvino	G	VOA (21)	11204310 (HCL) (2)	LF03GW	S: 05/19/2011 09:56		.05
JDQ62	Ground Water/ Andy McDonald	G	VOA (21)	11204312 (HCL) (2)	LF04GW	S: 05/19/2011 10:25		.06

Shipment for Case Complete? Y

Sample (s) to be used for laboratory QC: JDQ52, JDQ54

Additional Sampler Signature (s): BC, DP, AM, AT [signature] for

Cooler Temperature Upon Receipt: 2.4°C

Chain of Custody Seal Number :

Analysis Key: VOA = CLP TCL Volatiles

Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium

Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y

Shipment Iced? Y

ORIGINAL
Case: 41270 SDG: JDQ96
Episode: S-4034 init/date: NLH 5/24/11

COC Number : 10-4097213-052311-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96 **L**

Date Shipped:	5/23/2011	**Chain Of Custody Record**	Sampler Signature: RNorden	**For Lab Use Only**
Carrier Name:	FedEx			Lab Contract No: EPW11031
Airbill No:	8656 1491 4941	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 RNorden 5/23/11 13:00		Transfer To:
		2		Lab Contract No:
		3		Unit Price:
		4	[illegible] 5/24/11 10:25	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ55	Water/ Renee Nordeen	G	BNA (21)	11204305 (Ice Only) (2)	RS02WT	S: 05/21/2011 14:55	S-4034.02	
JDQ90	Ground Water/ Bryan Ciecko	G	BNA (21)	11204340 (Ice Only) (2)	MW05GW	S: 05/20/2011 18:20		
JDQ91	Ground Water/ Derek Pulvino	G	BNA (21)	11204341 (Ice Only) (2)	MW06GW	S: 05/21/2011 11:58		
JDQ92	Ground Water/ Bryan Ciecko	G	BNA (21)	11204342 (Ice Only) (2)	MW07GW	S: 05/21/2011 13:15		
JDQ93	Ground Water/ Derek Pulvino	G	BNA (21)	11204343 (Ice Only) (2)	MW08GW	S: 05/21/2011 13:30		
JDQ94	Ground Water/ Bryan Ciecko	G	BNA (21)	11204344 (Ice Only) (2)	MW09GW	S: 05/21/2011 14:15	S-4034.14	
JDQ95	Water/ Renee Nordeen	G	BNA (21)	11204345 (Ice Only) (2)	RS01WT	S: 05/21/2011 14:45	↓ .15	

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** RNorden for DP+BC	**Cooler Temperature Upon Receipt:** 2.7°C	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** Y	**Shipment Iced?** Y

BNA = CLP TCL Semivolatiles

ORIGINAL
Case: 41270 SDG: JDQ96
Episode: S-4034 init/date: [illegible] 5/24/11

COC Number : 10-4097213-052311-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped:	5/23/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name:	FedEx			Lab Contract No: EPW11031
Airbill No:	8656 1491 4952	**Relinquished By (Date/Time)**	**Received By (Date/Time)**	Unit Price:
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 for 5/23/11 1300		Transfer To:
		2		Lab Contract No:
		3		Unit Price:
		4	5/24/11 10:25	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ64	Ground Water/ Alan Jensen	G	VOA (21)	11204314 (HCL) (2)	LF05GW	S: 05/19/2011 14:55	S-4034.07	
JDQ66	Ground Water/ Andy McDonald	G	VOA (21)	11204316 (HCL) (2)	LF06GW	S: 05/19/2011 11:35	.08	
JDQ68	Ground Water/ Derek Pulvino	G	VOA (21)	11204318 (HCL) (2)	LF07GW	S: 05/19/2011 12:07	.09	
JDQ78	Ground Water/ Derek Pulvino	G	VOA (21)	11204328 (HCL) (2)	LF12GW	S: 05/19/2011 08:55	.10	
JDQ82	Ground Water/ Derek Pulvino	G	VOA (21)	11204332 (HCL) (2)	LF14GW	S: 05/18/2011 14:55	.11	
JDQ84	Ground Water/ Bryan Ciecko	G	VOA (21)	11204334 (HCL) (2)	LF15GW	S: 05/19/2011 14:10	.12	
JDQ86	Ground Water/ Bryan Ciecko	G	VOA (21)	11204336 (HCL) (2)	MW01GW	S: 05/20/2011 10:00	.13	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	JDQ52, JDQ54	for AJ, AM, BC, DP	2.4°C	

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

VOA = CLP TCL Volatiles

COC Number : 10-4097213-052311-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped:	5/23/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 4930
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065

Chain Of Custody Record

Sampler Signature: [illegible] for BC

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [illegible]	5/23/11/1300		
2			
3			
4		[illegible]	5/24/11 10:25

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ54	Ground Water/ Derek Pulvino	G	BNA (21)	11204303 (Ice Only) (6)	BG03GW	S: 05/20/2011 16:54		S-4034.01
JDQ86	Ground Water/ Bryan Ciecko	G	BNA (21)	11204336 (Ice Only) (2)	MW01GW	S: 05/20/2011 10:00		↓ .13
JDQ89	Ground Water/ Bryan Ciecko	G	BNA (21)	11204339 (Ice Only) (2)	MW04GW	S: 05/20/2011 17:00		

ORIGINAL
Case: 41270 SDG: JDQ96
Episode: S-4034 init/date: [illegible] 5/24/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	JDQ54	[illegible]	2.5°C	

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-052011-0006

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped: 5/20/2011
Carrier Name: FedEx
Airbill No: 8656 1491 4919
Shipped to: KAP Technologies, Inc.
9391 Grogans Mill Road
The Woodlands TX 77380
2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 BVora	5/20/11/1700		
2			
3			
4		[signature]	5/24/11 10:25

For Lab Use Only
Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ62	Ground Water/ Andy McDonald	G	BNA (21)	11204312 (Ice Only) (2)	LF04GW	S: 05/19/2011 10:25		S-4034.06
JDQ64	Ground Water/ Alan Jensen	G	BNA (21)	11204314 (Ice Only) (2)	LF05GW	S: 05/19/2011 14:55		.07
JDQ66	Ground Water/ Andy McDonald	G	BNA (21)	11204316 (Ice Only) (2)	LF06GW	S: 05/19/2011 11:35		.08
JDQ68	Ground Water/ Derek Pulvino	G	BNA (21)	11204318 (Ice Only) (2)	LF07GW	S: 05/19/2011 12:07		.09
JDQ84	Ground Water/ Bryan Ciecko	G	BNA (21)	11204334 (Ice Only) (2)	LF15GW	S: 05/19/2011 14:10		.12

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature] BVora for AJ + AM	2.9°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** N **Shipment Iced?** Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-052011-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41270
DAS No:
SDG No: JDQ96

L

Date Shipped:	5/23/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 4952
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	5/23/11 1300		
2			
3			
4		[signature]	5/24/11 10:25

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
JDQ94	Ground Water/ Bryan Ciecko	G	VOA (21)	11204344 (HCL) (2)	MW09GW	S: 05/21/2011 14:15		S-4034.14
JDQ95	Water/ Renee Nordeen	G	VOA (21)	11204345 (HCL) (2)	RS01WT	S: 05/21/2011 14:45		.15
JDQ98	Water/ Renee Nordeen	G	VOA (21)	11204348 (HCL) (2)	TB03WT	S: 05/19/2011 08:45		.16 [illegible]

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	JDQ52, JDQ54	for AJ, AM, BC, DP [signature]	2.4°C	

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

VOA = CLP TCL Volatiles

COC Number : 10-4097213-052311-0005

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	Date Shipped:	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	FedEx		
Account Code:		Airbill:	8731 4571 5730	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/25/11 15:00	K Wood 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	8/26/11
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				good
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FB01SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344529 (Ice Only) (1)	FB01SS	S: 08/23/2011 10:55	N1
FB02SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344531 (Ice Only) (1)	FB02SS	S: 08/23/2011 11:00	N1
FB03SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344533 (Ice Only) (1)	FB03SS	S: 08/23/2011 11:09	N1
FB04SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344534 (Ice Only) (1)	FB04SS	S: 08/23/2011 11:18	N1
FP08SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344528 (Ice Only) (1)	FP08SS	S: 08/23/2011 10:30	N1
FP09SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344530 (Ice Only) (1)	FP09SS	S: 08/23/2011 10:53	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** YES

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	FedEx		
Account Code:		**Airbill:**	8731 4571 5730	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/25/11 13:00	K wood 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	8/26/11
Project Leader:	Renee Nordeen			4	good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FP10SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344532 (Ice Only) (1)	FP10SS	S: 08/23/2011 11:09	N1
FR07SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344525 (Ice Only) (1)	FR07SS	S: 08/23/2011 09:55	N1
FR12SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344545 (Ice Only) (1)	FR12SS	S: 08/23/2011 14:28	N1
FR13SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344546 (Ice Only) (1)	FR13SS	S: 08/23/2011 14:40	N1
FR14SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344547 (Ice Only) (1)	FR14SS	S: 08/23/2011 14:52	N1
FR15SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344548 (Ice Only) (1)	FR15SS	S: 08/23/2011 15:09	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	FedEx		
Account Code:		**Airbill:**	8731 4571 5730	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/25/11 13:00	K. Wood 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	8/26/11
Project Leader:	Renee Nordeen			4	good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
OB05SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344544 (Ice Only) (1)	OB05SS	S: 08/23/2011 14:25	N1
OP01SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344536 (Ice Only) (1)	OP01SS	S: 08/23/2011 11:35	N1
FB05SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344535 (Ice Only) (1)	FB05SS	S: 08/23/2011 11:26	N1
FB06SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344538 (Ice Only) (1)	FB06SS	S: 08/23/2011 11:33	N1
FP06SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344524 (Ice Only) (1)	FP06SS	S: 08/23/2011 09:46	N1
FP07SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344527 (Ice Only) (1)	FP07SS	S: 08/23/2011 10:05	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	FedEx		
Account Code:		**Airbill:**	8731 4571 5730	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/24/11 13:00	K Wood 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	8/26/11
Project Leader:	Renee Nordeen			4	good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FR08SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344526 (Ice Only) (1)	FR08SS	S: 08/23/2011 10:05	N1
FR09SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344539 (Ice Only) (1)	FR09SS	S: 08/23/2011 13:45	N1
FR10SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344541 (Ice Only) (1)	FR10SS	S: 08/23/2011 14:08	N1
FR11SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344543 (Ice Only) (1)	FR11SS	S: 08/23/2011 14:17	N1
FR16SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344549 (Ice Only) (1)	FR16SS	S: 08/23/2011 15:25	N1
OB02SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344537 (Ice Only) (1)	OB02SS	S: 08/23/2011 13:45	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** Yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	**Date Shipped:**	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	FedEx		
Account Code:		**Airbill:**	8731 4571 5730	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/24/11 13:30	L. Wood 1245 8/26/11 good
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
OB03SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344540 (Ice Only) (1)	OB03SS	S: 08/23/2011 13:58	N
OB04SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344542 (Ice Only) (1)	OB04SS	S: 08/23/2011 14:10	N

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** YES

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	**Date Shipped:**	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	FedEx		
Account Code:		**Airbill:**	8731 4571 5740	**Relinquished By** (Date/Time)	**Received By** (Date/Time)
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/25/11 1300	8/26/11 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	Good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
PU01SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344505 (Ice Only) (1)	PU01SD	S: 08/22/2011 14:27	N1
PU02SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344506 (Ice Only) (1)	PU02SD	S: 08/22/2011 14:30	N1
PU03SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344507 (Ice Only) (1)	PU03SD	S: 08/22/2011 14:47	N1
PU04SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344508 (Ice Only) (1)	PU04SD	S: 08/22/2011 14:58	N1
PU05SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344509 (Ice Only) (1)	PU05SD	S: 08/22/2011 15:14	N1
PU06SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344510 (Ice Only) (1)	PU06SD	S: 08/22/2011 15:33	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** FP01SS, FR03SS	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** YES

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	**Date Shipped:**	8/25/2011
Project Code:	TEC-993B	**Carrier Name:**	FedEx
Account Code:		**Airbill:**	8731 4571 5740
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747
Spill ID:			
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA		
Project Leader:	Renee Nordeen		
Action:	Expanded Site Investigation/RI		
Sampling Co:	Ecology and Environment, Inc.		

Chain of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	R Nord	8/25/11 1300	K Nuetz	
2				8/26/11
3				1245
4				good

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FP01SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344500 (Ice Only) (1)	FP01SS	S: 08/22/2011 11:45	N1
FP02SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344501 (Ice Only) (1)	FP02SS	S: 08/22/2011 13:05	N1
FP03SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344502 (Ice Only) (1)	FP03SS	S: 08/22/2011 13:30	N1
FP04SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344503 (Ice Only) (1)	FP04SS	S: 08/22/2011 14:05	N1
FP05SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344504 (Ice Only) (1)	FP05SS	S: 08/22/2011 14:30	N1
FR01SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344518 (Ice Only) (1)	FR01SS	S: 08/23/2011 09:01	N1

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
N	FP01SS	[signature]	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Shipment Iced?** YES

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

(8)

Region:	10	Date Shipped:	8/25/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	FedEx		
Account Code:		Airbill:	8731 4571 5740	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 RV 8/25/11/1300	KN 8/26/11 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	Good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FR02SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344519 (Ice Only) (1)	FR02SS	S: 08/23/2011 09:13	N1
FR03SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344520 (Ice Only) (1)	FR03SS	S: 08/23/2011 09:22	N1
FR04SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344521 (Ice Only) (1)	FR04SS	S: 08/23/2011 09:30	N1
FR05SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344522 (Ice Only) (1)	FR05SS	S: 08/23/2011 09:41	N1
FR06SS	Surface Soil/ Jeff Fetters	G	NIT_ARO (21)	11344523 (Ice Only) (1)	FR06SS	S: 08/23/2011 09:50	N1
OB01SS	Surface Soil/ Mark Zawistoski	G	NIT_ARO (21)	11344516 (Ice Only) (1)	OB01SS	S: 08/22/2011 16:30	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** FP01SS, FR03SS	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** Yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	FedEx		
Account Code:		**Airbill:**	8731 4571 5740	**Relinquished By** (Date/Time)	**Received By** (Date/Time)
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 8/25/11/1300	[illegible] 8/26/11 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
PU07SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344511 (Ice Only) (1)	PU07SD	S: 08/22/2011 16:12	N1
PU08SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344512 (Ice Only) (1)	PU08SD	S: 08/22/2011 16:33	N1
PU09SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344513 (Ice Only) (1)	PU09SD	S: 08/22/2011 16:48	N1
PU10SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344514 (Ice Only) (1)	PU10SD	S: 08/22/2011 16:58	N1
PU11SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344515 (Ice Only) (1)	PU11SD	S: 08/22/2011 17:08	N1
PU12SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21)	11344517 (Ice Only) (1)	PU12SD	S: 08/22/2011 17:22	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** FP01SS, FR03SS	**Additional Sampler Signature (s):** [illegible]	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

(1D)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	Date Shipped:	8/25/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)
Account Code:		Airbill:	8731 4571 5692	1 8/25/11 1300	8/26/11 1245
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	
Spill ID:				3	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			4	good
Project Leader:	Renee Nordeen				
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
CT01SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344556 (Ice Only) (1)	CT01SS	S: 08/24/2011 10:07	N1
CT02SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344557 (Ice Only) (1)	CT02SS	S: 08/24/2011 10:26	N1
CT03SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344558 (Ice Only) (1)	CT03SS	S: 08/24/2011 10:46	N1
CT04SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344559 (Ice Only) (1)	CT04SS	S: 08/24/2011 11:17	N1
CT10SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344565 (Ice Only) (1)	CT10SS	S: 08/24/2011 14:42	N1
CT11SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344566 (Ice Only) (1)	CT11SS	S: 08/24/3011 15:13	N1

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
N	CT11SS		
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Shipment Iced? yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0010

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	Date Shipped:	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	FedEx		
Account Code:		Airbill:	8731 4571 5692	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 8/25/11 1300	K. Wood 8/26/11
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	1245
Project Leader:	Renee Nordeen			4	Good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FP11SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344550 (Ice Only) (1)	FP11SS	S: 08/23/2011 15:36	N(
FP12SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344551 (Ice Only) (1)	FP12SS	S: 08/23/2011 15:47	N(
OB06SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344562 (Ice Only) (1)	OB06SS	S: 08/24/2011 13:42	N(
OB07SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344563 (Ice Only) (1)	OB07SS	S: 08/24/2011 13:55	N(
OB08SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344567 (Ice Only) (1)	OB08SS	S: 08/24/2011 14:43	N(
OB09SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344568 (Ice Only) (1)	OB09SS	S: 08/24/2011 15:10	N(

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** CT11SS, FP16SS	**Additional Sampler Signature (s):** [illegible]	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0010

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

(12)

Reference Case: 41603
Client No:

R

Region:	10	Date Shipped:	8/25/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	FedEx		
Account Code:		Airbill:	8731 4571 5692	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/25/11	8/26/11 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
CT05SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344560 (Ice Only) (1)	CT05SS	S: 08/24/2011 11:40	N1
CT06SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344561 (Ice Only) (1)	CT06SS	S: 08/24/2011 13:20	N1
CT07SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344570 (Ice Only) (1)	CT07SS	S: 08/24/2011 13:50	N1
CT09SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344564 (Ice Only) (1)	CT09SS	S: 08/24/2011 14:25	N1
FP13SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344552 (Ice Only) (1)	FP13SS	S: 08/23/2011 15:58	N1
FP14SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344553 (Ice Only) (1)	FP14SS	S: 08/23/2011 16:16	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** CT11SS	**Additional Sampler Signature (s):** Andy McDonald	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0010

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

(13)

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	Date Shipped:	8/25/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	FedEx		
Account Code:		Airbill:	8731 4571 5692	Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/25/11 13:00	8/26/11 1245
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	good
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
FP15SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344554 (Ice Only) (1)	FP15SS	S: 08/23/2011 16:33	N1
FP16SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344555 (Ice Only) (1)	FP16SS	S: 08/23/2011 17:02	N1

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** CT11SS, FP16SS	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** yes

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082411-0010

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

14

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	Date Shipped:	8/29/2011
Project Code:	TEC-993B	Carrier Name:	Hand Delivery
Account Code:		Airbill:	
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747
Spill ID:			
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA		
Project Leader:	Renee Nordeen		
Action:	Expanded Site Investigation/RI		
Sampling Co:	Ecology and Environment, Inc.		

Chain of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	8/29/11 1540	[signature]	8/30/11 750
2			
3			
4			

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LC08SD	Sediment/ Andy McDonald	G	~~GS~~ TOC Dist (21), NIT_ARO (21)	11344600 (Ice Only) (2)	LC08SD	S: 08/25/2011 13:25	--
PT01SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344572 (Ice Only) (1)	PT01SS	S: 08/24/2011 16:16	--
PT02SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	~~A~~ 11344573 (Ice Only) (1)	PT02SS	S: 08/24/2011 16:30	--
PT03SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344575 (Ice Only) (1)	PT03SS	S: 08/24/2011 16:40	--
PT04SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344576 (Ice Only) (1)	PT04SS	S: 08/24/3011 16:55	--
PT05SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344579 (Ice Only) (1)	PT05SS	S: 08/24/2011 17:08	--

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
N		[signature]	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Shipment Iced?** ✓

GS Dist = Grain Size Distribution, NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082611-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

Page 1 of 4

153

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	Date Shipped:	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:				1 [illegible] 8/29/11 1540	[illegible]
Spill ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	8/30/11
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	750
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
PT06SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344577 (Ice Only) (1)	PT06SS	S: 08/24/2011 17:20	--
PT07SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344578 (Ice Only) (1)	PT07SS	S: 08/24/2011 17:23	--
PT08SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344583 (Ice Only) (1)	PT08SS	S: 08/24/2011 17:30	--
PT09SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344580 (Ice Only) (1)	PT09SS	S: 08/24/2011 17:36	--
PT10SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344581 (Ice Only) (1)	PT10SS	S: 08/24/2011 18:05	--
PT11SS	Surface Soil/ Ada Hamilton	G	NIT_ARO (21)	11344582 (Ice Only) (1)	PT11SS	S: 08/24/2011 18:03	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** [illegible]	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

GS Dist = Grain Size Distribution, NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082611-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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163

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 [illegible] 8/29/11 1540	[illegible]
Spill ID:				2	8/30/11
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	750
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
PT12SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344584 (Ice Only) (1)	PT12SS	S: 08/25/2011 09:05	--
PT13SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344585 (Ice Only) (1)	PT13SS	S: 08/25/2011 09:15	--
PT14SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344586 (Ice Only) (1)	PT14SS	S: 08/25/2011 09:24	--
PT15SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344587 (Ice Only) (1)	PT15SS	S: 08/25/2011 09:35	--
PT16SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344588 (Ice Only) (1)	PT16SS	S: 08/25/2011 09:40	--
PT17SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344589 (Ice Only) (1)	PT17SS	S: 08/25/2011 09:45	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

GS Dist = Grain Size Distribution, NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082611-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	Date Shipped:	8/29/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/29/11 1540	8/30/11 750
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
PT18SS	Surface Soil/ Brad Martin	G	NIT_ARO (21)	11344590 (Ice Only) (1)	PT18SS	S: 08/25/2011 09:52	--
CT08SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344571 (Ice Only) (1)	CT08SS	S: 08/24/2011 14:05	--
EF01SD	Sediment/ Andy McDonald	G	TOC ~~GS Dist~~ (21), NIT_ARO (21)	11344569 (Ice Only) (2)	EF01SD	S: 08/24/2011 15:59	--
EF02SD	Sediment/ Andy McDonald	G	TOC ~~GS Dist~~ (21), NIT_ARO (21)	11344574 (Ice Only) (2)	EF02SD	S: 08/24/2011 16:40	--
LC02SD	Sediment/ Brad Martin	G	TOC ~~GS Dist~~ (21), NIT_ARO (21)	11344592 (Ice Only) (2)	LC02SD	S: 08/25/2011 10:50	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

GS Dist = Grain Size Distribution, NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082611-0003

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USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

18

Region:	10	Date Shipped:	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:				1	
Spill ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG04SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21), TOC (21)	11344647 (Ice Only) (2)	BG04SD	S: 08/26/2011 16:05	--
BG04SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344645 (Ice Only) (2)	BG04SW	S: 08/26/2011 16:10	--
LC14SW	Surface Water/ Ada Hamilton	G	NIT_ARO (21)	11344609 (Ice Only) (2)	LC14SW	S: 08/25/2011 15:45	--
LC15SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344612 (Ice Only) (2)	LC15SW	S: 08/25/2011 16:25	--
NF06SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21), TOC (21)	11344637 (Ice Only) (2)	NF06SD	S: 08/26/2011 14:00	--
NF07SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344640 (Ice Only) (2)	NF07SD	S: 08/26/2011 14:22	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0005

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/29/11 1540	8/30/11 750
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
NF07SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344638 (Ice Only) (2)	NF07SW	S: 08/26/2011 14:29	--
NF08SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344641 (Ice Only) (2)	NF08SD	S: 08/26/2011 14:56	--
NF09SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21), TOC (21)	11344644 (Ice Only) (2)	NF09SD	S: 08/26/2011 15:31	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** NF09SD	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0005

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

B 20

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature: for B Martin
Project Code:	TEC-993B	**Carrier Name:**	FedEx	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
Account Code:		**Airbill:**		1 [illegible] 8/29/11 1540	[illegible]
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	2	8/30/11
Spill ID:				3	750
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			4	
Project Leader:	Renee Nordeen				
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LC03SW	Surface Water/ Andy McDonald	G	NIT_ARO (21)	~~11344622~~ (Ice Only) (2) 11344648	LC03SW	S: 08/25/2011 10:50	--
NF02SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344622 (Ice Only) (2)	NF02SW	S: 08/26/2011 09:48	--
NF04SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344629 (Ice Only) (2)	NF04SW	S: 08/26/2011 11:50	--
NF05SW	Surface Water/ Brad Martin	B	NIT_ARO (21)	11344633 (Ice Only) (2)	NF05SW	S: 08/26/2011 12:29	--
NF09SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344642 (Ice Only) (2)	NF09SW	S: 08/26/2011 15:40	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** [illegible]	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082911-0004

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/29/11 1540	8/30/11 7:50
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LC13SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344608 (Ice Only) (2)	LC13SD	S: 08/25/2011 15:30	--
LC14SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344611 (Ice Only) (2)	LC14SD	S: 08/25/2011 15:50	--
LC15SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344614 (Ice Only) (2)	LC15SD	S: 08/25/2011 16:30	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** LC13SD	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0002

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22

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/29/11 1540	8/30/11 7:50
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LC06SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344598 (Ice Only) (2)	LC06SD	S: 08/25/2011 13:05	--
LC07SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344599 (Ice Only) (2)	LC07SD	S: 08/25/2011 13:28	--
LC09SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344601 (Ice Only) (2)	LC09SD	S: 08/25/2011 13:43	--
LC10SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344602 (Ice Only) (2)	LC10SD	S: 08/25/2011 14:21	--
LC11SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344607 (Ice Only) (2)	LC11SD	S: 08/25/2011 15:12	--
LC12SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344604 (Ice Only) (2)	LC12SD	S: 08/25/2011 14:30	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0002

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23

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	Date Shipped:	8/29/2011	Chain of Custody Record	Sampler Signature:
Project Code:	TEC-993B	Carrier Name:	Hand Delivery		
Account Code:		Airbill:		Relinquished By (Date/Time)	Received By (Date/Time)
CERCLIS ID:		Shipped to:	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/29/11 1540	8/30/11 7:50
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BC01SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344603 (Ice Only) (2)	BC01SD	S: 08/25/2011 14:35	--
DC04SD	Sediment/ Ada Hamilton	G	NIT_ARO (21), TOC (21)	11344620 (Ice Only) (2)	DC04SD	S: 08/25/2011 17:48	--
LC01SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344591 (Ice Only) (2)	LC01SD	S: 08/25/2011 10:00	--
LC03SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344595 (Ice Only) (2)	LC03SD	S: 08/25/2011 11:00	--
LC04SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344596 (Ice Only) (2)	LC04SD	S: 08/25/2011 12:17	--
LC05SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344597 (Ice Only) (2)	LC05SD	S: 08/25/2011 11:50	--

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Chain Of Custody Seal Number :
N			
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0002

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USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By** (Date/Time)	**Received By** (Date/Time)
CERCLIS ID:					
Spill ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	8/29/11 1540	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			2	8/30/11 7:50
Project Leader:	Renee Nordeen			3	
Action:	Expanded Site Investigation/RI			4	
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
NF05SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21), TOC (21)	11344635 (Ice Only) (2)	NF05SD	S: 08/26/2011 12:35	–

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** DC03SD	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0001

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25

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:
R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:					
Spill ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	8/29/11 1540	8/30/11 7:50
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			2	
Project Leader:	Renee Nordeen			3	
Action:	Expanded Site Investigation/RI			4	
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
DC03SD	Sediment/ Ada Hamilton	G	NIT_ARO (21), TOC (21)	11344619 (Ice Only) (2)	DC03SD	S: 08/25/2011 17:27	--
EF03SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344617 (Ice Only) (2)	EF03SD	S: 08/25/2011 16:50	--
NF01SD	Sediment/ Jeff Fetters	G	NIT_ARO (21), TOC (21)	11344618 (Ice Only) (2)	NF01SD	S: 08/25/2011 17:24	--
NF02SD	Sediment/ Brad Martin	G	NIT_ARO (21), TOC (21)	11344624 (Ice Only) (2)	NF02SD	S: 08/26/2011 09:50	--
NF03SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21), TOC (21)	11344628 (Ice Only) (2)	NF03SD	S: 08/26/2011 10:34	--
NF04SD	Sediment/ Mark Zawistoski	G	NIT_ARO (21), TOC (21)	11344631 (Ice Only) (2)	NF04SD	S: 08/26/2011 12:00	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** DC03SD	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?**

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0001

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USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature:
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	1 8/29/11 1540	8/30/11 7:00
Spill ID:				2	
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			3	
Project Leader:	Renee Nordeen			4	
Action:	Expanded Site Investigation/RI				
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
BG01SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344621 (Ice Only) (2)	BG01SD	S: 08/26/2011 09:40	--
BG01SS	Surface Soil/ Andy McDonald	G	NIT_ARO (21)	11344632 (Ice Only) (1)	BG01SS	S: 08/26/2011 11:30	--
BG02SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344625 (Ice Only) (2)	BG02SD	S: 08/26/2011 10:15	--
BG03SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344636 (Ice Only) (2)	BG03SD	S: 08/26/2011 12:48	--
DC01SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344615 (Ice Only) (2)	DC01SD	S: 08/25/2011 16:30	--
DC02SD	Sediment/ Andy McDonald	G	NIT_ARO (21), TOC (21)	11344616 (Ice Only) (2)	DC02SD	S: 08/25/2011 16:50	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics, TOC = Total Organic Carbon

COC Number : 10-4097213-082911-0001

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27

USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case: 41603
Client No:

R

Region:	10	**Date Shipped:**	8/29/2011	**Chain of Custody Record**	Sampler Signature: BMartin for B. Martin
Project Code:	TEC-993B	**Carrier Name:**	Hand Delivery		
Account Code:		**Airbill:**		**Relinquished By (Date/Time)**	**Received By (Date/Time)**
CERCLIS ID:					
Spill ID:		**Shipped to:**	Manchester Environmental Laboratory 7411 Beach Drive East Port Orchard WA 98366 3608718747	[illegible] 8/29/11 1540	[illegible]
Site Name / City/State:	Camp Bonneville Phase II VAncouver, WA			2	8/30/11
Project Leader:	Renee Nordeen			3	7:50
Action:	Expanded Site Investigation/RI			4	
Sampling Co:	Ecology and Environment, Inc.				

SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
LC11SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344605 (Ice Only) (6)	LC11SW	S: 08/25/2011 14:55	--
NF03SW	Surface Water/ Brad Martin	G	NIT_ARO (21)	11344626 (Ice Only) (2)	NF03SW	S: 08/26/2011 10:32	--

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** LC11SW	**Additional Sampler Signature (s):**	**Chain Of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Shipment Iced?** ✓

NIT_ARO = Nitroaromatics

COC Number : 10-4097213-082911-0003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

CORRECTIVE ACTION NOTICE

Project Name:	Camp Bonneville Phase II	Date Received:	8/31/2011
Project Code:	TEC-993B	Sampling Agency	E&E
Account Code:	2011T10P302DD2C101RLA00	Sampler(s):	Andy McDonald Ada Hamilton Brad Martin Mark Zawistoski
Project Officer:	Monica Tonel		
Phone:	206-553-0323		
		Recorder:	Renee Nordeen

Sample Numbers: **11344569,11344571-11344648**

6	**Number of shipping containers received**
0	**Number of shipping containers received with errors**
14	**Number of chains of custody received**
3	**Number of chains of custody received with errors**

# Containers	Description of Shipment/Chain of Custody Container Issues Noted:
0	Shipping Container - Addressed incorrectly (must be addressed to 'Sample Custodian')
0	Shipping Container - Samples improperly packed for shipment
0	Shipping Container - Cooler Return information not provided
0	Custody Seals - Custody Samples received with seals missing/broken
0	Chain of Custody - Missing/Outdated Form
0	Chain of Custody - Missing/Incorrect chain of custody header information

67	**Number of samples received in this shipment**
1	**Number of samples received with critical and/or non-critical errors**
0	**Number of samples received with critical errors**

# Samples	Description of Shipment/Chain of Custody/Sample Container Issues Noted:
0	Chain of Custody - Missing/Incorrect EPA numbers
2	Chain of Custody - No analysis/Incorrect analysis listed for received samples **** See #1 below
0	Chain of Custody - Samples listed not included in shipment
0	Unique Container ID* - Missing on COC and/or Not written on the container
0	Unique Container ID* - Incorrectly assigned
0	Sample Container - Labels Missing/Damaged/Illegible
1	Sample Container - EPA Sample Numbers Missing/Incorrect ***See #2 below**
0	Custody Seals - Criminal Samples received with seals missing/broken
0	Sample Container - Received at elevated temperature (above 6°C)
0	Sample Container - Sample preservation requirements not met
0	Sample Container - Broken/Leaking
0	Sample Container- Insufficient sample volume and/or incorrect sample container
1	Chain of Custody- Incorrect sample number recorded

* per Region 10 Sample Receiving SOP

Additional Information

1. Two Chains of Custody had the incorrect sample analysis for sample numbers 11344569,11344574,11344592,11344600. The COC's were corrected to reflect the correct analysis of TOC.

2. Sample # 11344592 was duplicated on the chain of custody and used for both a water sample and a soil sample . The water sample was re-assigned #11344648 . The chain of custody was corrected at the Lab.

Transmitted By: Karen Norton/ ESAT

Date: 8/31/2011

Original: File

RSCC Contact: Jennifer Crawford

Project Officer: Monica Tonel

Laboratory Director: Barry Pepich

Laboratory Staff: Gerald Dodo, Chris Pace, Dave Dobb, Dana Walker, Carol Haines, Katie Adams, Stepahnie Le, Tom Pearson, Dan Jacobsen, Kim Wood

cc: Renee Nordeen- E&E

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KL2

L

Date Shipped:	8/25/2011	Chain Of Custody Record	Sampler Signature:
Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)
Airbill No:	8656 1491 3350	1 8/25/11/1300	8/26/11 9:55
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277	2	
		3 8/26/11	
		4	

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/26/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KS6	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344564 (Ice Only) (1)	CT09SS	S: 08/24/2011 14:25		0014622-01 1st SX insDon
MJ8KS7	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344565 (Ice Only) (1)	CT10SS	S: 08/24/2011 14:42		-02
MJ8KS8	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344566 (Ice Only) (1)	CT11SS	S: 08/24/3011 15:13		-03
MJ8KS9	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344567 (Ice Only) (1)	OB08SS	S: 08/24/2011 14:43		-04
MJ8KT0	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344568 (Ice Only) (1)	OB09SS	S: 08/24/2011 15:10		-05
MJ8KT2	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344570 (Ice Only) (1)	CT07SS	S: 08/24/2011 13:50		-06

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: MJ8KR7, MJ8KS8	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0007

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KL2

L

Date Shipped: 8/25/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No: EPW09035
Airbill No: 8656 1491 3658	1	8/26/11 9:55	Unit Price:
Shipped to: A4 Scientific, 1544 Sawdust Road, Suite 505, The Woodlands TX 77380, 2812925277	2		Transfer To:
	3		Lab Contract No: 8/26/11
	4		Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KL2	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344500 (Ice Only) (1)	FP01SS	S: 08/22/2011 11:45		0014622-07
MJ8KL3	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344501 (Ice Only) (1)	FP02SS	S: 08/22/2011 13:05		-08
MJ8KL4	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344502 (Ice Only) (1)	FP03SS	S: 08/22/2011 13:30		-09
MJ8KL5	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344503 (Ice Only) (1)	FP04SS	S: 08/22/2011 14:05		-10
MJ8KL6	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344504 (Ice Only) (1)	FP05SS	S: 08/22/2011 14:30		-11
MJ8KL7	Sediment/ Mark Zewistoski	G	TM-MA (21)	11344505 (Ice Only) (1)	PU01SD	S: 08/22/2011 14:27		-12
MJ8KL8	Sediment/ Mark Zewistoski	G	TM-MA (21)	11344506 (Ice Only) (1)	PU02SD	S: 08/22/2011 14:30		-13

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: MJ8KL2	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0003

0013

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KL2

L

Date Shipped:	8/25/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3658
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1			8/26/11 9:55
2			
3	8/26/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/26/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KL9	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344507 (Ice Only) (1)	PU03SD	S: 08/22/2011 14:47		0014622-14
MJ8KM0	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344508 (Ice Only) (1)	PU04SD	S: 08/22/2011 14:58		-15
MJ8KM1	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344509 (Ice Only) (1)	PU05SD	S: 08/22/2011 15:14		-16
MJ8KM2	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344510 (Ice Only) (1)	PU06SD	S: 08/22/2011 15:33		-17
MJ8KM3	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344511 (Ice Only) (1)	PU07SD	S: 08/22/2011 16:12		-18
MJ8KM4	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344512 (Ice Only) (1)	PU08SD	S: 08/22/2011 16:33		-19
MJ8KM5	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344513 (Ice Only) (1)	PU09SD	S: 08/22/2011 16:48		-20 final SDG

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KL2		4°C	NA

Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0003

0014

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KM6

L

Date Shipped: 8/25/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3658
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1		Raym	8/26/11 9:55
2			
3	8/26/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/26/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KM6	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344514 (Ice Only) (1)	PU10SD	S: 08/22/2011 16:58		0014623-01 1st sx in SDG
MJ8KM7	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344515 (Ice Only) (1)	PU11SD	S: 08/22/2011 17:08		-02
MJ8KM8	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344516 (Ice Only) (1)	OB01SS	S: 08/22/2011 16:30		-03
MJ8KM9	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344517 (Ice Only) (1)	PU12SD	S: 08/22/2011 17:22		-04
MJ8KN0	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344518 (Ice Only) (1)	FR01SS	S: 08/23/2011 09:01		-05
MJ8KN1	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344519 (Ice Only) (1)	FR02SS	S: 08/23/2011 09:13		-06
MJ8KN2	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344520 (Ice Only) (1)	FR03SS	S: 08/23/2011 09:22		-07

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KL2, MJ8KN2		4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0003

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KM6

L

Date Shipped:	8/25/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3658
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1		Lagm	8/26/11 9:55
2			
3	8/26/11		
4			

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To: 8/26/11
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KN3	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344521 (Ice Only) (1)	FR04SS	S: 08/23/2011 09:30		0014623-08
MJ8KN4	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344522 (Ice Only) (1)	FR05SS	S: 08/23/2011 09:41		-09
MJ8KN5	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344523 (Ice Only) (1)	FR06SS	S: 08/23/2011 09:50		-10

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KL2, MJ8KN2		4°C	MA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0003

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USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KM6

L

Date Shipped:	8/26/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3360
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[illegible]	8/26/11 16:3-	[illegible]	8/30/11 10:05
2				
3	8/30/11			
4				

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KW6	Surface Soil/ Brad Martin	G	TM-MA (21)	11344584 (Ice Only) (1)	PT12SS	S: 08/25/2011 09:05		0014641-01 JSI SX in SDG
MJ8KW7	Surface Soil/ Brad Martin	G	TM-MA (21)	11344585 (Ice Only) (1)	PT13SS	S: 08/25/2011 09:15		-02
MJ8KW8	Surface Soil/ Brad Martin	G	TM-MA (21)	11344586 (Ice Only) (1)	PT14SS	S: 08/25/2011 09:24		-03
MJ8KW9	Surface Soil/ Brad Martin	G	TM-MA (21)	11344587 (Ice Only) (1)	PT15SS	S: 08/25/2011 09:35		-04
MJ8KX0	Surface Soil/ Brad Martin	G	TM-MA (21)	11344588 (Ice Only) (1)	PT16SS	S: 08/25/2011 09:40		-05
MJ8KX1	Surface Soil/ Brad Martin	G	TM-MA (21)	11344589 (Ice Only) (1)	PT17SS	S: 08/25/2011 09:45		-06
MJ8KX2	Surface Soil/ Brad Martin	G	TM-MA (21)	11344590 (Ice Only) (1)	PT18SS	S: 08/25/2011 09:52		-07

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[illegible]	4°C	MA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KM6

L

Date Shipped: 8/26/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3360
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

	Relinquished By (Date/Time)	Received By (Date/Time)
1	8/26/11 15:30	8/30/11 10:05
2		
3		
4	8/30/11	

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To: 8/30/11
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KX3	Sediment/ Andy McDonald	G	TM-MA (21)	11344591 (Ice Only) (1)	LC01SD	S: 08/25/2011 10:00		0014641-08
MJ8KX4	Sediment/ Brad Martin	G	TM-MA (21)	11344592 (Ice Only) (1)	LC02SD	S: 08/25/2011 10:50		-09
MJ8KX9	Sediment/ Brad Martin	G	TM-MA (21)	11344597 (Ice Only) (1)	LC05SD	S: 08/25/2011 11:50		-10
MJ8KY2	Sediment/ Andy McDonald	G	TM-MA (21)	11344600 (Ice Only) (1)	LC08SD	S: 08/25/2011 13:25		final SX SDG

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		no additional	4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KN6

L

Date Shipped: 8/25/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only
Carrier Name: FedEx			Lab Contract No: EPW09035
Airbill No: 8656 1491 3669	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: A4 Scientific, 1544 Sawdust Road, Suite 505, The Woodlands TX 77380, 2812925277	1 8/25/11/1300	8/26/11 9:55	Transfer To:
	2		Lab Contract No: 8/26/11
	3 8/26/11		Unit Price:
	4		

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KN6	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344524 (Ice Only) (1)	FP06SS	S: 08/23/2011 09:46		0014620-01 251sx ins Daq
MJ8KN7	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344525 (Ice Only) (1)	FR07SS	S: 08/23/2011 09:55		-02
MJ8KN8	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344526 (Ice Only) (1)	FR08SS	S: 08/23/2011 10:05		-03
MJ8KN9	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344527 (Ice Only) (1)	FP07SS	S: 08/23/2011 10:05		-04
MJ8KP0	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344528 (Ice Only) (1)	FP08SS	S: 08/23/2011 10:30		-05
MJ8KP1	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344529 (Ice Only) (1)	FB01SS	S: 08/23/2011 10:55		-06
MJ8KP2	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344530 (Ice Only) (1)	FP09SS	S: 08/23/2011 10:53		-07

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

0012

COC Number : 10-4097213-082411-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KN6

L

Date Shipped: 8/25/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No: EPW09035
Airbill No: 8656 1491 3669	1 8/25/11 1130	8/26/11 9:55	Unit Price:
Shipped to: A4 Scientific, 1544 Sawdust Road, Suite 505, The Woodlands TX 77380, 2812925277	2		Transfer To:
	3 8/26/11		Lab Contract No: 8/26/11
	4		Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KP3	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344531 (Ice Only) (1)	FB02SS	S: 08/23/2011 11:00		0014620-08
MJ8KP4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344532 (Ice Only) (1)	FP10SS	S: 08/23/2011 11:09		-09
MJ8KP5	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344533 (Ice Only) (1)	FB03SS	S: 08/23/2011 11:09		-10
MJ8KP6	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344534 (Ice Only) (1)	FB04SS	S: 08/23/2011 11:18		-11
MJ8KP7	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344535 (Ice Only) (1)	FB05SS	S: 08/23/2011 11:26		-12
MJ8KP8	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344536 (Ice Only) (1)	OP01SS	S: 08/23/2011 11:35		-13
MJ8KP9	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344537 (Ice Only) (1)	OB02SS	S: 08/23/2011 13:45		-14

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014620

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KN6

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No: EPW09035
Airbill No: 8656 1491 3669	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: A4 Scientific, 1544 Sawdust Road, Suite 505, The Woodlands TX 77380, 2812925277	1 8/25/11 1:30	8/26/11 9:55	Transfer To:
	2		Lab Contract No: 8/26/11
	3 8/26/11		Unit Price:
	4		

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KQ0	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344538 (Ice Only) (1)	FB06SS	S: 08/23/2011 11:33		0014620-15
MJ8KQ1	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344539 (Ice Only) (1)	FR09SS	S: 08/23/2011 13:45		-16
MJ8KQ2	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344540 (Ice Only) (1)	OB03SS	S: 08/23/2011 13:58		-17
MJ8KQ3	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344541 (Ice Only) (1)	FR10SS	S: 08/23/2011 14:08		-18
MJ8KQ4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344542 (Ice Only) (1)	OB04SS	S: 08/23/2011 14:10		-19
MJ8KQ5	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344543 (Ice Only) (1)	FR11SS	S: 08/23/2011 14:17	8/26/11	0014622-20 SX SDG
MJ8KQ6	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344544 (Ice Only) (1)	OB05SS	S: 08/23/2011 14:25		0014620-01

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:** 4°C	**Chain of Custody Seal Number :** NA 8/26/11
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** Y	**Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

0014

COC Number : 10-4097213-082411-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KZ2N6

L

8/10/11

Date Shipped:	8/25/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3350
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	8/25/11/130	[signature]	8/26/11 9:55
2				
3		8/26/11		
4				

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/26/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KS6	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344564 (Ice Only) (1)	CT09SS	S: 08/24/2011 14:25		0014622-01 1st sx insDn
MJ8KS7	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344565 (Ice Only) (1)	CT10SS	S: 08/24/2011 14:42		-02
MJ8KS8	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344566 (Ice Only) (1)	CT11SS	S: 08/24/3011 15:13		0014620-20 final sx ~~-03~~ 8/26/11
MJ8KS9	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344567 (Ice Only) (1)	OB08SS	S: 08/24/2011 14:43		0014622-04
MJ8KT0	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344568 (Ice Only) (1)	OB09SS	S: 08/24/2011 15:10		-05
MJ8KT2	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344570 (Ice Only) (1)	CT07SS	S: 08/24/2011 13:50		-06

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KR7, MJ8KS8	[signature]	4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

0015

COC Number : 10-4097213-082411-0007

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014621

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KQ6

L

Date Shipped:	8/25/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3669
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	BA	8/25/11 1300	Raton	8/26/11 9:55
2				
3		8/26/11		
4				

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/26/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KQ0	Surface Soil/ Jeff Fetters	G	TM-MA (21)	11344538 (Ice Only) (1)	FB08SS	S: 08/23/2011 11:33		0014620-15
MJ8KQ1	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344539 (Ice Only) (1)	FR09SS	S: 08/23/2011 13:45		-16
MJ8KQ2	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344540 (Ice Only) (1)	OB03SS	S: 08/23/2011 13:58		-17
MJ8KQ3	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344541 (Ice Only) (1)	FR10SS	S: 08/23/2011 14:08		-18
MJ8KQ4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344542 (Ice Only) (1)	OB04SS	S: 08/23/2011 14:10		-19
MJ8KQ5	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344543 (Ice Only) (1)	FR11SS	S: 08/23/2011 14:17		-20
MJ8KQ6	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344544 (Ice Only) (1)	OB05SS	S: 08/23/2011 14:25		0014620-01 1st SX

B 8/26/11 in SDG

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : MA
N				

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

0013

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KQ6

L

Date Shipped:	8/25/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only	
Carrier Name:	FedEx			Lab Contract No:	EPW09035
Airbill No:	8656 1491 3669	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:	
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277	1 Ryan 8/25/11 1130	Return 8/26/11 9:55	Transfer To:	8/26/11
		2		Lab Contract No:	
		3 8/26/14		Unit Price:	
		4			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KQ7	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344545 (Ice Only) (1)	FR12SS	S: 08/23/2011 14:28		0014621-02
MJ8KQ8	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344546 (Ice Only) (1)	FR13SS	S: 08/23/2011 14:40		-03
MJ8KQ9	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344547 (Ice Only) (1)	FR14SS	S: 08/23/2011 14:52		-04
MJ8KR0	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344548 (Ice Only) (1)	FR15SS	S: 08/23/2011 15:09		-05
MJ8KR1	Surface Soil/ Mark Zawistoski	G	TM-MA (21)	11344549 (Ice Only) (1)	FR16SS	S: 08/23/2011 15:25		-06

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0004

0014

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KQ6

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only** 09035
Carrier Name: FedEx			Lab Contract No: EPW~~10018~~ 8/26/11
Airbill No: 8656 1491 3350	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277	1 BNo 8/25/11 1300	Rath 8/26/11 9:55	Transfer To:
	2		Lab Contract No: 8/26/11
	3 8/26/11		Unit Price:
	4		

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KR2	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344550 (Ice Only) (1)	FP11SS	S: 08/23/2011 15:36		0014621-07
MJ8KR3	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344551 (Ice Only) (1)	FP12SS	S: 08/23/2011 15:47		-08
MJ8KR4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344552 (Ice Only) (1)	FP13SS	S: 08/23/2011 15:58		-09
MJ8KR5	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344553 (Ice Only) (1)	FP14SS	S: 08/23/2011 16:16		-10
MJ8KR6	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344554 (Ice Only) (1)	FP15SS	S: 08/23/2011 16:33		-11
MJ8KR7	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344555 (Ice Only) (1)	FP16SS	S: 08/23/2011 17:02		-12
MJ8KR8	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344556 (Ice Only) (1)	CT01SS	S: 08/24/2011 10:07		-13

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KR7	[signature]	4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0007

0015

PR provides preliminary results. Requests for preliminary results will increase analytical coste.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

Page 1 of 3

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KQ6

L

Date Shipped:	8/25/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3350
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1		8/25/11 1:30		8/26/11 9:55
2				
3				
4				

For Lab Use Only
Lab Contract No: SPW ~~10018~~ 09035 8/26/11
Unit Price:
Transfer To: 8/26/11
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KR9	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344557 (Ice Only) (1)	CT02SS	S: 08/24/2011 10:26		0014621-14
MJ8KS0	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344558 (Ice Only) (1)	CT03SS	S: 08/24/2011 10:46		-15
MJ8KS1	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344559 (Ice Only) (1)	CT04SS	S: 08/24/2011 11:17		-16
MJ8KS2	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344560 (Ice Only) (1)	CT05SS	S: 08/24/2011 11:40		-17
MJ8KS3	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344561 (Ice Only) (1)	CT06SS	S: 04/24/2011 13:20		-18
MJ8KS4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344562 (Ice Only) (1)	OB06SS	S: 08/24/2011 13:42		-19
MJ8KS5	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344563 (Ice Only) (1)	OB07SS	S: 08/24/2011 13:65		-20 final SDX

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: MJ8KR7	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082411-0007

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

0016

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KT1

L

Date Shipped:	8/26/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3371
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/26/11 1700		8/30/11 18:05
2			
3	8/30/11		
4			

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KY6	Sediment/ Andy McDonald	G	TM-MA (21)	11344604 (Ice Only) (1)	LC12SD	S: 08/25/2011 14:30		
MJ8KY9	Sediment/ Brad Martin	G	TM-MA (21)	11344607 (Ice Only) (1)	LC11SD	S: 08/25/2011 15:12		
MJ8KZ0	Sediment/ Andy McDonald	G	TM-MA (21)	11344608 (Ice Only) (1)	LC13SD	S: 08/25/2011 15:30		
MJ8KZ9	Sediment/ Brad Martin	G	TM-MA (21)	11344617 (Ice Only) (1)	EF03SD	S: 08/25/2011 16:50		
MJ8L00	Sediment/ Jeff Fetters	G	TM-MA (21)	11344618 (Ice Only) (1)	NF01SD	S: 08/25/2011 17:24		
MJ8L01	Sediment/ Ada Hamilton	G	TM-MA (21)	11344619 (Ice Only) (1)	DC03SD	S: 08/25/2011 17:27	0014640-01	1st SX in SDG
MJ8L02	Sediment/ Ada Hamilton	G	TM-MA (21)	11344620 (Ice Only) (1)	DC04SD	S: 08/25/2011 17:48		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KZ0, MJ8L01		4C	NA

Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Greb = G, Both = B	Custody Seal Intact?	Shipment Iced?
			Y	Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KT1

L

Date Shipped:	8/26/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3371
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	8/26/11 1700	[signature]	8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only

Lab Contract No:	EPW09035
Unit Price:	
Transfer To:	
Lab Contract No:	8/30/11
Unit Price:	

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L07	Sediment/ Andy McDonald	G	TM-MA (21)	11344625 (Ice Only) (1)	BG02SD	S: 08/26/2011 10:15		0014640-02
MJ8L10	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344628 (Ice Only) (1)	NF03SD	S: 08/26/2011 10:34		-03
MJ8L13	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344631 (Ice Only) (1)	NF04SD	S: 08/26/2011 12:00		-04
MJ8L14	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344632 (Ice Only) (1)	BG01SS	S: 08/26/2011 11:30		-05
MJ8L17	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344635 (Ice Only) (1)	NF05SD	S: 08/26/2011 12:35		-06
MJ8L18	Sediment/ Andy McDonald	G	TM-MA (21)	11344636 (Ice Only) (1)	BG03SD	S: 08/26/2011 12:48		-07
MJ8KY5	Sediment/ Brad Martin	G	TM-MA (21)	11344603 (Ice Only) (1)	BC01SD	S: 08/25/2011 14:35		-08

8/30/11

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** [signature]	**Cooler Temperature Upon Receipt:** 4°C	**Chain of Custody Seal Number :** M
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate** [signature] Composite = C, Grab = G, Both = B	**Custody Seal Intact?** Y	**Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase anelytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KT1

L

Date Shipped: 8/26/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3360
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	8/26/11 16:30	[signature]	8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW0903 S
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KT1	Sediment/ Andy McDonald	G	TM-MA (21)	11344569 (Ice Only) (1)	EF01SD	S: 08/24/2011 15:59		0014640-089
MJ8KT3	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344571 (Ice Only) (1)	CT08SS	S: 08/24/2011 14:05		-089 10
MJ8KT4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344572 (Ice Only) (1)	PT01SS	S: 08/24/2011 16:16		-1011
MJ8KT5	Surface Soil/ Ada Hamilton	G	TM-MA (21)	A11344573 (Ice Only) (1)	PT02SS	S: 08/24/2011 16:30		-1112
MJ8KT6	Sediment/ Andy McDonald	G	TM-MA (21)	11344574 (Ice Only) (1)	EF02SD	S: 08/24/2011 16:40		-1213
MJ8KT7	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344575 (Ice Only) (1)	PT03SS	S: 08/24/2011 16:40		-1314
MJ8KT8	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344576 (Ice Only) (1)	PT04SS	S: 08/24/3011 16:55		-1415

8/30/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature]	4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KT1

L

Date Shipped:	8/26/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3360
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/26/11 16:30	Raton	8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only

Lab Contract No: EP W09035
Unit Price:
Transfer To: 8/30/11
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KT9	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344577 (Ice Only) (1)	PT06SS	S: 08/24/2011 17:20		0014640 -1516
MJ8KW0	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344578 (Ice Only) (1)	PT07SS	S: 08/24/2011 17:23		-1617
MJ8KW1	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344579 (Ice Only) (1)	PT05SS	S: 08/24/2011 17:08		-1718
MJ8KW2	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344580 (Ice Only) (1)	PT09SS	S: 08/24/2011 17:36		-1819
MJ8KW3	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344581 (Ice Only) (1)	PT10SS	S: 08/24/2011 18:05		-1920 final SDG
MJ8KW4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344582 (Ice Only) (1)	PT11SS	S: 08/24/2011 18:03		-20
MJ8KW5	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344583 (Ice Only) (1)	PT08SS	S: 08/24/2011 17:30		

8/30/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
N				

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KW4

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	8/29/11, 1700	[signature]	8/30/11 10:05
2				
3				
4		8/30/11		

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L22	Sediment/ Brad Martin	G	TM-MA (21)	11344640 (Ice Only) (1)	NF07SD	S: 08/26/2011 14:22		
MJ8L29	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344647 (Ice Only) (1)	BG04SD	S: 08/26/2011 16:05		0014642-01 1st sx in SDG
MJ8L23	Sediment/ Brad Martin	G	TM-MA (21)	11344641 (Ice Only) (1)	NF08SD	S: 08/26/2011 14:56		-02
MJ8L24	Surface Water/ Brad Martin	G	TM-MA (21)	11344642 (HNO3) (1)	NF09SW	S: 08/26/2011 15:40		
MJ8L25	Surface Water/ Brad Martin	G	DM-MA (21)	11344643 (HNO3) (1)	NF09SW-D	S: 08/26/2011 15:40		
MJ8L26	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344644 (Ice Only) (1)	NF09SD	S: 08/26/2011 15:31		0014642-03

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	MJ8KY7, MJ8KY8, MJ8L26	[signature] for B. Martin	4°C	NA

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014642

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603 R 8/30/11 **L**
DAS No:
SDG No: MJ8KTW4

Date Shipped:	8/26/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3360
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	8/26/11 16:30	Raton	8/30/11 10:05
2				
3	R 8/30/11			
4				

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: R 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KT9	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344577 (Ice Only) (1)	PT06SS	S: 08/24/2011 17:20		0014640 -~~15~~16
MJ8KW0	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344578 (Ice Only) (1)	PT07SS	S: 08/24/2011 17:23		-~~16~~17
MJ8KW1	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344579 (Ice Only) (1)	PT05SS	S: 08/24/2011 17:08		-~~17~~18
MJ8KW2	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344580 (Ice Only) (1)	PT09SS	S: 08/24/2011 17:36		-~~18~~19
MJ8KW3	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344581 (Ice Only) (1)	PT10SS	S: 08/24/2011 18:05		-~~19~~20 final SDG
MJ8KW4	Surface Soil/ Ada Hamilton	G	TM-MA (21)	11344582 (Ice Only) (1)	PT11SS	S: 08/24/2011 18:03		0014642 -~~08~~ 4 ~~20~~
MJ8KW5	Surface Soil/ Andy McDonald	G	TM-MA (21)	11344583 (Ice Only) (1)	PT08SS	S: 08/24/2011 17:30		-~~09~~5 R 8/30/11

R 8/30/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature]	4 °C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

0014642

Case No:	41603
DAS No:	
SDG No:	MJ8KM6WU

L

Date Shipped:	8/26/2011	Chain Of Custody Record	Sampler Signature:
Carrier Name:	FedEx		
Airbill No:	8656 1491 3360	Relinquished By (Date/Time)	Received By (Date/Time)
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277	1 8/26/11 16:30	8/30/11 10:05
		2	
		3	
		4 8/30/11	

For Lab Use Only

Lab Contract No: EPW09035

Unit Price:

Transfer To:

Lab Contract No: 8/30/11

Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KX3	Sediment/ Andy McDonald	G	TM-MA (21)	11344591 (Ice Only) (1)	LC01SD	S: 08/25/2011 10:00		0014641-08
MJ8KX4	Sediment/ Brad Martin	G	TM-MA (21)	11344592 (Ice Only) (1)	LC02SD	S: 08/25/2011 10:50		-09
MJ8KX9	Sediment/ Brad Martin	G	TM-MA (21)	11344597 (Ice Only) (1)	LC05SD	S: 08/25/2011 11:50		-10
MJ8KY2	Sediment/ Andy McDonald	G	TM-MA (21)	11344600 (Ice Only) (1)	LC08SD	S: 08/25/2011 13:25		0014642-06

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s): no additional	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014637

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX5

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 BVR	8/29/11 1700	Ratch	8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KY7	Surface Water/ Brad Martin	G	TM-MA (21)	11344605 (HNO3) (2)	LC11SW	S: 08/25/2011 14:55		0014637-01 1st SX in SDG
MJ8KY8	Surface Water/ Brad Martin	G	DM-MA (21)	11344606 (HNO3) (2)	LC11SW-D	S: 08/25/2011 14:55		0014638-01
MJ8KZ4	Surface Water/ Brad Martin	G	TM-MA (21)	11344612 (HNO3) (1)	LC15SW	S: 08/25/2011 16:25		0014637-02
MJ8KZ5	Surface Water/ Brad Martin	G	DM-MA (21)	11344613 (HNO3) (1)	LC15SW-D	S: 08/25/2011 16:25		0014638-02
MJ8L04	Surface Water/ Brad Martin	G	TM-MA (21)	11344622 (HNO3) (1)	NF02SW	S: 08/26/2011 09:48		0014637-03
MJ8L05	Surface Water/ Brad Martin	G	DM-MA (21)	11344623 (HNO3) (1)	NF02SW-D	S: 08/26/2011 09:48		0014638-03
MJ8L19	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344637 (Ice Only) (1)	NF06SD	S: 08/26/2011 14:00		

Shipment for Case Complete? Y

Sample (s) to be used for laboratory QC: MJ8KY7, MJ8KY8

Additional Sampler Signature (s): BM for B Martin

Cooler Temperature Upon Receipt: 4°c

Chain of Custody Seal Number : NA

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014637

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX5

L

Date Shipped: 8/29/2011	Chain Of Custody Record	Sampler Signature: BM for B Martin	For Lab Use Only	
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No: EPW09035	
Airbill No: 8656 1491 3382	1 BM 8/29/11 1700	Patan 8/30/11 10:05	Unit Price:	
Shipped to: A4 Scientific, 1544 Sawdust Road, Suite 505, The Woodlands TX 77380, 2812925277	2		Transfer To:	
	3		Lab Contract No:	
	4		Unit Price:	

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KZ1	Surface Water/ Ada Hamilton	G	TM-MA (21)	11344609 (HNO3) (1)	LC14SW	S: 08/25/2011 15:45		0014637-04
MJ8KZ2	Surface Water/ Ada Hamilton	G	DM-MA (21)	11344610 (HNO3) (1)	LC14SW-D	S: 08/25/2011 15:45		0014638-04
MJ8L08	Surface Water/ Brad Martin	G	TM-MA (21)	11344626 (HNO3) (1)	NF03SW	S: 08/26/2011 10:32		0014637-05
MJ8L09	Surface Water/ Brad Martin	G	DM-MA (21)	11344627 (HNO3) (1)	NF03SW-D	S: 08/26/2011 10:32		0014638-05
MJ8L11	Surface Water/ Brad Martin	G	TM-MA (21)	11344629 (HNO3) (1)	NF04SW	S: 08/26/2011 11:50		0014637-06
MJ8L12	Surface Water/ Brad Martin	G	DM-MA (21)	11344630 (HNO3) (1)	NF04SW-D	S: 08/26/2011 11:50		0014638-06
MJ8L15	Surface Water/ Brad Martin	B	TM-MA (21)	11344633 (HNO3) (1)	NF05SW	S: 08/26/2011 12:29		0014637-07

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N			4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0011

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014637

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX5

L

Date Shipped:	8/29/2011	**Chain Of Custody Record**	Sampler Signature: for B Martin	**For Lab Use Only**
Carrier Name:	FedEx			Lab Contract No: EPW09035
Airbill No:	8656 1491 3382	**Relinquished By (Date/Time)**	**Received By (Date/Time)**	Unit Price:
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277	1 8/29/11 1700	Return 8/30/11 10:05	Transfer To: 8/30/11
		2		Lab Contract No:
		3 8/30/11		Unit Price:
		4		

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L16	Surface Water/ Brad Martin	G	DM-MA (21)	11344634 (HNO3) (1)	NF05SW-D	S: 08/26/2011 12:29		0014638-07
MJ8L20	Surface Water/ Brad Martin	G	TM-MA (21)	11344638 (HNO3) (1)	NF07SW	S: 08/26/2011 14:29		0014637-08
MJ8L21	Surface Water/ Brad Martin	G	DM-MA (21)	11344639 (HNO3) (1)	NF07SW-D	S: 08/26/2011 14:29		0014638-08
MJ8L27	Surface Water/ Brad Martin	G	TM-MA (21)	11344645 (HNO3) (1)	BG04SW	S: 08/26/2011 16:10		0014638-09
MJ8L28	Surface Water/ Brad Martin	G	DM-MA (21)	11344646 (HNO3) (1)	BG04SW-D	S: 08/26/2011 16:10		0014638-09

8/30/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number : NA
N				

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0011

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014637

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX5

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/29/11 1700		8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To: 8/30/11
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L22	Sediment/ Brad Martin	G	TM-MA (21)	11344640 (Ice Only) (1)	NF07SD	S: 08/26/2011 14:22		
MJ8L29	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344647 (Ice Only) (1)	BG04SD	S: 08/26/2011 16:05		
MJ8L23	Sediment/ Brad Martin	G	TM-MA (21)	11344641 (Ice Only) (1)	NF08SD	S: 08/26/2011 14:56		
MJ8L24	Surface Water/ Brad Martin	G	TM-MA (21)	11344642 (HNO3) (1)	NF09SW	S: 08/26/2011 15:40		0014637-10
MJ8L25	Surface Water/ Brad Martin	G	DM-MA (21)	11344643 (HNO3) (1)	NF09SW-D	S: 08/26/2011 15:40		0014638-10
MJ8L26	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344644 (Ice Only) (1)	NF09SD	S: 08/26/2011 15:31		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	MJ8KY7, MJ8KY8, MJ8L26	for B. Martin	4°C	MA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014637

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX5

L

Date Shipped: 8/26/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3371
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/26/11 11:17		8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KX5	Surface Water/ Andy McDonald	G	TM-MA (21)	11344592 (HNO3) (1)	LC03SW	S: 08/25/2011 10:50		0014637-11
MJ8KX6	Surface Water/ Andy McDonald	G	DM-MA (21)	11344594 (HNO3) (1)	LC03SW-D	S: 08/25/2011 10:50		0014638-11
MJ8KX7	Sediment/ Andy McDonald	G	TM-MA (21)	11344595 (Ice Only) (1)	LC03SD	S: 08/25/2011 11:00		
MJ8KX8	Sediment/ Andy McDonald	G	TM-MA (21)	11344596 (Ice Only) (1)	LC04SD	S: 08/25/2011 12:17		
MJ8KY0	Sediment/ Brad Martin	G	TM-MA (21)	11344598 (Ice Only) (1)	LC06SD	S: 08/25/2011 13:05		
MJ8KY1	Sediment/ Brad Martin	G	TM-MA (21)	11344599 (Ice Only) (1)	LC07SD	S: 08/25/2011 13:28		
MJ8KY3	Sediment/ Andy McDonald	G	TM-MA (21)	11344601 (Ice Only) (1)	LC09SD	S: 08/25/2011 13:43		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :	
N					
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B		Custody Seal Intact?	Shipment Iced?

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

0014638

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX6

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

	Relinquished By (Date/Time)	Received By (Date/Time)
1	BVR 8/29/11 1700	Patch 8/30/11 10:05
2		
3	8/30/11	
4		

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KY7	Surface Water/ Brad Martin	G	TM-MA (21)	11344605 (HNO3) (2)	LC11SW	S: 08/25/2011 14:55		0014637-01
MJ8KY8	Surface Water/ Brad Martin	G	DM-MA (21)	11344606 (HNO3) (2)	LC11SW-D	S: 08/25/2011 14:55		0014638-01 1st SX in SDG
MJ8KZ4	Surface Water/ Brad Martin	G	TM-MA (21)	11344612 (HNO3) (1)	LC15SW	S: 08/25/2011 16:25		0014637-02
MJ8KZ5	Surface Water/ Brad Martin	G	DM-MA (21)	11344613 (HNO3) (1)	LC15SW-D	S: 08/25/2011 16:25		0014638-02
MJ8L04	Surface Water/ Brad Martin	G	TM-MA (21)	11344622 (HNO3) (1)	NF02SW	S: 08/26/2011 09:48		0014637-03
MJ8L05	Surface Water/ Brad Martin	G	DM-MA (21)	11344623 (HNO3) (1)	NF02SW-D	S: 08/26/2011 09:48		0014638-03
MJ8L19	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344637 (Ice Only) (1)	NF06SD	S: 08/26/2011 14:00		

Shipment for Case Complete? Y

Sample (s) to be used for laboratory QC: MJ8KY7, MJ8KY8

Additional Sampler Signature (s): BV for B Martin

Cooler Temperature Upon Receipt: 4°C

Chain of Custody Seal Number : NA

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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Page 1 of 2

0014638

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX6

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature: for B Martin

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	BM	8/29/11 1700	Ratan	8/30/11 10:05
2				
3		8/30/11		
4				

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KZ1	Surface Water/ Ada Hamilton	G	TM-MA (21)	11344609 (HNO3) (1)	LC14SW	S: 08/25/2011 15:45		0014637-04
MJ8KZ2	Surface Water/ Ada Hamilton	G	DM-MA (21)	11344610 (HNO3) (1)	LC14SW-D	S: 08/25/2011 15:45		0014638-04
MJ8L08	Surface Water/ Brad Martin	G	TM-MA (21)	11344626 (HNO3) (1)	NF03SW	S: 08/26/2011 10:32		0014637-05
MJ8L09	Surface Water/ Brad Martin	G	DM-MA (21)	11344627 (HNO3) (1)	NF03SW-D	S: 08/26/2011 10:32		0014638-05
MJ8L11	Surface Water/ Brad Martin	G	TM-MA (21)	11344629 (HNO3) (1)	NF04SW	S: 08/26/2011 11:50		00146387-06 8/30
MJ8L12	Surface Water/ Brad Martin	G	DM-MA (21)	11344630 (HNO3) (1)	NF04SW-D	S: 08/26/2011 11:50		0014638-06
MJ8L15	Surface Water/ Brad Martin	B	TM-MA (21)	11344633 (HNO3) (1)	NF05SW	S: 08/26/2011 12:29		0014637-07

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature]	4°C	MA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0011

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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Page 1 of 2

0014638

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX6

L

Date Shipped:	8/29/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3382
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature: for B Martin

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/29/11 1700		8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To: 8/30/11
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L16	Surface Water/ Brad Martin	G	DM-MA (21)	11344634 (HNO3) (1)	NF05SW-D	S: 08/26/2011 12:29		0014638-07
MJ8L20	Surface Water/ Brad Martin	G	TM-MA (21)	11344638 (HNO3) (1)	NF07SW	S: 08/26/2011 14:29		0014637-08
MJ8L21	Surface Water/ Brad Martin	G	DM-MA (21)	11344639 (HNO3) (1)	NF07SW-D	S: 08/26/2011 14:29		0014638-08
MJ8L27	Surface Water/ Brad Martin	G	TM-MA (21)	11344645 (HNO3) (1)	BG04SW	S: 08/26/2011 16:10		0014637-09
MJ8L28	Surface Water/ Brad Martin	G	DM-MA (21)	11344646 (HNO3) (1)	BG04SW-D	S: 08/26/2011 16:10		0014638-09

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:** 4°C	**Chain of Custody Seal Number :** NA
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** Y	**Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0011

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

0014638

Case No: 41603
DAS No:
SDG No: MT8KX6

L

Date Shipped:	8/29/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3382
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	8/29/11, 1170	[signature]	8/30/11 10:05
2				
3				
4		8/30/11		

For Lab Use Only

Lab Contract No:	EPW09035
Unit Price:	
Transfer To:	
Lab Contract No:	8/30/11
Unit Price:	

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L22	Sediment/ Brad Martin	G	TM-MA (21)	11344640 (Ice Only) (1)	NF07SD	S: 08/26/2011 14:22		
MJ8L29	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344647 (Ice Only) (1)	BG04SD	S: 08/26/2011 16:05		
MJ8L23	Sediment/ Brad Martin	G	TM-MA (21)	11344641 (Ice Only) (1)	NF08SD	S: 08/26/2011 14:56		
MJ8L24	Surface Water/ Brad Martin	G	TM-MA (21)	11344642 (HNO3) (1)	NF09SW	S: 08/26/2011 15:40		0014637-10
MJ8L25	Surface Water/ Brad Martin	G	DM-MA (21)	11344643 (HNO3) (1)	NF09SW-D	S: 08/26/2011 15:40		0014638-10
MJ8L26	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344644 (Ice Only) (1)	NF09SD	S: 08/26/2011 15:31		

Shipment for Casa Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	MJ8KY7, MJ8KY8, MJ8L26	[signature] for B. Martin	4°C	MA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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Page 2 of 2

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

0014638

Case No: 41603
DAS No:
SDG No: MJ8KX6

L

Date Shipped:	8/26/2011
Carrier Name:	FedEx
Airbill No:	8656 1491 3371
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/26/11 1700		8/30/11 19:05
2			
3	8/30/11		
4			

For Lab Use Only

Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KX5	Surface Water/ Andy McDonald	G	TM-MA (21)	11344592 (HNO3) (1)	LC03SW	S: 08/25/2011 10:50		0014637-11
MJ8KX6	Surface Water/ Andy McDonald	G	DM-MA (21)	11344594 (HNO3) (1)	LC03SW-D	S: 08/25/2011 10:50		0014638-11
MJ8KX7	Sediment/ Andy McDonald	G	TM-MA (21)	11344595 (Ice Only) (1)	LC03SD	S: 08/25/2011 11:00		
MJ8KX8	Sediment/ Andy McDonald	G	TM-MA (21)	11344596 (Ice Only) (1)	LC04SD	S: 08/25/2011 12:17		
MJ8KY0	Sediment/ Brad Martin	G	TM-MA (21)	11344598 (Ice Only) (1)	LC06SD	S: 08/25/2011 13:05		
MJ8KY1	Sediment/ Brad Martin	G	TM-MA (21)	11344599 (Ice Only) (1)	LC07SD	S: 08/25/2011 13:28		
MJ8KY3	Sediment/ Andy McDonald	G	TM-MA (21)	11344601 (Ice Only) (1)	LC09SD	S: 08/25/2011 13:43		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N				NA

Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX7

L

Date Shipped: 8/26/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3371
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

	Relinquished By (Date/Time)	Received By (Date/Time)
1	8/26/11 1700	Ratan 8/30/11 19:05
2		
3	8/30/11	
4		

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KX5	Surface Water/ Andy McDonald	G	TM-MA (21)	11344592 (HNO3) (1)	LC03SW	S: 08/25/2011 10:50		
MJ8KX6	Surface Water/ Andy McDonald	G	DM-MA (21)	11344594 (HNO3) (1)	LC03SW-D	S: 08/25/2011 10:50		
MJ8KX7	Sediment/ Andy McDonald	G	TM-MA (21)	11344595 (Ice Only) (1)	LC03SD	S: 08/25/2011 11:00		0014539-01 1 Br Bx in SDG+
MJ8KX8	Sediment/ Andy McDonald	G	TM-MA (21)	11344596 (Ice Only) (1)	LC04SD	S: 08/25/2011 12:17		-02
MJ8KY0	Sediment/ Brad Martin	G	TM-MA (21)	11344598 (Ice Only) (1)	LC06SD	S: 08/25/2011 13:05		-03
MJ8KY1	Sediment/ Brad Martin	G	TM-MA (21)	11344599 (Ice Only) (1)	LC07SD	S: 08/25/2011 13:28		-04
MJ8KY3	Sediment/ Andy McDonald	G	TM-MA (21)	11344601 (Ice Only) (1)	LC09SD	S: 08/25/2011 13:43		-05

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N			4°C	MA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX7

L

Date Shipped: 8/26/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3371
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/26/11 1700		8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KY4	Sediment/ Brad Martin	G	TM-MA (21)	11344602 (Ice Only) (1)	LC10SD	S: 08/25/2011 14:21		0014639-06
MJ8KZ3	Sediment/ Andy McDonald	G	TM-MA (21)	11344611 (Ice Only) (1)	LC14SD	S: 08/25/2011 15:50		-07
MJ8KZ6	Sediment/ Brad Martin	G	TM-MA (21)	11344614 (Ice Only) (1)	LC15SD	S: 08/25/2011 16:30		-08
MJ8KZ7	Sediment/ Andy McDonald	G	TM-MA (21)	11344615 (Ice Only) (1)	DC01SD	S: 08/25/2011 16:30		-09
MJ8KZ8	Sediment/ Andy McDonald	G	TM-MA (21)	11344616 (Ice Only) (1)	DC02SD	S: 08/25/2011 16:50		-10
MJ8L03	Sediment/ Andy McDonald	G	TM-MA (21)	11344621 (Ice Only) (1)	BG01SD	S: 08/26/2011 09:40		-11
MJ8L06	Sediment/ Brad Martin	G	TM-MA (21)	11344624 (Ice Only) (1)	NF02SD	S: 08/26/2011 09:50		-12

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KZ0, MJ8L01		4°C	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX7

L

Date Shipped: 8/26/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3371
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/29/11 15:00		8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KY6	Sediment/ Andy McDonald	G	TM-MA (21)	11344604 (Ice Only) (1)	LC12SD	S: 08/25/2011 14:30		0014639-13
MJ8KY9	Sediment/ Brad Martin	G	TM-MA (21)	11344607 (Ice Only) (1)	LC11SD	S: 08/25/2011 15:12		-14
MJ8KZ0	Sediment/ Andy McDonald	G	TM-MA (21)	11344608 (Ice Only) (1)	LC13SD	S: 08/25/2011 15:30		-15
MJ8KZ9	Sediment/ Brad Martin	G	TM-MA (21)	11344617 (Ice Only) (1)	EF03SD	S: 08/25/2011 16:50		-16
MJ8L00	Sediment/ Jeff Fetters	G	TM-MA (21)	11344618 (Ice Only) (1)	NF01SD	S: 08/25/2011 17:24		-17
MJ8L01	Sediment/ Ada Hamilton	G	TM-MA (21)	11344619 (Ice Only) (1)	DC03SD	S: 08/25/2011 17:27		
MJ8L02	Sediment/ Ada Hamilton	G	TM-MA (21)	11344620 (Ice Only) (1)	DC04SD	S: 08/25/2011 17:48		0014639-18

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	MJ8KZ0, MJ8L01		4°	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082611-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX7

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/29/11 10:00		8/30/11 10:05
2			
3	8/30/11		
4			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8KY7	Surface Water/ Brad Martin	G	TM-MA (21)	11344605 (HNO3) (2)	LC11SW	S: 08/25/2011 14:55		
MJ8KY8	Surface Water/ Brad Martin	G	DM-MA (21)	11344606 (HNO3) (2)	LC11SW-D	S: 08/25/2011 14:55		
MJ8KZ4	Surface Water/ Brad Martin	G	TM-MA (21)	11344612 (HNO3) (1)	LC15SW	S: 08/25/2011 16:25		
MJ8KZ5	Surface Water/ Brad Martin	G	DM-MA (21)	11344613 (HNO3) (1)	LC15SW-D	S: 08/25/2011 16:25		
MJ8L04	Surface Water/ Brad Martin	G	TM-MA (21)	11344622 (HNO3) (1)	NF02SW	S: 08/26/2011 09:48		
MJ8L05	Surface Water/ Brad Martin	G	DM-MA (21)	11344623 (HNO3) (1)	NF02SW-D	S: 08/26/2011 09:48		
MJ8L19	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344637 (Ice Only) (1)	NF06SD	S: 08/26/2011 14:00		0014639-19

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	MJ8KY7, MJ8KY8	for B Martin	4°c	NA

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: MJ8KX7

L

Date Shipped: 8/29/2011
Carrier Name: FedEx
Airbill No: 8656 1491 3382
Shipped to: A4 Scientific
1544 Sawdust Road
Suite 505
The Woodlands TX 77380
2812925277

Chain Of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date/Time)	Received By	(Date/Time)
1	[signature]	8/29/11, 1170	[signature]	8/30/11 10:05
2				
3				
4	[signature] 8/30/11			

For Lab Use Only
Lab Contract No: EPW09035
Unit Price:
Transfer To:
Lab Contract No: [signature] 8/30/11
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
MJ8L22	Sediment/ Brad Martin	G	TM-MA (21)	11344640 (Ice Only) (1)	NF07SD	S: 08/26/2011 14:22		0014639-20
MJ8L29	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344647 (Ice Only) (1)	BG04SD	S: 08/26/2011 16:05		final sx SDG
MJ8L23	Sediment/ Brad Martin	G	TM-MA (21)	11344641 (Ice Only) (1)	NF08SD	S: 08/26/2011 14:56		
MJ8L24	Surface Water/ Brad Martin	G	TM-MA (21)	11344642 (HNO3) (1)	NF09SW	S: 08/26/2011 15:40		
MJ8L25	Surface Water/ Brad Martin	G	DM-MA (21)	11344643 (HNO3) (1)	NF09SW-D	S: 08/26/2011 15:40		
MJ8L26	Sediment/ Mark Zawistoski	G	TM-MA (21)	11344644 (Ice Only) (1)	NF09SD	S: 08/26/2011 15:31		

Shipment for Case Complete? Y

Sample (s) to be used for laboratory QC: MJ8KY7, MJ8KY8, MJ8L26

Additional Sampler Signature (s): [signature] for B. Martin

Cooler Temperature Upon Receipt: 4°C

Chain of Custody Seal Number : NA

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y **Shipment Iced?** Y

DM-MA = CLP TAL Dissolved Metals+Li/Sr/Sn, TM-MA = CLP TAL METALS (ICP/MS)+Li/Sr/Sn

COC Number : 10-4097213-082911-0012

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: J8L04

L

Date Shipped: 8/29/2011	**Chain Of Custody Record**	Sampler Signature: RVor for B Martin	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No: EPW11031
Airbill No: 8762 5167 3829	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 RVor 8/29/11/1700		Transfer To:
	2		Lab Contract No:
	3	Nicole Hogue	Unit Price:
	4	8/30/11 ~~9:55~~ 10:00 NH 8/30/11	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
J8L04	Surface Water/ Brad Martin	G	BNA (21)	11344622 (Ice Only) (2)	NF02SW	S: 08/26/2011 09:48		S-4300.01 1 [illegible]
J8L08	Surface Water/ Brad Martin	G	BNA (21)	11344626 (Ice Only) (2)	NF03SW	S: 08/26/2011 10:32		.02
J8L11	Surface Water/ Brad Martin	G	BNA (21)	11344629 (Ice Only) (2)	NF04SW	S: 08/26/2011 11:50		.03
J8L24	Surface Water/ Brad Martin	G	BNA (21)	11344642 (Ice Only) (6)	NF09SW	S: 08/26/2011 15:40		.06
J8L27	Surface Water/ Brad Martin	G	BNA (21)	11344645 (Ice Only) (2)	BG04SW	S: 08/26/2011 16:10		.07

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Y	J8L24		2.1°C	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-082911-0010

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Page 1 of 1

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: J8L04

L

Date Shipped:	8/29/2011	Chain Of Custody Record	Sampler Signature:		For Lab Use Only
Carrier Name:	FedEx				Lab Contract No: EPW11031
Airbill No:	8762 5167 3818	Relinquished By (Date/Time)	Received By (Date/Time)		Unit Price:
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 R Norden 8/29/11/1700			Transfer To:
		2			Lab Contract No:
		3			Unit Price:
		4	Nicole Hogue 8/30/11 ~~9:55~~ 10:00 NH 8/30/11		

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
J8L30	Water/ Renee Nordeen	G	VOA (21)	11344648 (HCL) (3)	TB01WT	S: 08/29/2011 13:50	S-4300.08	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :	
N	J8L24, J8L26, J8L30	R Norden	4.5°C		
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B		Custody Seal Intact? Y	Shipment Iced? Y

VOA = CLP TCL Volatiles

COC Number : 10-4097213-082911-0008

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: J8L04

L

Date Shipped: 8/29/2011	Chain Of Custody Record	Sampler Signature: [signature]	For Lab Use Only
Carrier Name: FedEx			Lab Contract No: EPW 11031
Airbill No: 8762 5167 3807	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 [signature] 8/29/11 1700		Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4	Nicole Hogue 8/30/11 ~~9:55~~ 10:00 NH 8/30/11	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
J8L23	Sediment/ Brad Martin	G	BNA (21)	11344641 (Ice Only) (1)	NF08SD	S: 08/26/2011 14:56	S-4300.07	
~~J8L24~~	~~Surface Water/ Brad Martin~~	~~G~~	~~BNA (21)~~	~~11344642 (Ice Only) (2)~~	~~NF09SW~~	~~S: 08/26/2011 15:40~~	BN NH 8/30/11	
J8L26	Sediment/ Mark Zawistoski	G	BNA (21)	11344644 (Ice Only) (1)	NF09SD	S: 08/26/2011 15:31	S-4300.08	
J8L29	Sediment/ Mark Zawistoski	G	BNA (21)	11344647 (Ice Only) (1)	BG04SD	S: 08/26/2011 16:05	.09	
J8L06	Sediment/ Brad Martin	G	BNA (21)	11344624 (Ice Only) (1)	NF02SD	S: 08/26/2011 09:50	S-4301.01	
J8L10	Sediment/ Mark Zawistoski	G	BNA (21)	11344628 (Ice Only) (1)	NF03SD	S: 08/26/2011 10:34	.02	
J8L13	Sediment/ Mark Zawistoski	G	BNA (21)	11344631 (Ice Only) (1)	NF04SD	S: 08/26/2011 12:00	.03	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	J8L26		2.3°C	

Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-082911-0009

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: J8L04

L

Date Shipped: 8/29/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only
Carrier Name: FedEx			Lab Contract No: EPW11031
Airbill No: 8762 5167 3807	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 8/29/11/1700		Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4	Nicole Hogue 8/30/11 9:55 10:00 8/30/11	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
J8L15	Surface Water/ Brad Martin	B	BNA (21)	11344633 (Ice Only) (2)	NF05SW	S: 08/26/2011 12:29	S-4300.04	
J8L17	Sediment/ Mark Zawistoski	G	BNA (21)	11344635 (Ice Only) (1)	NF05SD	S: 08/26/2011 12:35	S-4301.04	
J8L19	Sediment/ Mark Zawistoski	G	BNA (21)	11344637 (Ice Only) (1)	NF06SD	S: 08/26/2011 14:00	.05	
J8L20	Surface Water/ Brad Martin	G	BNA (21)	(Ice Only), 11344638 (Ice Only) (2)	NF07SW	S: 08/26/2011 14:29	S-4300.05	
J8L22	Sediment/ Brad Martin	G	BNA (21)	11344640 (Ice Only) (1)	NF07SD	S: 08/26/2011 14:22	S-4301.06	

ORIGINAL
Case 41603 SDG J8L04
Episode S-4300 init/date AM 8/30/11

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	J8L26		2.3 °C	

Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles

COC Number : 10-4097213-082911-0009

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: J8L04

L

Date Shipped: 8/29/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only	
Carrier Name: FedEx			Lab Contract No: EPW11031	
Airbill No: 8762 5167 3818	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:	
Shipped to: KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065	1 [illegible] 8/29/11 17:00		Transfer To:	
	2		Lab Contract No:	
	3		Unit Price:	
	4	Nicole Hogue 8/30/11 9:55 10:00 NH 8/30/11		

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
J8L04	Surface Water/ Brad Martin	G	VOA (21)	11344622 (HCL), 11344622 (Ice Only) (3)	NF02SW	S: 08/26/2011 09:48	S-4300.01	
J8L08	Surface Water/ Brad Martin	G	VOA (21)	11344626 (HCL) (3)	NF03SW	S: 08/26/2011 10:32	↓ .02	
J8L10	Sediment/ Mark Zawistoski	G	VOA (21)	(Ice Only), 11344628 (Ice Only) (4)	NF03SD	S: 08/26/2011 10:34	S-4301.02	
J8L11	Surface Water/ Brad Martin	G	VOA (21)	11344629 (HCL), 11344629 (Ice Only) (3)	NF04SW	S: 08/26/2011 11:50	S-4300.03	
J8L13	Sediment/ Mark Zawistoski	G	VOA (21)	11344631 (Ice Only) (4)	NF04SD	S: 08/26/2011 12:00	S-4301.03	
J8L15	Surface Water/ Brad Martin	B	VOA (21)	11344633 (HCL), 11344633 (Ice Only) (3)	NF05SW	S: 08/26/2011 12:29	S-4300.04	
J8L17	Sediment/ Mark Zawistoski	G	VOA (21)	(Ice Only), 11344635 (Ice Only) (4)	NF05SD	S: 08/26/2011 12:35	S-4301.04	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[illegible]	4.5°	

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? Y Shipment Iced? Y

VOA = CLP TCL Volatiles

ORIGINAL
Case 41603 SDG J8L04
Episode S-4300 init/date NH 8/30/11

COC Number : 10-4097213-082911-0008

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 41603
DAS No:
SDG No: J8L04

L

Date Shipped:	8/29/2011	**Chain Of Custody Record**	Sampler Signature: [signature]
Carrier Name:	FedEx		
Airbill No:	8762 5167 3818		
Shipped to:	KAP Technologies, Inc. 9391 Grogans Mill Road The Woodlands TX 77380 2813670065		

Relinquished By	(Date/Time)	Received By	(Date/Time)
1 [signature]	8/29/11 1700		
2			
3			
4		Nicole Hogue 8/30/11	~~9:55~~ 10:00 NLH 8/30/11

For Lab Use Only

Lab Contract No: EPW11031
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
J8L19	Sediment/ Mark Zawistoski	G	VOA (21)	(Ice Only), 11344637 (Ice Only) (4)	NF06SD	S: 08/26/2011 14:00	S-4301.05	
J8L20	Surface Water/ Brad Martin	G	VOA (21)	11344638 (HCL) (3)	NF07SW	S: 08/26/2011 14:29	S-4300.05	
J8L22	Sediment/ Brad Martin	G	VOA (21)	11344640 (Ice Only) (4)	NF07SD	S: 08/26/2011 14:22	S-4301.06	
J8L24	Surface Water/ Brad Martin	G	VOA (21)	11344642 (HCL) (9)	NF09SW	S: 08/26/2011 15:40	S-4300.06	
J8L26	Sediment/ Mark Zawistoski	G	VOA (21)	11344644 (Ice Only) (10)	NF09SD	S: 08/26/2011 15:31	S-4301.08	
J8L27	Surface Water/ Brad Martin	G	VOA (21)	11344645 (HCL), 11344645 (Ice Only) (3)	BG04SW	S: 08/26/2011 16:10	S-4300.07	
J8L29	Sediment/ Mark Zawistoski	G	VOA (21)	(Ice Only), 11344647 (Ice Only) (4)	BG04SD	S: 08/26/2011 16:05	S-4301.09	

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	J8L24, J8L26	[signature]	4.5°C	

Analysis Key: **Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** Y **Shipment Iced?** Y

VOA = CLP TCL Volatiles

ORIGINAL
Case: 41603 SDG: J8L04
Episode: S-4300 init/date: NLH 8/30/11

COC Number : 10-4097213-082911-0008

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0098	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [illegible] 8/25/11 1300	Cathy Gamble 8/26/11 1014	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28293

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-1	FP01SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344500 (Ice Only) (1)	FP01SS	S: 08/22/2011 11:45		
-2	FP02SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344501 (Ice Only) (1)	FP02SS	S: 08/22/2011 13:05		
-3	FP03SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344502 (Ice Only) (1)	FP03SS	S: 08/22/2011 13:30		
-4	FP04SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344503 (Ice Only) (1)	FP04SS	S: 08/22/2011 14:05		
-5	FP05SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344504 (Ice Only) (1)	FP05SS	S: 08/22/2011 14:30		
-6	FR01SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344518 (Ice Only) (1)	FR01SS	S: 08/23/2011 09:01		
-7	FR02SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344519 (Ice Only) (1)	FR02SS	S: 08/23/2011 09:13		

Cooler/TB Dig/IR cor. w/ [illegible]
Cooler Dsch. red ch @ Lab
Wet Packs Packing bubble
w/c Fedex P.O.

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** FP01SS	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?**	**Shipment Iced?**

COC Number : 10-4097213-082411-0005

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0098	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [illegible] 8/25/11/1500	Cathy Gamble 8/26/11 10:15	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-8	FR03SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344520 (Ice Only) (1)	FR03SS	S: 08/23/2011 09:22		
-9	FR04SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344521 (Ice Only) (1)	FR04SS	S: 08/23/2011 09:30		
-10	FR05SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344522 (Ice Only) (1)	FR05SS	S: 08/23/2011 09:41		
-11	FR06SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344523 (Ice Only) (1)	FR06SS	S: 08/23/2011 09:50		
-12	OB01SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344516 (Ice Only) (1)	OB01SS	S: 08/22/2011 16:30		
-13	PU01SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344505 (Ice Only) (1)	PU01SD	S: 08/22/2011 14:27		
-14	PU02SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344506 (Ice Only) (1)	PU02SD	S: 08/22/2011 14:30		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** FP01SS, FR03SS	**Additional Sampler Signature (s):** [illegible]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___
Perch = Perchlorate				

COC Number : 10-4097213-082411-0005

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/25/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only	
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:	
Airbill No: 8704 8264 0098	1 [illegible] 8/25/11/1200	Cathy Gamble 8/26/11 10:10	Unit Price:	
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:	
	3		Lab Contract No:	
	4		Unit Price:	
			28293	

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-15	PU03SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344507 (Ice Only) (1)	PU03SD	S: 08/22/2011 14:47		
-16	PU04SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344508 (Ice Only) (1)	PU04SD	S: 08/22/2011 14:58		
-17	PU05SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344509 (Ice Only) (1)	PU05SD	S: 08/22/2011 15:14		
-18	PU06SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344510 (Ice Only) (1)	PU06SD	S: 08/22/2011 15:33		
-19	PU07SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344511 (Ice Only) (1)	PU07SD	S: 08/22/2011 16:12		
-20	PU08SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344512 (Ice Only) (1)	PU08SD	S: 08/22/2011 16:33		
-21	PU09SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344513 (Ice Only) (1)	PU09SD	S: 08/22/2011 16:48		

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: FP01SS, FR03SS	Additional Sampler Signature (s): [illegible]	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Analysis Key: Perch = Perchlorate	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? ___	Shipment Iced? ___

COC Number : 10-4097213-082411-0005

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped:	8/25/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name:	FedEx			Lab Contract No:
Airbill No:	8704 8264 0098	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to:	Test America 5755 8th Street East Tacoma WA 98424	1 [illegible] 8/25/11/1300	Cathy Gamble 8/26/11 10:40	Transfer To:
		2		Lab Contract No:
		3		Unit Price:
		4		28293

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-22	PU10SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344514 (Ice Only) (1)	PU10SD	S: 08/22/2011 16:58		
-23	PU11SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344515 (Ice Only) (1)	PU11SD	S: 08/22/2011 17:08		
-24	PU12SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344517 (Ice Only) (1)	PU12SD	S: 08/22/2011 17:22		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** FP01SS, FR03SS	**Additional Sampler Signature (s):** [illegible]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___
Perch = Perchlorate				

COC Number : 10-4097213-082411-0005

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 82640102	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [signature] 8-25-11 13:00	Cathy Gamble 8/26/11 10:00	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28297

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-1	FB01SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344529 (Ice Only) (1)	FB01SS	S: 08/23/2011 10:55		
-2	FB02SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344531 (Ice Only) (1)	FB02SS	S: 08/23/2011 11:00		
-3	FB03SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344533 (Ice Only) (1)	FB03SS	S: 08/23/2011 11:09		
-4	FB04SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344534 (Ice Only) (1)	FB04SS	S: 08/23/2011 11:18		
-5	FP08SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344528 (Ice Only) (1)	FP08SS	S: 08/23/2011 10:30		
-6	FP09SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344530 (Ice Only) (1)	FP09SS	S: 08/23/2011 10:53		
-7	FP10SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344532 (Ice Only) (1)	FP10SS	S: 08/23/2011 11:09		

A2
Cooler/TB Dig/IR cor 5.9 unc 5.6
Cooler Dsc Lgred wh. @ Lab
Wet/Packs Packing bubble
w/cs Fedex P.O.

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature]		

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** ___ **Shipment Iced?** ___

Perch = Perchlorate

COC Number : 10-4097213-082411-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**	
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:	
Airbill No: 8704 82640102	1 [illegible] 8-25-11 13:00	Cathy Gamble 8/26/11 10:00	Unit Price:	
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:	
	3		Lab Contract No:	
	4		Unit Price:	
			28297	

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-8	FR07SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344525 (Ice Only) (1)	FR07SS	S: 08/23/2011 09:55		
-9	FR12SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344545 (Ice Only) (1)	FR12SS	S: 08/23/2011 14:28		
-10	FR13SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344546 (Ice Only) (1)	FR13SS	S: 08/23/2011 14:40		
-11	FR14SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344547 (Ice Only) (1)	FR14SS	S: 08/23/2011 14:52		
-12	FR15SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344548 (Ice Only) (1)	FR15SS	S: 08/23/2011 15:09		
-13	OB05SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344544 (Ice Only) (1)	OB05SS	S: 08/23/2011 14:25		
-14	OP01SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344536 (Ice Only) (1)	OP01SS	S: 08/23/2011 11:35		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___
Perch = Perchlorate				

COC Number : 10-4097213-082411-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 82640102	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [illegible] 8-25-11 13:00	Cathy Gamble 8/26/11 10:00	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28297

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-15	FB05SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344535 (Ice Only) (1)	FB05SS	S: 08/23/2011 11:26		
-16	FB06SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344538 (Ice Only) (1)	FB06SS	S: 08/23/2011 11:33		
-17	FP06SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344524 (Ice Only) (1)	FP06SS	S: 08/23/2011 09:46		
-18	FP07SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344527 (Ice Only) (1)	FP07SS	S: 08/23/2011 10:05		
-19	FR08SS	Surface Soil/ Jeff Fetters	G	Perch (21)	11344526 (Ice Only) (1)	FR08SS	S: 08/23/2011 10:05		
-20	FR09SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344539 (Ice Only) (1)	FR09SS	S: 08/23/2011 13:45		
-21	FR10SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344541 (Ice Only) (1)	FR10SS	S: 08/23/2011 14:08		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

COC Number : 10-4097213-082411-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/25/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:
Airbill No: 8704 82640102	1 [illegible] 8-25-11 13:00	Cathy Gamble 8/26/11 10:00	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:
	3		Lab Contract No:
	4		Unit Price:

28297

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-22	FR11SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344543 (Ice Only) (1)	FR11SS	S: 08/23/2011 14:17		
-23	FR16SS	Surface Soil/ Mark Zawistoski	G	Perch (21)	11344549 (Ice Only) (1)	FR16SS	S: 08/23/2011 15:25		
-24	OB02SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344537 (Ice Only) (1)	OB02SS	S: 08/23/2011 13:45		
-25	OB03SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344540 (Ice Only) (1)	OB03SS	S: 08/23/2011 13:58		
-26	OB04SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344542 (Ice Only) (1)	OB04SS	S: 08/23/2011 14:10		

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Analysis Key:	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact?	Shipment Iced?
Perch = Perchlorate				

COC Number : 10-4097213-082411-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0113	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [signature] 8/25/11 13:00	Cathy Gamble 8/26/11 10:00	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		8/26/11 28295 ~~28290~~

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-1	CT01SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344556 (Ice Only) (1)	CT01SS	S: 08/24/2011 10:07		
-2	CT02SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344557 (Ice Only) (1)	CT02SS	S: 08/24/2011 10:26		
-3	CT03SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344558 (Ice Only) (1)	CT03SS	S: 08/24/2011 10:46		
-4	CT04SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344559 (Ice Only) (1)	CT04SS	S: 08/24/2011 11:17		
-5	CT10SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344565 (Ice Only) (1)	CT10SS	S: 08/24/2011 14:42		
-6	CT11SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344566 (Ice Only) (1)	CT11SS	S: 08/24/3011 15:13		
-7	FP11SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344550 (Ice Only) (1)	FP11SS	S: 08/23/2011 15:36		

Cooler TB Dig IR cor 0.8 unc 0.5 A2
Cooler Dsc Lg ned wh @ Lab –
Wet Packs Packing bubble
w/co Fedex P.O.

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** CT11SS	**Additional Sampler Signature (s):** [signature]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

COC Number : 10-4097213-082411-0009

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/25/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0113	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [signature] 8/25/11 13:00	Cathy Crumble 8/26/11 10:00	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28295

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-8	FP12SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344551 (Ice Only) (1)	FP12SS	S: 08/23/2011 15:47		
-9	OB06SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344562 (Ice Only) (1)	OB06SS	S: 08/24/2011 13:42		
-10	OB07SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344553 (Ice Only) (1)	OB07SS	S: 08/24/2011 13:55		
-11	OB08SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344567 (Ice Only) (1)	OB08SS	S: 08/24/2011 14:43		
-12	OB09SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344568 (Ice Only) (1)	OB09SS	S: 08/24/2011 15:10		
-13	CT05SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344560 (Ice Only) (1)	CT05SS	S: 08/24/2011 11:40		
-14	CT06SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344561 (Ice Only) (1)	CT06SS	S: 04/24/2011 13:20		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** [signature]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

COC Number : 10-4097213-082411-0009

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/25/2011	Chain Of Custody Record	Sampler Signature: [signature]	For Lab Use Only
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:
Airbill No: 8704 8264 0113	1 [signature] 8/25/11 13:00	Cathy Gamble 8/26/11 11:00	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:
	3		Lab Contract No:
	4		Unit Price:
			28295

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-15	CT07SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344570 (Ice Only) (1)	CT07SS	S: 08/24/2011 13:50		
-16	CT09SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344564 (Ice Only) (1)	CT09SS	S: 08/24/2011 14:25		
-17	FP13SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344552 (Ice Only) (1)	FP13SS	S: 08/23/2011 15:58		
-18	FP14SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344553 (Ice Only) (1)	FP14SS	S: 08/23/2011 16:16		
-19	FP15SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344554 (Ice Only) (1)	FP15SS	S: 08/23/2011 16:33		
-20	FP16SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344555 (Ice Only) (1)	FP16SS	S: 08/23/2011 17:02		

Shipment for Case Complete? N	Sample (s) to be used for laboratory QC: CT11SS, FP16SS	Additional Sampler Signature (s): [signature]	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
Analysis Key: Perch = Perchlorate	Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium	Type/Designate : Composite = C, Grab = G, Both = B	Custody Seal Intact? ___	Shipment Iced? ___

COC Number : 10-4097213-082411-0009

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/26/2011	**Chain Of Custody Record**	Sampler Signature: Andy McDonald	**For Lab Use Only**
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:
Airbill No: 8704 8264 0124	1 [illegible] 8/29/11 1440	Jillian [illegible] 8/29/11 1440	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:
	3		Lab Contract No:
	4		Unit Price:

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-13	CT08SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344571 (Ice Only) (1)	CT08SS	S: 08/24/2011 14:05		
-14	EF01SD	Sediment/ Andy McDonald	G	Perch (21), TOC (21)	11344569 (Ice Only) (2)	EF01SD	S: 08/24/2011 15:59		
-15	EF02SD	Sediment/ Andy McDonald	G	Perch (21), TOC (21)	11344574 (Ice Only) (2)	EF02SD	S: 08/24/2011 16:40		
-16	LC01SD	Sediment/ Andy McDonald	G	Perch (21), TOC (21)	11344591 (Ice Only) (2)	LC01SD	S: 08/25/2011 10:00		
-17	LC02SD	Sediment/ Brad Martin	G	Perch (21), TOC (21)	11344592 (Ice Only) (2)	LC02SD	S: 08/25/2011 10:50		
-18	LC05SD	Sediment/ Brad Martin	G	Perch (21), TOC (21)	11344597 (Ice Only) (2)	LC05SD	S: 08/25/2011 11:50		
-19	LC08SD	Sediment/ Andy McDonald	G	Perch (21), TOC (21)	11344600 (Ice Only) (2)	LC08SD	S: 08/25/2011 13:25		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** [illegible]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B		**Custody Seal Intact?** ___ **Shipment Iced?** ___

Perch = Perchlorate, TOC = Total Organic Carbon

2 cooler info on pg 3

COC Number : 10-4097213-082611-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/26/2011	**Chain Of Custody Record**	Sampler Signature	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0124	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 8/29/11 1440	8/29/11 1440	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-20	PT01SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344572 (Ice Only) (1)	PT01SS	S: 08/24/2011 16:16		
-21	PT02SS	Surface Soil/ Ada Hamilton	G	Perch (21)	A11344573 (Ice Only) (1)	PT02SS	S: 08/24/2011 16:30		
-22	PT03SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344575 (Ice Only) (1)	PT03SS	S: 08/24/2011 16:40		
-23	PT04SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344576 (Ice Only) (1)	PT04SS	S: 08/24/3011 16:55		
-24	PT05SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344579 (Ice Only) (1)	PT05SS	S: 08/24/2011 17:08		
-25	PT06SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344577 (Ice Only) (1)	PT06SS	S: 08/24/2011 17:20		
-26	PT07SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344578 (Ice Only) (1)	PT07SS	S: 08/24/2011 17:23		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?**	**Shipment Iced?**

Perch = Perchlorate, TOC = Total Organic Carbon

2

COC Number : 10-4097213-082611-0002

LABORATORY COPY

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/26/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0124	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [signature] 8/29/11 1440	[signature] 8/29/11 1440	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-27	PT08SS	Surface Soil/ Andy McDonald	G	Perch (21)	11344583 (Ice Only) (1)	PT08SS	S: 08/24/2011 17:30		
-28	PT10SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344581 (Ice Only) (1)	PT10SS	S: 08/24/2011 18:05		
-29	PT15SS	Surface Soil/ Brad Martin	G	Perch (21)	11344587 (Ice Only) (1)	PT15SS	S: 08/25/2011 09:35		
-30	PT16SS	Surface Soil/ Brad Martin	G	Perch (21)	11344588 (Ice Only) (1)	PT16SS	S: 08/25/2011 09:40		
-31	PT17SS	Surface Soil/ Brad Martin	G	Perch (21)	11344589 (Ice Only) (1)	PT17SS	S: 08/25/2011 09:45		
-32	PT11SS	Surface Soil/ Ada Hamilton	G	Perch (21)	11344582 (Ice Only) (1)	PT11SS	S: 08/24/2011 18:03		
-33	PT12SS	Surface Soil/ Brad Martin	G	Perch (21)	11344584 (Ice Only) (1)	PT12SS	S: 08/25/2011 09:05		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature]		

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B **Custody Seal Intact?** ___ **Shipment Iced?** ___

Perch = Perchlorate, TOC = Total Organic Carbon

(2) Lg Red/wh wet/bubble client drop A1TB=5.2/4.9

COC Number : 10-4097213-082611-0002

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/26/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only**
Carrier Name: FedEx	Relinquished By (Date/Time)	Received By (Date/Time)	Lab Contract No:
Airbill No: 8704 8264 0124	1 [signature] 8/29/11 1440	[signature] 8/29/11 1440	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:
	3		Lab Contract No:
	4		Unit Price:
			28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-34	PT13SS	Surface Soil/ Brad Martin	G	Perch (21)	11344585 (Ice Only) (1)	PT13SS	S: 08/25/2011 09:15		
-35	PT14SS	Surface Soil/ Brad Martin	G	Perch (21)	11344586 (Ice Only) (1)	PT14SS	S: 08/25/2011 09:24		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):** [signature]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

Perch = Perchlorate, TOC = Total Organic Carbon

2

COC Number : 10-4097213-082611-0002

LABORATORY COPY

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3

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/26/2011	**Chain Of Custody Record**	Sampler Signature: [signature]	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0180	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 [signature] 8/29/11 1440	[signature] 8/29/11 1440	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-36	BC01SD	Sediment/ Brad Martin	G	GS Dist (21)	11344603 (Ice Only) (1)	BC01SD	S: 08/25/2011 14:35		
-37	BG02SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344625 (Ice Only) (1)	BG02SD	S: 08/26/2011 10:15		
-38	DC04SD	Sediment/ Ada Hamilton	G	GS Dist (21)	11344620 (Ice Only) (1)	DC04SD	S: 08/25/2011 17:48		
-39	LC03SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344595 (Ice Only) (1)	LC03SD	S: 08/25/2011 11:00		
-40	LC04SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344596 (Ice Only) (1)	LC04SD	S: 08/25/2011 12:17		
-41	LC06SD	Sediment/ Brad Martin	G	GS Dist (21)	11344598 (Ice Only) (1)	LC06SD	S: 08/25/2011 13:05		
-42	LC07SD	Sediment/ Brad Martin	G	GS Dist (21)	11344599 (Ice Only) (1)	LC07SD	S: 08/25/2011 13:28		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N		[signature]		

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium **Type/Designate :** Composite = C, Grab = G, Both = B

Custody Seal Intact? ___ **Shipment Iced?** ___

GS Dist = Grain Size Distribution

A1TB = 6.8/6.5

(3) Lg Blue/wh wet/bubb client drop

COC Number : 10-4097213-082611-0004

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Page 1 of 2

10/27/2011

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped:	8/26/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name:	FedEx			Lab Contract No:
Airbill No:	8704 8264 0180	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to:	Test America 5755 8th Street East Tacoma WA 98424	1 8/29/11 1440	8/29/11 1440	Transfer To: Lab Contract No: Unit Price:
		2		
		3		
		4		

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-43	LC09SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344601 (Ice Only) (1)	LC09SD	S: 08/25/2011 13:43		
-44	LC10SD	Sediment/ Brad Martin	G	GS Dist (21)	11344602 (Ice Only) (1)	LC10SD	S: 08/25/2011 14:21		
-45	LC11SD	Sediment/ Brad Martin	G	GS Dist (21)	11344607 (Ice Only) (1)	LC11SD	S: 08/25/2011 15:12		
-46	LC12SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344604 (Ice Only) (1)	LC12SD	S: 08/25/2011 14:30		
-47	LC13SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344608 (Ice Only) (1)	LC13SD	S: 08/25/2011 15:30		
-48	LC14SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344611 (Ice Only) (1)	LC14SD	S: 08/25/2011 15:50		
-49	NF05SD	Sediment/ Mark Zawistoski	G	GS Dist (21)	11344635 (Ice Only) (1)	NF05SD	S: 08/26/2011 12:35		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:**	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

GS Dist = Grain Size Distribution

3

COC Number : 10-4097213-082611-0004

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4

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/26/2011	Chain Of Custody Record	Sampler Signature:	For Lab Use Only
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0135	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 8/29/11 1440	8/29/11 1440	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-50	BC01SD	Sediment/ Brad Martin	G	Perch (21)	11344603 (Ice Only) (1)	BC01SD	S: 08/25/2011 14:35		
-51	BG01SD	Sediment/ Andy McDonald	G	Perch (21)	11344621 (Ice Only) (1)	BG01SD	S: 08/26/2011 09:40		
-52	BG02SD	Sediment/ Andy McDonald	G	Perch (21)	11344625 (Ice Only) (1)	BG02SD	S: 08/26/2011 10:15		
-53	BG03SD	Sediment/ Andy McDonald	G	Perch (21)	11344636 (Ice Only) (1)	BG03SD	S: 08/26/2011 12:48		
-54	DC01SD	Sediment/ Andy McDonald	G	GS Dist (21), Perch (21)	11344615 (Ice Only) (2)	DC01SD	S: 08/25/2011 16:30		
-55	DC03SD	Sediment/ Ada Hamilton	G	GS Dist (21), Perch (21)	11344619 (Ice Only) (2)	DC03SD	S: 08/25/2011 17:27		
-56	DC04SD	Sediment/ Ada Hamilton	G	Perch (21)	11344620 (Ice Only) (1)	DC04SD	S: 08/25/2011 17:48		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	DC03SD			

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? ___ Shipment Iced? ___

GS Dist = Grain Size Distribution, Perch = Perchlorate

4 IR= 11.4/11.3 Lg Blue/Wh wet/bubble client drop

COC Number : 10-4097213-082611-0005

LABORATORY COPY

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped:	8/26/2011	**Chain Of Custody Record**	Sampler Signature:
Carrier Name:	FedEx	Relinquished By (Date/Time)	Received By (Date/Time)
Airbill No:	8704 8264 0135	1 [illegible] 8/29/11 1440	Jillian Patrick 8/29/11 1440
Shipped to:	Test America 5755 8th Street East Tacoma WA 98424	2	
		3	
		4	

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-57	EF03SD	Sediment/ Brad Martin	G	Perch (21)	11344617 (Ice Only) (1)	EF03SD	S: 08/25/2011 16:50		
-58	LC03SD	Sediment/ Andy McDonald	G	Perch (21)	11344595 (Ice Only) (1)	LC03SD	S: 08/25/2011 11:00		
-59	LC03SW	Surface Water/ Andy McDonald	G	Perch (21)	11344592 (Ice Only) (1)	LC03SW	S: 08/25/2011 10:50		
-60	LC04SD	Sediment/ Andy McDonald	G	Perch (21)	11344596 (Ice Only) (1)	LC04SD	S: 08/25/2011 12:17		
-61	LC06SD	Sediment/ Brad Martin	G	Perch (21)	11344598 (Ice Only) (1)	LC06SD	S: 08/25/2011 13:05		
-62	LC07SD	Sediment/ Brad Martin	G	Perch (21)	11344599 (Ice Only) (1)	LC07SD	S: 08/25/2011 13:28		
-63	LC09SD	Sediment/ Andy McDonald	G	Perch (21)	11344601 (Ice Only) (1)	LC09SD	S: 08/25/2011 13:43		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** DC03SD	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?**	**Shipment Iced?**

GS Dist = Grain Size Distribution, Perch = Perchlorate

4

COC Number : 10-4097213-082611-0005

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped:	8/26/2011	**Chain Of Custody Record**	Sampler Signature:
Carrier Name:	FedEx		
Airbill No:	8704 8264 0135	**Relinquished By (Date/Time)**	**Received By (Date/Time)**
Shipped to:	Test America 5755 8th Street East Tacoma WA 98424	1 [illegible] 8/26/11 1440	[illegible] 8/26/11 1440
		2	
		3	
		4	

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-64	LC10SD	Sediment/ Brad Martin	G	Perch (21)	11344602 (Ice Only) (1)	LC10SD	S: 08/25/2011 14:21		
-65	LC11SD	Sediment/ Brad Martin	G	Perch (21)	11344607 (Ice Only) (1)	LC11SD	S: 08/25/2011 15:12		
-66	LC12SD	Sediment/ Andy McDonald	G	Perch (21)	11344604 (Ice Only) (1)	LC12SD	S: 08/25/2011 14:30		
-67	LC13SD	Sediment/ Andy McDonald	G	Perch (21)	11344608 (Ice Only) (1)	LC13SD	S: 08/25/2011 15:30		
-68	LC14SD	Sediment/ Andy McDonald	G	Perch (21)	11344611 (Ice Only) (1)	LC14SD	S: 08/25/2011 15:50		
-69	LC15SD	Sediment/ Brad Martin	G	Perch (21)	11344614 (Ice Only) (1)	LC15SD	S: 08/25/2011 16:30		
-70	NF02SD	Sediment/ Brad Martin	G	GS Dist (21), Perch (21)	11344624 (Ice Only) (2)	NF02SD	S: 08/26/2011 09:50		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** DC03SD, LC13SD	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

GS Dist = Grain Size Distribution, Perch = Perchlorate

(4)

COC Number : 10-4097213-082611-0005

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10/27/2011

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/26/2011	**Chain Of Custody Record**	Sampler Signature:	**For Lab Use Only**
Carrier Name: FedEx			Lab Contract No:
Airbill No: 8704 8264 0135	Relinquished By (Date/Time)	Received By (Date/Time)	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	1 8/29/11 1440	8/29/11 1440	Transfer To:
	2		Lab Contract No:
	3		Unit Price:
	4		28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-71	NF03SD	Sediment/ Mark Zawistoski	G	GS Dist (21)	11344628 (Ice Only) (1)	NF03SD	S: 08/26/2011 10:34		
-72	NF04SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344631 (Ice Only) (1)	NF04SD	S: 08/26/2011 12:00		
-73	NF05SD	Sediment/ Mark Zawistoski	G	Perch (21)	11344635 (Ice Only) (1)	NF05SD	S: 08/26/2011 12:35		

Shipment for Case Complete? N	**Sample (s) to be used for laboratory QC:** DC03SD, LC13SD	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key:	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B		**Custody Seal Intact?** ___ **Shipment Iced?** ___

GS Dist = Grain Size Distribution, Perch = Perchlorate

4

COC Number : 10-4097213-082611-0005

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1

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/29/2011
Carrier Name: Hand Delivery
Airbill No:
Shipped to: Test America
5755 8th Street East
Tacoma WA 98424

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/29/11 1440		8/29/11 1440
2			
3			
4			

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-1	BG01SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344621 (Ice Only) (2)	BG01SD	S: 08/26/2011 09:40		
-2	BG03SD	Sediment/ Andy McDonald	G	GS Dist (21)	11344636 (Ice Only) (2)	BG03SD	S: 08/26/2011 12:48		
-3	BG04SD	Sediment/ Mark Zawistoski	G	GS Dist (21), Perch (21)	11344647 (Ice Only) (3)	BG04SD	S: 08/26/2011 16:05		
-4	DC02SD	Sediment/ Andy McDonald	G	GS Dist (21), Perch (21)	11344616 (Ice Only) (3)	DC02SD	S: 08/25/2011 16:50		
-5	EF03SD	Sediment/ Brad Martin	G	GS Dist (21)	11344617 (Ice Only) (2)	EF03SD	S: 08/25/2011 16:50		
-6	LC15SD	Sediment/ Brad Martin	G	GS Dist (21)	11344614 (Ice Only) (2)	LC15SD	S: 08/25/2011 16:30		
-7	NF01SD	Sediment/ Jeff Fetters	G	GS Dist (21), Perch (21)	11344618 (Ice Only) (3)	NF01SD	S: 08/25/2011 17:24		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N				

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? ___ Shipment Iced? ___

GS Dist = Grain Size Distribution, Perch = Perchlorate

(1) IR = 8.6/8.5 Lg. Red/wh wet/bubble client days

COC Number : 10-4097213-082911-0006

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USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/29/2011
Carrier Name: Hand Delivery
Airbill No:
Shipped to: Test America
5755 8th Street East
Tacoma WA 98424

Chain Of Custody Record

Sampler Signature:

Relinquished By	(Date/Time)	Received By	(Date/Time)
1	8/29/11 1440		8/29/11 1440
2			
3			
4			

For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-8	NF04SD	Sediment/ Mark Zawistoski	G	GS Dist (21)	11344631 (Ice Only) (2)	NF04SD	S: 08/26/2011 12:00		
-9	NF06SD	Sediment/ Mark Zawistoski	G	GS Dist (21), Perch (21)	11344637 (Ice Only) (3)	NF06SD	S: 08/26/2011 14:00		
-10	NF07SD	Sediment/ Brad Martin	G	GS Dist (21), Perch (21)	11344640 (Ice Only) (3)	NF07SD	S: 08/26/2011 14:22		
-11	NF08SD	Sediment/ Brad Martin	G	GS Dist (21), Perch (21)	11344641 (Ice Only) (3)	NF08SD	S: 08/26/2011 14:56		
-12	NF09SD	Sediment/ Mark Zawistoski	G	GS Dist (21), Perch (21)	11344644 (Ice Only) (3)	NF09SD	S: 08/26/2011 15:31		

Shipment for Case Complete?	Sample (s) to be used for laboratory QC:	Additional Sampler Signature (s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number :
N	NF09SD			

Analysis Key: Concentration : L = Low, M = Medium, H = High, L/M = Low/Medium Type/Designate : Composite = C, Grab = G, Both = B

Custody Seal Intact? ___ Shipment Iced? ___

GS Dist = Grain Size Distribution, Perch = Perchlorate

1

COC Number : 10-4097213-082911-0006

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5

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:

L

Date Shipped: 8/29/2011 **Carrier Name:** Hand Delivery **Airbill No:** **Shipped to:** Test America 5755 8th Street East Tacoma WA 98424	**Chain Of Custody Record**	Sampler Signature: Rrod for B. Martin	**For Lab Use Only** Lab Contract No: Unit Price: Transfer To: Lab Contract No: Unit Price:
	Relinquished By (Date/Time)	**Received By** (Date/Time)	
	1 [signature] 8/29/11 1440	[signature] 8/29/11 1440	
	2		
	3		
	4		

28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	SAMPLE No	FOR LAB USE ONLY Sample Condition On Receipt
-74	BG04SW	Surface Water/ Brad Martin	G	Perch (21)	11344645 (Ice Only) (1)	BG04SW	S: 08/26/2011 16:10		
-75	LC11SW	Surface Water/ Brad Martin	G	Perch (21)	11344605 (Ice Only) (2)	LC11SW	S: 08/25/2011 14:55		
-76	LC14SW	Surface Water/ Ada Hamilton	G	Perch (21)	11344609 (Ice Only) (1)	LC14SW	S: 08/25/2011 15:45		
-77	LC15SW	Surface Water/ Brad Martin	G	Perch (21)	11344612 (Ice Only) (1)	LC15SW	S: 08/25/2011 16:25		
-78	NF02SW	Surface Water/ Brad Martin	G	Perch (21)	11344622 (Ice Only) (1)	NF02SW	S: 08/26/2011 09:48		
-79	NF03SW	Surface Water/ Brad Martin	G	Perch (21)	11344626 (Ice Only) (1)	NF03SW	S: 08/26/2011 10:32		
-80	NF04SW	Surface Water/ Brad Martin	G	Perch (21)	11344629 (Ice Only) (1)	NF04SW	S: 08/26/2011 11:50		

Shipment for Case Complete? Y	**Sample (s) to be used for laboratory QC:** LC11SW	**Additional Sampler Signature (s):** [signature]	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?** ___	**Shipment Iced?** ___

5

IR = 11.4/11.3
Lg Blue/wh gel/~~bot~~ other client drop

COC Number : 10-4097213-082911-0007

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com
Page 1036 of 1044
Page 1 of 2
10/27/2011

USEPA Contract Laboratory Program
Generic Chain of Custody

Case No: 41603
DAS No:
SDG No:
L

Date Shipped: 8/29/2011	**Chain Of Custody Record**	Sampler Signature: RN for B Martin	**For Lab Use Only**
Carrier Name: Hand Delivery	**Relinquished By** (Date/Time)	**Received By** (Date/Time)	Lab Contract No:
Airbill No:	1 [illegible] 8/29/11 1440	[illegible] 8/29/11 1440	Unit Price:
Shipped to: Test America, 5755 8th Street East, Tacoma WA 98424	2		Transfer To:
	3		Lab Contract No:
	4		Unit Price:
			28371

	SAMPLE No.	MATRIX/ SAMPLER	TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	SAMPLING LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY SAMPLE No	Sample Condition On Receipt
-81	NF05SW	Surface Water/ Brad Martin	B	Perch (21)	11344633 (Ice Only) (1)	NF05SW	S: 08/26/2011 12:29		
-82	NF07SW	Surface Water/ Brad Martin	G	Perch (21)	11344638 (Ice Only) (1)	NF07SW	S: 08/26/2011 14:29		
-83	NF09SW	Surface Water/ Brad Martin	G	Perch (21)	11344642 (Ice Only) (1)	NF09SW	S: 08/26/2011 15:40		
-84	PT09SS					PT09SS	08/24/11 17:36		
-85	PT18SS					PT18SS	08/25/11 09:52		
-86	BG01SS					BG01SS	08/29/11 11:30		

8/31/11

Shipment for Case Complete? Y	**Sample (s) to be used for laboratory QC:** LC11SW	**Additional Sampler Signature (s):**	**Cooler Temperature Upon Receipt:**	**Chain of Custody Seal Number :**
Analysis Key: Perch = Perchlorate	**Concentration :** L = Low, M = Medium, H = High, L/M = Low/Medium	**Type/Designate :** Composite = C, Grab = G, Both = B	**Custody Seal Intact?**	**Shipment Iced?**

5

COC Number : 10-4097213-082911-0007

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

FORMS II Lite Help Desk, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602; e-Mail f2lite@fedcsc.com

G Sample Plan Alteration Forms

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SAMPLE PLAN ALTERATION FORM

Project Name and Number: Camp Bonneville 11-02-0010

Material to be Sampled:

Surface soil and sediment

Measurement Parameters:

Not applicable

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Sample material was collected using a dedicated stainless steel bowl. The material was placed in a dedicated stainless steel bowl, thoroughly homogenized then placed in a pre-labeled sample container (E & E SQAP)

Reason for Change in Field Procedure or Analytical Variation:

Various. See below.

Variation from Field or Analytical Procedure:

Changes in the number of surface soil samples collected at the direction of the Task Monitor as noted below:

- Central Impact Target Area – One additional surface soil sample was collected based on visual observations during the field event.
- Open Burn/Open Detonation Area 2 – One fewer sample was collected due to the proximity of the feature to the Central Impact Target Area
- 1,000-Yard Range– Five fewer samples were collected because it was determined this feature was also the Pop-up Targets East feature identified in the SQAP
- Artillery Position 5 and Former Artillery Position1/Stokes Mortar Area combined – Five fewer samples were collected and these features were combined based on observations in the field
- Firing Bank – Six samples were added to the field event and were collected at the Firing Bank because this feature was discovered during the field event and had not been previously identified or sampled.
- North Machine Gun Range – Five fewer samples were collected because it was determined there was no overland pathway from this source to a surface water body.
- South Machine gun Range – Five fewer samples were collected because it was determined there was no overland pathway from this source to a surface water body.
- 25-millimeter Gun Range – Five fewer samples were collected because it was determined there was no overland pathway from this source to a surface water body.
- Lacamas Creek – Three fewer samples were collected downstream of the site boundary because access points could not be reached.
- North Fork Lacamas Creek – One additional surface water and four additional sediment samples were collected based on observations in the field.

SAMPLE PLAN ALTERATION FORM

Special Equipment, Materials, or Personnel Required:

Not applicable

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Renee Nordeen	Renee L Nordeen	**3/7/12**
START PL: Linda E. Ader	Linda E Ader	**3/14/12**
EPA TM: Monica Tonel	Monica Tonel	3/14/2012
EPA QA Manager : Gina Grepo-Grove	[illegible]	3/15/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Camp Bonneville 11-02-0010

Material to be Sampled:

Surface Soil

Measurement Parameters:

Lead, antimony, and arsenic screening using a field portable X-Ray Fluorescence

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Not applicable

Reason for Change in Field Procedure or Analytical Variation:

Not applicable.

Variation from Field or Analytical Procedure:

Eight fewer locations were field screened in the Pop-up Targets area based on visual observations by the Task Monitor.

Special Equipment, Materials, or Personnel Required:

Field portable X-Ray Fluorescence unit.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Renee Nordeen	Renee L Nordeen	3/7/12
START PL: Linda E. Ader	Linda E Ader	3/14/12
EPA TM: Monica Tonel	Monica Tonel	3/14/2012
EPA QA Manager : Gina Grepo-Grove	[illegible]	3/15/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Camp Bonneville 11-02-0010

Material to be Sampled:

Ground water in shallow temporary well points

Measurement Parameters:

Not applicable

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Perchlorate field screening using a modified Army Corps of Engineers Method

Reason for Change in Field Procedure or Analytical Variation:

The desired detection limits could not be achieved with this method.

Variation from Field or Analytical Procedure:

No water samples were field screened for perchlorate.

Special Equipment, Materials, or Personnel Required:

Not applicable

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Renee L. Nordeen	Renee L. Nordeen	3/6/12
START PL: Linda E. Ader	Linda E. Ader	3/14/12
EPA TM: Monica Tonel	Monica Tonel	3/14/2012
EPA QA Manager : Gina Grepo-Grove	[illegible]	3/15/2012

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Camp Bonneville 11-02-0010

Material to be Sampled:

Subsurface soil and ground water sample locations LF10SB/GW, LF11SB/GW, and LF15SB/GW

Measurement Parameters:

Not applicable

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Not Applicable

Reason for Change in Field Procedure or Analytical Variation:

Refusal was encountered at locations LF10SB, LF11SB, and LF15SB. For this reason, no subsurface soil or ground water samples were collected at these locations.

A seep was noted near location LF09SB/GW. A sediment sample was collected from this location for field screening of perchlorate. Based on a positive perchlorate field screening result, it was decided that a sediment sample (LF01SD) would be collected from this location for fixed laboratory analysis. Additionally, one probable point of entry (PPE) sediment sample (PP01SD) was collected from North Fork Lacamas Creek immediately adjacent to the seep. A background sediment sample (BG01SD) also was collected for comparison to both the seep sediment sample and the Lacamas Creek PPE sediment sample. The location of BG01SD is in the vicinity of BG01SB/GW in North Fork Lacamas Creek upgradient of Landfill 4. These three sediment samples replace the three subsurface soil samples noted above. All sediment samples were submitted to a fixed laboratory for VOCs, pesticides/PCBs, metals, and SVOCs analysis. No associated ground water or surface water samples were collected at these locations.

Variation from Field or Analytical Procedure:

Not applicable

Special Equipment, Materials, or Personnel Required:

Not applicable

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Renee Nordeen	Renee L. Nordeen	05/18/2011
START PL: Linda E. Costello	Linda E. Costello	05/18/2011
EPA TM: Monica Tonel	Monica Tonel	5/18/2011
EPA QA Manager : Gina Grepo-Grove	[illegible]	5/18/2011

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Camp Bonneville 11-02-0010

Material to be Sampled:

Ground water in shallow temporary well points

Measurement Parameters:

Not applicable

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Solinst™ hand tool advanced to ground water then collect water sample

Reason for Change in Field Procedure or Analytical Variation:

Multiple unsuccessful attempts were made to collect a water sample using the Solinst™ hand tool.

Variation from Field or Analytical Procedure:

The hand auger will be used to advance to ground water, once encountered, ground water is purged from the open borehole until parameters are stabilized within 10%, then a ground water grab sample is collected using dedicated Teflon-lined polyethylene tubing and a peristaltic pump into pre-labeled sample containers. If stabilized parameters are not reached within 20 minutes, a grab sample is collected using the above described method.

Alternately, Geoprobe™ 4 foot ground water screens may be used. In this case, the screen will be advanced with the slide hammer and the samples will be collected as they were planned with the Solinst™ water samplers.

Special Equipment, Materials, or Personnel Required:

Hand auger, peristaltic pump, Horiba U-52 water quality meter

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Renee Nordeen	Renee L. Nordeen	5/18/2011
START PL: Linda E. Costello	Linda E. Costello	05/18/2011
EPA TM: Monica Tonel	Monica Tonel	5/18/2011
EPA QA Manager : Gina Grepo-Grove	[illegible]	5/18/2011

SAMPLE PLAN ALTERATION FORM

Project Name and Number: Camp Bonneville 11-02-0010

Material to be Sampled:

Monitoring wells L4-MW06 and L4-MW07B.

Measurement Parameters:

Not applicable.

Standard Procedure for Field Collection and Laboratory Analysis (cite references):

Not applicable.

Reason for Change in Field Procedure or Analytical Variation:

Monitoring well L4-MW06 was presented in the SQAP for sampling; however, this monitoring well has never produced water. No sample could be collected from this monitoring well. Monitoring well L4-MW07B, was inadvertently left out of the SQAP for sampling; however, this well has recently shown an increase in perchlorate concentrations and was therefore sampled in place of L4-MW06.

Variation from Field or Analytical Procedure:

Not applicable.

Special Equipment, Materials, or Personnel Required:

Not applicable.

CONTACT	APPROVED SIGNATURE	DATE
Initiator: Renee Nordeen	Renee L. Nordeen	5/24/11
START PL: Linda E. Costello	Linda E. Costello	5/24/11
EPA TM: Monica Tonel	Monica Tonel	5/24/11
EPA QA Manager : Gina Grepo-Grove	[illegible]	5/24/11

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H Global Positioning System Coordinates

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Table G-1 Camp Bonneville Phase I and II Global Positioning System Coordinates

EPA Sample ID	Station Location	Decimal Degrees Longitude	Decimal Degrees Latitude	Longitude Degrees	Longitude Minutes	Latitude Degrees	Latitude Minutes
11204301	BG01SB/SD/GW	-122.3990644	45.70657242	-122	23.94386352	45	42.39434521
11204302	BG02GW (L4-MW01A)	-122.4016203	45.70475382	-122	24.09721752	45	42.2852289
11204303	BG03GW (L4-MW01B)	-122.4016054	45.7047793	-122	24.09632568	45	42.28675776
11204307	LF01SB/GW	-122.4030417	45.70564547	-122	24.18250026	45	42.33872833
11204309	LF02SB/GW	-122.4032638	45.70562543	-122	24.19583058	45	42.33752596
11204311	LF03SB/GW	-122.4033833	45.70540688	-122	24.20299542	45	42.32441287
11204313	LF04SB/GW	-122.4033548	45.70523175	-122	24.2012901	45	42.31390474
11204315	LF05SB/GW	-122.4034047	45.70498514	-122	24.20427966	45	42.29910811
11204317	LF06SB/GW	-122.4034487	45.704754	-122	24.20692404	45	42.28523987
11204319	LF07SB/GW	-122.4033116	45.70460162	-122	24.19869372	45	42.27609698
11204322	LF08SB	-122.4031679	45.70444223	-122	24.19007334	45	42.266534
11204323	LF09SB	-122.4030889	45.70430763	-122	24.1853313	45	42.25845795
11204326	LF01SD/ LF15GW	-122.4031092	45.70425822	-122	24.1865532	45	42.25549312
11204327	PP01SD	-122.4031063	45.7042015	-122	24.18637548	45	42.25209028
11204329	LF12SB/GW	-122.4026962	45.70575658	-122	24.16176948	45	42.34539452
11204331	LF13SB/GW	-122.4023993	45.70581331	-122	24.14395746	45	42.34879888
11204333	LF14SB/GW	-122.4021374	45.70592492	-122	24.12824532	45	42.35549497
11204336	MW01GW (L4-MW05A)	-122.4026094	45.70458691	-122	24.15656616	45	42.27521466
11204337	MW02GW (L4-MW03B)	-122.4024094	45.7046438	-122	24.14456466	45	42.2786277
11204338	MW03GW (L4-MW03A)	-122.4023554	45.70469463	-122	24.14132202	45	42.2816778
11204339	MW04GW (L4-MW02A)	-122.4026158	45.70490047	-122	24.15694926	45	42.29402808
11204340	MW05GW (L4-MW04A)	-122.4023435	45.70534717	-122	24.14061264	45	42.32083044
11204341	MW06GW (L4-MW02B)	-122.4025835	45.70496334	-122	24.15501216	45	42.29780064
11204342	MW07GW (L4-MW17)	-122.4033102	45.69940978	-122	24.19861158	45	41.96458692
11204343	BG01SD-2	-122.3826033	45.68469648	-122	22.95619542	45	41.08178869
11204344	MW09GW (L4-MW18)	-122.4024407	45.69941405	-122	24.1464396	45	41.96484312
11204349	MW08GW (L4-MW07B)	-122.4021993	45.70318484	-122	24.13195986	45	42.19109022
11344500	FP01SS	-122.4280008	45.67459359	-122	25.68005046	45	40.47561536
11344501	FP02SS	-122.4283442	45.67462104	-122	25.7006544	45	40.47726259
11344502	FP03SS	-122.4283555	45.67439233	-122	25.7013315	45	40.46353981
11344503	FP04SS	-122.428105	45.67437171	-122	25.68630006	45	40.46230236
11344504	FP05SS	-122.4280089	45.67454006	-122	25.68053238	45	40.47240348
11344505	PU01SD	-122.4060571	45.69570566	-122	24.3634254	45	41.74233952
11344506	PU02SD	-122.4059178	45.69545804	-122	24.35506722	45	41.72748224
11344507	PU03SD	-122.4058764	45.69515082	-122	24.35258214	45	41.70904891
11344508	PU04SD	-122.406753	45.6950906	-122	24.40517898	45	41.7054357
11344509	PU05SD	-122.4068431	45.69522127	-122	24.410583	45	41.71327607
11344510	PU06SD	-122.4065074	45.6952435	-122	24.39044178	45	41.71461019
11344511	PU07SD	-122.4066124	45.69486415	-122	24.39674322	45	41.69184887
11344512	PU08SD	-122.4069869	45.69478464	-122	24.41921112	45	41.68707811
11344513	PU09SD	-122.407196	45.69502828	-122	24.43175802	45	41.70169708
11344514	PU10SD	-122.4074709	45.69528776	-122	24.4482543	45	41.71726541
11344515	PU11SD	-122.4074332	45.6954413	-122	24.4459908	45	41.72647822

Table G-1 Camp Bonneville Phase I and II Global Positioning System Coordinates

EPA Sample ID	Station Location	Decimal Degrees Longitude	Decimal Degrees Latitude	Longitude Degrees	Longitude Minutes	Latitude Degrees	Latitude Minutes
11344516	OB01SS	-122.427213	45.67624872	-122	25.63278174	45	40.57492315
11344517	PU12SD	-122.4071051	45.69562238	-122	24.42630738	45	41.73734287
11344518	FR01SS	-122.4148737	45.69157903	-122	24.89242272	45	41.49474187
11344519	FR02SS	-122.4148192	45.6914274	-122	24.88914972	45	41.48564409
11344520	FR03SS	-122.4146294	45.69122816	-122	24.87776562	45	41.47368976
11344521	FR04SS	-122.4143266	45.69133266	-122	24.85959612	45	41.47995967
11344522	FR05SS	-122.4138817	45.69145787	-122	24.83290188	45	41.4874723
11344523	FR06SS	-122.4140337	45.69166947	-122	24.84202296	45	41.50016815
11344524	FP06SS	-122.4263425	45.67545032	-122	25.58055084	45	40.52701942
11344525	FR07SS	-122.4141696	45.69189657	-122	24.85017732	45	41.51379433
11344526	FR08SS	-122.4144567	45.6917725	-122	24.8674029	45	41.50634979
11344527	FP07SS	-122.4258363	45.67519256	-122	25.55017746	45	40.51155368
11344528	FP08SS	-122.42616	45.67455193	-122	25.56959748	45	40.473116
11344529	FB01SS	-122.4146296	45.69117305	-122	24.87777834	45	41.47038316
11344530	FP09SS	-122.4266976	45.6746071	-122	25.60185798	45	40.4764261
11344531	FB02SS	-122.4145503	45.69115394	-122	24.87301698	45	41.46923618
11344532	FP10SS	-122.4266284	45.67493808	-122	25.59770532	45	40.49628509
11344533	FB03SS	-122.414297	45.69123623	-122	24.85781802	45	41.47417382
11344534	FB04SS	-122.4141873	45.69130082	-122	24.85123818	45	41.47804949
11344535	FB05SS	-122.4139685	45.69137932	-122	24.83811	45	41.48275925
11344536	OP01SS	-122.4282837	45.67590989	-122	25.6970211	45	40.55459348
11344537	OB02SS	-122.4272039	45.67626639	-122	25.63223334	45	40.57598333
11344538	FB06SS	-122.4139668	45.69137513	-122	24.83800908	45	41.48250802
11344539	FR09SS	-122.4188496	45.6904834	-122	25.1309733	45	41.42900429
11344540	OB03SS	-122.4272714	45.67619903	-122	25.63628466	45	40.57194177
11344541	FR10SS	-122.4191926	45.69031904	-122	25.15155852	45	41.41914212
11344542	OB04SS	-122.4271375	45.67607472	-122	25.62825072	45	40.56448294
11344543	FR11SS	-122.4195131	45.69011528	-122	25.17078822	45	41.40691675
11344544	OB05SS	-122.4270888	45.67613068	-122	25.62533088	45	40.56784095
11344545	FR12SS	-122.4206357	45.68965015	-122	25.23813912	45	41.37900881
11344546	FR13SS	-122.4205125	45.68936535	-122	25.23074712	45	41.36192081
11344547	FR14SS	-122.4200564	45.68958736	-122	25.2033846	45	41.37524164
11344548	FR15SS	-122.4194356	45.68980343	-122	25.16613708	45	41.38820557
11344549	FR16SS	-122.4188184	45.69001213	-122	25.12910328	45	41.4007277
11344550	FP11SS	-122.4241753	45.68587349	-122	25.45051992	45	41.15240939
11344551	FP12SS	-122.4240319	45.6862787	-122	25.44191682	45	41.17672228
11344552	FP13SS	-122.4241617	45.68657211	-122	25.44970296	45	41.19432672
11344553	FP14SS	-122.4253672	45.68655097	-122	25.52203158	45	41.1930583
11344554	FP15SS	-122.4250134	45.68600255	-122	25.50080418	45	41.16015296
11344555	FP16SS	-122.4256684	45.68676804	-122	25.54010322	45	41.20608222
11344556	CT01SS	-122.3964541	45.69589758	-122	23.78724726	45	41.75385484
11344557	CT02SS	-122.3967601	45.69582402	-122	23.8056057	45	41.74944097
11344558	CT03SS	-122.3971852	45.69584323	-122	23.83111206	45	41.75059362
11344559	CT04SS	-122.3968894	45.69560355	-122	23.813364	45	41.736213
11344560	CT05SS	-122.3959879	45.69249391	-122	23.759271	45	41.54963461
11344561	CT06SS	-122.3896296	45.69189868	-122	23.37777324	45	41.513921
11344562	OB06SS	-122.3973528	45.69307438	-122	23.84116806	45	41.58446281
11344563	OB07SS	-122.3977701	45.69342316	-122	23.86620438	45	41.60538984
11344564	CT09SS	-122.3896218	45.69096186	-122	23.3773089	45	41.4577116
11344565	CT10SS	-122.3883786	45.69177359	-122	23.3027184	45	41.5064154
11344566	CT11SS	-122.392941	45.69405861	-122	23.5764588	45	41.6435166
11344567	OB08SS	-122.3977802	45.69282149	-122	23.86681488	45	41.5692896
11344568	OB09SS	-122.3982399	45.69293592	-122	23.8943946	45	41.57615549
11344569	EF01SD	-122.3967934	45.69824018	-122	23.80760268	45	41.89441052
11344570	CT07SS	-122.38967	45.69098414	-122	23.38019808	45	41.45904822

Table G-1 Camp Bonneville Phase I and II Global Positioning System Coordinates

EPA Sample ID	Station Location	Decimal Degrees Longitude	Decimal Degrees Latitude	Longitude Degrees	Longitude Minutes	Latitude Degrees	Latitude Minutes
11344571	CT08SS	-122.3896023	45.6909426	-122	23.37613848	45	41.45655611
11344572	PT01SS	-122.4035801	45.69556643	-122	24.21480606	45	41.73398577
11344573	PT02SS	-122.4037421	45.69558833	-122	24.2245284	45	41.73530006
11344574	EF02SD	-122.3937978	45.69622612	-122	23.62786758	45	41.77356693
11344575	PT03SS	-122.4039369	45.69545555	-122	24.23621352	45	41.72733317
11344576	PT04SS	-122.4041034	45.69537194	-122	24.2462025	45	41.72231614
11344577	PT06SS	-122.4050217	45.69527598	-122	24.30130146	45	41.71655873
11344578	PT07SS	-122.4050715	45.69535156	-122	24.30428814	45	41.72109357
11344579	PT05SS	-122.4046813	45.69532474	-122	24.28087602	45	41.71948417
11344580	PT09SS	-122.4049682	45.69566226	-122	24.29809374	45	41.73973582
11344581	PT10SS	-122.4075728	45.69457846	-122	24.45436836	45	41.6747074
11344582	PT11SS	-122.4074802	45.69424641	-122	24.44881146	45	41.6547848
11344583	PT08SS	-122.4050033	45.69548377	-122	24.30020088	45	41.72902628
11344584	PT12SS	-122.407957	45.69479257	-122	24.47741964	45	41.68755392
11344585	PT13SS	-122.4079869	45.69503056	-122	24.47921652	45	41.70183374
11344586	PT14SS	-122.408445	45.69533074	-122	24.5067024	45	41.7198445
11344587	PT15SS	-122.4097553	45.6951461	-122	24.58531938	45	41.70876582
11344588	PT16SS	-122.4102609	45.69436647	-122	24.61565478	45	41.66198816
11344589	PT17SS	-122.408255	45.69476317	-122	24.49529976	45	41.68579005
11344590	PT18SS	-122.4082485	45.69421807	-122	24.49490706	45	41.65308424
11344591	LC01SD	-122.4498202	45.67267755	-122	26.989209	45	40.360653
11344592	LC02SD	-122.4344442	45.67509161	-122	26.06665116	45	40.50549667
11344592	LC03SW	-122.4294208	45.67646107	-122	25.7652468	45	40.5876642
11344595	LC03SD	-122.4294208	45.67646107	-122	25.7652468	45	40.5876642
11344596	LC04SD	-122.4247482	45.68112479	-122	25.48489074	45	40.86748759
11344597	LC05SD	-122.4229458	45.68430139	-122	25.37674998	45	41.05808333
11344598	LC06SD	-122.4226667	45.68666944	-122	25.36000002	45	41.20016666
11344599	LC07SD	-122.4230833	45.68841667	-122	25.38499998	45	41.305
11344600	LC08SD	-122.418982	45.690726	-122	25.13892	45	41.44356
11344601	LC09SD	-122.417858	45.691859	-122	25.07148	45	41.51154
11344602	LC10SD	-122.4168333	45.69147222	-122	25.00999998	45	41.48833333
11344603	BC01SD	-122.4158189	45.69088524	-122	24.94913532	45	41.45311436
11344604	LC12SD	-122.412001	45.695498	-122	24.72006	45	41.72988
11344605	LC11SW	-122.4145278	45.69183333	-122	24.87166668	45	41.51
11344607	LC11SD	-122.4145278	45.69183333	-122	24.87166668	45	41.51
11344608	LC13SD	-122.4080986	45.695757	-122	24.485916	45	41.74542
11344609	LC14SW	-122.407948	45.695877	-122	24.47688	45	41.75262
11344611	LC14SD	-122.407948	45.695877	-122	24.47688	45	41.75262
11344612	LC15SW	-122.4028889	45.69908333	-122	24.17333334	45	41.945
11344614	LC15SD	-122.4028889	45.69908333	-122	24.17333334	45	41.945
11344615	DC01SD	-122.407507	45.695531	-122	24.45042	45	41.73186
11344616	DC02SD	-122.407634	45.695209	-122	24.45804	45	41.71254
11344617	EF03SD	-122.40225	45.69861094	-122	24.1349988	45	41.91665629
11344618	NF01SD	-122.4028601	45.69932554	-122	24.17160534	45	41.95953244
11344619	DC03SD	-122.407089	45.69470684	-122	24.42534	45	41.6824104
11344620	DC04SD	-122.3972304	45.69186066	-122	23.83382592	45	41.51163962
11344622	NF02SW	-122.4031031	45.70364901	-122	24.18618324	45	42.21894062
11344624	NF02SD	-122.4031031	45.70364901	-122	24.18618324	45	42.21894062
11344625	BG02SD	-122.3960466	45.68209805	-122	23.76279582	45	40.92588304
11344626	NF03SW	-122.403102	45.704209	-122	24.18612	45	42.25254
11344628	NF03SD	-122.403102	45.704209	-122	24.18612	45	42.25254
11344629	NF04SW	-122.4034675	45.7049543	-122	24.20804844	45	42.29725802
11344631	NF04SD	-122.4034675	45.7049543	-122	24.20804844	45	42.29725802
11344632	BG01SS	-122.3733049	45.70536184	-122	22.39829106	45	42.32171035
11344633	NF05SW	-122.4034601	45.70513094	-122	24.20760642	45	42.30785651

Table G-1 Camp Bonneville Phase I and II Global Positioning System Coordinates

EPA Sample ID	Station Location	Decimal Degrees Longitude	Decimal Degrees Latitude	Longitude Degrees	Longitude Minutes	Latitude Degrees	Latitude Minutes
11344635	NF05SD	-122.4034601	45.70513094	-122	24.20760642	45	42.30785651
11344636	BG03SD	-122.3734361	45.70037261	-122	22.40616534	45	42.02235634
11344637	NF06SD	-122.403468	45.705293	-122	24.20808	45	42.31758
11344638	NF07SW	-122.403341	45.705588	-122	24.20046	45	42.33528
11344640	NF07SD	-122.403341	45.705588	-122	24.20046	45	42.33528
11344641	NF08SD	-122.402956	45.705752	-122	24.17736	45	42.34512
11344642	NF09SW	-122.4019494	45.706096	-122	24.1169655	45	42.36575975
11344644	NF09SD	-122.4019494	45.706096	-122	24.1169655	45	42.36575975
11344645	BG04SW	-122.399036	45.706538	-122	23.94216	45	42.39228
11344647	BG04SD	-122.399036	45.706538	-122	23.94216	45	42.39228

Data Validation Memoranda and Laboratory Data Sheets

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MEMORANDUM

DATE: August 1, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 16 soil and 25 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for nitroaromatics, nitramines, and nitrate esters (EPA Method 8330B) was performed by the USEPA Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

11204300	11204301	11204302	11204303	11204305	11204306
11204307	11204308	11204309	11204310	11204311	11204312
11204313	11204314	11204315	11204316	11204317	11204318
11204319	11204322	11204323	11204326	11204327	11204328
11204329	11204330	11204331	11204332	11204333	11204334
11204336	11204337	11204338	11204339	11204340	11204341
11204342	11204343	11204344	11204345	11204349	

No discrepancies were noted. The secondary reviewer added bias qualifiers to estimated results based on comments in the Quality Assurance review. The secondary reviewer used professional judgment to apply bias qualifiers when more than one bias qualifier was required.

Bias Qualifier and Definitions

K - The associated estimated sample result has a likely unknown bias.

L - The associated estimated sample result has a likely low bias.

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT:	Data Release for Nitroaromatics, Nitramines, and Nitrate Esters Analysis Results from the USEPA Region 10 Laboratory
PROJECT NAME:	Camp Bonneville SI, Phase 1
PROJECT CODE:	TEC-993A
FROM:	Gerald Dodo, Supervisory Chemist Office of Environmental Assessment, USEPA Region 10 Laboratory
TO:	Monica Tonel, Project Manager, Office of Environmental Cleanup Office of Environmental Cleanup, USEPA Region 10
CC:	Renee Nordeen (rnordeen@ene.com)

I have authorized release of this data package. Attached you will find the Nitroaromatics, Nitramines, and Nitrate Esters results for the Camp Bonneville SI, Phase 1 project for the samples collected on 05/19/2011 through 05/23/2011. For further information regarding the attached data, contact Dana Walker at 360-871-8704.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: July 25, 2011

To: Monica Tonel, Project Manager
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, US EPA Region 10

From: Dana Walker, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review of the Camp Bonneville SI, Phase 1
Project Code: TEC-993A
Account Code: 2011T10P302DD2C10ZZLA00

CC: Renee Nordeen, E & E

The following is a quality assurance review of the data for nitroaromatics, nitramines, and nitrate esters analysis of 16 soil and 25 water samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory ESAT contractor using EPA SW846 method 8330B.

This review was conducted for the following samples:

Soil:

11204301	11204307	11204309	11204311	11204313
11204315	11204317	11204319	11204322	11204323
11204326	11204327	11204329	11204331	11204333
11204343				

Water:

11204300	11204302	11204303	11204305	11204306
11204308	11204310	11204312	11204314	11204316
11204318	11204328	11204330	11204332	11204334
11204336	11204337	11204338	11204339	11204340
11204341	11204342	11204344	11204345	11204349

1. **Data Qualifications**

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures that did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

For those tests for which the EPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

2. **Sample Transport and Receipt**

Upon sample receipt, no conditions were noted that would impact data quality.

3. **Sample Holding Times**

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of soil samples is 14 days and water samples is 7 days from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

4. **Sample Preparation**

Samples were prepared according to the method.

5. **Initial Calibration/Continuing Calibration Verification (CCV)**

Initial calibration was performed on 05/04/11. Correlation coefficients met the criteria of ≥0.99. Due to coelution of a number of analytes, two standards and spiking solutions were used. Also, a second source calibration verification was analyzed and passed the required 70-130% recovery.

The CCVs for samples met the criteria for frequency of analysis. The percent accuracies were 85-115% of the true value.

6. **Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD)** - *Laboratory/QAPP Criteria Not Met*

LCS/LCSD are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the criteria of 50-150% with a relative percent difference (RPD) of ≤30 for waters and soils with the exception of Tetryl. There was a low recovery problem for Tetryl because it breaks down while in a mixed solvent system (e.g., water/organic solvent). Recoveries for soil for Tetryl was actually in control, however, due to the erratic nature of this compound, a J flag appears warranted. Based on this all results for samples and QC for Tetryl have been flagged with a J (the identification of the analyte is acceptable; the reported value is an estimate.). No Tetryl was detected in any water or soil sample.

7. **Blank Analysis**

Method blanks were analyzed with each sample batch to evaluate the potential for laboratory contamination and effects on the sample results. Target analytes were not detected in method blanks.

8. **Surrogate Spikes** - *Laboratory/QAPP Criteria Not Met*

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. The surrogate compound used for these analyses was 1,2-dinitrobenzene. All surrogate recoveries were within the criteria of 50-150%. Except for water samples 112043302 and 11204332, which had a low recovery for the surrogate compound (27%). This

was due to a high level of solid material in the water sample, which caused the SPE filter to clog. The wrong sample was reextracted and analyzed, therefore only the initial result is available for this sample. For sample 11204332, all analytes are flagged with a J (the identification of the analyte is acceptable; the reported value is an estimate.). For sample 112043302, the surrogate was recovered at 152%, which is high yet no target compounds were detected in the sample. No flags are assigned in this case.

9. Matrix Spike/Matrix Spike Duplicate Analysis (MS/MSD) - *Laboratory/QAPP Criteria Not Met*

MS/MSD analyses are performed to provide information on the effects of sample matrices toward the analytical method. An MS/MSD analysis was performed using samples 11204302 and 11204303 for waters and 11204307 for soils. The recoveries met the criteria of 50-150% for soil samples for all analytes, however, for water sample 11204303, Tetryl, recovery was low for both the MS and MSD. Tetryl was flagged with a J (the identification of the analyte is acceptable; the reported value is an estimate.) in the sample that was spiked.

10. Compound Quantitation

The initial calibration functions from the primary column were used for calculations. Reported quantitation limits and detected analyte results were based on the initial calibration standards and sample size used for the analysis.

Do to poor low level calibration response, TETRYL and PETN were reported at elevated reporting limits.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

11. Identification

Method 8330B analytes and the surrogate were identified based on chromatographic retention times of two dissimilar liquid chromatography columns.

12. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Dana Walker at the Region 10 Laboratory, phone number (360) 871 - 8704.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

US EPA Region 10 Laboratory

Multi-Analyte Final Report

TEC-993A CAMP BONNEVILLE : PHASE I

Project Code : TEC-993A

Contact : Monica Tonel

Lab Name : Region 10 Lab

Account : 2011T10P302DD2C101RLA00

Sample Information

11204300

Description : BG01GW

Sampling Date/Time : 5/18/2011 11:09:00AM

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 9:28:07PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.81	ug/L	U
99650	1,3-Dinitrobenzene	0.81	ug/L	U
118967	2,4,6-Trinitrotoluene	0.81	ug/L	U
121142	2,4-Dinitrotoluene	0.81	ug/L	U
606202	2,6-Dinitrotoluene	0.81	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.81	ug/L	U
88722	2-Nitrotoluene	0.81	ug/L	U
99081	3-Nitrotoluene	0.81	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.81	ug/L	U
99990	4-Nitrotoluene	0.81	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.81	ug/L	U
2691410	HMX	0.81	ug/L	U
98953	Nitrobenzene	0.81	ug/L	U
55630	Nitroglycerine	0.81	ug/L	U
78115	PETN	4	ug/L	U
121824	RDX	0.81	ug/L	U

Explosives

Target Results (cont.)

Analyte Code	Analyte Name	Result	Unit	Qual.
479458	TETRYL	10	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**148**	%Rec	

Sample Information

11204301

Description : BG01SB

Sampling Date/Time : 5/17/2011 9:33:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 7:59:07PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**69**	%Rec	

Sample Information

11204302

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/6/2011 10:13:47PM **Batch ID:** A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.75	ug/L	U
99650	1,3-Dinitrobenzene	0.75	ug/L	U
118967	2,4,6-Trinitrotoluene	0.75	ug/L	U
121142	2,4-Dinitrotoluene	0.75	ug/L	U
606202	2,6-Dinitrotoluene	0.75	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.75	ug/L	U
88722	2-Nitrotoluene	0.75	ug/L	U
99081	3-Nitrotoluene	0.75	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.75	ug/L	U
99990	4-Nitrotoluene	0.75	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.75	ug/L	U
2691410	HMX	0.75	ug/L	U
98953	Nitrobenzene	0.75	ug/L	U
55630	Nitroglycerine	0.75	ug/L	U
78115	PETN	3.8	ug/L	U
121824	RDX	0.75	ug/L	U
479458	TETRYL	9.4	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**152**	%Rec	

Sample Information

11204303

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/6/2011 10:59:22PM **Batch ID:** A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.79	ug/L	U
99650	1,3-Dinitrobenzene	0.79	ug/L	U
118967	2,4,6-Trinitrotoluene	0.79	ug/L	U
121142	2,4-Dinitrotoluene	0.79	ug/L	U
606202	2,6-Dinitrotoluene	0.79	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.79	ug/L	U
88722	2-Nitrotoluene	0.79	ug/L	U
99081	3-Nitrotoluene	0.79	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.79	ug/L	U
99990	4-Nitrotoluene	0.79	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.79	ug/L	U
2691410	HMX	0.79	ug/L	U
98953	Nitrobenzene	0.79	ug/L	U
55630	Nitroglycerine	0.79	ug/L	U
78115	PETN	4	ug/L	U
121824	RDX	0.79	ug/L	U
479458	TETRYL	9.9	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**146**	%Rec	

Sample Information

11204305

Description : RS02WT

Sampling Date/Time : 5/21/2011 2:55:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/6/2011 11:44:57PM **Batch ID:** A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.75	ug/L	U
99650	1,3-Dinitrobenzene	0.75	ug/L	U
118967	2,4,6-Trinitrotoluene	0.75	ug/L	U
121142	2,4-Dinitrotoluene	0.75	ug/L	U
606202	2,6-Dinitrotoluene	0.75	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.75	ug/L	U
88722	2-Nitrotoluene	0.75	ug/L	U
99081	3-Nitrotoluene	0.75	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.75	ug/L	U
99990	4-Nitrotoluene	0.75	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.75	ug/L	U
2691410	HMX	0.75	ug/L	U
98953	Nitrobenzene	0.75	ug/L	U
55630	Nitroglycerine	0.75	ug/L	U
78115	PETN	3.8	ug/L	U
121824	RDX	0.75	ug/L	U
479458	TETRYL	9.4	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	147	%Rec	

Sample Information

11204306

Description : LF01GW

Sampling Date/Time : 5/18/2011 3:40:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/9/2011 1:53:08PM **Batch ID:** A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.89	ug/L	U
99650	1,3-Dinitrobenzene	0.89	ug/L	U
118967	2,4,6-Trinitrotoluene	0.89	ug/L	U
121142	2,4-Dinitrotoluene	0.89	ug/L	U
606202	2,6-Dinitrotoluene	0.89	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.89	ug/L	U
88722	2-Nitrotoluene	0.89	ug/L	U
99081	3-Nitrotoluene	0.89	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.89	ug/L	U
99990	4-Nitrotoluene	0.89	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.89	ug/L	U
2691410	HMX	0.89	ug/L	U
98953	Nitrobenzene	0.89	ug/L	U
55630	Nitroglycerine	0.89	ug/L	U
78115	PETN	4.4	ug/L	U
121824	RDX	0.89	ug/L	U
479458	TETRYL	11	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**150**	%Rec	

Sample Information

11204307

Description : LF01SB

Sampling Date/Time : 5/16/2011 11:40:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 8:44:47PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**88**	%Rec	

Sample Information

11204308

Description : LF02GW

Sampling Date/Time : 5/19/2011 9:45:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/9/2011 2:38:47PM

Batch ID: A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	1.0	ug/L	U
99650	1,3-Dinitrobenzene	1.0	ug/L	U
118967	2,4,6-Trinitrotoluene	1.0	ug/L	U
121142	2,4-Dinitrotoluene	1.0	ug/L	U
606202	2,6-Dinitrotoluene	1.0	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	1.0	ug/L	U
88722	2-Nitrotoluene	1.0	ug/L	U
99081	3-Nitrotoluene	1.0	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	1.0	ug/L	U
99990	4-Nitrotoluene	1.0	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	1.0	ug/L	U
2691410	HMX	1.0	ug/L	U
98953	Nitrobenzene	1.0	ug/L	U
55630	Nitroglycerine	1.0	ug/L	U
78115	PETN	5.2	ug/L	U
121824	RDX	1.0	ug/L	U
479458	TETRYL	13	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**147**	%Rec	

Sample Information

11204309

Description : LF02SB

Sampling Date/Time : 5/16/2011 12:35:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 9:30:22PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	75	%Rec	

Sample Information

11204310

Description : LF03GW

Sampling Date/Time : 5/19/2011 9:56:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/9/2011 5:41:12PM **Batch ID:** A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.79	ug/L	U
99650	1,3-Dinitrobenzene	0.79	ug/L	U
118967	2,4,6-Trinitrotoluene	0.79	ug/L	U
121142	2,4-Dinitrotoluene	0.79	ug/L	U
606202	2,6-Dinitrotoluene	0.79	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.79	ug/L	U
88722	2-Nitrotoluene	0.79	ug/L	U
99081	3-Nitrotoluene	0.79	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.79	ug/L	U
99990	4-Nitrotoluene	0.79	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.79	ug/L	U
2691410	HMX	0.79	ug/L	U
98953	Nitrobenzene	0.79	ug/L	U
55630	Nitroglycerine	0.79	ug/L	U
78115	PETN	3.9	ug/L	U
121824	RDX	**1.7**	ug/L	
479458	TETRYL	9.8	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**138**	%Rec	

Sample Information

11204311

Description : LF03SB

Sampling Date/Time : 5/16/2011 2:03:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 10:15:57PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**96**	%Rec	

Sample Information

11204312

Description : LF04GW

Sampling Date/Time : 5/19/2011 10:25:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/9/2011 6:26:47PM **Batch ID:** A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.85	ug/L	U
99650	1,3-Dinitrobenzene	0.85	ug/L	U
118967	2,4,6-Trinitrotoluene	0.85	ug/L	U
121142	2,4-Dinitrotoluene	0.85	ug/L	U
606202	2,6-Dinitrotoluene	0.85	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.85	ug/L	U
88722	2-Nitrotoluene	0.85	ug/L	U
99081	3-Nitrotoluene	0.85	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.85	ug/L	U
99990	4-Nitrotoluene	0.85	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.85	ug/L	U
2691410	HMX	0.85	ug/L	U
98953	Nitrobenzene	0.85	ug/L	U
55630	Nitroglycerine	0.85	ug/L	U
78115	PETN	4.3	ug/L	U
121824	RDX	**3.7**	ug/L	
479458	TETRYL	11	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**144**	%Rec	

Sample Information

11204313

Description : LF04SB

Sampling Date/Time : 5/16/2011 2:32:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/2/2011 8:55:35PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/2/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**95**	%Rec	

Sample Information

11204314

Description : LF05GW

Sampling Date/Time : 5/19/2011 2:55:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/9/2011 7:12:26PM **Batch ID:** A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.78	ug/L	U
99650	1,3-Dinitrobenzene	0.78	ug/L	U
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U
121142	2,4-Dinitrotoluene	0.78	ug/L	U
606202	2,6-Dinitrotoluene	0.78	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U
88722	2-Nitrotoluene	0.78	ug/L	U
99081	3-Nitrotoluene	0.78	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U
99990	4-Nitrotoluene	0.78	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U
2691410	HMX	0.78	ug/L	U
98953	Nitrobenzene	0.78	ug/L	U
55630	Nitroglycerine	0.78	ug/L	U
78115	PETN	3.9	ug/L	U
121824	RDX	**5.2**	ug/L	
479458	TETRYL	9.8	ug/L	UJK

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**119**	%Rec	

Sample Information

11204315

Description : LF05SB

Sampling Date/Time : 5/16/2011 3:05:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/2/2011 9:41:10PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/2/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**57**	%Rec	

Sample Information

11204316

Description : LF06GW

Sampling Date/Time : 5/19/2011 11:35:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/9/2011 7:58:01PM **Batch ID:** A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.86	ug/L	U
99650	1,3-Dinitrobenzene	0.86	ug/L	U
118967	2,4,6-Trinitrotoluene	0.86	ug/L	U
121142	2,4-Dinitrotoluene	0.86	ug/L	U
606202	2,6-Dinitrotoluene	0.86	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.86	ug/L	U
88722	2-Nitrotoluene	0.86	ug/L	U
99081	3-Nitrotoluene	0.86	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.86	ug/L	U
99990	4-Nitrotoluene	0.86	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.86	ug/L	U
2691410	HMX	0.86	ug/L	U
98953	Nitrobenzene	0.86	ug/L	U
55630	Nitroglycerine	0.86	ug/L	U
78115	PETN	4.3	ug/L	U
121824	RDX	**4.9**	ug/L	
479458	TETRYL	11	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**146**	%Rec	

Sample Information

11204317

Description : LF06SB

Sampling Date/Time : 5/16/2011 3:34:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/2/2011 10:26:45PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/2/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	99	%Rec	

Sample Information

11204318

Description : LF07GW

Sampling Date/Time : 5/19/2011 12:07:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/9/2011 8:43:36PM **Batch ID:** A-8330B-HPLC-DAN-060911

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.77	ug/L	U
99650	1,3-Dinitrobenzene	0.77	ug/L	U
118967	2,4,6-Trinitrotoluene	0.77	ug/L	U
121142	2,4-Dinitrotoluene	0.77	ug/L	U
606202	2,6-Dinitrotoluene	0.77	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.77	ug/L	U
88722	2-Nitrotoluene	0.77	ug/L	U
99081	3-Nitrotoluene	0.77	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.77	ug/L	U
99990	4-Nitrotoluene	0.77	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.77	ug/L	U
2691410	HMX	0.77	ug/L	U
98953	Nitrobenzene	0.77	ug/L	U
55630	Nitroglycerine	0.77	ug/L	U
78115	PETN	3.8	ug/L	U
121824	RDX	**3.1**	ug/L	
479458	TETRYL	9.6	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**140**	%Rec	

Sample Information

11204319

Description : LF07SB

Sampling Date/Time : 5/17/2011 10:52:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/2/2011 11:12:24PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/2/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**105**	%Rec	

Sample Information

11204322

Description : LF08SB

Sampling Date/Time : 5/17/2011 11:32:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/2/2011 11:57:59PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/2/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	**250**	ug/kg	
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**80**	%Rec	

Sample Information

11204323

Description : LF09SB

Sampling Date/Time : 5/17/2011 1:43:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 12:43:34AM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	78	%Rec	

Sample Information

11204326

Description : LF01SD

Sampling Date/Time : 5/18/2011 8:55:00AM
Matrix : Sediment
Field Sample ID :

Explosives

Method Information

Lab Matrix : Sediment **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 1:29:14AM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**53**	%Rec	

Sample Information

11204327

Description : PP01SD

Sampling Date/Time : 5/18/2011 9:11:00AM
Matrix : Sediment
Field Sample ID :

Explosives

Method Information

Lab Matrix : Sediment **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 2:14:49AM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**92**	%Rec	

Sample Information

11204328

Description : LF12GW

Sampling Date/Time : 5/19/2011 8:55:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 11:53:15AM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.77	ug/L	U
99650	1,3-Dinitrobenzene	0.77	ug/L	U
118967	2,4,6-Trinitrotoluene	0.77	ug/L	U
121142	2,4-Dinitrotoluene	0.77	ug/L	U
606202	2,6-Dinitrotoluene	0.77	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.77	ug/L	U
88722	2-Nitrotoluene	0.77	ug/L	U
99081	3-Nitrotoluene	0.77	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.77	ug/L	U
99990	4-Nitrotoluene	0.77	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.77	ug/L	U
2691410	HMX	0.77	ug/L	U
98953	Nitrobenzene	0.77	ug/L	U
55630	Nitroglycerine	0.77	ug/L	U
78115	PETN	3.8	ug/L	U
121824	RDX	0.77	ug/L	U
479458	TETRYL	9.6	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**94**	%Rec	

Sample Information

11204329

Description : LF12SB

Sampling Date/Time : 5/17/2011 3:11:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 3:00:23AM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**103**	%Rec	

Sample Information

11204330

Description : LF13GW

Sampling Date/Time : 5/18/2011 2:15:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 12:38:50PM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.77	ug/L	U
99650	1,3-Dinitrobenzene	0.77	ug/L	U
118967	2,4,6-Trinitrotoluene	0.77	ug/L	U
121142	2,4-Dinitrotoluene	0.77	ug/L	U
606202	2,6-Dinitrotoluene	0.77	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.77	ug/L	U
88722	2-Nitrotoluene	0.77	ug/L	U
99081	3-Nitrotoluene	0.77	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.77	ug/L	U
99990	4-Nitrotoluene	0.77	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.77	ug/L	U
2691410	HMX	0.77	ug/L	U
98953	Nitrobenzene	0.77	ug/L	U
55630	Nitroglycerine	0.77	ug/L	U
78115	PETN	3.9	ug/L	U
121824	RDX	**1.4**	ug/L	
479458	TETRYL	9.7	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**139**	%Rec	

Sample Information

11204331

Description : LF13SB

Sampling Date/Time : 5/17/2011 3:38:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 3:46:03AM **Batch ID:** EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**71**	%Rec	

Sample Information

11204332

Description : LF14GW

Sampling Date/Time : 5/18/2011 2:55:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 1:24:30PM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.78	ug/L	UJ
99650	1,3-Dinitrobenzene	0.78	ug/L	UJ
118967	2,4,6-Trinitrotoluene	0.78	ug/L	UJ
121142	2,4-Dinitrotoluene	0.78	ug/L	UJ
606202	2,6-Dinitrotoluene	0.78	ug/L	UJ
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	UJ
88722	2-Nitrotoluene	0.78	ug/L	UJ
99081	3-Nitrotoluene	0.78	ug/L	UJ
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	UJ
99990	4-Nitrotoluene	0.78	ug/L	UJ
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	UJ
2691410	HMX	0.78	ug/L	UJ
98953	Nitrobenzene	0.78	ug/L	UJ
55630	Nitroglycerine	0.78	ug/L	UJ
78115	PETN	3.9	ug/L	UJ
121824	RDX	0.78	ug/L	UJ
479458	TETRYL	9.7	ug/L	UJ

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**27**	%Rec	

Sample Information

11204333

Description : LF14SB

Sampling Date/Time : 5/17/2011 3:58:00PM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/4/2011 11:24:05PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/4/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	71	%Rec	

Sample Information

11204334

Description : LF15GW

Sampling Date/Time : 5/19/2011 2:10:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 2:10:04PM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.80	ug/L	U
99650	1,3-Dinitrobenzene	0.80	ug/L	U
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U
121142	2,4-Dinitrotoluene	0.80	ug/L	U
606202	2,6-Dinitrotoluene	0.80	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U
88722	2-Nitrotoluene	0.80	ug/L	U
99081	3-Nitrotoluene	0.80	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U
99990	4-Nitrotoluene	0.80	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U
2691410	HMX	0.80	ug/L	U
98953	Nitrobenzene	0.80	ug/L	U
55630	Nitroglycerine	0.80	ug/L	U
78115	PETN	4.0	ug/L	U
121824	RDX	0.80	ug/L	U
479458	TETRYL	10	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**141**	%Rec	

Sample Information

11204336

Description : MW01GW

Sampling Date/Time : 5/20/2011 10:00:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 2:55:39PM **Batch ID:** A-8330B-HPLC-DAN-061D11

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.80	ug/L	U
99650	1,3-Dinitrobenzene	0.80	ug/L	U
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U
121142	2,4-Dinitrotoluene	0.80	ug/L	U
606202	2,6-Dinitrotoluene	0.80	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U
88722	2-Nitrotoluene	0.80	ug/L	U
99081	3-Nitrotoluene	0.80	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U
99990	4-Nitrotoluene	0.80	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U
2691410	HMX	0.80	ug/L	U
98953	Nitrobenzene	0.80	ug/L	U
55630	Nitroglycerine	0.80	ug/L	U
78115	PETN	4.0	ug/L	U
121824	RDX	**3.2**	ug/L	
479458	TETRYL	10	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**135**	%Rec	

Sample Information

11204337

Description : MW02GW

Sampling Date/Time : 5/20/2011 12:20:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/11/2011 3:34:15AM **Batch ID:** A-8330B-HPLC-DAN-061111

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.78	ug/L	U
99650	1,3-Dinitrobenzene	0.78	ug/L	U
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U
121142	2,4-Dinitrotoluene	0.78	ug/L	U
606202	2,6-Dinitrotoluene	0.78	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U
88722	2-Nitrotoluene	0.78	ug/L	U
99081	3-Nitrotoluene	0.78	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U
99990	4-Nitrotoluene	0.78	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U
2691410	HMX	0.78	ug/L	U
98953	Nitrobenzene	0.78	ug/L	U
55630	Nitroglycerine	0.78	ug/L	U
78115	PETN	3.9	ug/L	U
121824	RDX	**4.7**	ug/L	
479458	TETRYL	9.8	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**144**	%Rec	

Sample Information

11204338

Description : MW03GW

Sampling Date/Time : 5/20/2011 1:35:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 5:17:01PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.82	ug/L	U
99650	1,3-Dinitrobenzene	0.82	ug/L	U
118967	2,4,6-Trinitrotoluene	0.82	ug/L	U
121142	2,4-Dinitrotoluene	0.82	ug/L	U
606202	2,6-Dinitrotoluene	0.82	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.82	ug/L	U
88722	2-Nitrotoluene	0.82	ug/L	U
99081	3-Nitrotoluene	0.82	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.82	ug/L	U
99990	4-Nitrotoluene	0.82	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.82	ug/L	U
2691410	HMX	0.82	ug/L	U
98953	Nitrobenzene	0.82	ug/L	U
55630	Nitroglycerine	0.82	ug/L	U
78115	PETN	4.1	ug/L	U
121824	RDX	**7.5**	ug/L	
479458	TETRYL	10	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**149**	%Rec	

Sample Information

11204339

Description : MW04GW

Sampling Date/Time : 5/20/2011 5:00:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/11/2011 4:19:51AM **Batch ID:** A-8330B-HPLC-DAN-061111

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.80	ug/L	U
99650	1,3-Dinitrobenzene	0.80	ug/L	U
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U
121142	2,4-Dinitrotoluene	0.80	ug/L	U
606202	2,6-Dinitrotoluene	0.80	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U
88722	2-Nitrotoluene	0.80	ug/L	U
99081	3-Nitrotoluene	0.80	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U
99990	4-Nitrotoluene	0.80	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U
2691410	HMX	**3.0**	ug/L	
98953	Nitrobenzene	0.80	ug/L	U
55630	Nitroglycerine	0.80	ug/L	U
78115	PETN	4.0	ug/L	U
121824	RDX	**13**	ug/L	
479458	TETRYL	10	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**147**	%Rec	

Sample Information

11204340

Description : MW05GW

Sampling Date/Time : 5/20/2011 6:20:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 12:43:20PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.81	ug/L	U
99650	1,3-Dinitrobenzene	0.81	ug/L	U
118967	2,4,6-Trinitrotoluene	0.81	ug/L	U
121142	2,4-Dinitrotoluene	0.81	ug/L	U
606202	2,6-Dinitrotoluene	0.81	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.81	ug/L	U
88722	2-Nitrotoluene	0.81	ug/L	U
99081	3-Nitrotoluene	0.81	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.81	ug/L	U
99990	4-Nitrotoluene	0.81	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.81	ug/L	U
2691410	HMX	0.81	ug/L	U
98953	Nitrobenzene	0.81	ug/L	U
55630	Nitroglycerine	0.81	ug/L	U
78115	PETN	4.1	ug/L	U
121824	RDX	**2.6**	ug/L	
479458	TETRYL	10	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**144**	%Rec	

Sample Information

11204341

Description : MW06GW

Sampling Date/Time : 5/21/2011 11:58:00AM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 1:28:58PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.76	ug/L	U
99650	1,3-Dinitrobenzene	0.76	ug/L	U
118967	2,4,6-Trinitrotoluene	0.76	ug/L	U
121142	2,4-Dinitrotoluene	0.76	ug/L	U
606202	2,6-Dinitrotoluene	0.76	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.76	ug/L	U
88722	2-Nitrotoluene	0.76	ug/L	U
99081	3-Nitrotoluene	0.76	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.76	ug/L	U
99990	4-Nitrotoluene	0.76	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.76	ug/L	U
2691410	HMX	**6.2**	ug/L	
98953	Nitrobenzene	0.76	ug/L	U
55630	Nitroglycerine	0.76	ug/L	U
78115	PETN	3.8	ug/L	U
121824	RDX	**59**	ug/L	
479458	TETRYL	9.5	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**146**	%Rec	

Sample Information

11204342

Description : MW07GW

Sampling Date/Time : 5/21/2011 1:15:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 2:14:33PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.92	ug/L	U
99650	1,3-Dinitrobenzene	0.92	ug/L	U
118967	2,4,6-Trinitrotoluene	0.92	ug/L	U
121142	2,4-Dinitrotoluene	0.92	ug/L	U
606202	2,6-Dinitrotoluene	0.92	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.92	ug/L	U
88722	2-Nitrotoluene	0.92	ug/L	U
99081	3-Nitrotoluene	0.92	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.92	ug/L	U
99990	4-Nitrotoluene	0.92	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.92	ug/L	U
2691410	HMX	0.92	ug/L	U
98953	Nitrobenzene	0.92	ug/L	U
55630	Nitroglycerine	0.92	ug/L	U
78115	PETN	4.6	ug/L	U
121824	RDX	0.92	ug/L	U
479458	TETRYL	11	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**146**	%Rec	

Sample Information

11204343

Description : BG01SD

Sampling Date/Time : 5/18/2011 10:42:00AM
Matrix : Sediment
Field Sample ID :

Explosives

Method Information

Lab Matrix : Sediment **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/5/2011 12:09:45AM **Batch ID:** EXPLOSIV-8330B-DAN J-6/5/2011

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**100**	%Rec	

Sample Information

11204344

Description : MW09GW

Sampling Date/Time : 5/21/2011 2:15:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 3:45:47PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.77	ug/L	U
99650	1,3-Dinitrobenzene	0.77	ug/L	U
118967	2,4,6-Trinitrotoluene	0.77	ug/L	U
121142	2,4-Dinitrotoluene	0.77	ug/L	U
606202	2,6-Dinitrotoluene	0.77	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.77	ug/L	U
88722	2-Nitrotoluene	0.77	ug/L	U
99081	3-Nitrotoluene	0.77	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.77	ug/L	U
99990	4-Nitrotoluene	0.77	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.77	ug/L	U
2691410	HMX	0.77	ug/L	U
98953	Nitrobenzene	0.77	ug/L	U
55630	Nitroglycerine	0.77	ug/L	U
78115	PETN	3.8	ug/L	U
121824	RDX	0.77	ug/L	U
479458	TETRYL	9.6	ug/L	UJK

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**145**	%Rec	

Sample Information

11204345

Description : RS01WT

Sampling Date/Time : 5/21/2011 2:45:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 4:31:21PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.85	ug/L	U
99650	1,3-Dinitrobenzene	0.85	ug/L	U
118967	2,4,6-Trinitrotoluene	0.85	ug/L	U
121142	2,4-Dinitrotoluene	0.85	ug/L	U
606202	2,6-Dinitrotoluene	0.85	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.85	ug/L	U
88722	2-Nitrotoluene	0.85	ug/L	U
99081	3-Nitrotoluene	0.85	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.85	ug/L	U
99990	4-Nitrotoluene	0.85	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.85	ug/L	U
2691410	HMX	0.85	ug/L	U
98953	Nitrobenzene	0.85	ug/L	U
55630	Nitroglycerine	0.85	ug/L	U
78115	PETN	4.2	ug/L	U
121824	RDX	0.85	ug/L	U
479458	TETRYL	11	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**143**	%Rec	

Sample Information

11204349

Description : MW08GW

Sampling Date/Time : 5/21/2011 1:30:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/13/2011 3:00:08PM **Batch ID:** A-8330B-HPLC-DAN-061311

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.84	ug/L	U
99650	1,3-Dinitrobenzene	0.84	ug/L	U
118967	2,4,6-Trinitrotoluene	0.84	ug/L	U
121142	2,4-Dinitrotoluene	0.84	ug/L	U
606202	2,6-Dinitrotoluene	0.84	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.84	ug/L	U
88722	2-Nitrotoluene	0.84	ug/L	U
99081	3-Nitrotoluene	0.84	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.84	ug/L	U
99990	4-Nitrotoluene	0.84	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.84	ug/L	U
2691410	HMX	0.84	ug/L	U
98953	Nitrobenzene	0.84	ug/L	U
55630	Nitroglycerine	0.84	ug/L	U
78115	PETN	4.2	ug/L	U
121824	RDX	0.84	ug/L	U
479458	TETRYL	11	ug/L	UJ K

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**148**	%Rec	

Sample Information

11204302 Matrix Spike

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 7:12:37PM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	101	%Rec	
99650	1,3-Dinitrobenzene	104	%Rec	
118967	2,4,6-Trinitrotoluene	104	%Rec	
121142	2,4-Dinitrotoluene	105	%Rec	
606202	2,6-Dinitrotoluene	102	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	101	%Rec	
88722	2-Nitrotoluene	99	%Rec	
99081	3-Nitrotoluene	99	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	98	%Rec	
99990	4-Nitrotoluene	102	%Rec	
2691410	HMX	90	%Rec	
98953	Nitrobenzene	104	%Rec	
121824	RDX	96	%Rec	
479458	TETRYL	77	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	112	%Rec	

Sample Information

11204303 Matrix Spike

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/10/2011 8:43:50PM

Batch ID: A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	**92**	%Rec	
99650	1,3-Dinitrobenzene	**103**	%Rec	
118967	2,4,6-Trinitrotoluene	**99**	%Rec	
121142	2,4-Dinitrotoluene	**105**	%Rec	
606202	2,6-Dinitrotoluene	**102**	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	**100**	%Rec	
88722	2-Nitrotoluene	**99**	%Rec	
99081	3-Nitrotoluene	**100**	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	**99**	%Rec	
99990	4-Nitrotoluene	**99**	%Rec	
2691410	HMX	**96**	%Rec	
98953	Nitrobenzene	**103**	%Rec	
121824	RDX	**97**	%Rec	
479458	TETRYL	0	%Rec	U

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**117**	%Rec	

Sample Information

11204307 Matrix Spike

Description : LF01SB

Sampling Date/Time : 5/16/2011 11:40:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/4/2011 8:21:42PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/4/2011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	%Rec	
99650	1,3-Dinitrobenzene	82	%Rec	
118967	2,4,6-Trinitrotoluene	82	%Rec	
121142	2,4-Dinitrotoluene	83	%Rec	
606202	2,6-Dinitrotoluene	85	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	76	%Rec	
88722	2-Nitrotoluene	82	%Rec	
99081	3-Nitrotoluene	82	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	69	%Rec	
99990	4-Nitrotoluene	85	%Rec	
2691410	HMX	76	%Rec	
98953	Nitrobenzene	85	%Rec	
121824	RDX	66	%Rec	
479458	TETRYL	74	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	88	%Rec	

Sample Information

11204302 Matrix Spike#2

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/10/2011 10:15:02PM

Batch ID: A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	**104**	%Rec	
55630	Nitroglycerine	**114**	%Rec	
78115	PETN	**97**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**110**	%Rec	

Sample Information

11204303 Matrix Spike#2

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/11/2011 2:03:03AM **Batch ID:** A-8330B-HPLC-DAN-061111

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	**102**	%Rec	
55630	Nitroglycerine	**95**	%Rec	
78115	PETN	**97**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**110**	%Rec	

Sample Information

11204307 Matrix Spike#2

Description : LF01SB

Sampling Date/Time : 5/16/2011 11:40:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/4/2011 9:52:56PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/4/2011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	78	%Rec	
55630	Nitroglycerine	97	%Rec	
78115	PETN	111	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	95	%Rec	

Sample Information

11204302 Matrix Spike#3

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 7:58:13PM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	99	%Rec	
99650	1,3-Dinitrobenzene	104	%Rec	
118967	2,4,6-Trinitrotoluene	105	%Rec	
121142	2,4-Dinitrotoluene	107	%Rec	
606202	2,6-Dinitrotoluene	104	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	99	%Rec	
88722	2-Nitrotoluene	102	%Rec	
99081	3-Nitrotoluene	102	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	98	%Rec	
99990	4-Nitrotoluene	104	%Rec	
2691410	HMX	89	%Rec	
98953	Nitrobenzene	103	%Rec	
121824	RDX	90	%Rec	
479458	TETRYL	83	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	114	%Rec	

Sample Information

11204303 Matrix Spike#3

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/10/2011 9:29:26PM **Batch ID:** A-8330B-HPLC-DAN-061011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	**98**	%Rec	
99650	1,3-Dinitrobenzene	**107**	%Rec	
118967	2,4,6-Trinitrotoluene	**116**	%Rec	
121142	2,4-Dinitrotoluene	**109**	%Rec	
606202	2,6-Dinitrotoluene	**106**	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	**104**	%Rec	
88722	2-Nitrotoluene	**104**	%Rec	
99081	3-Nitrotoluene	**104**	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	**103**	%Rec	
99990	4-Nitrotoluene	**103**	%Rec	
2691410	HMX	**97**	%Rec	
98953	Nitrobenzene	**107**	%Rec	
121824	RDX	**100**	%Rec	
479458	TETRYL	**16**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**120**	%Rec	

Sample Information

11204307 Matrix Spike#3

Description : LF01SB

Sampling Date/Time : 5/16/2011 11:40:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/4/2011 9:07:16PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/4/2011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	90	%Rec	
99650	1,3-Dinitrobenzene	90	%Rec	
118967	2,4,6-Trinitrotoluene	92	%Rec	
121142	2,4-Dinitrotoluene	92	%Rec	
606202	2,6-Dinitrotoluene	97	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	85	%Rec	
88722	2-Nitrotoluene	90	%Rec	
99081	3-Nitrotoluene	89	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	80	%Rec	
99990	4-Nitrotoluene	92	%Rec	
2691410	HMX	86	%Rec	
98953	Nitrobenzene	91	%Rec	
121824	RDX	75	%Rec	
479458	TETRYL	75	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	96	%Rec	

Sample Information

11204302 Matrix Spike#4

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/11/2011 1:17:27AM **Batch ID:** A-8330B-HPLC-DAN-061111

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	**107**	%Rec	
55630	Nitroglycerine	**107**	%Rec	
78115	PETN	**98**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**113**	%Rec	

Sample Information

11204303 Matrix Spike#4

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

Explosives

Method Information

Lab Matrix : Water **Data Package :**PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC
Analysis Date/Time: 6/11/2011 2:48:39AM **Batch ID:** A-8330B-HPLC-DAN-061111

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	107	%Rec	
55630	Nitroglycerine	116	%Rec	
78115	PETN	101	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	115	%Rec	

Sample Information

11204307 Matrix Spike#4

Description : LF01SB

Sampling Date/Time : 5/16/2011 11:40:00AM
Matrix : Soil
Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1186

Weight Basis : Dry

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/4/2011 10:38:31PM **Batch ID:** EXPLOSIV-8330B-DAN J-6/4/2011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	76	%Rec	
55630	Nitroglycerine	90	%Rec	
78115	PETN	87	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	89	%Rec	

Sample Information

OBS1146A3 Blank

Description : Blank

Sampling Date/Time :

Matrix : Soil

Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil

Data Package :PKG# 1186

Weight Basis : Dry

Preparation Method(s):

8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 3:25:33PM

Batch ID: EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:

8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**117**	%Rec	

Sample Information

OBS1146A4 Blank

Description : Blank

Sampling Date/Time :

Matrix : Soil

Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil

Data Package :PKG# 1186

Weight Basis : Dry

Preparation Method(s):

8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 4:11:08PM

Batch ID: EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:

8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	80	ug/kg	U
99650	1,3-Dinitrobenzene	80	ug/kg	U
118967	2,4,6-Trinitrotoluene	80	ug/kg	U
121142	2,4-Dinitrotoluene	80	ug/kg	U
606202	2,6-Dinitrotoluene	80	ug/kg	U
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U
88722	2-Nitrotoluene	80	ug/kg	U
99081	3-Nitrotoluene	80	ug/kg	U
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U
99990	4-Nitrotoluene	80	ug/kg	U
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U
2691410	HMX	80	ug/kg	U
98953	Nitrobenzene	80	ug/kg	U
55630	Nitroglycerine	80	ug/kg	U
78115	PETN	400	ug/kg	U
121824	RDX	80	ug/kg	U
479458	TETRYL	1000	ug/kg	UJ

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**120**	%Rec	

Sample Information

OBW1145A3 Blank

Description : Blank

Sampling Date/Time :

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 4:54:29PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.80	ug/L	U
99650	1,3-Dinitrobenzene	0.80	ug/L	U
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U
121142	2,4-Dinitrotoluene	0.80	ug/L	U
606202	2,6-Dinitrotoluene	0.80	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U
88722	2-Nitrotoluene	0.80	ug/L	U
99081	3-Nitrotoluene	0.80	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U
99990	4-Nitrotoluene	0.80	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U
2691410	HMX	0.80	ug/L	U
98953	Nitrobenzene	0.80	ug/L	U
55630	Nitroglycerine	0.80	ug/L	U
78115	PETN	4.0	ug/L	U
121824	RDX	0.80	ug/L	U
479458	TETRYL	10	ug/L	UJ

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**141**	%Rec	

Sample Information

OBW1145A4 Blank

Description : Blank

Sampling Date/Time :

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 5:40:08PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	0.80	ug/L	U
99650	1,3-Dinitrobenzene	0.80	ug/L	U
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U
121142	2,4-Dinitrotoluene	0.80	ug/L	U
606202	2,6-Dinitrotoluene	0.80	ug/L	U
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U
88722	2-Nitrotoluene	0.80	ug/L	U
99081	3-Nitrotoluene	0.80	ug/L	U
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U
99990	4-Nitrotoluene	0.80	ug/L	U
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U
2691410	HMX	0.80	ug/L	U
98953	Nitrobenzene	0.80	ug/L	U
55630	Nitroglycerine	0.80	ug/L	U
78115	PETN	4.0	ug/L	U
121824	RDX	0.80	ug/L	U
479458	TETRYL	10	ug/L	UJ

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**142**	%Rec	

Sample Information

LCS1145C Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 6:25:43PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	**100**	%Rec	
99650	1,3-Dinitrobenzene	**106**	%Rec	
118967	2,4,6-Trinitrotoluene	**106**	%Rec	
121142	2,4-Dinitrotoluene	**107**	%Rec	
606202	2,6-Dinitrotoluene	**105**	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	**103**	%Rec	
88722	2-Nitrotoluene	**102**	%Rec	
99081	3-Nitrotoluene	**103**	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	**102**	%Rec	
99990	4-Nitrotoluene	**101**	%Rec	
2691410	HMX	**96**	%Rec	
98953	Nitrobenzene	**105**	%Rec	
121824	RDX	**95**	%Rec	
479458	TETRYL	**67**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**117**	%Rec	

Sample Information

LCS1145E Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 7:56:58PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	111	%Rec	
55630	Nitroglycerine	109	%Rec	
78115	PETN	114	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	114	%Rec	

Sample Information

LCS1146C Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Soil

Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil

Data Package :PKG# 1186

Preparation Method(s):

8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 4:56:43PM

Batch ID: EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:

8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	110	%Rec	
99650	1,3-Dinitrobenzene	107	%Rec	
118967	2,4,6-Trinitrotoluene	106	%Rec	
121142	2,4-Dinitrotoluene	108	%Rec	
606202	2,6-Dinitrotoluene	108	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	107	%Rec	
88722	2-Nitrotoluene	105	%Rec	
99081	3-Nitrotoluene	104	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	105	%Rec	
99990	4-Nitrotoluene	103	%Rec	
2691410	HMX	106	%Rec	
98953	Nitrobenzene	105	%Rec	
121824	RDX	109	%Rec	
479458	TETRYL	113	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	114	%Rec	

Sample Information

LCS1146E Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Soil

Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil

Data Package :PKG# 1186

Preparation Method(s):

8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 6:27:58PM

Batch ID: EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:

8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	**105**	%Rec	
55630	Nitroglycerine	**104**	%Rec	
78115	PETN	**104**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**115**	%Rec	

Sample Information

LCS1145D Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 7:11:18PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	**102**	%Rec	
99650	1,3-Dinitrobenzene	**107**	%Rec	
118967	2,4,6-Trinitrotoluene	**108**	%Rec	
121142	2,4-Dinitrotoluene	**107**	%Rec	
606202	2,6-Dinitrotoluene	**103**	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	**105**	%Rec	
88722	2-Nitrotoluene	**104**	%Rec	
99081	3-Nitrotoluene	**105**	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	**105**	%Rec	
99990	4-Nitrotoluene	**104**	%Rec	
2691410	HMX	**96**	%Rec	
98953	Nitrobenzene	**105**	%Rec	
121824	RDX	**97**	%Rec	
479458	TETRYL	**83**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**119**	%Rec	

Sample Information

LCS1145F Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Water

Field Sample ID :

Explosives

Method Information

Lab Matrix : Water

Data Package :PKG# 1186

Preparation Method(s):

8330B - Explosives by HPLC

Analysis Date/Time: 6/6/2011 8:42:32PM

Batch ID: A-8330B-HPLC-DAN-060611

Analytical Method:

8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	**105**	%Rec	
55630	Nitroglycerine	**104**	%Rec	
78115	PETN	**93**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**114**	%Rec	

Sample Information

LCS1146D Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Soil

Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 5:42:23PM

Batch ID: EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
99354	1,3,5-Trinitrobenzene	108	%Rec	
99650	1,3-Dinitrobenzene	108	%Rec	
118967	2,4,6-Trinitrotoluene	109	%Rec	
121142	2,4-Dinitrotoluene	108	%Rec	
606202	2,6-Dinitrotoluene	109	%Rec	
35572782	2-amino, 4,6-Dinitrotoluene	105	%Rec	
88722	2-Nitrotoluene	104	%Rec	
99081	3-Nitrotoluene	105	%Rec	
1946510	4-amino,2,6-Dinitrotoluene	105	%Rec	
99990	4-Nitrotoluene	106	%Rec	
2691410	HMX	108	%Rec	
98953	Nitrobenzene	107	%Rec	
121824	RDX	107	%Rec	
479458	TETRYL	110	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	115	%Rec	

Sample Information

LCS1146F Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Soil

Field Sample ID :

Explosives

Method Information

Lab Matrix : Soil

Data Package :PKG# 1186

Preparation Method(s):
8330B - Explosives by HPLC

Analysis Date/Time: 6/3/2011 7:13:32PM

Batch ID: EXPLOSIV-8330B-DAN J-6/3/2011

Analytical Method:
8330B - Explosives by HPLC

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
618871	BENZENAMINE, 3,5-DINITRO-	**103**	%Rec	
55630	Nitroglycerine	**113**	%Rec	
78115	PETN	**96**	%Rec	

Surrogate Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
528290	1,2-Dinitrobenzene	**113**	%Rec	

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MEMORANDUM

DATE: November 22, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Explosives Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 126 soil and 11 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for explosives (EPA SW-846 Method 8330B) was performed at the Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

Soil:

11344500	11344501	11344502	11344503	11344504	11344505
11344506	11344507	11344508	11344509	11344510	11344511
11344512	11344513	11344514	11344515	11344516	11344517
11344518	11344519	11344520	11344521	11344522	11344523
11344524	11344525	11344526	11344527	11344528	11344529
11344530	11344531	11344532	11344533	11344534	11344535
11344536	11344537	11344538	11344539	11344540	11344541
11344542	11344543	11344544	11344545	11344546	11344547
11344548	11344549	11344550	11344551	11344552	11344553
11344554	11344555	11344556	11344557	11344558	11344559
11344560	11344561	11344562	11344563	11344564	11344565
11344566	11344567	11344568	11344569	11344570	11344571
11344572	11344573	11344574	11344575	11344576	11344577
11344578	11344579	11344580	11344581	11344582	11344583
11344584	11344585	11344586	11344587	11344588	11344589
11344590	11344591	11344592	11344595	11344596	11344597
11344598	11344599	11344600	11344601	11344602	11344603
11344604	11344607	11344608	11344611	11344614	11344615
11344616	11344617	11344618	11344619	11344620	11344621
11344624	11344625	11344628	11344631	11344632	11344635
11344636	11344637	11344640	11344641	11344644	11344647

Water:

11344605	11344609	11344612	11344622	11344626	11344629
11344633	11344638	11344642	11344645	11344648	

No discrepancies were noted. The secondary reviewer added the "K" bias qualifier to estimated results to indicate that there was an unknown bias and the "Q" bias qualifier to estimated results to indicate that the positive result was less than the sample quantitation limit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT:	Data Release for Nitroaromatics, Nitramines, and Nitrate Esters Analysis Results from the USEPA Region 10 Laboratory
PROJECT NAME:	Camp Bonneville SI, Phase II
PROJECT CODE:	TEC-993B
FROM:	Gerald Dodo, Supervisory Chemist Office of Environmental Assessment, USEPA Region 10 Laboratory
TO:	Monica Tonel, Project Manager, Office of Environmental Cleanup Office of Environmental Cleanup, USEPA Region 10
CC:	Renee Nordeen (rnordeen@ene.com)

I have authorized release of this data package. Attached you will find the Nitroaromatics, Nitramines, and Nitrate Esters results for the Camp Bonneville SI, Phase II project for the samples collected on 08/22/2011 through 08/26/2011. For further information regarding the attached data, contact Dana Walker at 360-871-8704.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: November 14, 2011

To: Monica Tonel, Project Manager
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, US EPA Region 10

From: Dana Walker, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review of the Camp Bonneville SI, Phase 1
Project Code: TEC-993B
Account Code: 2011T10P302DD2C101RLA00

CC: Renee Nordeen, E & E

The following is a quality assurance review of the data for nitroaromatics, nitramines, and nitrate esters analysis of 126 soil and 11 water samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory ESAT contractor using EPA SW846 method 8330B.

This review was conducted for the following samples:

Soil:

11344500	11344501	11344502	11344503	11344504	11344505
11344506	11344507	11344508	11344509	11344510	11344511
11344512	11344513	11344514	11344515	11344516	11344517
11344518	11344519	11344520	11344521	11344522	11344523
11344524	11344525	11344526	11344527	11344528	11344529
11344530	11344531	11344532	11344533	11344534	11344535
11344536	11344537	11344538	11344539	11344540	11344541
11344542	11344543	11344544	11344545	11344546	11344547
11344548	11344549	11344550	11344551	11344552	11344553
11344554	11344555	11344556	11344557	11344558	11344559
11344560	11344561	11344562	11344563	11344564	11344565
11344566	11344567	11344568	11344569	11344570	11344571
11344572	11344573	11344574	11344575	11344576	11344577
11344578	11344579	11344580	11344581	11344582	11344583
11344584	11344585	11344586	11344587	11344588	11344589
11344590	11344591	11344592	11344595	11344596	11344597
11344598	11344599	11344600	11344601	11344602	11344603
11344604	11344607	11344608	11344611	11344614	11344615
11344616	11344617	11344618	11344619	11344620	11344621
11344624	11344625	11344628	11344631	11344632	11344635
11344636	11344637	11344640	11344641	11344644	11344647

Water:

11344605	11344609	11344612	11344622	11344626	11344629
11344633	11344638	11344642	11344645	11344648	

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures that did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

For those tests for which the EPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of soil samples is 14 days and water samples is 7 days from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

4. Sample Preparation

Samples were prepared according to the method.

5. Initial Calibration/Continuing Calibration Verification (CCV)

Initial calibration was performed on 09/019/11. Correlation coefficients met the criteria of ≥0.99. Due to coelution of a number of analytes, two standards and spiking solutions were used. Also, a second source calibration verification was analyzed and passed the required 70-130% recovery. There were repeated failures for Tetryl that required recalibration, see comments in Section 12 regarding flagging for this compound.

The CCVs for samples met the criteria for frequency of analysis. The percent accuracies were 85-115% of the true value.

6. Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD)

LCS/LCSD are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the criteria of 50-150% with a relative percent difference (RPD) of ≤30 for waters and soils. Note that for LCSs and Matrix Spikes, two aliquots from each sample are analyzed and spiked with a subset of the 8330B. One of the mixes contains Benzenamine, 3,5-dinitro-, Nitroglycerine, and PETN. The other mix contains the remaining compounds for the method. Each is analyzed separately and reported on its own report sheet.

7. Blank Analysis

Method blanks were analyzed with each sample batch to evaluate the potential for laboratory contamination and effects on the sample results. Target analytes were not detected in method blanks.

8. Surrogate Spikes

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. The surrogate compound used for these analyses was 1, 2-dinitrobenzene. All surrogate recoveries were within the criteria of 50-150%.

9. Matrix Spike/Matrix Spike Duplicate Analysis (MS/MSD)

MS/MSD analyses are performed to provide information on the effects of sample matrices toward the analytical method. An MS/MSD analysis was performed using samples 11344520, 11344555, 11344566, 11344608, 11344619, and 11344644, for soils and 11344605 for waters. The recoveries met the criteria of 50-150% for soil samples for all analytes.

10. Compound Quantitation

The initial calibration functions from the primary column were used for calculations. Reported quantitation limits and detected analyte results were based on the initial calibration standards and sample size used for the analysis.

Do to poor low level calibration response, TETRYL was reported at elevated reporting limits.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

11. Identification

Method 8330B analytes and the surrogate were identified based on chromatographic retention times of two dissimilar liquid chromatography columns.

12. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data. For Tetryl, there have been ongoing analytical problems with this compound because it breaks down while in a mixed solvent system (e.g., water/organic solvent). While the overall QC results for this specific project appear in control, the Tetryl was flagged with a J to indicate its periodic erratic performance.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Dana Walker at the Region 10 Laboratory, phone number (360) 871 - 8704.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

US EPA Region 10 Laboratory

Multi-Analyte Final Report

Project Code : TEC-993B
Site : CAMP BONNEVILLE : PHASE II
Contact : Monica Tonel
Account : 2011T10P302DD2C101RLA00

Sample : 11344500
COC Description : FP01SS
Matrix : Soil **Weight Basis :** Dry
Collected : 8/22/11 11:45

Parameter : Explosives
Fraction : N/A
Prep Method: 8330B - Explosives by HPLC
Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/21/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/21/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/21/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/21/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/21/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/21/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/21/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/21/11	1
2691410	HMX	80	ug/kg	U	9/21/11	1
98953	Nitrobenzene	80	ug/kg	U	9/21/11	1
55630	Nitroglycerine	80	ug/kg	U	9/21/11	1
78115	PETN	80	ug/kg	U	9/21/11	1
121824	RDX	80	ug/kg	U	9/21/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/21/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	92	%Rec		9/21/11	1

Sample : 11344501

COC Description : FP02SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 13:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/21/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/21/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/21/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/21/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/21/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/21/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/21/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/21/11	1
2691410	HMX	80	ug/kg	U	9/21/11	1
98953	Nitrobenzene	80	ug/kg	U	9/21/11	1
55630	Nitroglycerine	80	ug/kg	U	9/21/11	1
78115	PETN	80	ug/kg	U	9/21/11	1
121824	RDX	80	ug/kg	U	9/21/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/21/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		9/21/11	1

Sample : 11344502

COC Description : FP03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 13:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/21/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/21/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/21/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/21/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/21/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/21/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/21/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/21/11	1
2691410	HMX	80	ug/kg	U	9/21/11	1
98953	Nitrobenzene	80	ug/kg	U	9/21/11	1
55630	Nitroglycerine	80	ug/kg	U	9/21/11	1
78115	PETN	80	ug/kg	U	9/21/11	1
121824	RDX	80	ug/kg	U	9/21/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/21/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		9/21/11	1

Sample : 11344503

COC Description : FP04SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 14:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/21/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/21/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/21/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/21/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/21/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/21/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/21/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/21/11	1
2691410	HMX	80	ug/kg	U	9/21/11	1
98953	Nitrobenzene	80	ug/kg	U	9/21/11	1
55630	Nitroglycerine	80	ug/kg	U	9/21/11	1
78115	PETN	80	ug/kg	U	9/21/11	1
121824	RDX	80	ug/kg	U	9/21/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/21/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		9/21/11	1

Sample : 11344504

COC Description : FP05SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 14:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/21/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/21/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/21/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/21/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/21/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/21/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/21/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/21/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/21/11	1
2691410	HMX	80	ug/kg	U	9/21/11	1
98953	Nitrobenzene	80	ug/kg	U	9/21/11	1
55630	Nitroglycerine	80	ug/kg	U	9/21/11	1
78115	PETN	80	ug/kg	U	9/21/11	1
121824	RDX	80	ug/kg	U	9/21/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/21/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		9/21/11	1

Sample : 11344505

COC Description : PU01SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 14:27

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJK	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	96	%Rec		9/22/11	1

Sample : 11344506

COC Description : PU02SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 14:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		9/22/11	1

Sample : 11344507

COC Description : PU03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 14:47

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJK	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		9/22/11	1

Sample : 11344508

COC Description : PU04SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 14:58

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		9/22/11	1

Sample : 11344509

COC Description : PU05SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 15:14

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/22/11	1

Sample : 11344510

COC Description : PU06SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 15:33

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		9/22/11	1

Sample : 11344511

COC Description : PU07SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 16:12

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	96	%Rec		9/22/11	1

Sample : 11344512

COC Description : PU08SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 16:33

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/22/11	1

Sample : 11344513

COC Description : PU09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 16:48

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		9/22/11	1

Sample : 11344514

COC Description : PU10SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 16:58

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		9/22/11	1

Sample : 11344515

COC Description : PU11SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/22/11 17:08

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		9/22/11	1

Sample : 11344516

COC Description : OB01SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 16:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	**1,3,5-Trinitrobenzene**	**95**	**ug/kg**	J Q	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	**2,4,6-Trinitrotoluene**	**20600**	**ug/kg**		10/10/11	2
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	**2-amino, 4,6-Dinitrotoluene**	**810**	**ug/kg**		9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	**4-amino,2,6-Dinitrotoluene**	**680**	**ug/kg**		9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/22/11	1

Sample : 11344517

COC Description : PU12SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/22/11 17:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/22/11	1

Sample : 11344518

COC Description : FR01SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:01

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/22/11	1

Sample : 11344519

COC Description : FR02SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:13

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/22/11	1

Sample : 11344520

COC Description : FR03SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/23/11 9:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/22/11	1

Sample : 11344521

COC Description : FR04SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/22/11	1

Sample : 11344522

COC Description : FR05SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:41

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/22/11	1

Sample : 11344523

COC Description : FR06SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	**Nitroglycerine**	**197**	**ug/kg**		9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/22/11	1

Sample : 11344524

COC Description : FP06SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:46

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/22/11	1

Sample : 11344525

COC Description : FR07SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/22/11	1

Sample : 11344526

COC Description : FR08SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 10:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/22/11	1

Sample : 11344527

COC Description : FP07SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 10:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/22/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/22/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/22/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/22/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/22/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/22/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/22/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/22/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/22/11	1
2691410	HMX	80	ug/kg	U	9/22/11	1
98953	Nitrobenzene	80	ug/kg	U	9/22/11	1
55630	Nitroglycerine	80	ug/kg	U	9/22/11	1
78115	PETN	80	ug/kg	U	9/22/11	1
121824	RDX	80	ug/kg	U	9/22/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/22/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/22/11	1

Sample : 11344528

COC Description : FP08SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 10:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/23/11	1

Sample : 11344529

COC Description : FB01SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 10:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/23/11	1

Sample : 11344530

COC Description : FP09SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/23/11 10:53

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/23/11	1

Sample : 11344531

COC Description : FB02SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:00

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJK	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/23/11	1

Sample : 11344532

COC Description : FP10SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:09

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/23/11	1

Sample : 11344533

COC Description : FB03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:09

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJK	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/23/11	1

Sample : 11344534

COC Description : FB04SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:18

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJK	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/23/11	1

Sample : 11344535

COC Description : FB05SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:26

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/23/11	1

Sample : 11344536

COC Description : OP01SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:35

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/23/11	1

Sample : 11344537

COC Description : OB02SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 13:45

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	109	%Rec		9/23/11	1

Sample : 11344538

COC Description : FB06SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 11:33

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	114	%Rec		9/23/11	1

Sample : 11344539

COC Description : FR09SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 13:45

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/23/11	1

Sample : 11344540

COC Description : OB03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 13:58

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJK	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	108	%Rec		9/23/11	1

Sample : 11344541

COC Description : FR10SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 14:08

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/23/11	1

Sample : 11344542

COC Description : OB04SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 14:10

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	119	%Rec		9/23/11	1

Sample : 11344543

COC Description : FR11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 14:17

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/23/11	1

Sample : 11344544

COC Description : OB05SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/23/11 14:25

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	118	%Rec		9/23/11	1

Sample : 11344545

COC Description : FR12SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 14:28

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/23/11	1

Sample : 11344546

COC Description : FR13SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/23/11 14:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/23/11	1

Sample : 11344547

COC Description : FR14SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 14:52

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	143	%Rec		9/23/11	1

Sample : 11344548

COC Description : FR15SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/23/11 15:09

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	**BENZENAMINE, 3,5-DINITRO-**	**160**	**ug/kg**		9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/23/11	1

Sample : 11344549

COC Description : FR16SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 15:25

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/23/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/23/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/23/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/23/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/23/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/23/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/23/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/23/11	1
618871	**BENZENAMINE, 3,5-DINITRO-**	**130**	**ug/kg**		9/23/11	1
2691410	HMX	80	ug/kg	U	9/23/11	1
98953	Nitrobenzene	80	ug/kg	U	9/23/11	1
55630	Nitroglycerine	80	ug/kg	U	9/23/11	1
78115	PETN	80	ug/kg	U	9/23/11	1
121824	RDX	80	ug/kg	U	9/23/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/23/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/23/11	1

Sample : 11344550

COC Description : FP11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 15:36

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/24/11	1

Sample : 11344551

COC Description : FP12SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 15:47

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/24/11	1

Sample : 11344552

COC Description : FP13SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 15:58

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/24/11	1

Sample : 11344553

COC Description : FP14SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 16:16

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/24/11	1

Sample : 11344554

COC Description : FP15SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 16:33

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	**2,4-Dinitrotoluene**	**350**	**ug/kg**		9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/24/11	1

Sample : 11344555

COC Description : FP16SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 17:02

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	**BENZENAMINE, 3,5-DINITRO-**	**250**	**ug/kg**		9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/24/11	1

Sample : 11344556

COC Description : CT01SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 10:07

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/24/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/24/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/24/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/24/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/24/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/24/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/24/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/24/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/24/11	1
2691410	HMX	80	ug/kg	U	9/24/11	1
98953	Nitrobenzene	80	ug/kg	U	9/24/11	1
55630	Nitroglycerine	80	ug/kg	U	9/24/11	1
78115	PETN	80	ug/kg	U	9/24/11	1
121824	RDX	80	ug/kg	U	9/24/11	1
479458	TETRYL	1000	ug/kg	UJK	9/24/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/24/11	1

Sample : 11344557

COC Description : CT02SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 10:26

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/25/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/25/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/25/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/25/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/25/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/25/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/25/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/25/11	1
2691410	HMX	80	ug/kg	U	9/25/11	1
98953	Nitrobenzene	80	ug/kg	U	9/25/11	1
55630	Nitroglycerine	80	ug/kg	U	9/25/11	1
78115	PETN	80	ug/kg	U	9/25/11	1
121824	RDX	80	ug/kg	U	9/25/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/25/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/25/11	1

Sample : 11344558

COC Description : CT03SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 10:46

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/25/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/25/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/25/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/25/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/25/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/25/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/25/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/25/11	1
2691410	HMX	80	ug/kg	U	9/25/11	1
98953	Nitrobenzene	80	ug/kg	U	9/25/11	1
55630	Nitroglycerine	80	ug/kg	U	9/25/11	1
78115	PETN	80	ug/kg	U	9/25/11	1
121824	RDX	80	ug/kg	U	9/25/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/25/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/25/11	1

Sample : 11344559

COC Description : CT04SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 11:17

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/25/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/25/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/25/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/25/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/25/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/25/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/25/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/25/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/25/11	1
2691410	HMX	80	ug/kg	U	9/25/11	1
98953	Nitrobenzene	80	ug/kg	U	9/25/11	1
55630	Nitroglycerine	80	ug/kg	U	9/25/11	1
78115	PETN	80	ug/kg	U	9/25/11	1
121824	RDX	80	ug/kg	U	9/25/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/25/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/25/11	1

Sample : 11344560

COC Description : CT05SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 11:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJK	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/30/11	1

Sample : 11344561

COC Description : CT06SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 13:20

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	**BENZENAMINE, 3,5-DINITRO-**	**130**	**ug/kg**		9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/30/11	1

Sample : 11344562

COC Description : OB06SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 13:42

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/30/11	1

Sample : 11344563

COC Description : OB07SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 13:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	117	%Rec		9/30/11	1

Sample : 11344564

COC Description : CT09SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 14:25

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJK	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/30/11	1

Sample : 11344565

COC Description : CT10SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 14:42

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJK	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/30/11	1

Sample : 11344566

COC Description : CT11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 15:13

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	**BENZENAMINE, 3,5-DINITRO-**	**240**	**ug/kg**		9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJ K	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	109	%Rec		9/30/11	1

Sample : 11344567

COC Description : OB08SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 14:43

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/30/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/30/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/30/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/30/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/30/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/30/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/30/11	1
618871	**BENZENAMINE, 3,5-DINITRO-**	**220**	**ug/kg**		9/30/11	1
2691410	HMX	80	ug/kg	U	9/30/11	1
98953	Nitrobenzene	80	ug/kg	U	9/30/11	1
55630	Nitroglycerine	80	ug/kg	U	9/30/11	1
78115	PETN	80	ug/kg	U	9/30/11	1
121824	RDX	80	ug/kg	U	9/30/11	1
479458	TETRYL	1000	ug/kg	UJK	9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/30/11	1

Sample : 11344568

COC Description : OB09SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 15:10

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/1/11	1

Sample : 11344569

COC Description : EF01SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 15:59

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJK	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/1/11	1

Sample : 11344570

COC Description : CT07SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 13:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJK	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/1/11	1

Sample : 11344571

COC Description : CT08SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 14:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/1/11	1

Sample : 11344572

COC Description : PT01SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 16:16

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/1/11	1

Sample : 11344573

COC Description : PT02SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 16:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/1/11	1

Sample : 11344574

COC Description : EF02SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 16:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/1/11	1

Sample : 11344575

COC Description : PT03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 16:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/1/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/1/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/1/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/1/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/1/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/1/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/1/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/1/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/1/11	1
2691410	HMX	80	ug/kg	U	10/1/11	1
98953	Nitrobenzene	80	ug/kg	U	10/1/11	1
55630	Nitroglycerine	80	ug/kg	U	10/1/11	1
78115	PETN	80	ug/kg	U	10/1/11	1
121824	RDX	80	ug/kg	U	10/1/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/1/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/1/11	1

Sample : 11344576

COC Description : PT04SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 16:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/3/11	1

Sample : 11344577

COC Description : PT06SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 17:20

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	130	%Rec		10/3/11	1

Sample : 11344578

COC Description : PT07SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 17:23

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/3/11	1

Sample : 11344579

COC Description : PT05SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 17:08

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/3/11	1

Sample : 11344580

COC Description : PT09SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 17:36

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/3/11	1

Sample : 11344581

COC Description : PT10SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 18:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/3/11	1

Sample : 11344582

COC Description : PT11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 18:03

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/3/11	1

Sample : 11344583

COC Description : PT08SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/24/11 17:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/3/11	1

Sample : 11344584

COC Description : PT12SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 9:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/3/11	1

Sample : 11344585

COC Description : PT13SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 9:15

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/3/11	1

Sample : 11344586

COC Description : PT14SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 9:24

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/3/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/3/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/3/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/3/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/3/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/3/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/3/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/3/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/3/11	1
2691410	HMX	80	ug/kg	U	10/3/11	1
98953	Nitrobenzene	80	ug/kg	U	10/3/11	1
55630	Nitroglycerine	80	ug/kg	U	10/3/11	1
78115	PETN	80	ug/kg	U	10/3/11	1
121824	RDX	80	ug/kg	U	10/3/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/3/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/3/11	1

Sample : 11344587

COC Description : PT15SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 9:35

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344588

COC Description : PT16SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 9:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344589

COC Description : PT17SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 9:45

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/4/11	1

Sample : 11344590

COC Description : PT18SS

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 9:52

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/4/11	1

Sample : 11344591

COC Description : LC01SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 10:00

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/4/11	1

Sample : 11344592

COC Description : LC02SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 10:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344595

COC Description : LC03SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 11:00

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/4/11	1

Sample : 11344596

COC Description : LC04SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 12:17

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344597

COC Description : LC05SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 11:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344598

COC Description : LC06SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 13:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344599

COC Description : LC07SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 13:28

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344600

COC Description : LC08SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 13:25

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/4/11	1

Sample : 11344601

COC Description : LC09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 13:43

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344602

COC Description : LC10SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 14:21

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344603

COC Description : BC01SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 14:35

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJK	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/4/11	1

Sample : 11344607

COC Description : LC11SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 15:12

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344605

COC Description : LC11SW

Matrix : Water

Weight Basis : N/A

Collected : 8/25/11 14:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.71	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/6/11	1

Sample : 11344604

COC Description : LC12SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 14:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/4/11	1

Sample : 11344608

COC Description : LC13SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/25/11 15:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344609

COC Description : LC14SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/25/11 15:45

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.5	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.75	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.75	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.75	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.75	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.75	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.75	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.75	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.75	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.75	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.75	ug/L	U	10/6/11	1
2691410	HMX	0.75	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.75	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.75	ug/L	U	10/6/11	1
78115	PETN	0.75	ug/L	U	10/6/11	1
121824	RDX	0.75	ug/L	U	10/6/11	1
479458	TETRYL	9.43	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/6/11	1

Sample : 11344611

COC Description : LC14SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 15:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344612

COC Description : LC15SW

Matrix : Water

Weight Basis : N/A

Collected : 8/25/11 16:25

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.80	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		10/6/11	1

Sample : 11344614

COC Description : LC15SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 16:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/4/11	1

Sample : 11344615

COC Description : DC01SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 16:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/4/11	1

Sample : 11344616

COC Description : DC02SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 16:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/4/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/4/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/4/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/4/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/4/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/4/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/4/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/4/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/4/11	1
2691410	HMX	80	ug/kg	U	10/4/11	1
98953	Nitrobenzene	80	ug/kg	U	10/4/11	1
55630	Nitroglycerine	80	ug/kg	U	10/4/11	1
78115	PETN	80	ug/kg	U	10/4/11	1
121824	RDX	80	ug/kg	U	10/4/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/4/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/4/11	1

Sample : 11344617

COC Description : EF03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 16:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/5/11	1

Sample : 11344618

COC Description : NF01SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:24

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/5/11	1

Sample : 11344619

COC Description : DC03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:27

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/5/11	1

Sample : 11344620

COC Description : DC04SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:48

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/5/11	1

Sample : 11344621

COC Description : BG01SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 9:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/5/11	1

Sample : 11344622

COC Description : NF02SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/26/11 9:48

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.71	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/6/11	1

Sample : 11344624

COC Description : NF02SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 9:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	115	%Rec		10/5/11	1

Sample : 11344625

COC Description : BG02SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 10:15

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		10/5/11	1

Sample : 11344626

COC Description : NF03SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/26/11 10:32

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.80	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.80	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.80	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.80	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U	10/6/11	1
2691410	HMX	0.80	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.80	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.80	ug/L	U	10/6/11	1
78115	PETN	0.80	ug/L	U	10/6/11	1
121824	RDX	0.80	ug/L	U	10/6/11	1
479458	TETRYL	10.0	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/6/11	1

Sample : 11344628

COC Description : NF03SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/26/11 10:34

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/5/11	1

Sample : 11344629

COC Description : NF04SW

Matrix : Water

Weight Basis : N/A

Collected : 8/26/11 11:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.5	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.76	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.76	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.76	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.76	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.76	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.76	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.76	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.76	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.76	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.76	ug/L	U	10/6/11	1
2691410	HMX	0.76	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.76	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.76	ug/L	U	10/6/11	1
78115	PETN	0.76	ug/L	U	10/6/11	1
121824	RDX	0.76	ug/L	U	10/6/11	1
479458	TETRYL	9.52	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	94	%Rec		10/6/11	1

Sample : 11344631

COC Description : NF04SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 12:00

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/5/11	1

Sample : 11344632

COC Description : BG01SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 11:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/5/11	1

Sample : 11344633

COC Description : NF05SW

Matrix : Water

Weight Basis : N/A

Collected : 8/26/11 12:29

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.71	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/6/11	1

Sample : 11344635

COC Description : NF05SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 12:35

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	**3-Nitrotoluene**	**940**	**ug/kg**		10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	111	%Rec		10/5/11	1

Sample : 11344636

COC Description : BG03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 12:48

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/5/11	1

Sample : 11344637

COC Description : NF06SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 14:00

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	107	%Rec		10/5/11	1

Sample : 11344638

COC Description : NF07SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/26/11 14:29

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.80	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.80	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.80	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.80	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U	10/6/11	1
2691410	HMX	0.80	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.80	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.80	ug/L	U	10/6/11	1
78115	PETN	0.80	ug/L	U	10/6/11	1
121824	RDX	0.80	ug/L	U	10/6/11	1
479458	TETRYL	10.0	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/6/11	1

Sample : 11344640

COC Description : NF07SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 14:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/5/11	1

Sample : 11344641

COC Description : NF08SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 14:56

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/5/11	1

Sample : 11344642

COC Description : NF09SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/26/11 15:40

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.71	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/6/11	1

Sample : 11344644

COC Description : NF09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 15:31

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/5/11	1

Sample : 11344645

COC Description : BG04SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/26/11 16:10

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.80	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/6/11	1

Sample : 11344647

COC Description : BG04SD

Matrix : Soil

Weight Basis : Dry

Collected : 8/26/11 16:05

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	10/5/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	10/5/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	10/5/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
88722	2-Nitrotoluene	80	ug/kg	U	10/5/11	1
99081	3-Nitrotoluene	80	ug/kg	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	10/5/11	1
99990	4-Nitrotoluene	80	ug/kg	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	10/5/11	1
2691410	HMX	80	ug/kg	U	10/5/11	1
98953	Nitrobenzene	80	ug/kg	U	10/5/11	1
55630	Nitroglycerine	80	ug/kg	U	10/5/11	1
78115	PETN	80	ug/kg	U	10/5/11	1
121824	RDX	80	ug/kg	U	10/5/11	1
479458	TETRYL	1000	ug/kg	UJ K	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		10/5/11	1

Sample : 11344648

COC Description : LC03SW

Matrix : Water

Weight Basis : N/A

Collected : 8/25/11 10:50

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.78	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.78	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.78	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.78	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.78	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.78	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.78	ug/L	U	10/6/11	1
2691410	HMX	0.78	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.78	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.78	ug/L	U	10/6/11	1
78115	PETN	0.78	ug/L	U	10/6/11	1
121824	RDX	0.78	ug/L	U	10/6/11	1
479458	TETRYL	9.71	ug/L	UJ K	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/6/11	1

Sample : 11344520 Matrix Spike

COC Description : FR03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	99	%Rec		10/6/11	1
99650	1,3-Dinitrobenzene	101	%Rec		10/6/11	1
118967	2,4,6-Trinitrotoluene	99	%Rec		10/6/11	1
121142	2,4-Dinitrotoluene	101	%Rec		10/6/11	1
606202	2,6-Dinitrotoluene	115	%Rec		10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	101	%Rec		10/6/11	1
88722	2-Nitrotoluene	104	%Rec		10/6/11	1
99081	3-Nitrotoluene	104	%Rec		10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	85	%Rec		10/6/11	1
99990	4-Nitrotoluene	97	%Rec		10/6/11	1
2691410	HMX	106	%Rec		10/6/11	1
98953	Nitrobenzene	101	%Rec		10/6/11	1
121824	RDX	76	%Rec		10/6/11	1
479458	TETRYL	88	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	109	%Rec		10/6/11	1

Sample : 11344555 Matrix Spike

COC Description : FP16SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 17:02

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	102	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	102	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	103	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	102	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	107	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	101	%Rec		10/7/11	1
88722	2-Nitrotoluene	106	%Rec		10/7/11	1
99081	3-Nitrotoluene	103	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	%Rec		10/7/11	1
99990	4-Nitrotoluene	97	%Rec		10/7/11	1
618871	BENZENAMINE, 3,5-DINITRO-	21	%Rec		10/7/11	1
2691410	HMX	130	%Rec		10/7/11	1
98953	Nitrobenzene	102	%Rec		10/7/11	1
121824	RDX	90	%Rec		10/7/11	1
479458	TETRYL	96	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	107	%Rec		10/7/11	1

Sample : 11344566 Matrix Spike

COC Description : CT11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 15:13

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	104	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	97	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	102	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	98	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	102	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	87	%Rec		10/7/11	1
88722	2-Nitrotoluene	105	%Rec		10/7/11	1
99081	3-Nitrotoluene	146	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	59	%Rec		10/7/11	1
99990	4-Nitrotoluene	92	%Rec		10/7/11	1
618871	BENZENAMINE, 3,5-DINITRO-	26	%Rec		10/7/11	1
2691410	HMX	97	%Rec		10/7/11	1
98953	Nitrobenzene	99	%Rec		10/7/11	1
121824	RDX	113	%Rec		10/7/11	1
479458	TETRYL	97	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	108	%Rec		10/7/11	1

Sample : 11344605 Matrix Spike

COC Description : LC11SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/25/11 14:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	98	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	100	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	99	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	100	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	116	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	105	%Rec		10/7/11	1
88722	2-Nitrotoluene	103	%Rec		10/7/11	1
99081	3-Nitrotoluene	102	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	105	%Rec		10/7/11	1
99990	4-Nitrotoluene	106	%Rec		10/7/11	1
2691410	HMX	96	%Rec		10/7/11	1
98953	Nitrobenzene	100	%Rec		10/7/11	1
121824	RDX	100	%Rec		10/7/11	1
479458	TETRYL	81	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/7/11	1

Sample : 11344608 Matrix Spike

COC Description : LC13SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 15:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	95	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	100	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	99	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	101	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	96	%Rec		10/7/11	1
88722	2-Nitrotoluene	100	%Rec		10/7/11	1
99081	3-Nitrotoluene	99	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	90	%Rec		10/7/11	1
99990	4-Nitrotoluene	96	%Rec		10/7/11	1
2691410	HMX	91	%Rec		10/7/11	1
98953	Nitrobenzene	99	%Rec		10/7/11	1
121824	RDX	83	%Rec		10/7/11	1
479458	TETRYL	89	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/7/11	1

Sample : 11344619 Matrix Spike

COC Description : DC03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:27

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	98	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	104	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	104	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	105	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	105	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	100	%Rec		10/7/11	1
88722	2-Nitrotoluene	106	%Rec		10/7/11	1
99081	3-Nitrotoluene	101	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	98	%Rec		10/7/11	1
99990	4-Nitrotoluene	105	%Rec		10/7/11	1
2691410	HMX	88	%Rec		10/7/11	1
98953	Nitrobenzene	103	%Rec		10/7/11	1
121824	RDX	71	%Rec		10/7/11	1
479458	TETRYL	93	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		10/7/11	1

Sample : 11344644 Matrix Spike

COC Description : NF09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 15:31

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	98	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	100	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	100	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	100	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	102	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	94	%Rec		10/7/11	1
88722	2-Nitrotoluene	101	%Rec		10/7/11	1
99081	3-Nitrotoluene	99	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	81	%Rec		10/7/11	1
99990	4-Nitrotoluene	95	%Rec		10/7/11	1
2691410	HMX	110	%Rec		10/7/11	1
98953	Nitrobenzene	100	%Rec		10/7/11	1
121824	RDX	71	%Rec		10/7/11	1
479458	TETRYL	92	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		10/7/11	1

Sample : 11344520 Matrix Spike#2

COC Description : FR03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	100	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	102	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	100	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	101	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	115	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	104	%Rec		10/7/11	1
88722	2-Nitrotoluene	107	%Rec		10/7/11	1
99081	3-Nitrotoluene	106	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	91	%Rec		10/7/11	1
99990	4-Nitrotoluene	99	%Rec		10/7/11	1
2691410	HMX	85	%Rec		10/7/11	1
98953	Nitrobenzene	101	%Rec		10/7/11	1
121824	RDX	75	%Rec		10/7/11	1
479458	TETRYL	90	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	110	%Rec		10/7/11	1

Sample : 11344555 Matrix Spike#2

COC Description : FP16SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 17:02

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	108	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	102	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	102	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	101	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	108	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	101	%Rec		10/7/11	1
88722	2-Nitrotoluene	106	%Rec		10/7/11	1
99081	3-Nitrotoluene	104	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	83	%Rec		10/7/11	1
99990	4-Nitrotoluene	96	%Rec		10/7/11	1
618871	BENZENAMINE, 3,5-DINITRO-	18	%Rec		10/7/11	1
2691410	HMX	128	%Rec		10/7/11	1
98953	Nitrobenzene	101	%Rec		10/7/11	1
121824	RDX	91	%Rec		10/7/11	1
479458	TETRYL	94	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	107	%Rec		10/7/11	1

Sample : 11344566 Matrix Spike#2

COC Description : CT11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 15:13

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	102	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	96	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	99	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	102	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	87	%Rec		10/7/11	1
88722	2-Nitrotoluene	101	%Rec		10/7/11	1
99081	3-Nitrotoluene	148	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	61	%Rec		10/7/11	1
99990	4-Nitrotoluene	90	%Rec		10/7/11	1
2691410	HMX	95	%Rec		10/7/11	1
98953	Nitrobenzene	99	%Rec		10/7/11	1
121824	RDX	107	%Rec		10/7/11	1
479458	TETRYL	97	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		10/7/11	1

Sample : 11344605 Matrix Spike#2

COC Description : LC11SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/25/11 14:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	95	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	99	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	96	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	99	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	115	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	103	%Rec		10/7/11	1
88722	2-Nitrotoluene	101	%Rec		10/7/11	1
99081	3-Nitrotoluene	101	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	103	%Rec		10/7/11	1
99990	4-Nitrotoluene	104	%Rec		10/7/11	1
2691410	HMX	94	%Rec		10/7/11	1
98953	Nitrobenzene	98	%Rec		10/7/11	1
121824	RDX	98	%Rec		10/7/11	1
479458	TETRYL	76	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		10/7/11	1

Sample : 11344608 Matrix Spike#2

COC Description : LC13SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 15:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	100	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	100	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	102	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	100	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	100	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	97	%Rec		10/7/11	1
88722	2-Nitrotoluene	102	%Rec		10/7/11	1
99081	3-Nitrotoluene	100	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	88	%Rec		10/7/11	1
99990	4-Nitrotoluene	96	%Rec		10/7/11	1
2691410	HMX	120	%Rec		10/7/11	1
98953	Nitrobenzene	99	%Rec		10/7/11	1
121824	RDX	84	%Rec		10/7/11	1
479458	TETRYL	93	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/7/11	1

Sample : 11344619 Matrix Spike#2

COC Description : DC03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:27

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	97	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	102	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	102	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	103	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	100	%Rec		10/7/11	1
88722	2-Nitrotoluene	103	%Rec		10/7/11	1
99081	3-Nitrotoluene	100	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	95	%Rec		10/7/11	1
99990	4-Nitrotoluene	102	%Rec		10/7/11	1
2691410	HMX	87	%Rec		10/7/11	1
98953	Nitrobenzene	102	%Rec		10/7/11	1
121824	RDX	67	%Rec		10/7/11	1
479458	TETRYL	93	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/7/11	1

Sample : 11344644 Matrix Spike#2

COC Description : NF09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 15:31

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	97	%Rec		10/7/11	1
99650	1,3-Dinitrobenzene	99	%Rec		10/7/11	1
118967	2,4,6-Trinitrotoluene	100	%Rec		10/7/11	1
121142	2,4-Dinitrotoluene	100	%Rec		10/7/11	1
606202	2,6-Dinitrotoluene	100	%Rec		10/7/11	1
35572782	2-amino, 4,6-Dinitrotoluene	94	%Rec		10/7/11	1
88722	2-Nitrotoluene	104	%Rec		10/7/11	1
99081	3-Nitrotoluene	99	%Rec		10/7/11	1
1946510	4-amino,2,6-Dinitrotoluene	81	%Rec		10/7/11	1
99990	4-Nitrotoluene	97	%Rec		10/7/11	1
2691410	HMX	103	%Rec		10/7/11	1
98953	Nitrobenzene	97	%Rec		10/7/11	1
121824	RDX	71	%Rec		10/7/11	1
479458	TETRYL	93	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/7/11	1

Sample : 11344520 Matrix Spike#3

COC Description : FR03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	90	%Rec		10/7/11	1
55630	Nitroglycerine	124	%Rec		10/7/11	1
78115	PETN	101	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	110	%Rec		10/7/11	1

Sample : 11344555 Matrix Spike#3

COC Description : FP16SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 17:02

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	83	%Rec		10/7/11	1
55630	Nitroglycerine	131	%Rec		10/7/11	1
78115	PETN	103	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/7/11	1

Sample : 11344566 Matrix Spike#3

COC Description : CT11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 15:13

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	60	%Rec		10/7/11	1
55630	Nitroglycerine	121	%Rec		10/7/11	1
78115	PETN	96	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	112	%Rec		10/7/11	1

Sample : 11344605 Matrix Spike#3

COC Description : LC11SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/25/11 14:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	97	%Rec		10/6/11	1
55630	Nitroglycerine	116	%Rec		10/6/11	1
78115	PETN	92	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		10/6/11	1

Sample : 11344608 Matrix Spike#3

COC Description : LC13SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 15:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	102	%Rec		10/6/11	1
55630	Nitroglycerine	105	%Rec		10/6/11	1
78115	PETN	93	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		10/6/11	1

Sample : 11344619 Matrix Spike#3

COC Description : DC03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:27

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	101	%Rec		10/6/11	1
55630	Nitroglycerine	100	%Rec		10/6/11	1
78115	PETN	86	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		10/6/11	1

Sample : 11344644 Matrix Spike#3

COC Description : NF09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 15:31

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	91	%Rec		10/6/11	1
55630	Nitroglycerine	113	%Rec		10/6/11	1
78115	PETN	87	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	95	%Rec		10/6/11	1

Sample : 11344520 Matrix Spike#4

COC Description : FR03SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 9:22

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	92	%Rec		10/7/11	1
55630	Nitroglycerine	135	%Rec		10/7/11	1
78115	PETN	101	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	110	%Rec		10/7/11	1

Sample : 11344555 Matrix Spike#4

COC Description : FP16SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/23/11 17:02

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	79	%Rec		10/7/11	1
55630	Nitroglycerine	111	%Rec		10/7/11	1
78115	PETN	102	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		10/7/11	1

Sample : 11344566 Matrix Spike#4

COC Description : CT11SS

Matrix : Soil **Weight Basis :** Dry

Collected : 8/24/11 15:13

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	63	%Rec		10/7/11	1
55630	Nitroglycerine	122	%Rec		10/7/11	1
78115	PETN	85	%Rec		10/7/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	110	%Rec		10/7/11	1

Sample : 11344605 Matrix Spike#4

COC Description : LC11SW

Matrix : Water **Weight Basis :** N/A

Collected : 8/25/11 14:55

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	98	%Rec		10/6/11	1
55630	Nitroglycerine	105	%Rec		10/6/11	1
78115	PETN	94	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		10/6/11	1

Sample : 11344608 Matrix Spike#4

COC Description : LC13SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 15:30

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	101	%Rec		10/6/11	1
55630	Nitroglycerine	104	%Rec		10/6/11	1
78115	PETN	106	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		10/6/11	1

Sample : 11344619 Matrix Spike#4

COC Description : DC03SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/25/11 17:27

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	99	%Rec		10/6/11	1
55630	Nitroglycerine	106	%Rec		10/6/11	1
78115	PETN	89	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		10/6/11	1

Sample : 11344644 Matrix Spike#4

COC Description : NF09SD

Matrix : Soil **Weight Basis :** Dry

Collected : 8/26/11 15:31

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	92	%Rec		10/6/11	1
55630	Nitroglycerine	109	%Rec		10/6/11	1
78115	PETN	91	%Rec		10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		10/6/11	1

Sample : OBS1245A Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/26/11	1

Sample : OBS1245B Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/26/11	1

Sample : OBS1245C Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/26/11	1

Sample : OBS1245D Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/26/11	1

Sample : OBS1245E Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/26/11	1

Sample : OBS1245F Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/26/11	1

Sample : OBS1245G Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/26/11	1

Sample : OBS1245H Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	107	%Rec		9/26/11	1

Sample : OBS1250A Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/26/11	1

Sample : OBS1250B Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/26/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/26/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/26/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/26/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/26/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/26/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/26/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/26/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/26/11	1
2691410	HMX	80	ug/kg	U	9/26/11	1
98953	Nitrobenzene	80	ug/kg	U	9/26/11	1
55630	Nitroglycerine	80	ug/kg	U	9/26/11	1
78115	PETN	80	ug/kg	U	9/26/11	1
121824	RDX	80	ug/kg	U	9/26/11	1
479458	TETRYL	1000	ug/kg	UJ	9/26/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		9/26/11	1

Sample : OBS1250C Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/27/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/27/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/27/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/27/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/27/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/27/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/27/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/27/11	1
2691410	HMX	80	ug/kg	U	9/27/11	1
98953	Nitrobenzene	80	ug/kg	U	9/27/11	1
55630	Nitroglycerine	80	ug/kg	U	9/27/11	1
78115	PETN	80	ug/kg	U	9/27/11	1
121824	RDX	80	ug/kg	U	9/27/11	1
479458	TETRYL	1000	ug/kg	UJ	9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/27/11	1

Sample : OBS1250D Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/27/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/27/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/27/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/27/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/27/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/27/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/27/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/27/11	1
2691410	HMX	80	ug/kg	U	9/27/11	1
98953	Nitrobenzene	80	ug/kg	U	9/27/11	1
55630	Nitroglycerine	80	ug/kg	U	9/27/11	1
78115	PETN	80	ug/kg	U	9/27/11	1
121824	RDX	80	ug/kg	U	9/27/11	1
479458	TETRYL	1000	ug/kg	UJ	9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/27/11	1

Sample : OBS1250E Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/27/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/27/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/27/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/27/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/27/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/27/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/27/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/27/11	1
2691410	HMX	80	ug/kg	U	9/27/11	1
98953	Nitrobenzene	80	ug/kg	U	9/27/11	1
55630	Nitroglycerine	80	ug/kg	U	9/27/11	1
78115	PETN	80	ug/kg	U	9/27/11	1
121824	RDX	80	ug/kg	U	9/27/11	1
479458	TETRYL	1000	ug/kg	UJ	9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/27/11	1

Sample : OBS1250F Blank

COC Description : Blank

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	160	ug/kg	U	9/27/11	1
99650	1,3-Dinitrobenzene	80	ug/kg	U	9/27/11	1
118967	2,4,6-Trinitrotoluene	80	ug/kg	U	9/27/11	1
121142	2,4-Dinitrotoluene	80	ug/kg	U	9/27/11	1
606202	2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
35572782	2-amino, 4,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
88722	2-Nitrotoluene	80	ug/kg	U	9/27/11	1
99081	3-Nitrotoluene	80	ug/kg	U	9/27/11	1
1946510	4-amino,2,6-Dinitrotoluene	80	ug/kg	U	9/27/11	1
99990	4-Nitrotoluene	80	ug/kg	U	9/27/11	1
618871	BENZENAMINE, 3,5-DINITRO-	80	ug/kg	U	9/27/11	1
2691410	HMX	80	ug/kg	U	9/27/11	1
98953	Nitrobenzene	80	ug/kg	U	9/27/11	1
55630	Nitroglycerine	80	ug/kg	U	9/27/11	1
78115	PETN	80	ug/kg	U	9/27/11	1
121824	RDX	80	ug/kg	U	9/27/11	1
479458	TETRYL	1000	ug/kg	UJ	9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		9/27/11	1

Sample : OBW1243A Blank

COC Description : Blank

Matrix : Liquid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/5/11	1
99650	1,3-Dinitrobenzene	0.80	ug/L	U	10/5/11	1
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U	10/5/11	1
121142	2,4-Dinitrotoluene	0.80	ug/L	U	10/5/11	1
606202	2,6-Dinitrotoluene	0.80	ug/L	U	10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U	10/5/11	1
88722	2-Nitrotoluene	0.80	ug/L	U	10/5/11	1
99081	3-Nitrotoluene	0.80	ug/L	U	10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U	10/5/11	1
99990	4-Nitrotoluene	0.80	ug/L	U	10/5/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U	10/5/11	1
2691410	HMX	0.80	ug/L	U	10/5/11	1
98953	Nitrobenzene	0.80	ug/L	U	10/5/11	1
55630	Nitroglycerine	0.80	ug/L	U	10/5/11	1
78115	PETN	0.80	ug/L	U	10/5/11	1
121824	RDX	0.80	ug/L	U	10/5/11	1
479458	TETRYL	10.0	ug/L	UJ	10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/5/11	1

Sample : OBW1243B Blank

COC Description : Blank

Matrix : Liquid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Target Analyte Results:						
99354	1,3,5-Trinitrobenzene	1.6	ug/L	U	10/6/11	1
99650	1,3-Dinitrobenzene	0.80	ug/L	U	10/6/11	1
118967	2,4,6-Trinitrotoluene	0.80	ug/L	U	10/6/11	1
121142	2,4-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
606202	2,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
35572782	2-amino, 4,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
88722	2-Nitrotoluene	0.80	ug/L	U	10/6/11	1
99081	3-Nitrotoluene	0.80	ug/L	U	10/6/11	1
1946510	4-amino,2,6-Dinitrotoluene	0.80	ug/L	U	10/6/11	1
99990	4-Nitrotoluene	0.80	ug/L	U	10/6/11	1
618871	BENZENAMINE, 3,5-DINITRO-	0.80	ug/L	U	10/6/11	1
2691410	HMX	0.80	ug/L	U	10/6/11	1
98953	Nitrobenzene	0.80	ug/L	U	10/6/11	1
55630	Nitroglycerine	0.80	ug/L	U	10/6/11	1
78115	PETN	0.80	ug/L	U	10/6/11	1
121824	RDX	0.80	ug/L	U	10/6/11	1
479458	TETRYL	10.0	ug/L	UJ	10/6/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	91	%Rec		10/6/11	1

Sample : LCS1243A Lab Control Std

COC Description : Lab Control Standard

Matrix : Liquid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	89	%Rec		10/5/11	1
99650	1,3-Dinitrobenzene	91	%Rec		10/5/11	1
118967	2,4,6-Trinitrotoluene	92	%Rec		10/5/11	1
121142	2,4-Dinitrotoluene	91	%Rec		10/5/11	1
606202	2,6-Dinitrotoluene	94	%Rec		10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	94	%Rec		10/5/11	1
88722	2-Nitrotoluene	93	%Rec		10/5/11	1
99081	3-Nitrotoluene	92	%Rec		10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	92	%Rec		10/5/11	1
99990	4-Nitrotoluene	93	%Rec		10/5/11	1
2691410	HMX	76	%Rec		10/5/11	1
98953	Nitrobenzene	90	%Rec		10/5/11	1
121824	RDX	82	%Rec		10/5/11	1
479458	TETRYL	89	%Rec		10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	94	%Rec		10/5/11	1

Sample : LCS1243C Lab Control Std

COC Description : Lab Control Standard

Matrix : Liquid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	93	%Rec		10/5/11	1
55630	Nitroglycerine	100	%Rec		10/5/11	1
78115	PETN	94	%Rec		10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		10/5/11	1

Sample : LCS1245A Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	104	%Rec		9/29/11	1
99650	1,3-Dinitrobenzene	103	%Rec		9/29/11	1
118967	2,4,6-Trinitrotoluene	106	%Rec		9/29/11	1
121142	2,4-Dinitrotoluene	104	%Rec		9/29/11	1
606202	2,6-Dinitrotoluene	105	%Rec		9/29/11	1
35572782	2-amino, 4,6-Dinitrotoluene	109	%Rec		9/29/11	1
88722	2-Nitrotoluene	106	%Rec		9/29/11	1
99081	3-Nitrotoluene	104	%Rec		9/29/11	1
1946510	4-amino,2,6-Dinitrotoluene	112	%Rec		9/29/11	1
99990	4-Nitrotoluene	103	%Rec		9/29/11	1
2691410	HMX	101	%Rec		9/29/11	1
98953	Nitrobenzene	102	%Rec		9/29/11	1
121824	RDX	106	%Rec		9/29/11	1
479458	TETRYL	106	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/29/11	1

Sample : LCS1245C Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	103	%Rec		9/27/11	1
55630	Nitroglycerine	108	%Rec		9/27/11	1
78115	PETN	90	%Rec		9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		9/27/11	1

Sample : LCS1245E Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	101	%Rec		9/29/11	1
99650	1,3-Dinitrobenzene	100	%Rec		9/29/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		9/29/11	1
121142	2,4-Dinitrotoluene	100	%Rec		9/29/11	1
606202	2,6-Dinitrotoluene	102	%Rec		9/29/11	1
35572782	2-amino, 4,6-Dinitrotoluene	102	%Rec		9/29/11	1
88722	2-Nitrotoluene	102	%Rec		9/29/11	1
99081	3-Nitrotoluene	101	%Rec		9/29/11	1
1946510	4-amino,2,6-Dinitrotoluene	103	%Rec		9/29/11	1
99990	4-Nitrotoluene	102	%Rec		9/29/11	1
2691410	HMX	99	%Rec		9/29/11	1
98953	Nitrobenzene	98	%Rec		9/29/11	1
121824	RDX	100	%Rec		9/29/11	1
479458	TETRYL	102	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/29/11	1

Sample : LCS1245G Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	100	%Rec		9/27/11	1
55630	Nitroglycerine	98	%Rec		9/27/11	1
78115	PETN	85	%Rec		9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/27/11	1

Sample : LCS1245I Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	101	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	101	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	100	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	104	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	102	%Rec		9/30/11	1
88722	2-Nitrotoluene	104	%Rec		9/30/11	1
99081	3-Nitrotoluene	103	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	102	%Rec		9/30/11	1
99990	4-Nitrotoluene	101	%Rec		9/30/11	1
2691410	HMX	99	%Rec		9/30/11	1
98953	Nitrobenzene	100	%Rec		9/30/11	1
121824	RDX	101	%Rec		9/30/11	1
479458	TETRYL	102	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/30/11	1

Sample : LCS1245K Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	108	%Rec		9/28/11	1
55630	Nitroglycerine	111	%Rec		9/28/11	1
78115	PETN	114	%Rec		9/28/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/28/11	1

Sample : LCS1245M Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	100	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	100	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	102	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	100	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	99	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	101	%Rec		9/30/11	1
88722	2-Nitrotoluene	101	%Rec		9/30/11	1
99081	3-Nitrotoluene	99	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	101	%Rec		9/30/11	1
99990	4-Nitrotoluene	101	%Rec		9/30/11	1
2691410	HMX	98	%Rec		9/30/11	1
98953	Nitrobenzene	98	%Rec		9/30/11	1
121824	RDX	99	%Rec		9/30/11	1
479458	TETRYL	103	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	100	%Rec		9/30/11	1

Sample : LCS1245O Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	99	%Rec		9/29/11	1
55630	Nitroglycerine	99	%Rec		9/29/11	1
78115	PETN	102	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	97	%Rec		9/29/11	1

Sample : LCS1250A Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	103	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	102	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	104	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	106	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	107	%Rec		9/30/11	1
88722	2-Nitrotoluene	106	%Rec		9/30/11	1
99081	3-Nitrotoluene	104	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	106	%Rec		9/30/11	1
99990	4-Nitrotoluene	106	%Rec		9/30/11	1
2691410	HMX	100	%Rec		9/30/11	1
98953	Nitrobenzene	100	%Rec		9/30/11	1
121824	RDX	102	%Rec		9/30/11	1
479458	TETRYL	104	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/30/11	1

Sample : LCS1250C Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	99	%Rec		9/29/11	1
55630	Nitroglycerine	101	%Rec		9/29/11	1
78115	PETN	104	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/29/11	1

Sample : LCS1250E Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	102	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	102	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	103	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	106	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	105	%Rec		9/30/11	1
88722	2-Nitrotoluene	106	%Rec		9/30/11	1
99081	3-Nitrotoluene	106	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	105	%Rec		9/30/11	1
99990	4-Nitrotoluene	106	%Rec		9/30/11	1
2691410	HMX	99	%Rec		9/30/11	1
98953	Nitrobenzene	99	%Rec		9/30/11	1
121824	RDX	101	%Rec		9/30/11	1
479458	TETRYL	105	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/30/11	1

Sample : LCS1250G Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	102	%Rec		9/30/11	1
55630	Nitroglycerine	100	%Rec		9/30/11	1
78115	PETN	100	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/30/11	1

Sample : LCS1250I Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	100	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	101	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	101	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	106	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	101	%Rec		9/30/11	1
88722	2-Nitrotoluene	101	%Rec		9/30/11	1
99081	3-Nitrotoluene	99	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	98	%Rec		9/30/11	1
99990	4-Nitrotoluene	102	%Rec		9/30/11	1
2691410	HMX	98	%Rec		9/30/11	1
98953	Nitrobenzene	94	%Rec		9/30/11	1
121824	RDX	100	%Rec		9/30/11	1
479458	TETRYL	90	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/30/11	1

Sample : LCS1250K Lab Control Std

COC Description : Lab Control Standard

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	99	%Rec		9/30/11	1
55630	Nitroglycerine	102	%Rec		9/30/11	1
78115	PETN	95	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	95	%Rec		9/30/11	1

Sample : LCS1243B Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Liquid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	90	%Rec		10/5/11	1
99650	1,3-Dinitrobenzene	92	%Rec		10/5/11	1
118967	2,4,6-Trinitrotoluene	93	%Rec		10/5/11	1
121142	2,4-Dinitrotoluene	92	%Rec		10/5/11	1
606202	2,6-Dinitrotoluene	97	%Rec		10/5/11	1
35572782	2-amino, 4,6-Dinitrotoluene	95	%Rec		10/5/11	1
88722	2-Nitrotoluene	96	%Rec		10/5/11	1
99081	3-Nitrotoluene	95	%Rec		10/5/11	1
1946510	4-amino,2,6-Dinitrotoluene	93	%Rec		10/5/11	1
99990	4-Nitrotoluene	95	%Rec		10/5/11	1
2691410	HMX	75	%Rec		10/5/11	1
98953	Nitrobenzene	91	%Rec		10/5/11	1
121824	RDX	84	%Rec		10/5/11	1
479458	TETRYL	91	%Rec		10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	94	%Rec		10/5/11	1

Sample : LCS1243D Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Liquid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	103	%Rec		10/5/11	1
55630	Nitroglycerine	96	%Rec		10/5/11	1
78115	PETN	90	%Rec		10/5/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		10/5/11	1

Sample : LCS1245B Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	101	%Rec		9/29/11	1
99650	1,3-Dinitrobenzene	100	%Rec		9/29/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		9/29/11	1
121142	2,4-Dinitrotoluene	101	%Rec		9/29/11	1
606202	2,6-Dinitrotoluene	105	%Rec		9/29/11	1
35572782	2-amino, 4,6-Dinitrotoluene	104	%Rec		9/29/11	1
88722	2-Nitrotoluene	106	%Rec		9/29/11	1
99081	3-Nitrotoluene	104	%Rec		9/29/11	1
1946510	4-amino,2,6-Dinitrotoluene	104	%Rec		9/29/11	1
99990	4-Nitrotoluene	105	%Rec		9/29/11	1
2691410	HMX	99	%Rec		9/29/11	1
98953	Nitrobenzene	100	%Rec		9/29/11	1
121824	RDX	103	%Rec		9/29/11	1
479458	TETRYL	104	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/29/11	1

Sample : LCS1245D Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	105	%Rec		9/27/11	1
55630	Nitroglycerine	102	%Rec		9/27/11	1
78115	PETN	88	%Rec		9/27/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	106	%Rec		9/27/11	1

Sample : LCS1245F Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	103	%Rec		9/29/11	1
99650	1,3-Dinitrobenzene	102	%Rec		9/29/11	1
118967	2,4,6-Trinitrotoluene	104	%Rec		9/29/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/29/11	1
606202	2,6-Dinitrotoluene	106	%Rec		9/29/11	1
35572782	2-amino, 4,6-Dinitrotoluene	106	%Rec		9/29/11	1
88722	2-Nitrotoluene	106	%Rec		9/29/11	1
99081	3-Nitrotoluene	105	%Rec		9/29/11	1
1946510	4-amino,2,6-Dinitrotoluene	105	%Rec		9/29/11	1
99990	4-Nitrotoluene	106	%Rec		9/29/11	1
2691410	HMX	100	%Rec		9/29/11	1
98953	Nitrobenzene	103	%Rec		9/29/11	1
121824	RDX	102	%Rec		9/29/11	1
479458	TETRYL	104	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/29/11	1

Sample : LCS1245H Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	99	%Rec		9/28/11	1
55630	Nitroglycerine	105	%Rec		9/28/11	1
78115	PETN	105	%Rec		9/28/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/28/11	1

Sample : LCS1245J Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	100	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	100	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	101	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	100	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	103	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	105	%Rec		9/30/11	1
88722	2-Nitrotoluene	104	%Rec		9/30/11	1
99081	3-Nitrotoluene	104	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	105	%Rec		9/30/11	1
99990	4-Nitrotoluene	106	%Rec		9/30/11	1
2691410	HMX	99	%Rec		9/30/11	1
98953	Nitrobenzene	99	%Rec		9/30/11	1
121824	RDX	100	%Rec		9/30/11	1
479458	TETRYL	101	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/30/11	1

Sample : LCS1245L Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	98	%Rec		9/28/11	1
55630	Nitroglycerine	112	%Rec		9/28/11	1
78115	PETN	90	%Rec		9/28/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/28/11	1

Sample : LCS1245N Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	102	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	102	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	104	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	102	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	100	%Rec		9/30/11	1
88722	2-Nitrotoluene	103	%Rec		9/30/11	1
99081	3-Nitrotoluene	100	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	99	%Rec		9/30/11	1
99990	4-Nitrotoluene	100	%Rec		9/30/11	1
2691410	HMX	100	%Rec		9/30/11	1
98953	Nitrobenzene	102	%Rec		9/30/11	1
121824	RDX	101	%Rec		9/30/11	1
479458	TETRYL	104	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	102	%Rec		9/30/11	1

Sample : LCS1245P Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	102	%Rec		9/29/11	1
55630	Nitroglycerine	98	%Rec		9/29/11	1
78115	PETN	98	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	99	%Rec		9/29/11	1

Sample : LCS1250B Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	101	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	101	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	102	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	105	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	106	%Rec		9/30/11	1
88722	2-Nitrotoluene	105	%Rec		9/30/11	1
99081	3-Nitrotoluene	105	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	108	%Rec		9/30/11	1
99990	4-Nitrotoluene	104	%Rec		9/30/11	1
2691410	HMX	99	%Rec		9/30/11	1
98953	Nitrobenzene	97	%Rec		9/30/11	1
121824	RDX	100	%Rec		9/30/11	1
479458	TETRYL	102	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	103	%Rec		9/30/11	1

Sample : LCS1250D Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	103	%Rec		9/29/11	1
55630	Nitroglycerine	109	%Rec		9/29/11	1
78115	PETN	88	%Rec		9/29/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	98	%Rec		9/29/11	1

Sample : LCS1250F Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	102	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	103	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	104	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	106	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	107	%Rec		9/30/11	1
88722	2-Nitrotoluene	107	%Rec		9/30/11	1
99081	3-Nitrotoluene	106	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	106	%Rec		9/30/11	1
99990	4-Nitrotoluene	104	%Rec		9/30/11	1
2691410	HMX	99	%Rec		9/30/11	1
98953	Nitrobenzene	102	%Rec		9/30/11	1
121824	RDX	103	%Rec		9/30/11	1
479458	TETRYL	105	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/30/11	1

Sample : LCS1250H Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	100	%Rec		9/30/11	1
55630	Nitroglycerine	105	%Rec		9/30/11	1
78115	PETN	101	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	104	%Rec		9/30/11	1

Sample : LCS1250J Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
99354	1,3,5-Trinitrobenzene	101	%Rec		9/30/11	1
99650	1,3-Dinitrobenzene	101	%Rec		9/30/11	1
118967	2,4,6-Trinitrotoluene	103	%Rec		9/30/11	1
121142	2,4-Dinitrotoluene	102	%Rec		9/30/11	1
606202	2,6-Dinitrotoluene	101	%Rec		9/30/11	1
35572782	2-amino, 4,6-Dinitrotoluene	100	%Rec		9/30/11	1
88722	2-Nitrotoluene	101	%Rec		9/30/11	1
99081	3-Nitrotoluene	100	%Rec		9/30/11	1
1946510	4-amino,2,6-Dinitrotoluene	98	%Rec		9/30/11	1
99990	4-Nitrotoluene	99	%Rec		9/30/11	1
2691410	HMX	98	%Rec		9/30/11	1
98953	Nitrobenzene	97	%Rec		9/30/11	1
121824	RDX	100	%Rec		9/30/11	1
479458	TETRYL	103	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	101	%Rec		9/30/11	1

Sample : LCS1250L Lab Control Std#2

COC Description : Lab Control Standard Dup.

Matrix : Solid

Parameter : Explosives

Fraction : N/A

Prep Method: 8330B - Explosives by HPLC

Analysis Method: 8330B - Explosives by HPLC

Analyte Code	Analyte Name	Result	Unit	Qual.	Analysis Date	Dilution
Spiked Compounds:						
618871	BENZENAMINE, 3,5-DINITRO-	102	%Rec		9/30/11	1
55630	Nitroglycerine	107	%Rec		9/30/11	1
78115	PETN	103	%Rec		9/30/11	1
Surrogate Compounds:						
528290	1,2-Dinitrobenzene	105	%Rec		9/30/11	1

Camp Bonneville Perchlorate Extraction Log

Lab ID	Field ID	Time Sampled	Date Sampled	Weight Ext.	Vol DIW Added	Ext mLs	DF	Time Extracted	Date Extracted
FLS01	LF01SB	11:40	5/16/2011	50	50	35	1.429	14:15	5/16/2011
FLS02	LF02SB	12:35	5/16/2011	50	50	35	1.429	14:18	5/16/2011
FLS03	LF03SB	14:03	5/16/2011	50	50	43	1.163	8:55	5/17/2011
FLS04	LF04SB	14:32	5/16/2011	50	50	39	1.282	8:59	5/17/2011
FLS05	LF05SB	15:05	5/16/2011	50	50	44	1.136	9:03	5/17/2011
FLS06	LF06SB	15:34	5/16/2011	50	50	43	1.163	9:10	5/17/2011
FLS07	BG01SB	9:33	5/17/2011	50	50	42	1.190	12:10	5/17/2011
FLS07MS	BG01SB	9:33	5/17/2011	50	50	41	1.220	12:10	5/17/2011
FLS07MSD	BG01SB	9:33	5/17/2011	50	50	44	1.136	12:10	5/17/2011
FLS08	LF07SB	10:52	5/17/2011	50	50	41	1.220	13:20	5/17/2011
FLS09	LF08SB		5/17/2011	50	50	39	1.282	13:24	5/17/2011
FLS10	SEEP	12:21	5/17/2011	50	50	38	1.316	13:30	5/17/2011
FLS11	LF09SB	13:43	5/17/2011	50	50	42	1.190	9:30	5/18/2011
FLS12	LF12SB	15:11	5/17/2011	50	50	39	1.282	9:30	5/18/2011
FLS13	LF13SB		5/17/2011	50	50	34	1.471	9:30	5/18/2011
FLS14	LF14SB	15:58	5/17/2011	50	50	38	1.316	9:30	5/18/2011
FLS15	PPOISD	9:11	5/18/2011	50	50	38	1.316	10:04	5/18/2011
FLS16	Background Sediment	10:42	5/18/2011	50	50	39	1.282	11:50	5/18/2011

6/6/11 JK

Perchlorate by Spec.

6/6/11 db

Analysis Date: 5/16/2011 Ana. Batch: 051611PCL Method: FAL001
Analyst: db ICal ID: 051611cal
Units: mg/kg

Field ID	Lab ID	Analysis Time	abs/cm	Raw mg/kg	DF	Result mg/kg	Qual	TV/ %RPD	%Rec
QC	LEVEL 1	13:53	0.041	-0.07	1	1.00	U		
QC	LEVEL 2	13:53	0.047	0.87	1	1.00	U		
QC	LEVEL 3	13:54	0.076	5.41	1	5.41	=		
QC	LEVEL 4	13:54	0.104	9.79	1	9.79	=		
QC	ICV-0516	13:55	0.075	5.25	1	5.25	=	5.0	105.0
QC	SB1-0516	15:49	-0.023	-10.07	1	1.00	U		
LF01SB	FLS01	16:02	-0.021	-9.76	1.423	1.42	U		
LF02SB	FLS02	16:02	-0.014	-8.67	1.423	1.42	U		

Comments

Reagent **Lot # / Expiration**

Perchlorate
Calibration Data

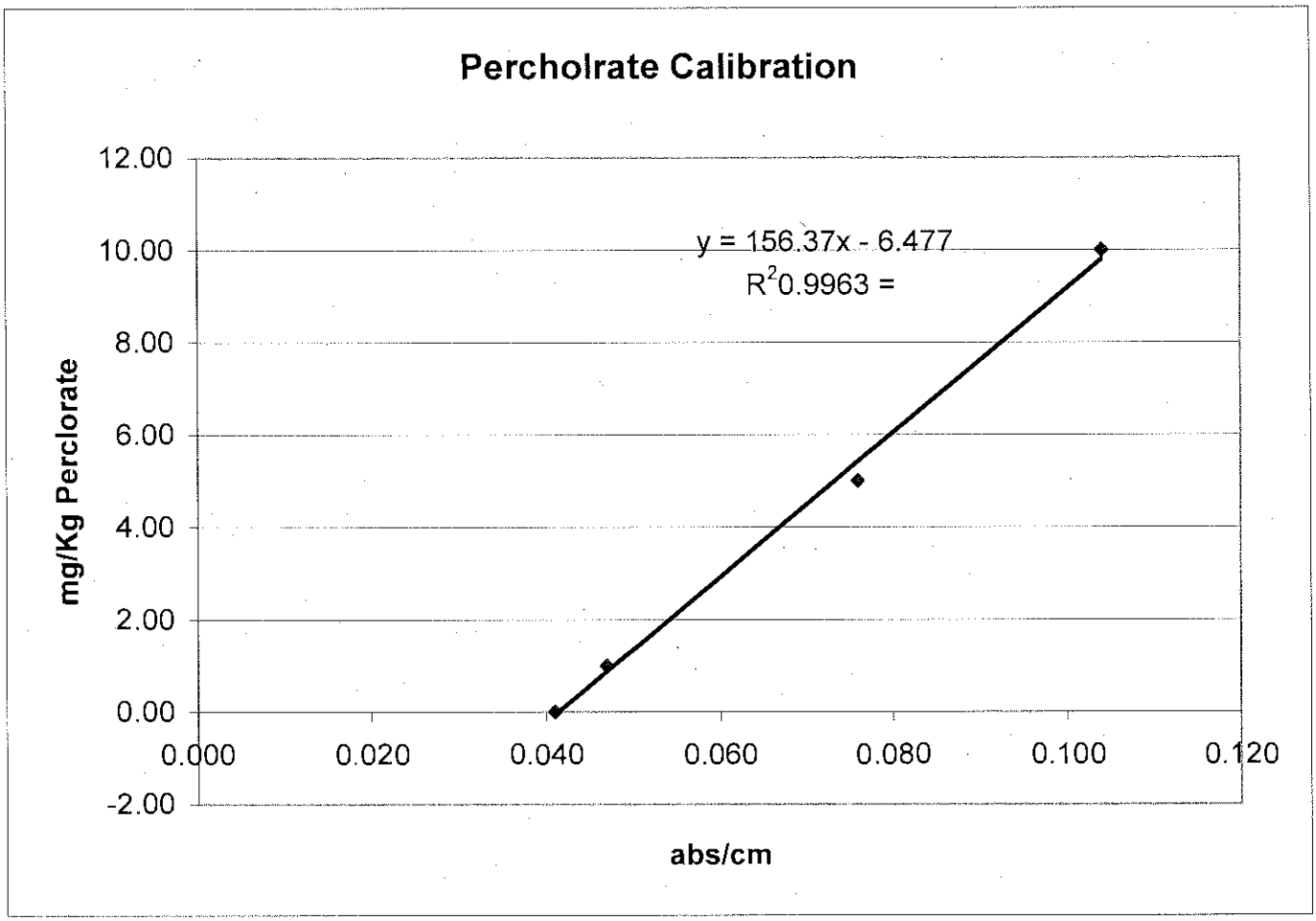
Standard mg/kg	Response abs/cm
10.00	0.104
5.00	0.076
1.00	0.047
0.00	0.041

Cal. Date	Time	Rep. Limit mg/Kg
5/16/2011	13:53	1

Cal ID:	051611cal	
Analyst:	db	
CalSource:	FAL-3-1	
Second Source/ICV ID:	FAL-3-1	
ICV Expected:	5.00	mg/kg
ICV Found:	5.25	mg/kg
Recovery:	105.0%	%

Slope	Intercept
156.4	-6.5

Linearity (r^2)
0.996252



Perchlorate by Spec.

6/6/11 JG

Analysis Date: 5/17/2011 Ana. Batch: 051711PCL Method: FAL001
Analyst: db ICal ID: 051711cal
Units: mg/kg

Field ID	Lab ID	Analysis Time	abs/cm	Raw mg/kg	DF	Result mg/kg	Qual	TV/ %RPD	%Rec
QC	LEVEL 1	11:40	0.002	-0.35	1	1.00	U		
QC	LEVEL 2	11:40	0.054	1.32	1	1.32	=		
QC	LEVEL 3	11:40	0.175	5.19	1	5.19	=		
QC	LEVEL 4	11:40	0.320	9.84	1	9.84	=		
QC	ICV-0517	11:51	0.187	5.58	1	5.58	=	5.0	111.6
QC	SB1-0517	11:52	0.006	-0.22	1	1.00	U		
LF03SB	FLS03	12:02	0.002	-0.35	1.163	1.16	U		
LF04SB	FLS04	12:02	0.010	-0.10	1.282	1.28	U		
LF05SB	FLS05	12:03	0.010	-0.10	1.136	1.14	U		
LF06SB	FLS06	12:03	0.011	-0.06	1.163	1.16	U		
BG01SB	FLS07	14:47	0.024	0.35	1.19	1.19	U		
BG01SB	FLS07MS	14:47	0.048	1.12	1.22	1.37	=	4.1	28.1
BG01SB	FLS07MSD	14:47	0.058	1.44	1.136	1.64	=	18.0	27.7
LF07SB	FLS08	14:52	0.029	0.51	1.22	1.22	U		
LF08SB	FLS09	14:52	0.019	0.19	1.282	1.28	U		
SEEP	FLS10	14:52	0.105	2.95	1.316	3.88	=		

Comments

Reagent **Lot # / Expiration**

Perchlorate
Calibration Data

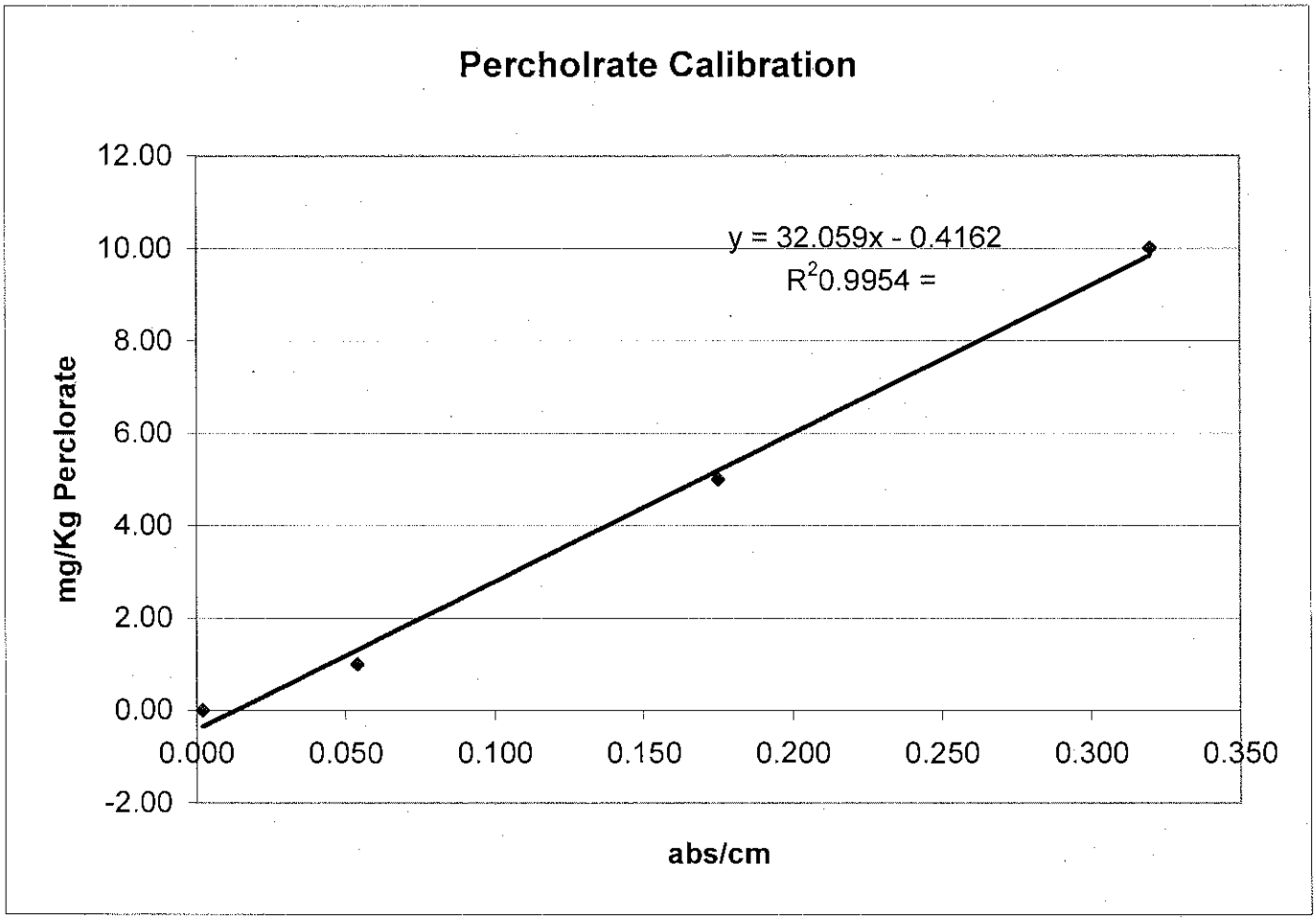
Standard mg/kg	Response abs/cm
10.00	0.320
5.00	0.175
1.00	0.054
0.00	0.002

Cal. Date	Time	Rep. Limit mg/kg
5/17/2011	**11:40**	**1**

Cal ID:	051711cal	
Analyst:	db	
CalSource:	FAL-3-1	
Second Source/ICV ID:	FAL-3-1	
ICV Expected:	5.00	mg/kg
ICV Found:	5.58	mg/kg
Recovery:	111.6%	%

Slope	Intercept
32.1	-0.4

Linearity (r^2)
0.995393



Perchlorate by Spec.

6/6/11 JG

Analysis Date: 5/18/2011 Ana. Batch: 051811PCL Method: FAL001
Analyst: db ICal ID: 051811cal
Units: mg/kg

Field ID	Lab ID	Analysis Time	abs/cm	Raw mg/kg	DF	Result mg/kg	Qual	TV/ %RPD	%Rec
QC	LEVEL 1	10:23	0.002	-0.16	1	1.00	U		
QC	LEVEL 2	10:23	0.039	1.30	1	1.30	=		
QC	LEVEL 3	10:23	0.128	4.82	1	4.82	=		
QC	LEVEL 4	10:23	0.260	10.04	1	10.04	=		
QC	ICV-0518	10:24	0.118	4.43	1	4.43	=	5.0	88.5
QC	SB1-0518	10:25	0.022	0.63	1	1.00	U		
FLS11	LF09SB	11:31	0.014	0.31	1.19	1.19	U		
FLS12	LF12SB	11:31	0.024	0.71	1.282	1.28	U		
FLS13	LF13SB	11:32	0.017	0.43	1.471	1.47	U		
FLS14	LF14SB	11:32	0.030	0.94	1.316	1.32	U		
FLS15	PPOISD	11:34	0.041	1.38	1.316	1.81	=		
FLS16	Background Sed	12:39	0.025	0.75	1.282	1.28	U		
QC	SB2-0518	12:34	0.018	0.47	1	1.00	U		

Comments

Reagent **Lot # / Expiration**

Perchlorate
Calibration Data

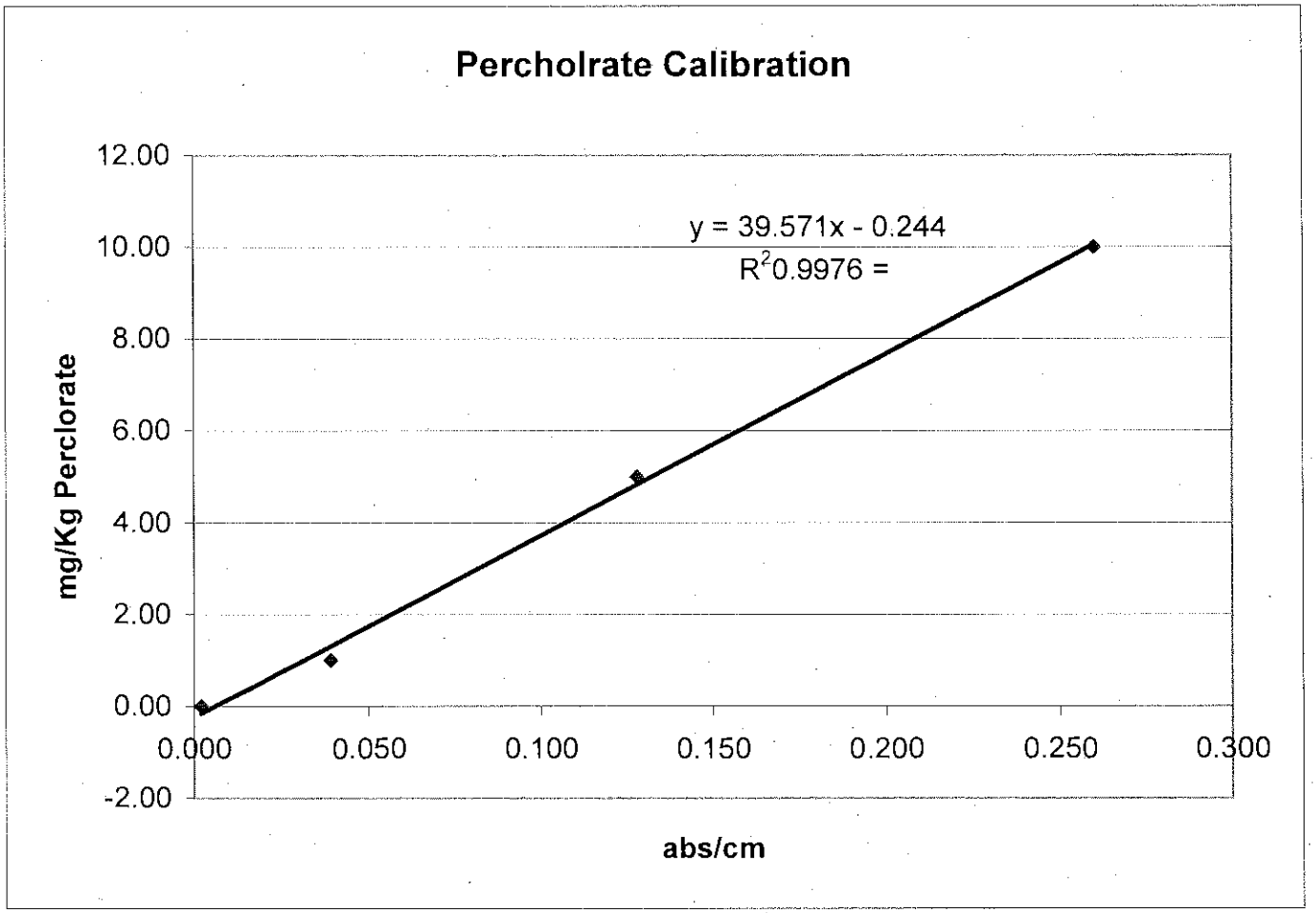
Standard mg/kg	Response abs/cm
10.00	0.260
5.00	0.128
1.00	0.039
0.00	0.002

Cal. Date	Time	Rep. Limit ug/Kg
5/18/2011	**10:25**	**1**

Cal ID:	051811cal	
Analyst:	db	
CalSource:	FAL-3-1	
Second Source/ICV ID:	FAL-3-1	
ICV Expected:	5.00	mg/kg
ICV Found:	4.43	mg/kg
Recovery:	88.6%	%

Slope	Intercept
39.6	-0.2

Linearity (r^2)
0.997569



ecology and environment, inc.
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MEMORANDUM

DATE: June 9, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Perchlorate Data Validation Memorandum, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 16 soil and 12 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for perchlorate (EPA Method 6860) was performed by Test America Denver, Arvada, Colorado.

The samples were numbered:

BG01GW	BG01SB	BG01SD	LF01GW	LF01SB	LF01SD
LF02GW	LF02SB	LF03GW	LF03SB	LF04GW	LF04SB
LF05GW	LF05SB	LF06GW	LF06SB	LF07GW	LF07SB
LF08SB	LF09SB	LF12GW	LF12SB	LF13GW	LF13SB
LF14GW	LF14SB	LF15GW	PPO1SD		

1. Sample Holding Times: Acceptable.

The samples were maintained and received within the QC limits of 4°C ± 2°C. The samples were collected between May 16 and 19, 2011, were extracted for perchlorate analysis by June 1, 2011, and were analyzed for perchlorate by June 6, 2011, therefore meeting QC criteria of less than 28 days between collection and extraction of soil samples and less than 28 days between collection (for water samples) or extraction (for soil samples) and analysis.

2. Initial Calibration: Acceptable.

The correlation coefficient for perchlorate was greater than the QC limit of ≥ 0.990.

3. Continuing Calibration: Acceptable.

All initial and continuing calibration verifications were within QC limits.

recycled paper

4. Blanks: Acceptable.

Initial and/or continuing calibration blanks were analyzed a minimum of every 10 samples. A method blank was analyzed for each 20 sample batch per matrix. There were no detections in any blanks.

5. Matrix Spike (MS)/Matrix Spike Duplicate (MSD) and Laboratory Control Sample (LCS) Aualysis: Satisfactory.

MS, MSD, and/or LCS analyses were performed per SDG or per matrix per concentration level, whichever was more frequent. All recoveries were within QC limits except one high recovery in sample BG01GWMS; associated positive sample results were qualified as estimated quantities with a high bias (JH).

6. Duplicate Analysis: Acceptable.

Laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All duplicate results were within QC limits.

7. Internal Standards: Acceptable.

All internal standard retention times were within QC limits of $\pm$ 5 minutes from the initial calibration retention time. All internal standard area counts were within $\pm$ 50% of the initial calibration area counts.

8. Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical methods, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

H- The associated result has a likely high bias.

J - The associated numerical value is an estimated quantity because the reported concentrations were less than the sample quantitation limits or because quality control criteria limits were not met.

U - The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.

UJ - The material was analyzed for, but not detected. The reported detection limit is estimated because quality control criteria were not met.

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **BG01GW**

Lab Sample ID: 280-16336-1
Client Matrix: Water

Date Sampled: 05/18/2011 1109
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01017.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1151			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.063 JH		0.0088	0.050

MV 6/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **BG01SB**

Lab Sample ID: 280-16336-2
Client Matrix: Solid
% Moisture: 39.7

Date Sampled: 05/17/2011 0933
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02027.d
Dilution:	1.0			Initial Weight/Volume:	10.06 g
Analysis Date:	06/02/2011 2220			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.066	0.82 U

MW
6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **BG01SD**

Lab Sample ID: 280-16336-3

Client Matrix: Solid

% Moisture: 67.1

Date Sampled: 05/18/2011 1042

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02030.d
Dilution:	1.0			Initial Weight/Volume:	10.66 g
Analysis Date:	06/02/2011 2345			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.11	J Q	0.11	1.4

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF01GW**

Lab Sample ID: 280-16336-4
Client Matrix: Water

Date Sampled: 05/18/2011 1540
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F02017.d
Dilution:	10			Initial Weight/Volume:	5 mL
Analysis Date:	06/02/2011 1736			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	2.4		0.088	0.50

MW
6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF01SB**

Lab Sample ID: 280-16336-5
Client Matrix: Solid
% Moisture: 37.4

Date Sampled: 05/16/2011 1140
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02031.d
Dilution:	1.0			Initial Weight/Volume:	10.88 g
Analysis Date:	06/03/2011 0014			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.47	J Q	0.059	0.73

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF01SD**

Lab Sample ID: 280-16336-6
Client Matrix: Solid
% Moisture: 37.9

Date Sampled: 05/18/2011 0855
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02032.d
Dilution:	1.0			Initial Weight/Volume:	10.21 g
Analysis Date:	06/03/2011 0042			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		1.5		0.063	0.79

MW 6/9/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF02GW**

Lab Sample ID: 280-16336-7
Client Matrix: Water

Date Sampled: 05/19/2011 0945
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F02020.d
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/02/2011 1901			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	2.2		0.044	0.25

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF02SB**

Lab Sample ID: 280-16336-8

Client Matrix: Solid

% Moisture: 45.4

Date Sampled: 05/16/2011 1235

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02033.d
Dilution:	1.0			Initial Weight/Volume:	10.82 g
Analysis Date:	06/03/2011 0111			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.068	0.85 U

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF03GW**

Lab Sample ID: 280-16336-9
Client Matrix: Water

Date Sampled: 05/19/2011 0956
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01022.d
Dilution:	10			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1413			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	3.0 JH		0.088	0.50

MW
6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: LF03SB

Lab Sample ID: 280-16336-10

Client Matrix: Solid

% Moisture: 33.2

Date Sampled: 05/16/2011 1403

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02034.d
Dilution:	1.0			Initial Weight/Volume:	10.30 g
Analysis Date:	06/03/2011 0139			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.058	0.73 U

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF04GW**

Lab Sample ID: 280-16336-11

Client Matrix: Water

Date Sampled: 05/19/2011 1025

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01023.d
Dilution:	100			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1442			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	22 JH		0.88	5.0

MW 6/7/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF04SB**

Lab Sample ID: 280-16336-12

Client Matrix: Solid

% Moisture: 41.1

Date Sampled: 05/16/2011 1432

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02035.d
Dilution:	1.0			Initial Weight/Volume:	10.05 g
Analysis Date:	06/03/2011 0207			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		7.1		0.068	0.85

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF05GW**

Lab Sample ID: 280-16336-13
Client Matrix: Water

Date Sampled: 05/19/2011 1455
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01027.d
Dilution:	100			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1635			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	36 JH		0.88	5.0

MW 6/9/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF05SB**

Lab Sample ID: 280-16336-14

Client Matrix: Solid

% Moisture: 35.0

Date Sampled: 05/16/2011 1505

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02036.d
Dilution:	1.0			Initial Weight/Volume:	10.75 g
Analysis Date:	06/03/2011 0236			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		7.0		0.057	0.72

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF06GW**

Lab Sample ID: 280-16336-15
Client Matrix: Water

Date Sampled: 05/19/2011 1135
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01028.d
Dilution:	100			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1704			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	40 JH		0.88	5.0

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF06SB**

Lab Sample ID: 280-16336-16

Client Matrix: Solid

% Moisture: 26.9

Date Sampled: 05/16/2011 1534

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02040.d
Dilution:	1.0			Initial Weight/Volume:	10.57 g
Analysis Date:	06/03/2011 0429			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		1.6		0.052	0.65

MW
6/9/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: LF07GW

Lab Sample ID: 280-16336-17
Client Matrix: Water

Date Sampled: 05/19/2011 1207
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01029.d
Dilution:	100			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1732			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	27 JH		0.88	5.0

MW 6/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF07SB**

Lab Sample ID: 280-16336-18

Client Matrix: Solid

% Moisture: 37.8

Date Sampled: 05/17/2011 1052

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02041.d
Dilution:	1.0			Initial Weight/Volume:	10.41 g
Analysis Date:	06/03/2011 0458			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.062	0.77 U

6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF08SB**

Lab Sample ID: 280-16336-19

Client Matrix: Solid

% Moisture: 50.1

Date Sampled: 05/17/2011 1132

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02042.d
Dilution:	1.0			Initial Weight/Volume:	10.55 g
Analysis Date:	06/03/2011 0526			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.12	J Q	0.076	0.95

JMW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF09SB**

Lab Sample ID: 280-16336-20

Client Matrix: Solid

% Moisture: 41.1

Date Sampled: 05/17/2011 1343

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02043.d
Dilution:	1.0			Initial Weight/Volume:	10.27 g
Analysis Date:	06/03/2011 0554			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.77	J Q	0.066	0.83

MW 6/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: LF12GW

Lab Sample ID: 280-16336-21

Client Matrix: Water

Date Sampled: 05/19/2011 0855

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01030.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1801			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	~~ND~~ MW		0.0088	0.050 U

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: LF12SB

Lab Sample ID: 280-16336-22

Client Matrix: Solid

% Moisture: 42.6

Date Sampled: 05/17/2011 1511

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02044.d
Dilution:	1.0			Initial Weight/Volume:	10.25 g
Analysis Date:	06/03/2011 0623			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.068	0.85 U

MW 6911

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF13GW**

Lab Sample ID: 280-16336-23

Client Matrix: Water

Date Sampled: 05/18/2011 1415

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01031.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1829			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.82 JH		0.0088	0.050

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: LF13SB

Lab Sample ID: 280-16336-24

Client Matrix: Solid

% Moisture: 51.5

Date Sampled: 05/17/2011 1538

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02045.d
Dilution:	1.0			Initial Weight/Volume:	10.13 g
Analysis Date:	06/03/2011 0651			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.93	J Q	0.081	1.0

MW 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF14GW**

Lab Sample ID: 280-16336-25
Client Matrix: Water

Date Sampled: 05/18/2011 1455
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01032.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1857			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.60 JH		0.0088	0.050

MW 6/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF14SB**

Lab Sample ID: 280-16336-26

Client Matrix: Solid

% Moisture: 33.4

Date Sampled: 05/17/2011 1558

Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02046.d
Dilution:	1.0			Initial Weight/Volume:	10.47 g
Analysis Date:	06/03/2011 0720			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.11	J Q	0.057	0.72

MN 6-9-11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **LF15GW**

Lab Sample ID: 280-16336-27
Client Matrix: Water

Date Sampled: 05/19/2011 1410
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-69786	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F01033.d
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	06/01/2011 1926			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	8.2 JH		0.18	1.0

MW
6/9/11

Client: Ecology and Environment, Inc.

Job Number: 280-16336-1

Client Sample ID: **PP01SD**

Lab Sample ID: 280-16336-28
Client Matrix: Solid
% Moisture: 28.9

Date Sampled: 05/18/2011 0911
Date Received: 05/21/2011 0930

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70123	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-69955	Lab File ID:	IC11F02047.d
Dilution:	1.0			Initial Weight/Volume:	10.61 g
Analysis Date:	06/03/2011 0748			Final Weight/Volume:	100 mL
Prep Date:	06/01/2011 1805			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.78		0.053	0.66

MW
6-9-11

ecology and environment, inc.
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MEMORANDUM

DATE: June 17, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Perchlorate Data Validation Memorandum, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data validation of 13 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for perchlorate (EPA Method 6860) was performed by Test America Denver, Arvada, Colorado.

The samples were numbered:

BG02GW	BG03GW	MW01GW	MW02GW	MW03GW	MW04GW
MW05GW	MW06GW	MW07GW	MW08GW	MW09GW	RS01WT
RS02WT					

1. Sample Holding Times: Acceptable.

The samples were maintained and received within the QC limits of $4^{o}C \pm 2^{o}C$. The samples were collected between May 20 and 21, 2011, and were analyzed for perchlorate by June 15, 2011, therefore meeting QC criteria of less than 28 days between collection and analysis.

2. Initial Calibration: Acceptable.

The correlation coefficient for perchlorate was greater than the QC limit of ≥ 0.990.

3. Continuing Calibration: Acceptable.

All initial and continuing calibration verifications were within QC limits.

4. Blanks: Acceptable.

Initial and/or continuing calibration blanks were analyzed a minimum of every 10 samples. A method blank was analyzed for each 20 sample batch per matrix. There were no detections in any blanks.

5. Matrix Spike (MS)/Matrix Spike Duplicate (MSD) and Laboratory Control Sample (LCS) Analysis: Acceptable.

MS, MSD, and/or LCS analyses were performed per SDG or per matrix per concentration level, whichever was more frequent. All recoveries were within QC limits except when not applicable due to the original sample concentrations exceeding the spike amount by a factor of four or more.

6. Duplicate Analysis: Acceptable.

Laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All duplicate results were within QC limits.

7. Internal Standards: Acceptable.

All internal standard retention times were within QC limits of $\pm$ 5 minutes from the initial calibration retention time. All internal standard area counts were within $\pm$ 50% of the initial calibration area counts.

8. LCS Interference Check Sample (ICS): Acceptable.

All LCS ICS results were within QC limits.

9. Overall Assessment of Data for Use

Positive sample results greater than the method detection limit were qualified as estimated quantities with a "Q" bias qualifier.

The overall usefulness of the data is based on the criteria outlined in the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical methods, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

J - The associated numerical value is an estimated quantity because the reported concentrations were less than the sample quantitation limits or because quality control criteria limits were not met.

Q - The associated sample result is less than the reporting limit.

U - The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.

UJ - The material was analyzed for, but not detected. The reported detection limit is estimated because quality control criteria were not met.

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **BG02GW**

Lab Sample ID: 280-16199-1
Client Matrix: Water

Date Sampled: 05/20/2011 1511
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-72016	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F15014.d
Dilution:	50			Initial Weight/Volume:	5 mL
Analysis Date:	06/15/2011 1413			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	39		0.44	2.5

MW 6/7-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **BG03GW**

Lab Sample ID: 280-16199-2
Client Matrix: Water

Date Sampled: 05/20/2011 1654
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06023.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1437			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.33		0.0088	0.050

MW
6/7/11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW01GW**

Lab Sample ID: 280-16199-3
Client Matrix: Water

Date Sampled: 05/20/2011 1000
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06026.d
Dilution:	100			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1602			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	31		0.88	5.0

MW 6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW02GW**

Lab Sample ID: 280-16199-4

Client Matrix: Water

Date Sampled: 05/20/2011 1220

Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06030.d
Dilution:	10			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1756			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	4.2		0.088	0.50

MW 6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW03GW**

Lab Sample ID: 280-16199-5
Client Matrix: Water

Date Sampled: 05/20/2011 1335
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06031.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1824			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.35		0.0088	0.050

MW
6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW04GW**

Lab Sample ID: 280-16199-6
Client Matrix: Water

Date Sampled: 05/20/2011 1700
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06032.d
Dilution:	200			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1852			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	190		1.8	10

MW 6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW05GW**

Lab Sample ID: 280-16199-7
Client Matrix: Water

Date Sampled: 05/20/2011 1820
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06033.d
Dilution:	100			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1921			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	38		0.88	5.0

MW 6/7/11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW06GW**

Lab Sample ID: 280-16199-8

Client Matrix: Water

Date Sampled: 05/21/2011 1158

Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06034.d
Dilution:	1000			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 1949			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	470		8.8	50

MW 6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW07GW**

Lab Sample ID: 280-16199-9

Client Matrix: Water

Date Sampled: 05/21/2011 1315

Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06035.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 2018			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.064		0.0088	0.050

MW
6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW08GW**

Lab Sample ID: 280-16199-10
Client Matrix: Water

Date Sampled: 05/21/2011 1330
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06036.d
Dilution:	10			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 2046			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	2.2		0.088	0.50

MW
6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **MW09GW**

Lab Sample ID: 280-16199-11
Client Matrix: Water

Date Sampled: 05/21/2011 1415
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06037.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 2114			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.17		0.0088	0.050

MW 6-17-11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **RS01WT**

Lab Sample ID: 280-16199-12
Client Matrix: Water

Date Sampled: 05/21/2011 1445
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06038.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 2143			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.031	J Q	0.0088	0.050

MW
6/7/11

Client: Ecology and Environment, Inc.

Job Number: 280-16199-1

Client Sample ID: **RS02WT**

Lab Sample ID: 280-16199-13
Client Matrix: Water

Date Sampled: 05/21/2011 1455
Date Received: 05/24/2011 0830

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-70528	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11F06039.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	06/06/2011 2211			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.032	J Q	0.0088	0.050

MW
6-17-11

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MEMORANDUM

DATE: September 30, 2011

TO: Renee Nordeen, Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

SUBJ: **Inorganic Data Quality Assurance Review, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data quality assurance review of 24 solid samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for Perchlorate (EPA Method 6860) was performed by TestAmerica Denver, Arvada, Colorado. All sample analyses were evaluated following EPA's Stage 2 and 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

FP01SS	FP02SS	FP03SS	FP04SS
FP05SS	FR01SS	FR02SS	FR03SS
FR04SS	FR05SS	FR06SS	OB01SS
PU01SD	PU02SD	PU03SD	PU04SD
PU05SD	PU06SD	PU07SD	PU08SD
PU09SD	PU10SD	PU11SD	PU12SD

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The samples were maintained at ≤ 6°C. The samples were collected on August 22 or 23, 2011, the samples were extracted on September 6, 1011, and all samples were analyzed by September 14, 2011, therefore meeting QC criteria of less than 28 days between extraction and analysis for soil samples.

2. **Initial and Continuing Calibration: Acceptable.**

All calibration results were within QC limits.

3. **Blanks: Acceptable.**

A preparation blank was analyzed for each 20 samples or per matrix per concentration level. Blanks were analyzed after each Initial or Continuing Calibration Verification. There were no detections in any blanks.

recycled paper

4. Precision and Bias Determination: Not Performed.

Samples necessary to determine precision and bias were not provided to the laboratory. All results were flagged "PND" (Precision Not Determined) and "RND" (Recovery Not Determined), although the flags do not appear on the data sheets.

5. Performance Evaluation Sample Analysis: Not Provided.

Performance evaluation samples were not provided to the laboratory.

6. LC ICS: Acceptable.

The LC ICS results were within QC limits.

7. Blank and Matrix Spike Analysis: Acceptable.

Blank and matrix spike analyses was performed per SDG or per matrix per concentration level, whichever was more frequent. Spike and spike duplicate recoveries were within the QC limits.

8. Duplicate Analysis: Acceptable.

A laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All duplicate results were within QC limits.

9. Internal Standards: Acceptable.

All internal standard results were within QC limits.

10. Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical methods, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

JH - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a high bias.

JL - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a low bias.

JK - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias.

JQ – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias and falls between the MDL and the Minimum (or Practical) Quantitation Limit (MQL, PQL).

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FP01SS**

Lab Sample ID: 580-28293-1

Client Matrix: Solid

% Moisture: 18.2

Date Sampled: 08/22/2011 1145

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11112046.d
Dilution:	1.0			Initial Weight/Volume:	10.29 g
Analysis Date:	09/13/2011 0750			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.096	J Q	0.048	0.59

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FP02SS**

Lab Sample ID: 580-28293-2

Client Matrix: Solid

% Moisture: 17.8

Date Sampled: 08/22/2011 1305

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12049.d
Dilution:	1.0			Initial Weight/Volume:	10.21 g
Analysis Date:	09/13/2011 0915			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.067	J Q	0.048	0.60

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FP03SS**

Lab Sample ID: 580-28293-3

Client Matrix: Solid

% Moisture: 28.7

Date Sampled: 08/22/2011 1330

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12050.d
Dilution:	1.0			Initial Weight/Volume:	10.17 g
Analysis Date:	09/13/2011 0943			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.088	J Q	0.055	0.69

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FP04SS**

Lab Sample ID: 580-28293-4

Client Matrix: Solid

% Moisture: 25.9

Date Sampled: 08/22/2011 1405

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12051.d
Dilution:	1.0			Initial Weight/Volume:	10.24 g
Analysis Date:	09/13/2011 1012			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.053	0.66 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FP05SS**

Lab Sample ID: 580-28293-5

Client Matrix: Solid

% Moisture: 22.1

Date Sampled: 08/22/2011 1430

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12052.d
Dilution:	1.0			Initial Weight/Volume:	10.24 g
Analysis Date:	09/13/2011 1040			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.13	J Q	0.050	0.63

MW 9-30-1

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FR01SS**

Lab Sample ID: 580-28293-6

Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 08/23/2011 0901

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12056.d
Dilution:	1.0			Initial Weight/Volume:	10.34 g
Analysis Date:	09/13/2011 1234			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.41	J Q	0.042	0.53

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FR02SS**

Lab Sample ID: 580-28293-7

Client Matrix: Solid

% Moisture: 14.4

Date Sampled: 08/23/2011 0913

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11112057.d
Dilution:	1.0			Initial Weight/Volume:	10.15 g
Analysis Date:	09/13/2011 1302			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.55	J Q	0.046	0.58

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FR03SS**

Lab Sample ID: 580-28293-8

Client Matrix: Solid

% Moisture: 24.4

Date Sampled: 08/23/2011 0922

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12058.d
Dilution:	1.0			Initial Weight/Volume:	10.99 g
Analysis Date:	09/13/2011 1330			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.59	J Q	0.048	0.60

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FR04SS**

Lab Sample ID: 580-28293-9

Client Matrix: Solid

% Moisture: 20.9

Date Sampled: 08/23/2011 0930

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12061.d
Dilution:	1.0			Initial Weight/Volume:	10.27 g
Analysis Date:	09/13/2011 1456			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.37	J Q	0.049	0.62

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FR05SS**

Lab Sample ID: 580-28293-10

Client Matrix: Solid

% Moisture: 16.3

Date Sampled: 08/23/2011 0941

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12063.d
Dilution:	1.0			Initial Weight/Volume:	10.54 g
Analysis Date:	09/13/2011 1552			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.13	J Q	0.045	0.57

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **FR06SS**

Lab Sample ID: 580-28293-11

Client Matrix: Solid

% Moisture: 9.5

Date Sampled: 08/23/2011 0950

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12062.d
Dilution:	1.0			Initial Weight/Volume:	10.42 g
Analysis Date:	09/13/2011 1524			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.22	J Q	0.042	0.53

JAW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **OB01SS**

Lab Sample ID: 580-28293-12

Client Matrix: Solid

% Moisture: 14.8

Date Sampled: 08/22/2011 1630

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11112064.d
Dilution:	1.0			Initial Weight/Volume:	10.20 g
Analysis Date:	09/13/2011 1621			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.24	J Q	0.046	0.58

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU01SD**

Lab Sample ID: 580-28293-13

Client Matrix: Solid

% Moisture: 78.0

Date Sampled: 08/22/2011 1427

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12065.d
Dilution:	1.0			Initial Weight/Volume:	10.04 g
Analysis Date:	09/13/2011 1649			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.18	2.3 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU02SD**

Lab Sample ID: 580-28293-14

Client Matrix: Solid

% Moisture: 25.6

Date Sampled: 08/22/2011 1430

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12069.d
Dilution:	1.0			Initial Weight/Volume:	10.27 g
Analysis Date:	09/13/2011 1843			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.052	0.65 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU03SD**

Lab Sample ID: 580-28293-15

Client Matrix: Solid

% Moisture: 21.5

Date Sampled: 08/22/2011 1447

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12070.d
Dilution:	1.0			Initial Weight/Volume:	10.81 g
Analysis Date:	09/13/2011 1911			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.047	0.59 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU04SD**

Lab Sample ID: 580-28293-16

Client Matrix: Solid

% Moisture: 35.9

Date Sampled: 08/22/2011 1458

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12071.d
Dilution:	1.0			Initial Weight/Volume:	10.32 g
Analysis Date:	09/13/2011 1940			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.060	0.76 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU05SD**

Lab Sample ID: 580-28293-17

Client Matrix: Solid

% Moisture: 30.7

Date Sampled: 08/22/2011 1514

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12072.d
Dilution:	1.0			Initial Weight/Volume:	10.05 g
Analysis Date:	09/13/2011 2008			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.057	0.72 U

MW 9/30/11

Client: Ecology and Environment, Inc. Job Number: 580-28293-1

Client Sample ID: **PU06SD**

Lab Sample ID: 580-28293-18 Date Sampled: 08/22/2011 1533
Client Matrix: Solid % Moisture: 22.4 Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12073.d
Dilution:	1.0			Initial Weight/Volume:	10.15 g
Analysis Date:	09/13/2011 2036			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.051	0.64 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU07SD**

Lab Sample ID: 580-28293-19

Client Matrix: Solid

% Moisture: 39.8

Date Sampled: 08/22/2011 1612

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11112074.d
Dilution:	1.0			Initial Weight/Volume:	10.82 g
Analysis Date:	09/13/2011 2105			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~<ND~~		0.061	0.77 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU08SD**

Lab Sample ID: 580-28293-20

Client Matrix: Solid

% Moisture: 27.0

Date Sampled: 08/22/2011 1633

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85611	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84713	Lab File ID:	IC11I12075.d
Dilution:	1.0			Initial Weight/Volume:	10.09 g
Analysis Date:	09/13/2011 2133			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1915			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.054	0.68 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU09SD**

Lab Sample ID: 580-28293-21

Client Matrix: Solid

% Moisture: 59.0

Date Sampled: 08/22/2011 1648

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14027.d
Dilution:	1.0			Initial Weight/Volume:	10.21 g
Analysis Date:	09/14/2011 1733			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.096	1.2 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU10SD**

Lab Sample ID: 580-28293-22

Client Matrix: Solid

% Moisture: 30.2

Date Sampled: 08/22/2011 1658

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14028.d
Dilution:	1.0			Initial Weight/Volume:	10.53 g
Analysis Date:	09/14/2011 1801			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.054	0.68 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU11SD**

Lab Sample ID: 580-28293-23

Client Matrix: Solid

% Moisture: 41.0

Date Sampled: 08/22/2011 1708

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14029.d
Dilution:	1.0			Initial Weight/Volume:	10.88 g
Analysis Date:	09/14/2011 1830			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.062	0.78 U

MW 9-30-11

Client: Ecology and Environment, Inc.

Job Number: 580-28293-1

Client Sample ID: **PU12SD**

Lab Sample ID: 580-28293-24

Client Matrix: Solid

% Moisture: 28.9

Date Sampled: 08/22/2011 1722

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14030.d
Dilution:	1.0			Initial Weight/Volume:	10.10 g
Analysis Date:	09/14/2011 1858			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.056	0.70 U

MW 9-30-11

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MEMORANDUM

DATE: October 5, 2011

TO: Renee Nordeen, Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

SUBJ: **Inorganic Data Quality Assurance Review, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data quality assurance review of 20 solid samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for Perchlorate (EPA Method 6860) was performed by TestAmerica Denver, Arvada, Colorado. All sample analyses were evaluated following EPA's Stage 2 and 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

CT01SS	CT02SS	CT03SS	CT04SS
CT10SS	CT11SS	FP11SS	FP12SS
OB06SS	OB07SS	OB08SS	OB09SS
CT05SS	CT06SS	CT07SS	CT09SS
FP13SS	FP14SS	FP15SS	FP16SS

Data Qualifications:

1. **Sample Holding Times: Acceptable.**

The samples were maintained at $\leq 6^{o}C$. The samples were collected on August 23 or 24, 2011, the samples were extracted by September 12, 1011, and all samples were analyzed by September 23, 2011, therefore meeting QC criteria of less than 28 days between extraction and analysis for soil samples.

2. **Initial and Continuing Calibration: Acceptable.**

All calibration results were within QC limits.

3. **Blanks: Acceptable.**

A preparation blank was analyzed for each 20 samples or per matrix per concentration level. Blanks were analyzed after each Initial or Continuing Calibration Verification. There were no detections in any blanks.

4. Precision and Bias Determination: Not Performed.

Samples necessary to determine precision and bias were not provided to the laboratory. All results were flagged "PND" (Precision Not Determined) and "RND" (Recovery Not Determined), although the flags do not appear on the data sheets.

5. Performance Evaluation Sample Analysis: Not Provided.

Performance evaluation samples were not provided to the laboratory.

6. LC ICS: Acceptable.

The LC ICS results were within QC limits.

7. Blank and Matrix Spike Analysis: Satisfactory.

Blank and matrix spike analyses was performed per SDG or per matrix per concentration level, whichever was more frequent. Spike and spike duplicate recoveries were within the QC limits except the low matrix spike and matrix spike duplicate recoveries associated with sample CT11SS; associated sample results were qualified as estimated quantities with a low bias (JL or UJL).

8. Duplicate Analysis: Acceptable.

A laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All duplicate results were within QC limits.

9. Internal Standards: Acceptable.

All internal standard results were within QC limits.

10. Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical methods, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

JH - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a high bias.

JL - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a low bias.

JK - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias.

JQ – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias and falls between the MDL and the Minimum (or Practical) Quantitation Limit (MQL, PQL).

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT01SS**

Lab Sample ID: 580-28295-1
Client Matrix: Solid
% Moisture: 22.3

Date Sampled: 08/24/2011 1007
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14031.d
Dilution:	1.0			Initial Weight/Volume:	10.24 g
Analysis Date:	09/14/2011 1926			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.28	J Q	0.050	0.63

MW 10-5-11

Analytical Data

Client: Ecology and Environment, Inc. Job Number: 580-28295-1

Client Sample ID: CT02SS

Lab Sample ID:	580-28295-2			Date Sampled:	08/24/2011 1026
Client Matrix:	Solid	% Moisture:	34.2	Date Received:	08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14032.d
Dilution:	1.0			Initial Weight/Volume:	10.92 g
Analysis Date:	09/14/2011 1955			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ Mw		0.056	0.70 UJL

MW
10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT03SS**

Lab Sample ID: 580-28295-3
Client Matrix: Solid
% Moisture: 20.0

Date Sampled: 08/24/2011 1046
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14033.d
Dilution:	1.0			Initial Weight/Volume:	10.82 g
Analysis Date:	09/14/2011 2023			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.41	J Q	0.046	0.58

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT04SS**

Lab Sample ID: 580-28295-4
Client Matrix: Solid
% Moisture: 22.1

Date Sampled: 08/24/2011 1117
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14037.d
Dilution:	1.0			Initial Weight/Volume:	10.22 g
Analysis Date:	09/14/2011 2217			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.17	J Q	0.050	0.63

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT10SS**

Lab Sample ID: 580-28295-5
Client Matrix: Solid
% Moisture: 22.1

Date Sampled: 08/24/2011 1442
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14038.d
Dilution:	1.0			Initial Weight/Volume:	10.16 g
Analysis Date:	09/14/2011 2245			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.051	0.63

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT11SS**

Lab Sample ID: 580-28295-6
Client Matrix: Solid
% Moisture: 26.3

Date Sampled: 08/24/2011 1513
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14039.d
Dilution:	1.0			Initial Weight/Volume:	10.03 g
Analysis Date:	09/14/2011 2314			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.87 JL		0.054	0.68

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **FP11SS**

Lab Sample ID: 580-28295-7
Client Matrix: Solid
% Moisture: 23.4

Date Sampled: 08/23/2011 1536
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14042.d
Dilution:	1.0			Initial Weight/Volume:	10.92 g
Analysis Date:	09/15/2011 0039			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.076	J Q	0.048	0.60

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **FP12SS**

Lab Sample ID: 580-28295-8
Client Matrix: Solid
% Moisture: 19.2

Date Sampled: 08/23/2011 1547
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14043.d
Dilution:	1.0			Initial Weight/Volume:	10.88 g
Analysis Date:	09/15/2011 0107			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.14	J Q	0.045	0.57

JMW 12-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **OB06SS**

Lab Sample ID: 580-28295-9
Client Matrix: Solid
% Moisture: 23.2

Date Sampled: 08/24/2011 1342
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14044.d
Dilution:	1.0			Initial Weight/Volume:	10.86 g
Analysis Date:	09/15/2011 0136			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.070	J Q	0.048	0.60

MW 10-5-11

Client: Ecology and Environment, Inc. Job Number: 580-28295-1

Client Sample ID: **OB07SS**

Lab Sample ID: 580-28295-10 Date Sampled: 08/24/2011 1355
Client Matrix: Solid % Moisture: 21.4 Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14045.d
Dilution:	1.0			Initial Weight/Volume:	10.27 g
Analysis Date:	09/15/2011 0204			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.44	J Q	0.050	0.62

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **OB08SS**

Lab Sample ID: 580-28295-11
Client Matrix: Solid
% Moisture: 13.9

Date Sampled: 08/24/2011 1443
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14046.d
Dilution:	1.0			Initial Weight/Volume:	10.07 g
Analysis Date:	09/15/2011 0232			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.18	J Q	0.046	0.58

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **OB09SS**

Lab Sample ID: 580-28295-12
Client Matrix: Solid
% Moisture: 27.3

Date Sampled: 08/24/2011 1510
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14050.d
Dilution:	1.0			Initial Weight/Volume:	10.41 g
Analysis Date:	09/15/2011 0426			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.24	J Q	0.053	0.66

MW 10-5-11

Client: Ecology and Environment, Inc. Job Number: 580-28295-1

Client Sample ID: **CT05SS**

Lab Sample ID: 580-28295-13 Date Sampled: 08/24/2011 1140
Client Matrix: Solid % Moisture: 22.1 Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14051.d
Dilution:	1.0			Initial Weight/Volume:	10.13 g
Analysis Date:	09/15/2011 0454			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.078	J Q	0.051	0.63

MW 12-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT06SS**

Lab Sample ID: 580-28295-14
Client Matrix: Solid
% Moisture: 19.1

Date Sampled: 08/24/2011 1320
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14052.d
Dilution:	1.0			Initial Weight/Volume:	10.13 g
Analysis Date:	09/15/2011 0523			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.33	J Q	0.049	0.61

JMW 12-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT07SS**

Lab Sample ID: 580-28295-15
Client Matrix: Solid
% Moisture: 15.9

Date Sampled: 08/24/2011 1350
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14053.d
Dilution:	1.0			Initial Weight/Volume:	10.05 g
Analysis Date:	09/15/2011 0551			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.19	J Q	0.047	0.59

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **CT09SS**

Lab Sample ID: 580-28295-16
Client Matrix: Solid
% Moisture: 22.1

Date Sampled: 08/24/2011 1425
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85868	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-84714	Lab File ID:	IC11I14054.d
Dilution:	1.0			Initial Weight/Volume:	10.30 g
Analysis Date:	09/15/2011 0619			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 1921			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.25	J Q	0.050	0.62

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **FP13SS**

Lab Sample ID: 580-28295-17
Client Matrix: Solid
% Moisture: 20.4

Date Sampled: 08/23/2011 1558
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22045.d
Dilution:	1.0			Initial Weight/Volume:	10.21 g
Analysis Date:	09/23/2011 0841			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.16	J Q	0.049	0.62

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **FP14SS**

Lab Sample ID: 580-28295-18
Client Matrix: Solid
% Moisture: 21.0

Date Sampled: 08/23/2011 1616
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22046.d
Dilution:	1.0			Initial Weight/Volume:	10.12 g
Analysis Date:	09/23/2011 0909			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.22	J Q	0.050	0.63

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **FP15SS**

Lab Sample ID: 580-28295-19
Client Matrix: Solid
% Moisture: 18.0

Date Sampled: 08/23/2011 1633
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22047.d
Dilution:	1.0			Initial Weight/Volume:	10.13 g
Analysis Date:	09/23/2011 0937			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.70		0.048	0.60

MW 10-5-11

Client: Ecology and Environment, Inc.

Job Number: 580-28295-1

Client Sample ID: **FP16SS**

Lab Sample ID: 580-28295-20
Client Matrix: Solid
% Moisture: 8.0

Date Sampled: 08/23/2011 1702
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22048.d
Dilution:	1.0			Initial Weight/Volume:	10.33 g
Analysis Date:	09/23/2011 1006			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.27	J Q	0.042	0.53

MW 10-5-11

ecology and environment, inc.
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MEMORANDUM

DATE: October 31, 2011

TO: Renee Nordeen, Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

SUBJ: **Inorganic Data Quality Assurance Review, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data quality assurance review of 86 samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for Perchlorate (EPA Method 6860), total organic carbon (TOC; EPA Method 9060), and grain size (ASTM Method D422) were performed by TestAmerica Denver, Arvada, Colorado. All sample analyses were evaluated following EPA's Stage 2 and 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

BG01SD	BG03SD	BG04SD	DC02SD	EF03SD	LC15SD
NF01SD	NF04SD	NF06SD	NF07SD	NF08SD	NF09SD
CT08SS	EF01SD	EF02SD	LC01SD	LC02SD	LC05SD
LC08SD	PT01SS	PT02SS	PT03SS	PT04SS	PT05SS
PT06SS	PT07SS	PT08SS	PT10SS	PT15SS	PT16SS
PT17SS	PT11SS	PT12SS	PT13SS	PT14SS	BC01SD
BG02SD	DC04SD	LC03SD	LC04SD	LC06SD	LC07SD
LC09SD	LC10SD	LC11SD	LC12SD	LC13SD	LC14SD
NF05SD	BC01SD	BG01SD	BG02SD	BG02SD	DC01SD
DC03SD	DC04SD	EF03SD	LC03SD	LC03SW	LC04SD
LC06SD	LC07SD	LC09SD	LC10SD	LC11SD	LC12SD
LC13SD	LC14SD	LC15SD	NF02SD	NF03SD	NF04SD
NF05SD	BG04SW	LC11SW	LC14SW	LC15SW	NF02SW
NF03SW	NF04SW	NF05SW	NF07SW	NF09SW	PT09SS
PT18SS	BG01SS				

<u>Data Qualifications</u>:

1. Sample Holding Times: Satisfactory.

The samples were maintained at ≤ 6°C except for several coolers that were received at the laboratory between 6.8°C and 11.4°C; no action was taken based on the cooler received at 6.8 °C as it was only slightly above QC limits. Perchlorate and TOC sample results associated with the other coolers received at >6 °C were qualified as estimated quantities with a low bias (JL or UJL). The samples were

collected between August 24 and 26, 2011, the samples were extracted by September 22, 2011, and all samples were analyzed by October 7, 2011, therefore meeting QC criteria of less than 28 days between collection and water sample analysis and less than 28 days between extraction and analysis for soil samples for perchlorate, but exceeding the 28 day holding time for TOC; associated TOC results were qualified as estimated quantities with a low bias (JL).

2. Initial and Continuing Calibration: Acceptable.

All calibration results were within QC limits.

3. Blanks: Satisfactory.

A preparation blank was analyzed for each 20 samples or per matrix per concentration level. Blanks were analyzed after each Initial or Continuing Calibration Verification. There were no detections in any blanks except the TOC method blank (1.71 g/kg), initial calibration blank (2.11 g/kg), continuing calibration blank (CCB) 1 (2.02 g/kg), and CCB2 (1.71 g/kg); sample results less than five times the associated blank results were qualified as not detected (U).

4. Precision and Bias Determination: Not Performed.

Samples necessary to determine precision and bias were not provided to the laboratory. All results were flagged "PND" (Precision Not Determined) and "RND" (Recovery Not Determined), although the flags do not appear on the data sheets.

5. Performance Evaluation Sample Analysis: Not Provided.

Performance evaluation samples were not provided to the laboratory.

6. LC ICS: Acceptable.

The LC ICS results were within QC limits.

7. Blank and Matrix Spike Analysis: Satisfactory.

Blank and matrix spike analyses was performed per SDG or per matrix per concentration level, whichever was more frequent. Spike and spike duplicate recoveries were within the QC limits except the high perchlorate matrix spike duplicate recovery associated with samples PT09SS, PT18SS, and BG01SS; associated positive sample results were qualified as estimated quantities with a high bias (JH).

8. Duplicate Analysis: Acceptable.

A laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All perchlorate spike duplicate results were within QC limits except the results associated with samples PT09SS, PT18SS, and BG01SS; no additional action was taken based on this outlier.

9. Internal Standards: Acceptable.

All internal standard results were within QC limits.

10. Overall Assessment of Data for Use

Positive sample results less than the reporting limit were qualified as estimated quantities (JQ); this

qualifier was the only one applied to sample results if it was applicable and other bias qualifiers were also applicable.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical methods, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

JH - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a high bias.

JL - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a low bias.

JK - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias.

JQ – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias and falls between the MDL and the Minimum (or Practical) Quantitation Limit (MQL, PQL).

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG04SD**

Lab Sample ID: 580-28371-3

Client Matrix: Solid

% Moisture: 40.4

Date Sampled: 08/26/2011 1605

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01109.d
Dilution:	1.0			Initial Weight/Volume:	10.42 g
Analysis Date:	10/03/2011 1635			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ Me		0.064	0.81 UJL

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC02SD**

Lab Sample ID: 580-28371-4

Client Matrix: Solid

% Moisture: 30.2

Date Sampled: 08/25/2011 1650

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01110.d
Dilution:	1.0			Initial Weight/Volume:	10.45 g
Analysis Date:	10/03/2011 1703			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ UJ		0.055	0.69

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF01SD**

Lab Sample ID: 580-28371-7

Client Matrix: Solid

% Moisture: 42.5

Date Sampled: 08/25/2011 1724

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01111.d
Dilution:	1.0			Initial Weight/Volume:	10.88 g
Analysis Date:	10/03/2011 1731			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ [illegible]		0.064	0.80 UJL

[illegible] 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF06SD**

Lab Sample ID: 580-28371-9

Client Matrix: Solid

% Moisture: 28.1

Date Sampled: 08/26/2011 1400

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01112.d
Dilution:	1.0			Initial Weight/Volume:	10.62 g
Analysis Date:	10/03/2011 1800			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MM		0.052	0.66 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF07SD**

Lab Sample ID: 580-28371-10

Client Matrix: Solid

% Moisture: 35.4

Date Sampled: 08/26/2011 1422

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01113.d
Dilution:	1.0			Initial Weight/Volume:	10.51 g
Analysis Date:	10/03/2011 1828			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.059	0.74 UJL

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF08SD**

Lab Sample ID: 580-28371-11

Client Matrix: Solid

% Moisture: 32.8

Date Sampled: 08/26/2011 1456

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01114.d
Dilution:	1.0			Initial Weight/Volume:	10.11 g
Analysis Date:	10/03/2011 1857			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.059	0.74 UJL

MW
10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF09SD**

Lab Sample ID: 580-28371-12

Client Matrix: Solid

% Moisture: 32.8

Date Sampled: 08/26/2011 1531

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01096.d
Dilution:	1.0			Initial Weight/Volume:	10.38 g
Analysis Date:	10/03/2011 0927			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.16	J Q	0.057	0.72

mw 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **CT08SS**

Lab Sample ID: 580-28371-13

Client Matrix: Solid

% Moisture: 22.9

Date Sampled: 08/24/2011 1405

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01099.d
Dilution:	1.0			Initial Weight/Volume:	10.84 g
Analysis Date:	10/03/2011 1056			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.18	J Q	0.048	0.60

10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **EF01SD**

Lab Sample ID: 580-28371-14

Client Matrix: Solid

% Moisture: 33.8

Date Sampled: 08/24/2011 1559

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01100.d
Dilution:	1.0			Initial Weight/Volume:	10.64 g
Analysis Date:	10/03/2011 1124			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.11	J Q	0.057	0.71

10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **EF02SD**

Lab Sample ID: 580-28371-15

Client Matrix: Solid

% Moisture: 16.3

Date Sampled: 08/24/2011 1640

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01120.d
Dilution:	1.0			Initial Weight/Volume:	10.48 g
Analysis Date:	10/03/2011 2147			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.046	0.57 U

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC01SD**

Lab Sample ID: 580-28371-16

Client Matrix: Solid

% Moisture: 31.2

Date Sampled: 08/25/2011 1000

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01121.d
Dilution:	1.0			Initial Weight/Volume:	10.90 g
Analysis Date:	10/03/2011 2215			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.053	0.67 U

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC02SD**

Lab Sample ID: 580-28371-17

Client Matrix: Solid

% Moisture: 56.7

Date Sampled: 08/25/2011 1050

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01122.d
Dilution:	1.0			Initial Weight/Volume:	10.38 g
Analysis Date:	10/03/2011 2244			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.089	1.1 U

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC05SD**

Lab Sample ID: 580-28371-18

Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 08/25/2011 1150

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01123.d
Dilution:	1.0			Initial Weight/Volume:	10.04 g
Analysis Date:	10/03/2011 2312			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.048	0.59 U

mw 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC08SD**

Lab Sample ID: 580-28371-19

Client Matrix: Solid

% Moisture: 22.2

Date Sampled: 08/25/2011 1325

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01124.d
Dilution:	1.0			Initial Weight/Volume:	10.23 g
Analysis Date:	10/03/2011 2341			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.050	0.63 U

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT01SS**

Lab Sample ID: 580-28371-20

Client Matrix: Solid

% Moisture: 18.6

Date Sampled: 08/24/2011 1616

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01125.d
Dilution:	1.0			Initial Weight/Volume:	10.16 g
Analysis Date:	10/04/2011 0009			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.65		0.048	0.60

MV 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT02SS**

Lab Sample ID: 580-28371-21

Client Matrix: Solid

% Moisture: 16.9

Date Sampled: 08/24/2011 1630

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01126.d
Dilution:	1.0			Initial Weight/Volume:	10.08 g
Analysis Date:	10/04/2011 0037			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.31	J Q	0.048	0.60

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT03SS**

Lab Sample ID: 580-28371-22

Client Matrix: Solid

% Moisture: 19.8

Date Sampled: 08/24/2011 1640

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01127.d
Dilution:	1.0			Initial Weight/Volume:	10.22 g
Analysis Date:	10/04/2011 0106			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.29	J Q	0.049	0.61

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT04SS**

Lab Sample ID: 580-28371-23

Client Matrix: Solid

% Moisture: 22.1

Date Sampled: 08/24/2011 1655

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01131.d
Dilution:	1.0			Initial Weight/Volume:	10.05 g
Analysis Date:	10/04/2011 0259			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.36	J Q	0.051	0.64

mw
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT05SS**

Lab Sample ID: 580-28371-24

Client Matrix: Solid

% Moisture: 16.7

Date Sampled: 08/24/2011 1708

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01132.d
Dilution:	1.0			Initial Weight/Volume:	10.16 g
Analysis Date:	10/04/2011 0328			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.26	J Q	0.047	0.59

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT08SS**

Lab Sample ID: 580-28371-27

Client Matrix: Solid

% Moisture: 13.6

Date Sampled: 08/24/2011 1730

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01135.d
Dilution:	1.0			Initial Weight/Volume:	10.29 g
Analysis Date:	10/04/2011 0453			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.36	J Q	0.045	0.56

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT06SS**

Lab Sample ID: 580-28371-25

Client Matrix: Solid

% Moisture: 16.4

Date Sampled: 08/24/2011 1720

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01133.d
Dilution:	1.0			Initial Weight/Volume:	10.57 g
Analysis Date:	10/04/2011 0356			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.16	J Q	0.045	0.57

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT07SS**

Lab Sample ID: 580-28371-26

Client Matrix: Solid

% Moisture: 14.0

Date Sampled: 08/24/2011 1723

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01134.d
Dilution:	1.0			Initial Weight/Volume:	10.12 g
Analysis Date:	10/04/2011 0425			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.059	J Q	0.046	0.57

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT10SS**

Lab Sample ID: 580-28371-28

Client Matrix: Solid

% Moisture: 16.7

Date Sampled: 08/24/2011 1805

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01136.d
Dilution:	1.0			Initial Weight/Volume:	10.31 g
Analysis Date:	10/04/2011 0521			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.31	J Q	0.047	0.58

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT15SS**

Lab Sample ID: 580-28371-29

Client Matrix: Solid

% Moisture: 18.5

Date Sampled: 08/25/2011 0935

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01137.d
Dilution:	1.0			Initial Weight/Volume:	10.22 g
Analysis Date:	10/04/2011 0550			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.19	J Q	0.048	0.60

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT16SS**

Lab Sample ID: 580-28371-30

Client Matrix: Solid

% Moisture: 12.6

Date Sampled: 08/25/2011 0940

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01138.d
Dilution:	1.0			Initial Weight/Volume:	10.68 g
Analysis Date:	10/04/2011 0635			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.34	J Q	0.043	0.54

MW 10-31-1

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT17SS**

Lab Sample ID: 580-28371-31

Client Matrix: Solid

% Moisture: 13.0

Date Sampled: 08/25/2011 0945

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01139.d
Dilution:	1.0			Initial Weight/Volume:	10.30 g
Analysis Date:	10/04/2011 0704			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.17	J Q	0.045	0.56

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT11SS**

Lab Sample ID: 580-28371-32

Client Matrix: Solid

% Moisture: 15.7

Date Sampled: 08/24/2011 1803

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01140.d
Dilution:	1.0			Initial Weight/Volume:	10.36 g
Analysis Date:	10/04/2011 0733			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.24	J Q	0.046	0.57

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT12SS**

Lab Sample ID: 580-28371-33

Client Matrix: Solid

% Moisture: 14.2

Date Sampled: 08/25/2011 0905

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01144.d
Dilution:	1.0			Initial Weight/Volume:	10.69 g
Analysis Date:	10/04/2011 0928			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.33	J Q	0.044	0.55

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT13SS**

Lab Sample ID: 580-28371-34

Client Matrix: Solid

% Moisture: 17.1

Date Sampled: 08/25/2011 0915

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86276	Lab File ID:	IC11J01145.d
Dilution:	1.0			Initial Weight/Volume:	10.67 g
Analysis Date:	10/04/2011 0957			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2015			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.25	J Q	0.045	0.57

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT14SS**

Lab Sample ID: 580-28371-35

Client Matrix: Solid

% Moisture: 19.2

Date Sampled: 08/25/2011 0924

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05073.d
Dilution:	1.0			Initial Weight/Volume:	10.12 g
Analysis Date:	10/07/2011 1132			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.26	J Q	0.049	0.61

MN
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BC01SD**

Lab Sample ID: 580-28371-50

Client Matrix: Solid

% Moisture: 31.6

Date Sampled: 08/25/2011 1435

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05074.d
Dilution:	1.0			Initial Weight/Volume:	10.35 g
Analysis Date:	10/07/2011 1200			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.056	0.71 UJL

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG01SD**

Lab Sample ID: 580-28371-51

Client Matrix: Solid

% Moisture: 38.2

Date Sampled: 08/26/2011 0940

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05075.d
Dilution:	1.0			Initial Weight/Volume:	10.13 g
Analysis Date:	10/07/2011 1229			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.064	0.80 UJ

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG02SD**

Lab Sample ID: 580-28371-52

Client Matrix: Solid

% Moisture: 47.6

Date Sampled: 08/26/2011 1015

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05076.d
Dilution:	1.0			Initial Weight/Volume:	10.21 g
Analysis Date:	10/07/2011 1257			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MN		0.075	0.93 UJL

MN
10-27-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG03SD**

Lab Sample ID: 580-28371-53

Client Matrix: Solid

% Moisture: 15.3

Date Sampled: 08/26/2011 1248

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05077.d
Dilution:	1.0			Initial Weight/Volume:	10.86 g
Analysis Date:	10/07/2011 1325			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.044	0.54 UJL

MW
10/31/11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC01SD**

Lab Sample ID: 580-28371-54

Client Matrix: Solid

% Moisture: 32.5

Date Sampled: 08/25/2011 1630

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05081.d
Dilution:	1.0			Initial Weight/Volume:	10.54 g
Analysis Date:	10/07/2011 1519			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.056	0.70 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC03SD**

Lab Sample ID: 580-28371-55

Client Matrix: Solid

% Moisture: 31.8

Date Sampled: 08/25/2011 1727

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05082.d
Dilution:	1.0			Initial Weight/Volume:	10.26 g
Analysis Date:	10/07/2011 1547			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.057	0.72 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC04SD**

Lab Sample ID: 580-28371-56
Client Matrix: Solid

% Moisture: 27.7

Date Sampled: 08/25/2011 1748
Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05085.d
Dilution:	1.0			Initial Weight/Volume:	10.43 g
Analysis Date:	10/07/2011 1713			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.053	0.66 UJL

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **EF03SD**

Lab Sample ID: 580-28371-57

Client Matrix: Solid

% Moisture: 22.1

Date Sampled: 08/25/2011 1650

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05086.d
Dilution:	1.0			Initial Weight/Volume:	10.44 g
Analysis Date:	10/07/2011 1741			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.049	0.61

UJL

10/31/11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC03SD**

Lab Sample ID: 580-28371-58

Client Matrix: Solid

% Moisture: 23.8

Date Sampled: 08/25/2011 1100

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05087.d
Dilution:	1.0			Initial Weight/Volume:	10.54 g
Analysis Date:	10/07/2011 1809			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MM		0.050	0.62 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC03SW**

Lab Sample ID: 580-28371-59

Client Matrix: Water

Date Sampled: 08/25/2011 1050

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85609	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I12018.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/12/2011 1835			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.079 JL		0.0088	0.050

MW
10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC04SD**

Lab Sample ID: 580-28371-60

Client Matrix: Solid

% Moisture: 20.2

Date Sampled: 08/25/2011 1217

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05088.d
Dilution:	1.0			Initial Weight/Volume:	10.55 g
Analysis Date:	10/07/2011 1838			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MY		0.048	0.59 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC06SD**

Lab Sample ID: 580-28371-61

Client Matrix: Solid

% Moisture: 32.5

Date Sampled: 08/25/2011 1305

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05092.d
Dilution:	1.0			Initial Weight/Volume:	10.20 g
Analysis Date:	10/07/2011 2031			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~<ND~~		0.058	0.73 UJL

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC07SD**

Lab Sample ID: 580-28371-62

Client Matrix: Solid

% Moisture: 47.1

Date Sampled: 08/25/2011 1328

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05093.d
Dilution:	1.0			Initial Weight/Volume:	10.54 g
Analysis Date:	10/07/2011 2100			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.072	0.90 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC09SD**

Lab Sample ID: 580-28371-63

Client Matrix: Solid

% Moisture: 37.3

Date Sampled: 08/25/2011 1343

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05094.d
Dilution:	1.0			Initial Weight/Volume:	10.47 g
Analysis Date:	10/07/2011 2128			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.061	0.76 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC10SD**

Lab Sample ID: 580-28371-64

Client Matrix: Solid

% Moisture: 31.5

Date Sampled: 08/25/2011 1421

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05095.d
Dilution:	1.0			Initial Weight/Volume:	10.65 g
Analysis Date:	10/07/2011 2157			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ 1.4		0.055	0.69 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC11SD**

Lab Sample ID: 580-28371-65

Client Matrix: Solid

% Moisture: 41.9

Date Sampled: 08/25/2011 1512

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05096.d
Dilution:	1.0			Initial Weight/Volume:	10.24 g
Analysis Date:	10/07/2011 2225			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~		0.067	0.84 UJL

JMW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC12SD**

Lab Sample ID: 580-28371-66

Client Matrix: Solid

% Moisture: 39.1

Date Sampled: 08/25/2011 1430

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05097.d
Dilution:	1.0			Initial Weight/Volume:	10.83 g
Analysis Date:	10/07/2011 2253			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.061	0.76 UJL

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC13SD**

Lab Sample ID: 580-28371-67

Client Matrix: Solid

% Moisture: 16.1

Date Sampled: 08/25/2011 1530

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89347	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86281	Lab File ID:	IC11J05098.d
Dilution:	1.0			Initial Weight/Volume:	10.11 g
Analysis Date:	10/07/2011 2322			Final Weight/Volume:	100 mL
Prep Date:	09/15/2011 2023			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ Mu		0.047	0.59 UJL

10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC14SD**

Lab Sample ID: 580-28371-68

Client Matrix: Solid

% Moisture: 16.3

Date Sampled: 08/25/2011 1550

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87807	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86679	Lab File ID:	IC11I26017.d
Dilution:	1.0			Initial Weight/Volume:	10.88 g
Analysis Date:	09/26/2011 1348			Final Weight/Volume:	100 mL
Prep Date:	09/18/2011 1410			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.044	0.55 UJL

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC15SD**

Lab Sample ID: 580-28371-69
Client Matrix: Solid
% Moisture: 16.0

Date Sampled: 08/25/2011 1630
Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87807	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86679	Lab File ID:	IC11I26020.d
Dilution:	1.0			Initial Weight/Volume:	10.07 g
Analysis Date:	09/26/2011 1513			Final Weight/Volume:	100 mL
Prep Date:	09/18/2011 1410			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.068	J Q	0.047	0.59

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF02SD**

Lab Sample ID: 580-28371-70

Client Matrix: Solid

% Moisture: 75.4

Date Sampled: 08/26/2011 0950

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87807	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86679	Lab File ID:	IC11I26021.d
Dilution:	1.0			Initial Weight/Volume:	10.14 g
Analysis Date:	09/26/2011 1541			Final Weight/Volume:	100 mL
Prep Date:	09/18/2011 1410			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.16	2.0 UJL

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF04SD**

Lab Sample ID: 580-28371-72

Client Matrix: Solid

% Moisture: 24.7

Date Sampled: 08/26/2011 1200

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87807	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86679	Lab File ID:	IC11I26022.d
Dilution:	1.0			Initial Weight/Volume:	10.29 g
Analysis Date:	09/26/2011 1610			Final Weight/Volume:	100 mL
Prep Date:	09/18/2011 1410			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ MW		0.052	0.65 UJL

MW
10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF05SD**

Lab Sample ID: 580-28371-73

Client Matrix: Solid

% Moisture: 59.8

Date Sampled: 08/26/2011 1235

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87807	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-86679	Lab File ID:	IC11I26023.d
Dilution:	1.0			Initial Weight/Volume:	10.94 g
Analysis Date:	09/26/2011 1638			Final Weight/Volume:	100 mL
Prep Date:	09/18/2011 1410			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		~~ND~~ UL		0.091	1.1 UJL

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG04SW**

Lab Sample ID: 580-28371-74

Client Matrix: Water

Date Sampled: 08/26/2011 1610

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85609	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I12019.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/12/2011 1903			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.021	J Q	0.0088	0.050

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC11SW**

Lab Sample ID: 580-28371-75

Client Matrix: Water

Date Sampled: 08/25/2011 1455

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09015.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/09/2011 2041			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.089 JL		0.0088	0.050

MW
10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC14SW**

Lab Sample ID: 580-28371-76

Client Matrix: Water

Date Sampled: 08/25/2011 1545

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09021.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/09/2011 2331			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.11 JL		0.0088	0.050

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC15SW**

Lab Sample ID: 580-28371-77

Client Matrix: Water

Date Sampled: 08/25/2011 1625

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09022.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/09/2011 2359			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.13 JL		0.0088	0.050

10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF02SW**

Lab Sample ID: 580-28371-78
Client Matrix: Water

Date Sampled: 08/26/2011 0948
Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09023.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/10/2011 0028			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.13 JL		0.0088	0.050

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF03SW**

Lab Sample ID: 580-28371-79
Client Matrix: Water

Date Sampled: 08/26/2011 1032
Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09024.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/10/2011 0056			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.086 JV		0.0088	0.050

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF04SW**

Lab Sample ID: 580-28371-80

Client Matrix: Water

Date Sampled: 08/26/2011 1150

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09025.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/10/2011 0125			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.026	J Q	0.0088	0.050

mw
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF05SW**

Lab Sample ID: 580-28371-81
Client Matrix: Water

Date Sampled: 08/26/2011 1229
Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09026.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/10/2011 0153			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.024	J Q	0.0088	0.050

MW
10/31/11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF07SW**

Lab Sample ID: 580-28371-82

Client Matrix: Water

Date Sampled: 08/26/2011 1429

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09027.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/10/2011 0221			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.025	J	0.0088	0.050

mw 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF09SW**

Lab Sample ID: 580-28371-83
Client Matrix: Water

Date Sampled: 08/26/2011 1540
Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-85295	Instrument ID:	LC_LCMS1
	N/A	Prep Batch:	N/A	Lab File ID:	IC11I09028.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/10/2011 0250			Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	250 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Perchlorate	0.023	J Q	0.0088	0.050

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT09SS**

Lab Sample ID: 580-28371-84

Client Matrix: Solid

% Moisture: 20.5

Date Sampled: 08/24/2011 1736

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89334	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-87403	Lab File ID:	IC11J05014.d
Dilution:	1.0			Initial Weight/Volume:	10.64 g
Analysis Date:	10/05/2011 2051			Final Weight/Volume:	100 mL
Prep Date:	09/22/2011 1639			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.16	J ~~H~~ Q	0.047	0.59

MN
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **PT18SS**

Lab Sample ID: 580-28371-85

Client Matrix: Solid

% Moisture: 15.9

Date Sampled: 08/25/2011 0952

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89334	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-87403	Lab File ID:	IC11J05015.d
Dilution:	1.0			Initial Weight/Volume:	10.34 g
Analysis Date:	10/05/2011 2119			Final Weight/Volume:	100 mL
Prep Date:	09/22/2011 1639			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.15	J Q	0.046	0.58

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG01SS**

Lab Sample ID: 580-28371-86

Client Matrix: Solid

% Moisture: 27.5

Date Sampled: 08/26/2011 1130

Date Received: 08/29/2011 1440

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89334	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-87403	Lab File ID:	IC11J05016.d
Dilution:	1.0			Initial Weight/Volume:	10.04 g
Analysis Date:	10/05/2011 2148			Final Weight/Volume:	100 mL
Prep Date:	09/22/2011 1639			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.14	J Q	0.055	0.69

MV 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

General Chemistry

Client Sample ID: **EF01SD**

Lab Sample ID: 580-28371-14

Client Matrix: Solid

Date Sampled: 08/24/2011 1559

Date Received: 08/29/2011 1440

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	7.1	UJL ~~HB~~	mg/Kg	1.7	4.0	1.0	9060
Analysis Batch: 280-88853	Analysis Date: 10/01/2011 1252						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	34		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N
Percent Solids	66		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

General Chemistry

Client Sample ID: **EF02SD**

Lab Sample ID: 580-28371-15

Client Matrix: Solid

Date Sampled: 08/24/2011 1640

Date Received: 08/29/2011 1440

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	5.3	UJL ~~H B~~	g/Kg	1.7	4.0	1.0	9060
Analysis Batch: 280-88853	Analysis Date: 10/01/2011 1254						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N
Percent Solids	84		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N

MW 10-31-11

General Chemistry

Client Sample ID: **LC01SD**

Lab Sample ID: 580-28371-16 Date Sampled: 08/25/2011 1000
Client Matrix: Solid Date Received: 08/29/2011 1440

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	19	JL ~~HB~~ JMW	g/Kg	1.7	4.0	1.0	9060
Analysis Batch: 280-88853	Analysis Date: 10/01/2011 1256						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	31		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N
Percent Solids	69		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N

JMW 10/31/11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

General Chemistry

Client Sample ID: **LC02SD**

Lab Sample ID: 580-28371-17

Client Matrix: Solid

Date Sampled: 08/25/2011 1050

Date Received: 08/29/2011 1440

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	31	~~HB~~	g/Kg	1.7	4.0	1.0	9060
Analysis Batch: 280-88853	Analysis Date: 10/01/2011 1259						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	57		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N
Percent Solids	43		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N

10-3-11

General Chemistry

Client Sample ID: **LC05SD**

Lab Sample ID: 580-28371-18 Date Sampled: 08/25/2011 1150
Client Matrix: Solid Date Received: 08/29/2011 1440

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	5.4	~~HB~~	g/Kg	1.7	4.0	1.0	9060
Analysis Batch: 280-88853	Analysis Date: 10/01/2011 1301						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N
Percent Solids	84		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N

JMW 10/31/11

General Chemistry

Client Sample ID: **LC08SD**

Lab Sample ID: 580-28371-19 Date Sampled: 08/25/2011 1325
Client Matrix: Solid Date Received: 08/29/2011 1440

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	4.0	~~HBW~~	g/Kg	1.7	4.0	1.0	9060
Analysis Batch: 280-88853	Analysis Date: 10/01/2011 1303						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	22		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N
Percent Solids	78		%	0.10	0.10	1.0	Moisture
Analysis Batch: 280-88164	Analysis Date: 09/28/2011 0855						DryWt Corrected: N

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG01SD**

Lab Sample ID: 580-28371-1

Client Matrix: Solid

Date Sampled: 08/26/2011 0940

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		4.3			
Coarse Sand		3.9			
Medium Sand		16.3			
Fine Sand		19.8			
Very Fine Sand		1.7			
Silt		30.9			
Clay		23.1			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG03SD**

Lab Sample ID: 580-28371-2
Client Matrix: Solid

Date Sampled: 08/26/2011 1248
Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		52.6			
Coarse Sand		25.4			
Medium Sand		16.4			
Fine Sand		4.7			
Very Fine Sand		0.1			
Silt		0.4			
Clay		0.4			

10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG04SD**

Lab Sample ID: 580-28371-3

Client Matrix: Solid

Date Sampled: 08/26/2011 1605

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		3.5			
Coarse Sand		3.6			
Medium Sand		32.0			
Fine Sand		37.9			
Very Fine Sand		0.9			
Silt		20.8			
Clay		1.3			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC02SD**

Lab Sample ID: 580-28371-4

Client Matrix: Solid

Date Sampled: 08/25/2011 1650

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		54.3			
Coarse Sand		6.6			
Medium Sand		6.5			
Fine Sand		17.1			
Very Fine Sand		1.1			
Silt		2.6			
Clay		11.8			

JMW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **EF03SD**

Lab Sample ID: 580-28371-5

Client Matrix: Solid

Date Sampled: 08/25/2011 1650

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		37.5			
Coarse Sand		28.0			
Medium Sand		25.5			
Fine Sand		7.2			
Very Fine Sand		0.1			
Silt		1.5			
Clay		0.2			

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC15SD**

Lab Sample ID: 580-28371-6

Client Matrix: Solid

Date Sampled: 08/25/2011 1630

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		44.3			
Coarse Sand		24.6			
Medium Sand		22.5			
Fine Sand		6.1			
Very Fine Sand		0.2			
Silt		1.8			
Clay		0.5			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF01SD**

Lab Sample ID: 580-28371-7

Client Matrix: Solid

Date Sampled: 08/25/2011 1724

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		8.1			
Coarse Sand		11.9			
Medium Sand		50.0			
Fine Sand		21.7			
Very Fine Sand		0.4			
Silt		7.0			
Clay		0.9			

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF04SD**

Lab Sample ID: 580-28371-8

Client Matrix: Solid

Date Sampled: 08/26/2011 1200

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		37.4			
Coarse Sand		22.0			
Medium Sand		19.6			
Fine Sand		18.6			
Very Fine Sand		0.4			
Silt		0.3			
Clay		1.7			

JMW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF06SD**

Lab Sample ID: 580-28371-9

Client Matrix: Solid

Date Sampled: 08/26/2011 1400

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-97349	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/06/2011 0833			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		10.5			
Coarse Sand		13.2			
Medium Sand		27.1			
Fine Sand		27.1			
Very Fine Sand		0.5			
Silt		20.1			
Clay		1.5			

MW
10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF07SD**

Lab Sample ID: 580-28371-10

Client Matrix: Solid

Date Sampled: 08/26/2011 1422

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98036	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/13/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		44.7			
Coarse Sand		12.2			
Medium Sand		16.2			
Fine Sand		22.6			
Very Fine Sand		0.5			
Silt		0.8			
Clay		3.0			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF08SD**

Lab Sample ID: 580-28371-11

Client Matrix: Solid

Date Sampled: 08/26/2011 1456

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98036	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/13/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		43.7			
Coarse Sand		14.9			
Medium Sand		20.4			
Fine Sand		17.8			
Very Fine Sand		0.4			
Silt		1.4			
Clay		1.5			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF09SD**

Lab Sample ID: 580-28371-12

Client Matrix: Solid

Date Sampled: 08/26/2011 1531

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98036	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/13/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		1.2			
Coarse Sand		2.1			
Medium Sand		9.8			
Fine Sand		18.0			
Very Fine Sand		1.4			
Silt		43.3			
Clay		24.2			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BC01SD**

Lab Sample ID: 580-28371-36

Client Matrix: Solid

Date Sampled: 08/25/2011 1435

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98036	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/13/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		23.9			
Coarse Sand		8.7			
Medium Sand		14.0			
Fine Sand		17.9			
Very Fine Sand		1.0			
Silt		23.3			
Clay		11.2			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **BG02SD**

Lab Sample ID: 580-28371-37

Client Matrix: Solid

Date Sampled: 08/26/2011 1015

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		3.0			
Coarse Sand		8.2			
Medium Sand		13.0			
Fine Sand		17.0			
Very Fine Sand		1.4			
Silt		38.8			
Clay		18.6			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC04SD**

Lab Sample ID: 580-28371-38

Client Matrix: Solid

Date Sampled: 08/25/2011 1748

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		41.2			
Coarse Sand		39.2			
Medium Sand		13.7			
Fine Sand		5.2			
Very Fine Sand		0.2			
Silt		0.3			
Clay		0.2			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC03SD**

Lab Sample ID: 580-28371-39
Client Matrix: Solid

Date Sampled: 08/25/2011 1100
Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		60.0			
Coarse Sand		11.8			
Medium Sand		13.9			
Fine Sand		11.1			
Very Fine Sand		0.2			
Silt		0.5			
Clay		2.6			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC04SD**

Lab Sample ID: 580-28371-40

Client Matrix: Solid

Date Sampled: 08/25/2011 1217

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		49.1			
Coarse Sand		21.0			
Medium Sand		14.2			
Fine Sand		12.8			
Very Fine Sand		0.3			
Silt		0.6			
Clay		2.0			

MW 10-27-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC06SD**

Lab Sample ID: 580-28371-41

Client Matrix: Solid

Date Sampled: 08/25/2011 1305

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.4			
Coarse Sand		1.5			
Medium Sand		20.0			
Fine Sand		59.8			
Very Fine Sand		1.3			
Silt		12.5			
Clay		4.6			

MW 10/31/11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC07SD**

Lab Sample ID: 580-28371-42

Client Matrix: Solid

Date Sampled: 08/25/2011 1328

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.0			
Coarse Sand		0.0			
Medium Sand		4.2			
Fine Sand		45.7			
Very Fine Sand		2.8			
Silt		42.4			
Clay		4.9			

MW 10-3-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC09SD**

Lab Sample ID: 580-28371-43

Client Matrix: Solid

Date Sampled: 08/25/2011 1343

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		25.7			
Coarse Sand		11.8			
Medium Sand		15.7			
Fine Sand		38.7			
Very Fine Sand		0.9			
Silt		4.3			
Clay		2.9			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC10SD**

Lab Sample ID: 580-28371-44

Client Matrix: Solid

Date Sampled: 08/25/2011 1421

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		45.2			
Coarse Sand		6.9			
Medium Sand		12.2			
Fine Sand		31.6			
Very Fine Sand		0.7			
Silt		0.5			
Clay		2.9			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC11SD**

Lab Sample ID: 580-28371-45

Client Matrix: Solid

Date Sampled: 08/25/2011 1512

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98057	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	09/20/2011 0830			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		2.1			
Coarse Sand		2.8			
Medium Sand		33.8			
Fine Sand		39.1			
Very Fine Sand		1.1			
Silt		17.1			
Clay		4.0			

JMW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC12SD**

Lab Sample ID: 580-28371-46

Client Matrix: Solid

Date Sampled: 08/25/2011 1430

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		0.6			
Coarse Sand		0.3			
Medium Sand		21.3			
Fine Sand		54.3			
Very Fine Sand		1.2			
Silt		17.9			
Clay		4.5			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC13SD**

Lab Sample ID: 580-28371-47

Client Matrix: Solid

Date Sampled: 08/25/2011 1530

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		55.8			
Coarse Sand		23.9			
Medium Sand		12.5			
Fine Sand		5.7			
Very Fine Sand		0.1			
Silt		1.9			
Clay		0.1			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **LC14SD**

Lab Sample ID: 580-28371-48

Client Matrix: Solid

Date Sampled: 08/25/2011 1550

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		68.5			
Coarse Sand		10.7			
Medium Sand		7.4			
Fine Sand		10.3			
Very Fine Sand		0.4			
Silt		1.4			
Clay		1.4			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF05SD**

Lab Sample ID: 580-28371-49
Client Matrix: Solid

Date Sampled: 08/26/2011 1235
Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		19.7			
Coarse Sand		19.6			
Medium Sand		21.7			
Fine Sand		29.5			
Very Fine Sand		29.5			
Silt		4.4			
Clay		3.9			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC01SD**

Lab Sample ID: 580-28371-54

Client Matrix: Solid

Date Sampled: 08/25/2011 1630

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		30.4			
Coarse Sand		9.4			
Medium Sand		24.1			
Fine Sand		30.4			
Very Fine Sand		0.7			
Silt		1.2			
Clay		3.8			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **DC03SD**

Lab Sample ID: 580-28371-55

Client Matrix: Solid

Date Sampled: 08/25/2011 1727

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		61.7			
Coarse Sand		10.5			
Medium Sand		13.1			
Fine Sand		12.0			
Very Fine Sand		0.8			
Silt		0.3			
Clay		1.7			

JAW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF02SD**

Lab Sample ID: 580-28371-70

Client Matrix: Solid

Date Sampled: 08/26/2011 0950

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		71.9			
Coarse Sand		7.2			
Medium Sand		8.9			
Fine Sand		10.2			
Very Fine Sand		0.5			
Silt		1.0			
Clay		0.3			

MW 10-31-11

Client: Ecology and Environment, Inc.

Job Number: 580-28371-1

Client Sample ID: **NF03SD**

Lab Sample ID: 580-28371-71

Client Matrix: Solid

Date Sampled: 08/26/2011 1034

Date Received: 08/29/2011 1440

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	580-98261	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0 g
Analysis Date:	10/10/2011 0842			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	NONE	NONE
Gravel		20.5			
Coarse Sand		29.3			
Medium Sand		33.5			
Fine Sand		10.7			
Very Fine Sand		10.7			
Silt		5.0			
Clay		0.6			

MW/10-27-11

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MEMORANDUM

DATE: November 17, 2011

TO: Renee Nordeen, Project Manager, E & E, Seattle, Washington

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

SUBJ: **Inorganic Data Qnality Assurance Review, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data quality assurance review of 26 solid samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for Perchlorate (EPA Method 6860) was performed by TestAmerica Denver, Arvada, Colorado. All sample analyses were evaluated following EPA's Stage 2 and 4 Data Validation Electronic/Manual Process (S4VEM).

The samples were numbered:

FB01SS	FB02SS	FB03SS	FB04SS
FP08SS	FP09SS	FP10SS	FR07SS
FR12SS	FR13SS	FR14SS	FR15SS
OB05SS	OP01SS	FB05SS	FB06SS
FP06SS	FP07SS	FR08SS	FR09SS
FR08SS	FR09SS	FR10SS	FR11SS
FR16SS	OB02SS	OB03SS	OB04SS

Data Qualifications:

1. Sample Holding Times: Acceptable.

The samples were maintained at $\leq 6°C$. The samples were collected on August 23, 2011, the samples were extracted by September 12, 1011, and all samples were analyzed by October 4, 2011, therefore meeting QC criteria of less than 28 days between extraction and analysis for soil samples.

2. Initial and Continuing Calibration: Acceptable.

All calibration results were within QC limits.

3. Blanks: Acceptable.

A preparation blank was analyzed for each 20 samples or per matrix per concentration level. Blanks were analyzed after each Initial or Continuing Calibration Verification. There were no detections

in any blanks.

4. Precision and Bias Determination: Not Performed.

Samples necessary to determine precision and bias were not provided to the laboratory. All results were flagged "PND" (Precision Not Determined) and "RND" (Recovery Not Determined), although the flags do not appear on the data sheets.

5. Performance Evaluation Sample Analysis: Not Provided.

Performance evaluation samples were not provided to the laboratory.

6. LC ICS: Acceptable.

The LC ICS results were within QC limits.

7. Blank and Matrix Spike Analysis: Acceptable.

Blank and matrix spike analyses was performed per SDG or per matrix per concentration level, whichever was more frequent. Spike and spike duplicate recoveries were within the QC limits.

8. Duplicate Analysis: Acceptable.

A laboratory spike duplicate analysis was performed per SDG or per matrix per concentration level, whichever was more frequent. All duplicate results were within QC limits.

9. Internal Standards: Acceptable.

All internal standard results were within QC limits.

10. Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical methods, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

JH - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a high bias.

JL - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a low bias.

JK - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias.

JQ – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias and falls between the MDL and the Minimum (or Practical) Quantitation Limit (MQL, PQL).

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FB01SS**

Lab Sample ID: 580-28297-1
Client Matrix: Solid
% Moisture: 24.6

Date Sampled: 08/23/2011 1055
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22051.d
Dilution:	1.0			Initial Weight/Volume:	10.57 g
Analysis Date:	09/23/2011 1131			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.55	J Q	0.050	0.63

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FB02SS**

Lab Sample ID: 580-28297-2

Client Matrix: Solid

% Moisture: 27.0

Date Sampled: 08/23/2011 1100

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22055.d
Dilution:	1.0			Initial Weight/Volume:	10.34 g
Analysis Date:	09/23/2011 1324			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.67		0.053	0.66

MW
11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FB03SS**

Lab Sample ID: 580-28297-3
Client Matrix: Solid
% Moisture: 22.6

Date Sampled: 08/23/2011 1109
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22056.d
Dilution:	1.0			Initial Weight/Volume:	10.80 g
Analysis Date:	09/23/2011 1353			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.44	J Q	0.048	0.60

MW
11/7/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FB04SS**

Lab Sample ID: 580-28297-4

Client Matrix: Solid

% Moisture: 21.3

Date Sampled: 08/23/2011 1118

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22057.d
Dilution:	1.0			Initial Weight/Volume:	10.08 g
Analysis Date:	09/23/2011 1421			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.36	J Q	0.050	0.63

MW
1H7-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FP08SS**

Lab Sample ID: 580-28297-5

Client Matrix: Solid

% Moisture: 20.5

Date Sampled: 08/23/2011 1030

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22058.d
Dilution:	1.0			Initial Weight/Volume:	10.03 g
Analysis Date:	09/23/2011 1450			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.069	J Q	0.050	0.63

MW 11/17/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FP09SS**

Lab Sample ID: 580-28297-6

Client Matrix: Solid

% Moisture: 14.5

Date Sampled: 08/23/2011 1053

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22059.d
Dilution:	1.0			Initial Weight/Volume:	10.40 g
Analysis Date:	09/23/2011 1518			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.18	J Q	0.045	0.56

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FP10SS**

Lab Sample ID: 580-28297-7
Client Matrix: Solid
% Moisture: 19.0

Date Sampled: 08/23/2011 1109
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22060.d
Dilution:	1.0			Initial Weight/Volume:	10.84 g
Analysis Date:	09/23/2011 1546			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.25	J Q	0.046	0.57

MW
11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR07SS**

Lab Sample ID: 580-28297-8

Client Matrix: Solid

% Moisture: 16.9

Date Sampled: 08/23/2011 0955

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22061.d
Dilution:	1.0			Initial Weight/Volume:	10.09 g
Analysis Date:	09/23/2011 1615			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		1.8		0.048	0.60

MW
11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR12SS**

Lab Sample ID: 580-28297-9

Client Matrix: Solid

% Moisture: 17.5

Date Sampled: 08/23/2011 1428

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22062.d
Dilution:	1.0			Initial Weight/Volume:	10.60 g
Analysis Date:	09/23/2011 1643			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.10	J Q	0.046	0.57

MW
11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR13SS**

Lab Sample ID: 580-28297-10
Client Matrix: Solid
% Moisture: 22.2

Date Sampled: 08/23/2011 1440
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22063.d
Dilution:	1.0			Initial Weight/Volume:	10.76 g
Analysis Date:	09/23/2011 1712			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.16	J Q	0.048	0.60

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR14SS**

Lab Sample ID: 580-28297-11
Client Matrix: Solid
% Moisture: 25.3

Date Sampled: 08/23/2011 1452
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22067.d
Dilution:	1.0			Initial Weight/Volume:	10.18 g
Analysis Date:	09/23/2011 1905			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.24	J Q	0.053	0.66

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR15SS**

Lab Sample ID: 580-28297-12
Client Matrix: Solid
% Moisture: 25.1

Date Sampled: 08/23/2011 1509
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22068.d
Dilution:	1.0			Initial Weight/Volume:	10.28 g
Analysis Date:	09/23/2011 1934			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.19	J Q	0.052	0.65

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **OB05SS**

Lab Sample ID: 580-28297-13
Client Matrix: Solid
% Moisture: 16.6

Date Sampled: 08/23/2011 1425
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22069.d
Dilution:	1.0			Initial Weight/Volume:	10.58 g
Analysis Date:	09/23/2011 2002			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		1.3		0.045	0.57

MW 11/17/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **OP01SS**

Lab Sample ID: 580-28297-14
Client Matrix: Solid
% Moisture: 38.3

Date Sampled: 08/23/2011 1135
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22070.d
Dilution:	1.0			Initial Weight/Volume:	10.65 g
Analysis Date:	09/23/2011 2030			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.19	J Q	0.061	0.76

MW 11/17/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FB05SS**

Lab Sample ID: 580-28297-15

Client Matrix: Solid

% Moisture: 23.6

Date Sampled: 08/23/2011 1126

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-87301	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85622	Lab File ID:	IC11I22071.d
Dilution:	1.0			Initial Weight/Volume:	10.40 g
Analysis Date:	09/23/2011 2059			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.36	J Q	0.050	0.63

MW 11/7/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FB06SS**

Lab Sample ID: 580-28297-16

Client Matrix: Solid

% Moisture: 20.0

Date Sampled: 08/23/2011 1133

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01073.d
Dilution:	1.0			Initial Weight/Volume:	10.25 g
Analysis Date:	10/03/2011 0009			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.31	J Q	0.049	0.61

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FP06SS**

Lab Sample ID: 580-28297-17

Client Matrix: Solid

% Moisture: 18.5

Date Sampled: 08/23/2011 0946

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01074.d
Dilution:	1.0			Initial Weight/Volume:	10.10 g
Analysis Date:	10/03/2011 0037			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.24	J Q	0.049	0.61

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FP07SS**

Lab Sample ID: 580-28297-18

Client Matrix: Solid

% Moisture: 32.0

Date Sampled: 08/23/2011 1005

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01075.d
Dilution:	1.0			Initial Weight/Volume:	10.28 g
Analysis Date:	10/03/2011 0105			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.37	J Q	0.057	0.71

MW 11/7/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR08SS**

Lab Sample ID: 580-28297-19
Client Matrix: Solid
% Moisture: 14.8

Date Sampled: 08/23/2011 1005
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01076.d
Dilution:	1.0			Initial Weight/Volume:	10.39 g
Analysis Date:	10/03/2011 0134			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.50	J Q	0.045	0.57

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR09SS**

Lab Sample ID: 580-28297-20

Client Matrix: Solid

% Moisture: 24.5

Date Sampled: 08/23/2011 1345

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01077.d
Dilution:	1.0			Initial Weight/Volume:	10.16 g
Analysis Date:	10/03/2011 0202			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.66		0.052	0.65

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR10SS**

Lab Sample ID: 580-28297-21

Client Matrix: Solid

% Moisture: 21.2

Date Sampled: 08/23/2011 1408

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01078.d
Dilution:	1.0			Initial Weight/Volume:	10.30 g
Analysis Date:	10/03/2011 0231			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.65		0.049	0.62

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR11SS**

Lab Sample ID: 580-28297-22
Client Matrix: Solid
% Moisture: 19.8

Date Sampled: 08/23/2011 1417
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01079.d
Dilution:	1.0			Initial Weight/Volume:	10.35 g
Analysis Date:	10/03/2011 0259			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.12	J Q	0.048	0.60

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **FR16SS**

Lab Sample ID: 580-28297-23
Client Matrix: Solid
% Moisture: 24.7

Date Sampled: 08/23/2011 1525
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-88877	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01105.d
Dilution:	1.0			Initial Weight/Volume:	10.54 g
Analysis Date:	10/03/2011 1347			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.24	J Q	0.050	0.63

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **OB02SS**

Lab Sample ID: 580-28297-24
Client Matrix: Solid
% Moisture: 28.0

Date Sampled: 08/23/2011 1345
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01149.d
Dilution:	1.0			Initial Weight/Volume:	10.52 g
Analysis Date:	10/04/2011 1150			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.072	J Q	0.053	0.66

MW 11-17-11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **OB03SS**

Lab Sample ID: 580-28297-25
Client Matrix: Solid
% Moisture: 16.6

Date Sampled: 08/23/2011 1358
Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01150.d
Dilution:	1.0			Initial Weight/Volume:	10.31 g
Analysis Date:	10/04/2011 1219			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.97		0.047	0.58

MW 11/7/11

Client: Ecology and Environment, Inc.

Job Number: 580-28297-1

Client Sample ID: **OB04SS**

Lab Sample ID: 580-28297-26

Client Matrix: Solid

% Moisture: 14.3

Date Sampled: 08/23/2011 1410

Date Received: 08/26/2011 1000

6860 Perchlorate by IC/MS or IC/MS/MS

Analysis Method:	6860	Analysis Batch:	280-89004	Instrument ID:	LC_LCMS1
Prep Method:	6860	Prep Batch:	280-85624	Lab File ID:	IC11J01151.d
Dilution:	1.0			Initial Weight/Volume:	10.37 g
Analysis Date:	10/04/2011 1247			Final Weight/Volume:	100 mL
Prep Date:	09/12/2011 1900			Injection Volume:	250 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perchlorate		0.29	J Q	0.045	0.56

MW 11-7-11

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720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: June 30, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Mercury Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 16 soil and 25 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for mercury (EPA Method 245.1) was performed by the USEPA Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

11204300	11204301	11204302	11204303	11204305	11204306
11204307	11204308	11204309	11204310	11204311	11204312
11204313	11204314	11204315	11204316	11204317	11204318
11204319	11204322	11204323	11204326	11204327	11204328
11204329	11204330	11204331	11204332	11204333	11204334
11204336	11204337	11204338	11204339	11204340	11204341
11204342	11204343	11204344	11204345	11204349	

No discrepancies were noted.

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT:	Data Release for Inorganics Results from the Region 10 USEPA Laboratory
PROJECT NAME:	Camp Bonneville SI, Phase 1 Samples
PROJECT CODE:	TEC-993A
FROM:	Gerald Dodo, Supervisory Chemist Office of Environmental Assessment USEPA Region 10 Laboratory
TO:	Monica Tonel, Project Manager Office of Environmental Cleanup, Assessment and Brownfield Unit 1, USEPA Region 10
CC:	Renee Nordeen, E & E

I have authorized release of this data package. Attached you will find the mercury results for the Camp Bonneville SI, Phase 1 samples received on 05/19/2011 and 05/23/2011. For further information regarding the attached data, contact Stephanie Le at 360-871-8715.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR INORGANIC CHEMICAL ANALYSES

DATE: June 27, 2011

TO: Monica Tonel, Project Manager
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, US EPA Region 10

FROM: Stephanie Le, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of the Camp Bonneville SI, Phase 1 Samples For Mercury

Project Code: TEC-993A
Account Code: 2011T10P302DD2C101RLA00

CC: Renee Nordeen, E & E

The following is a quality assurance review of the results of the analysis of 16 soil and 25 water samples for mercury. These samples were submitted for the Camp Bonneville SI Phase 1 project. The analysis was performed by ESAT chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

Soils:

11204301	11204307	11204309	11204311	11204313	11204315	11204317
11204319	11204322	11204323	11204326	11204327	11204329	11204331
11204333	11204343					

Waters:

11204300	11204302	11204303	11204305	11204306	11204308	11204310
11204312	11204314	11204316	11204318	11204328	11204330	11204332
11204334	11204336	11204337	11204338	11204339	11204340	11204341
11204342	11204344	11204345	11204349			

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with **"Laboratory/QAPP Criteria Not Met."**

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has also been accredited to the Standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt – Laboratory/QAPP Criteria Not Met

Refer to the Corrective Action Notices dated 05/20/2011 and 05/25/2011 for a record of observations made during sample receipt. These findings were administrative in nature and did not affect sample results.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples. The samples covered by this review met method holding time recommendations, where applicable.

3. Sample Preparation

The samples were prepared according to the method outlined in the SOP for these analytes for this type of matrix. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification

The linear regression generated for the initial calibrations met method criteria. The low point of the calibration curve is usually the Minimum Reporting Level (MRL) of the method. All calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples

All laboratory control sample results met the recovery acceptance criteria for the methods reported. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis

The method blanks did not contain detectable levels of analytes which would require data qualification. No qualification was required on the basis of blank contamination

7. Duplicate Analysis

Duplicate analysis was performed on samples 11204301 (soil), 11204302 (water), and 11204303 (water). Sample results which were greater than 5 times of the MRL level were within the 20% RPD requirement. No qualification was required based on duplicate analysis.

8. Matrix Spike/Matrix Spike Duplicate Analysis

Matrix spike analyses were performed on samples 11204301 (soil), 11204302 (water), and 11204303 (water). Sample results were within the 80-120% recovery requirements. No qualification was required based on matrix spike analyses.

9. Reference Materials

A reference material was prepared and analyzed with these samples. Analytical values for this sample were within the range of acceptable results. No qualification was necessary based on analysis of the reference material.

10. Instrument Peak Integrations

No manual integrations were performed for these methods.

11. Reporting Limits

All sample results that fall below the MRL are assigned the value of the MRL and the 'U' qualifier is attached.

12. Changes from Preliminary Data

No changes were made between the preliminary and final data.

13. Data Qualifiers

No data qualification was required for this analysis.

Below are the definitions for the codes used for qualifying data from these analyses. When more than one quality issue was involved, the most restrictive qualifier has been attached to the data.

U - The analyte was not detected at or above the reported value.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Stephanie Le at the Region 10 Laboratory, phone number (360) 871- 8715.

14. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DS), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards - Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analytes and the percent recoveries of the analytes are determined.

Method Blank- An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) - the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Low Range Standard (LRS) Level – A level where it has been demonstrated that the instrument achieves defined levels of accuracy and precision, as checked with the Low Range Standard during analysis.

Peak Integrations - The output of many analytical instruments is a peak which represents the quantity of analyte in the sample. The instrument automatically integrates the peak area to provide the concentration of the analyte; however, sometimes these peaks need to be manually integrated by the analyst.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Reference materials – Samples with analyte values that are homogeneous and well established. This allows the reference material to be used to assess the accuracy of the measurement method.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

US EPA Region 10 Laboratory

Multi-Sample Final Report

TEC-993A CAMP BONNEVILLE PHASE I

Project Code : TEC-993A

Contact : Monica Tonel

Account : 2011T10P302DD2C101RLA00

Lab Name : Region 10 Lab

Lab eRLN ID : USEPA Region 10 Laboratory

Hg

Method Information

Data Package PKG# 1158

7439976 - Mercury

Weight Basis : Wet

Preparation Method(s):

245.1 - Cold vapor mercury in water

Analytical Method:

245.1 - Cold vapor mercury in water

Target Results

Sample		Description	Lab Matrix	Result	Unit	Qual.
11204300	sam	BG01GW	Water	0.050	ug/L	U
11204302	sam	BG02GW	Water	0.050	ug/L	U
11204303	sam	BG03GW	Water	0.050	ug/L	U
11204305	sam	RS02WT	Water	0.050	ug/L	U
11204306	sam	LF01GW	Water	0.050	ug/L	U
11204308	sam	LF02GW	Water	0.050	ug/L	U
11204310	sam	LF03GW	Water	0.050	ug/L	U
11204312	sam	LF04GW	Water	**0.0551**	ug/L	
11204314	sam	LF05GW	Water	0.050	ug/L	U
11204316	sam	LF06GW	Water	0.050	ug/L	U
11204318	sam	LF07GW	Water	0.050	ug/L	U
11204328	sam	LF12GW	Water	**0.0536**	ug/L	
11204330	sam	LF13GW	Water	**0.0684**	ug/L	
11204332	sam	LF14GW	Water	0.050	ug/L	U
11204334	sam	LF15GW	Water	0.050	ug/L	U
11204336	sam	MW01GW	Water	0.050	ug/L	U
11204337	sam	MW02GW	Water	0.050	ug/L	U
11204338	sam	MW03GW	Water	0.050	ug/L	U
11204339	sam	MW04GW	Water	0.050	ug/L	U
11204340	sam	MW05GW	Water	0.050	ug/L	U
11204341	sam	MW06GW	Water	0.050	ug/L	U
11204342	sam	MW07GW	Water	0.050	ug/L	U
11204344	sam	MW09GW	Water	0.050	ug/L	U
11204345	sam	RS01WT	Water	0.050	ug/L	U
11204349	sam	MW08GW	Water	0.050	ug/L	U
11204302	du	BG02GW	Water	0.050	ug/L	U
11204303	du	BG03GW	Water	0.050	ug/L	U

Target Results (cont.)

Sample		Description	Lab Matrix	Result	Unit	Qual.
11204302	ms	BG02GW	Water	**92**	%Rec	
11204303	ms	BG03GW	Water	**98**	%Rec	
11204302	msd	BG02GW	Water	**97**	%Rec	
11204303	msd	BG03GW	Water	**97**	%Rec	
IW053111A	blk	Blank	Unspecified	0.050	ug/L	U
IW060211A	blk	Blank	Unspecified	0.050	ug/L	U
IW053111A	lcs	Lab Control Standard	Liquid	**99**	%Rec	
IW060211A	lcs	Lab Control Standard	Unspecified	**102**	%Rec	
IW053111A	lc2	Lab Control Standard Dup.	Liquid	**94**	%Rec	
IW060211A	lc2	Lab Control Standard Dup.	Unspecified	**105**	%Rec	

Data Package :PKG# 1158

7439976 - Mercury

Weight Basis : Dry

Preparation Method(s):

7471B - Mercury: Manual Cold Vapor - Solid/Semisolid Waste, SW-846

Analytical Method:

7471B - Mercury: Manual Cold Vapor - Solid/Semisolid Waste, SW-846

Target Results

Sample		Description	Lab Matrix	Result	Unit	Qual.
11204301	sam	BG01SB	Soil	**0.0731**	mg/Kg	
11204307	sam	LF01SB	Soil	**0.0334**	mg/Kg	
11204309	sam	LF02SB	Soil	**0.0540**	mg/Kg	
11204311	sam	LF03SB	Soil	**0.0186**	mg/Kg	
11204313	sam	LF04SB	Soil	**0.0303**	mg/Kg	
11204315	sam	LF05SB	Soil	**0.0688**	mg/Kg	
11204317	sam	LF06SB	Soil	**0.0180**	mg/Kg	
11204319	sam	LF07SB	Soil	**0.0358**	mg/Kg	
11204322	sam	LF08SB	Soil	**0.105**	mg/Kg	
11204323	sam	LF09SB	Soil	**0.0691**	mg/Kg	
11204326	sam	LF01SD	Sediment	0.0098	mg/Kg	U
11204327	sam	PP01SD	Sediment	**0.0164**	mg/Kg	
11204329	sam	LF12SB	Soil	**0.0296**	mg/Kg	
11204331	sam	LF13SB	Soil	**0.0625**	mg/Kg	
11204333	sam	LF14SB	Soil	**0.0553**	mg/Kg	
11204343	sam	BG01SD	Sediment	**0.0552**	mg/Kg	
11204301	du	BG01SB	Soil	**0.0696**	mg/Kg	
11204301	ms	BG01SB	Soil	**91**	%Rec	
11204301	msd	BG01SB	Soil	**87**	%Rec	
IS060711A	blk	Blank	Unspecified	0.010	mg/Kg	U
IS060711A	std	Control	Solid	**90**	%Rec	
IS060711A	lcs	Lab Control Standard	Unspecified	**105**	%Rec	
IS060711A	lc2	Lab Control Standard Dup.	Unspecified	**102**	%Rec	

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Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: July 5, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 16 soil and 25 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA Method 245.1) was performed by the USEPA Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

11204300	11204301	11204302	11204303	11204305	11204306
11204307	11204308	11204309	11204310	11204311	11204312
11204313	11204314	11204315	11204316	11204317	11204318
11204319	11204322	11204323	11204326	11204327	11204328
11204329	11204330	11204331	11204332	11204333	11204334
11204336	11204337	11204338	11204339	11204340	11204341
11204342	11204343	11204344	11204345	11204349	

No discrepancies were noted. The secondary reviewer added bias qualifiers to estimated results based on comments in the Quality Assurance review.

Bias Qualifier and Definitions

H - The associated estimated sample result has a likely high bias.

L - The associated estimated sample result has a likely low bias.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganics Results from the Region 10 USEPA Laboratory

PROJECT NAME: Camp Bonneville SI, Phase 1 Samples

PROJECT CODE: TEC-993A

FROM: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment
USEPA Region 10 Laboratory

TO: Monica Tonel, Project Manager
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, USEPA Region 10

CC: Renee Nordeen, E & E

I have authorized release of this data package. Attached you will find the metals results for the Camp Bonneville SI, Phase 1 samples received on 05/19/2011 and 05/23/2011. For further information regarding the attached data, contact Stephanie Le at 360-871-8715.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR INORGANIC CHEMICAL ANALYSES

DATE: June 23, 2011

TO: Monica Tonel, Project Manager
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, US EPA Region 10

FROM: Stephanie Le, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of the Camp Bonneville SI, Phase 1 Samples For Metals

Project Code: TEC-993A
Account Code: 2011T10P302DD2C101RLA00

CC: Renee Nordeen, E & E

The following is a quality assurance review of the results of the analysis of 16 soil and 25 water samples for metals. These samples were submitted for the Camp Bonneville SI Phase 1 project. The analysis was performed by ESAT chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

Soils:

11204301	11204307	11204309	11204311	11204313	11204315	11204317
11204319	11204322	11204323	11204326	11204327	11204329	11204331
11204333	11204343					

Waters:

11204300	11204302	11204303	11204305	11204306	11204308	11204310
11204312	11204314	11204316	11204318	11204328	11204330	11204332
11204334	11204336	11204337	11204338	11204339	11204340	11204341
11204342	11204344	11204345	11204349			

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with **"Laboratory/QAPP Criteria Not Met."**

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has also been accredited to the Standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt – Laboratory/QAPP Criteria Not Met

Refer to the Corrective Action Notices dated 05/20/2011 and 05/25/2011 for a record of observations made during sample receipt. These findings were administrative in nature and did not affect sample results.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples. The samples covered by this review met method holding time recommendations, where applicable.

3. Sample Preparation

The samples were prepared according to the method outlined in the SOP for these analytes for this type of matrix. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification – Laboratory/QAPP Criteria Not Met

The linear regression generated for the initial calibrations met method criteria. All calibration verification checks met the frequency and recovery criteria on the day of analysis with the exception of thallium for continuing calibration verification. Thallium results were qualified (J), estimated. No other qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples

All laboratory control sample results met the recovery acceptance criteria for the methods reported. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis – Laboratory/QAPP Criteria Not Met

The method blanks did not contain detectable levels of analytes which would require data qualification with the exception of sodium. Sodium was detected at trace level in the soil method blank. Sodium result in sample 11204333 was qualified (J), estimated, based on blank contamination. No other qualification was required on the basis of blank contamination.

7. Duplicate Analysis

Duplicate analyses were performed on samples 11204301 (soil), 11204302 (water), and 11204303 (water). Sample results which were above the Low Range Standard level were within the 20% RPD requirement. No qualification was required based on duplicate analysis.

8. Matrix Spike/Matrix Spike Duplicate Analysis – Laboratory/QAPP Criteria Not Met

Matrix spike analyses were performed on samples 11204301 (soil), 11204302 (water), and 11204303 (water). Sample results were within the 75-125% recovery requirements, with the following exceptions:

The antimony spike recoveries for soil samples were low at 14%/14%. All antimony results for soil samples were qualified (J), estimated.

The molybdenum spike recoveries for soil samples were low at 68%/68%. All molybdenum results for soil samples were qualified (J), estimated.

The thallium spike recoveries for soil samples were low at 71%/70%. All thallium results for soil samples were qualified (J), estimated. No other qualification was required based on matrix spike analyses.

9. Reference Materials

A reference material was prepared and analyzed with these samples. Analytical values for this sample were within the range of acceptable results. No qualification was necessary based on analysis of the reference material.

10. Instrument Peak Integrations

No manual integrations were performed for these methods.

11. Reporting Limits

All sample results that fall below the MRL are assigned the value of the MRL and the 'U' qualifier is attached. Sample results above the MRL but below the LRS are reported to two significant figures; results above the LRS level are reported to three significant figures.

12. Changes from Preliminary Data

No changes were made between the preliminary and final data.

13. Data Qualifiers

The antimony, molybdenum, and thallium results for all soil samples were qualified "J", estimated, because of low matrix spikes recoveries.

The sodium result for soil sample 11204333 was qualified "J", estimated, because of blank contamination.

No other data qualification was required for this analysis.

Below are the definitions for the codes used for qualifying data from these analyses. When more than one quality issue was involved, the most restrictive qualifier has been attached to the data.

U - The analyte was not detected at or above the reported value.

J - The identification of the analyte is acceptable; however the reported value is an estimate.

UJ - The analyte was not detected at or above the reported value. The reported value is an estimate.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Stephanie Le at the Region 10 Laboratory, phone number (360) 871- 8715.

14. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DS), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards - Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS

provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analytes and the percent recoveries of the analytes are determined.

Method Blank- An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) - the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Low Range Standard (LRS) Level – A level where it has been demonstrated that the instrument achieves defined levels of accuracy and precision, as checked with the Low Range Standard during analysis.

Peak Integrations - The output of many analytical instruments is a peak which represents the quantity of analyte in the sample. The instrument automatically integrates the peak area to provide the concentration of the analyte; however, sometimes these peaks need to be manually integrated by the analyst.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Reference materials – Samples with analyte values that are homogeneous and well established. This allows the reference material to be used to assess the accuracy of the measurement method.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

US EPA Region 10 Laboratory

Multi-Analyte Final Report

TEC-993A CAMP BONNEVILLE PHASE I

Project Code : TEC-993A

Contact : Monica Tonel

Account : 2011T10P302DD2C101RLA00

Lab Name : Region 10 Lab

Lab eRLN ID : USEPA Region 10 Laboratory

Sample Information

11204300

Description : BG01GW

Sampling Date/Time : 5/18/2011 11:09:00AM

Matrix : Water

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package : PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**2980**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**12.5**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1800**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**2180**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**870**	ug/L	
7439965	Manganese	**48.4**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U

ICP-SAS

Target Results (cont.)

Analyte Code	Analyte Name	Result	Unit	Qual.
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1410**	ug/L	
7440246	Strontium	**22**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**204**	ug/L	
7440622	Vanadium	10	ug/L	U
7440666	Zinc	**5.3**	ug/L	

Sample Information

11204301

Description : BG01SB

Sampling Date/Time : 5/17/2011 9:33:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**82300**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	**4.8**	mg/Kg	
7440393	Barium	**154**	mg/Kg	
7440417	Beryllium	**1.21**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**1940**	mg/Kg	
7440473	Chromium	**38.0**	mg/Kg	
7440484	Cobalt	**28.4**	mg/Kg	
7440508	Copper	**123**	mg/Kg	
7439896	Iron	**76900**	mg/Kg	
7439921	Lead	**7.8**	mg/Kg	
7439932	Lithium	**18.8**	mg/Kg	
7439954	Magnesium	**4660**	mg/Kg	
7439965	Manganese	**645**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ L
7440020	Nickel	**17.4**	mg/Kg	
7440097	Potassium	**742**	mg/Kg	
7782492	Selenium	**5.0**	mg/Kg	
7440224	Silver	1.0	mg/Kg	U
7440235	Sodium	**259**	mg/Kg	
7440246	Strontium	**70.6**	mg/Kg	
7440280	Thallium	**6.5**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2950**	mg/Kg	
7440622	Vanadium	**212**	mg/Kg	
7440666	Zinc	**82.0**	mg/Kg	

Sample Information

11204302

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**1630**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**8.80**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**3210**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**1050**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1710**	ug/L	
7439965	Manganese	**13.1**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2380**	ug/L	
7440246	Strontium	**39**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**69.2**	ug/L	
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204303

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**2000**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1110**	ug/L	
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1410**	ug/L	
7440246	Strontium	**27**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204305

Description : RS02WT

Sampling Date/Time : 5/21/2011 2:55:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**31**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	50	ug/L	U
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	100	ug/L	U
7440246	Strontium	15	ug/L	U
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204306

Description : LF01GW

Sampling Date/Time : 5/18/2011 3:40:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**7280**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**18.2**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**3390**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	**9.2**	ug/L	
7439896	Iron	**5720**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1480**	ug/L	
7439965	Manganese	**178**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1900**	ug/L	
7440246	Strontium	**28**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**502**	ug/L	
7440622	Vanadium	**25**	ug/L	
7440666	Zinc	**12**	ug/L	

Sample Information

11204307

Description : LF01SB

Sampling Date/Time : 5/16/2011 11:40:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil

Data Package :PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**69500**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	4.5	mg/Kg	U
7440393	Barium	**162**	mg/Kg	
7440417	Beryllium	**1.15**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**3660**	mg/Kg	
7440473	Chromium	**28.4**	mg/Kg	
7440484	Cobalt	**20.8**	mg/Kg	
7440508	Copper	**106**	mg/Kg	
7439896	Iron	**55100**	mg/Kg	
7439921	Lead	**5.0**	mg/Kg	
7439932	Lithium	**14.7**	mg/Kg	
7439954	Magnesium	**4980**	mg/Kg	
7439965	Manganese	**516**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ L
7440020	Nickel	**14.8**	mg/Kg	
7440097	Potassium	**781**	mg/Kg	
7782492	Selenium	5.0	mg/Kg	U
7440224	Silver	1.0	mg/Kg	U
7440235	Sodium	**461**	mg/Kg	
7440246	Strontium	**97.2**	mg/Kg	
7440280	Thallium	**5.2**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2360**	mg/Kg	
7440622	Vanadium	**186**	mg/Kg	
7440666	Zinc	**88.8**	mg/Kg	

Sample Information

11204308

Description : LF02GW

Sampling Date/Time : 5/19/2011 9:45:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :
Fraction : Total
Preparation Method(s):
3010A - Acid Digestion, aqueous samples, SW-846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**3530**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**9.50**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**6200**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	**5.0**	ug/L	
7439896	Iron	**3290**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**2150**	ug/L	
7439965	Manganese	**83.6**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2710**	ug/L	
7440246	Strontium	**24**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**219**	ug/L	
7440622	Vanadium	**13**	ug/L	
7440666	Zinc	**5.9**	ug/L	

Sample Information

11204309

Description : LF02SB

Sampling Date/Time : 5/16/2011 12:35:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**80600**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	**4.8**	mg/Kg	
7440393	Barium	**171**	mg/Kg	
7440417	Beryllium	**1.19**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**5380**	mg/Kg	
7440473	Chromium	**33.3**	mg/Kg	
7440484	Cobalt	**30.2**	mg/Kg	
7440508	Copper	**121**	mg/Kg	
7439896	Iron	**68400**	mg/Kg	
7439921	Lead	**8.7**	mg/Kg	
7439932	Lithium	**16.1**	mg/Kg	
7439954	Magnesium	**5620**	mg/Kg	
7439965	Manganese	**1260**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**17.0**	mg/Kg	
7440097	Potassium	**897**	mg/Kg	
7782492	Selenium	**6.4**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**462**	mg/Kg	
7440246	Strontium	**99.1**	mg/Kg	
7440280	Thallium	**6.8**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2620**	mg/Kg	
7440622	Vanadium	**200**	mg/Kg	
7440666	Zinc	**101**	mg/Kg	

Sample Information

11204310

Description : LF03GW

Sampling Date/Time : 5/19/2011 9:56:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**22400**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**59.9**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**3600**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	**8.2**	ug/L	
7440508	Copper	**32.0**	ug/L	
7439896	Iron	**15800**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	**4.6**	ug/L	
7439954	Magnesium	**2250**	ug/L	
7439965	Manganese	**297**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1910**	ug/L	
7440246	Strontium	**48**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**1540**	ug/L	
7440622	Vanadium	**52.3**	ug/L	
7440666	Zinc	**27.4**	ug/L	

Sample Information

11204311

Description : LF03SB

Sampling Date/Time : 5/16/2011 2:03:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**75900**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	**6.2**	mg/Kg	
7440393	Barium	**174**	mg/Kg	
7440417	Beryllium	**1.08**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**6130**	mg/Kg	
7440473	Chromium	**42.6**	mg/Kg	
7440484	Cobalt	**29.4**	mg/Kg	
7440508	Copper	**110**	mg/Kg	
7439896	Iron	**76900**	mg/Kg	
7439921	Lead	**3.7**	mg/Kg	
7439932	Lithium	**15.8**	mg/Kg	
7439954	Magnesium	**5850**	mg/Kg	
7439965	Manganese	**1080**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ L
7440020	Nickel	**15.7**	mg/Kg	
7440097	Potassium	**970**	mg/Kg	
7782492	Selenium	**6.0**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**639**	mg/Kg	
7440246	Strontium	**131**	mg/Kg	
7440280	Thallium	5.0	mg/Kg	UJ L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2470**	mg/Kg	
7440622	Vanadium	**204**	mg/Kg	
7440666	Zinc	**85.4**	mg/Kg	

Sample Information

11204312

Description : LF04GW

Sampling Date/Time : 5/19/2011 10:25:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**41400**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**155**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**3360**	ug/L	
7440473	Chromium	**19**	ug/L	
7440484	Cobalt	**17**	ug/L	
7440508	Copper	**66.8**	ug/L	
7439896	Iron	**33300**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	**7.9**	ug/L	
7439954	Magnesium	**3280**	ug/L	
7439965	Manganese	**425**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	**12**	ug/L	
7440097	Potassium	**880**	ug/L	
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2910**	ug/L	
7440246	Strontium	**65**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**2870**	ug/L	
7440622	Vanadium	**185**	ug/L	
7440666	Zinc	**60.4**	ug/L	

Sample Information

11204313

Description : LF04SB

Sampling Date/Time : 5/16/2011 2:32:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**71800**	mg/Kg	
7440360	Antimony	4.4	mg/Kg	UJ L
7440382	Arsenic	**5.0**	mg/Kg	
7440393	Barium	**231**	mg/Kg	
7440417	Beryllium	**1.17**	mg/Kg	
7440439	Cadmium	0.49	mg/Kg	U
7440702	Calcium	**2950**	mg/Kg	
7440473	Chromium	**37.7**	mg/Kg	
7440484	Cobalt	**23.7**	mg/Kg	
7440508	Copper	**115**	mg/Kg	
7439896	Iron	**65900**	mg/Kg	
7439921	Lead	**5.1**	mg/Kg	
7439932	Lithium	**15.4**	mg/Kg	
7439954	Magnesium	**5070**	mg/Kg	
7439965	Manganese	**552**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**16.2**	mg/Kg	
7440097	Potassium	**832**	mg/Kg	
7782492	Selenium	**5.1**	mg/Kg	
7440224	Silver	0.98	mg/Kg	U
7440235	Sodium	**434**	mg/Kg	
7440246	Strontium	**77.0**	mg/Kg	
7440280	Thallium	**6.1**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2520**	mg/Kg	
7440622	Vanadium	**215**	mg/Kg	
7440666	Zinc	**95.2**	mg/Kg	

Sample Information

11204314

Description : LF05GW

Sampling Date/Time : 5/19/2011 2:55:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :
Fraction : Total
Preparation Method(s):
3010A - Acid Digestion, aqueous samples, SW-846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**6150**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**17.9**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1490**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	**7.2**	ug/L	
7439896	Iron	**3080**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**828**	ug/L	
7439965	Manganese	**29.5**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1980**	ug/L	
7440246	Strontium	**24**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**321**	ug/L	
7440622	Vanadium	**11**	ug/L	
7440666	Zinc	**9.0**	ug/L	

Sample Information

11204315

Description : LF05SB

Sampling Date/Time : 5/16/2011 3:05:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**69000**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	**5.0**	mg/Kg	
7440393	Barium	**191**	mg/Kg	
7440417	Beryllium	**1.44**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**3350**	mg/Kg	
7440473	Chromium	**32.9**	mg/Kg	
7440484	Cobalt	**33.1**	mg/Kg	
7440508	Copper	**116**	mg/Kg	
7439896	Iron	**68000**	mg/Kg	
7439921	Lead	**7.0**	mg/Kg	
7439932	Lithium	**14.8**	mg/Kg	
7439954	Magnesium	**4880**	mg/Kg	
7439965	Manganese	**1470**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ L
7440020	Nickel	**16.5**	mg/Kg	
7440097	Potassium	**818**	mg/Kg	
7782492	Selenium	**5.5**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**293**	mg/Kg	
7440246	Strontium	**91.3**	mg/Kg	
7440280	Thallium	**8.4**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2560**	mg/Kg	
7440622	Vanadium	**217**	mg/Kg	
7440666	Zinc	**107**	mg/Kg	

Sample Information

11204316

Description : LF06GW

Sampling Date/Time : 5/19/2011 11:35:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**2950**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**11.0**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1360**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**1920**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**792**	ug/L	
7439965	Manganese	**22.4**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2080**	ug/L	
7440246	Strontium	**19**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**180**	ug/L	
7440622	Vanadium	**10**	ug/L	
7440666	Zinc	5.0	ug/L	U

Sample Information

11204317

Description : LF06SB

Sampling Date/Time : 5/16/2011 3:34:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**55000**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	4.5	mg/Kg	U
7440393	Barium	**132**	mg/Kg	
7440417	Beryllium	**0.931**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**2990**	mg/Kg	
7440473	Chromium	**34.8**	mg/Kg	
7440484	Cobalt	**15.9**	mg/Kg	
7440508	Copper	**75.7**	mg/Kg	
7439896	Iron	**58000**	mg/Kg	
7439921	Lead	**3.4**	mg/Kg	
7439932	Lithium	**11.1**	mg/Kg	
7439954	Magnesium	**3640**	mg/Kg	
7439965	Manganese	**398**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**11.9**	mg/Kg	
7440097	Potassium	**726**	mg/Kg	
7782492	Selenium	5.0	mg/Kg	U
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**319**	mg/Kg	
7440246	Strontium	**64.9**	mg/Kg	
7440280	Thallium	**6.9**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**1930**	mg/Kg	
7440622	Vanadium	**158**	mg/Kg	
7440666	Zinc	**69.5**	mg/Kg	

Sample Information

11204318

Description : LF07GW

Sampling Date/Time : 5/19/2011 12:07:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**10400**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**36.6**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1860**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	**14**	ug/L	
7439896	Iron	**7290**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1330**	ug/L	
7439965	Manganese	**68.4**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2130**	ug/L	
7440246	Strontium	**34**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**554**	ug/L	
7440622	Vanadium	**21**	ug/L	
7440666	Zinc	**13**	ug/L	

Sample Information

11204319

Description : LF07SB

Sampling Date/Time : 5/17/2011 10:52:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**57800**	mg/Kg	
7440360	Antimony	4.4	mg/Kg	UJ L
7440382	Arsenic	**6.5**	mg/Kg	
7440393	Barium	**174**	mg/Kg	
7440417	Beryllium	**0.837**	mg/Kg	
7440439	Cadmium	0.49	mg/Kg	U
7440702	Calcium	**2910**	mg/Kg	
7440473	Chromium	**33.9**	mg/Kg	
7440484	Cobalt	**15.8**	mg/Kg	
7440508	Copper	**84.0**	mg/Kg	
7439896	Iron	**62800**	mg/Kg	
7439921	Lead	**6.3**	mg/Kg	
7439932	Lithium	**12.6**	mg/Kg	
7439954	Magnesium	**3760**	mg/Kg	
7439965	Manganese	**412**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**12.7**	mg/Kg	
7440097	Potassium	**840**	mg/Kg	
7782492	Selenium	4.9	mg/Kg	U
7440224	Silver	0.98	mg/Kg	U
7440235	Sodium	**381**	mg/Kg	
7440246	Strontium	**74.9**	mg/Kg	
7440280	Thallium	**6.8**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**1900**	mg/Kg	
7440622	Vanadium	**193**	mg/Kg	
7440666	Zinc	**71.8**	mg/Kg	

Sample Information

11204322

Description : LF08SB

Sampling Date/Time : 5/17/2011 11:32:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**81200**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ
7440382	Arsenic	**5.7**	mg/Kg	
7440393	Barium	**139**	mg/Kg	
7440417	Beryllium	**1.27**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**2020**	mg/Kg	
7440473	Chromium	**46.9**	mg/Kg	
7440484	Cobalt	**36.7**	mg/Kg	
7440508	Copper	**149**	mg/Kg	
7439896	Iron	**82600**	mg/Kg	
7439921	Lead	**24.2**	mg/Kg	
7439932	Lithium	**15.7**	mg/Kg	
7439954	Magnesium	**4410**	mg/Kg	
7439965	Manganese	**1580**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ
7440020	Nickel	**19.0**	mg/Kg	
7440097	Potassium	**638**	mg/Kg	
7782492	Selenium	**6.8**	mg/Kg	
7440224	Silver	1.0	mg/Kg	U
7440235	Sodium	**170**	mg/Kg	
7440246	Strontium	**65.2**	mg/Kg	
7440280	Thallium	**7.8**	mg/Kg	J
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**3250**	mg/Kg	
7440622	Vanadium	**250**	mg/Kg	
7440666	Zinc	**88.7**	mg/Kg	

Sample Information

11204323

Description : LF09SB

Sampling Date/Time : 5/17/2011 1:43:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil

Data Package :PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**74200**	mg/Kg	
7440360	Antimony	4.4	mg/Kg	UJ L
7440382	Arsenic	4.4	mg/Kg	U
7440393	Barium	**169**	mg/Kg	
7440417	Beryllium	**1.03**	mg/Kg	
7440439	Cadmium	0.49	mg/Kg	U
7440702	Calcium	**2590**	mg/Kg	
7440473	Chromium	**48.1**	mg/Kg	
7440484	Cobalt	**33.0**	mg/Kg	
7440508	Copper	**105**	mg/Kg	
7439896	Iron	**66500**	mg/Kg	
7439921	Lead	**25.5**	mg/Kg	
7439932	Lithium	**13.7**	mg/Kg	
7439954	Magnesium	**4370**	mg/Kg	
7439965	Manganese	**1030**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**14.8**	mg/Kg	
7440097	Potassium	**1000**	mg/Kg	
7782492	Selenium	**5.9**	mg/Kg	
7440224	Silver	0.98	mg/Kg	U
7440235	Sodium	**238**	mg/Kg	
7440246	Strontium	**83.4**	mg/Kg	
7440280	Thallium	**8.6**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2410**	mg/Kg	
7440622	Vanadium	**192**	mg/Kg	
7440666	Zinc	**82.9**	mg/Kg	

Sample Information

11204326

Description : LF01SD

Sampling Date/Time : 5/18/2011 8:55:00AM
Matrix : Sediment
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Sediment

Data Package :PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**108000**	mg/Kg	
7440360	Antimony	4.4	mg/Kg	UJ L
7440382	Arsenic	**4.7**	mg/Kg	
7440393	Barium	**62.8**	mg/Kg	
7440417	Beryllium	**0.581**	mg/Kg	
7440439	Cadmium	0.49	mg/Kg	U
7440702	Calcium	**6140**	mg/Kg	
7440473	Chromium	**34.7**	mg/Kg	
7440484	Cobalt	**47.2**	mg/Kg	
7440508	Copper	**189**	mg/Kg	
7439896	Iron	**96700**	mg/Kg	
7439921	Lead	**4.1**	mg/Kg	
7439932	Lithium	**9.99**	mg/Kg	
7439954	Magnesium	**10700**	mg/Kg	
7439965	Manganese	**495**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**25.9**	mg/Kg	
7440097	Potassium	**783**	mg/Kg	
7782492	Selenium	**7.5**	mg/Kg	
7440224	Silver	0.98	mg/Kg	U
7440235	Sodium	**691**	mg/Kg	
7440246	Strontium	**430**	mg/Kg	
7440280	Thallium	4.9	mg/Kg	UJ L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**4060**	mg/Kg	
7440622	Vanadium	**200**	mg/Kg	
7440666	Zinc	**99.8**	mg/Kg	

Sample Information

11204327

Description : PP01SD

Sampling Date/Time : 5/18/2011 9:11:00AM
Matrix : Sediment
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Sediment **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**77800**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ
7440382	Arsenic	**4.7**	mg/Kg	
7440393	Barium	**180**	mg/Kg	
7440417	Beryllium	**0.859**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**7180**	mg/Kg	
7440473	Chromium	**41.0**	mg/Kg	
7440484	Cobalt	**44.4**	mg/Kg	
7440508	Copper	**101**	mg/Kg	
7439896	Iron	**71200**	mg/Kg	
7439921	Lead	**3.9**	mg/Kg	
7439932	Lithium	**15.6**	mg/Kg	
7439954	Magnesium	**5390**	mg/Kg	
7439965	Manganese	**1650**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ
7440020	Nickel	**15.6**	mg/Kg	
7440097	Potassium	**1180**	mg/Kg	
7782492	Selenium	**7.0**	mg/Kg	
7440224	Silver	1.0	mg/Kg	U
7440235	Sodium	**675**	mg/Kg	
7440246	Strontium	**220**	mg/Kg	
7440280	Thallium	**6.2**	mg/Kg	J
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2220**	mg/Kg	
7440622	Vanadium	**185**	mg/Kg	
7440666	Zinc	**85.7**	mg/Kg	

Sample Information

11204328

Description : LF12GW

Sampling Date/Time : 5/19/2011 8:55:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**28000**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**87.6**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**9150**	ug/L	
7440473	Chromium	**12**	ug/L	
7440484	Cobalt	**12**	ug/L	
7440508	Copper	**52.6**	ug/L	
7439896	Iron	**22000**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	**6.0**	ug/L	
7439954	Magnesium	**4510**	ug/L	
7439965	Manganese	**581**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	**19**	ug/L	
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**3260**	ug/L	
7440246	Strontium	**72**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**1810**	ug/L	
7440622	Vanadium	**90.3**	ug/L	
7440666	Zinc	**48.9**	ug/L	

Sample Information

11204329

Description : LF12SB

Sampling Date/Time : 5/17/2011 3:11:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**59100**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ
7440382	Arsenic	4.5	mg/Kg	U
7440393	Barium	**139**	mg/Kg	
7440417	Beryllium	**0.882**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**4740**	mg/Kg	
7440473	Chromium	**23.4**	mg/Kg	
7440484	Cobalt	**15.3**	mg/Kg	
7440508	Copper	**86.7**	mg/Kg	
7439896	Iron	**42200**	mg/Kg	
7439921	Lead	**3.1**	mg/Kg	
7439932	Lithium	**13.7**	mg/Kg	
7439954	Magnesium	**4320**	mg/Kg	
7439965	Manganese	**305**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ
7440020	Nickel	**13.2**	mg/Kg	
7440097	Potassium	**761**	mg/Kg	
7782492	Selenium	**9.5**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**452**	mg/Kg	
7440246	Strontium	**88.4**	mg/Kg	
7440280	Thallium	**6.9**	mg/Kg	J
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**1980**	mg/Kg	
7440622	Vanadium	**165**	mg/Kg	
7440666	Zinc	**70.3**	mg/Kg	

Sample Information

11204330

Description : LF13GW

Sampling Date/Time : 5/18/2011 2:15:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :
Fraction : Total
Preparation Method(s):
3010A - Acid Digestion, aqueous samples, SW-846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**39200**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**103**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**3200**	ug/L	
7440473	Chromium	**14**	ug/L	
7440484	Cobalt	**9.8**	ug/L	
7440508	Copper	**59.8**	ug/L	
7439896	Iron	**23200**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	**8.3**	ug/L	
7439954	Magnesium	**2860**	ug/L	
7439965	Manganese	**272**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	**12**	ug/L	
7440097	Potassium	**830**	ug/L	
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1900**	ug/L	
7440246	Strontium	**51**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**2410**	ug/L	
7440622	Vanadium	**106**	ug/L	
7440666	Zinc	**55.7**	ug/L	

Sample Information

11204331

Description : LF13SB

Sampling Date/Time : 5/17/2011 3:38:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**66800**	mg/Kg	
7440360	Antimony	4.4	mg/Kg	UJ
7440382	Arsenic	4.4	mg/Kg	U
7440393	Barium	**174**	mg/Kg	
7440417	Beryllium	**1.15**	mg/Kg	
7440439	Cadmium	0.49	mg/Kg	U
7440702	Calcium	**4960**	mg/Kg	
7440473	Chromium	**27.7**	mg/Kg	
7440484	Cobalt	**23.3**	mg/Kg	
7440508	Copper	**104**	mg/Kg	
7439896	Iron	**54200**	mg/Kg	
7439921	Lead	**7.3**	mg/Kg	
7439932	Lithium	**14.7**	mg/Kg	
7439954	Magnesium	**4650**	mg/Kg	
7439965	Manganese	**839**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ
7440020	Nickel	**15.2**	mg/Kg	
7440097	Potassium	**777**	mg/Kg	
7782492	Selenium	**5.5**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**376**	mg/Kg	
7440246	Strontium	**110**	mg/Kg	
7440280	Thallium	**9.0**	mg/Kg	J
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2160**	mg/Kg	
7440622	Vanadium	**169**	mg/Kg	
7440666	Zinc	**85.3**	mg/Kg	

Sample Information

11204332

Description : LF14GW

Sampling Date/Time : 5/18/2011 2:55:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**20400**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**50.8**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1460**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	**6.5**	ug/L	
7440508	Copper	**30.7**	ug/L	
7439896	Iron	**16800**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	**4.3**	ug/L	
7439954	Magnesium	**1600**	ug/L	
7439965	Manganese	**194**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1530**	ug/L	
7440246	Strontium	**23**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**1390**	ug/L	
7440622	Vanadium	**67.3**	ug/L	
7440666	Zinc	**25.0**	ug/L	

Sample Information

11204333

Description : LF14SB

Sampling Date/Time : 5/17/2011 3:58:00PM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :** PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**85400**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ L
7440382	Arsenic	**5.9**	mg/Kg	
7440393	Barium	**160**	mg/Kg	
7440417	Beryllium	**0.842**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**839**	mg/Kg	
7440473	Chromium	**37.7**	mg/Kg	
7440484	Cobalt	**34.5**	mg/Kg	
7440508	Copper	**121**	mg/Kg	
7439896	Iron	**74500**	mg/Kg	
7439921	Lead	**11**	mg/Kg	
7439932	Lithium	**17.3**	mg/Kg	
7439954	Magnesium	**2650**	mg/Kg	
7439965	Manganese	**1460**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**21.9**	mg/Kg	
7440097	Potassium	**636**	mg/Kg	
7782492	Selenium	**6.0**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**140**	mg/Kg	J H
7440246	Strontium	**26**	mg/Kg	
7440280	Thallium	**6.1**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2370**	mg/Kg	
7440622	Vanadium	**221**	mg/Kg	
7440666	Zinc	**96.5**	mg/Kg	

Sample Information

11204334

Description : LF15GW

Sampling Date/Time : 5/19/2011 2:10:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**3690**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**2440**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**2920**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1200**	ug/L	
7439965	Manganese	**143**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2150**	ug/L	
7440246	Strontium	**34**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**156**	ug/L	
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204336

Description : MW01GW

Sampling Date/Time : 5/20/2011 10:00:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**31**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**2030**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**964**	ug/L	
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1940**	ug/L	
7440246	Strontium	**23**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204337

Description : MW02GW

Sampling Date/Time : 5/20/2011 12:20:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**95**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**5570**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**48**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**2480**	ug/L	
7439965	Manganese	**2.0**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	**730**	ug/L	
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**3570**	ug/L	
7440246	Strontium	**53**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204338

Description : MW03GW

Sampling Date/Time : 5/20/2011 1:35:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1630**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**755**	ug/L	
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1420**	ug/L	
7440246	Strontium	**19**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204339

Description : MW04GW

Sampling Date/Time : 5/20/2011 5:00:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :
Fraction : Total
Preparation Method(s):
3010A - Acid Digestion, aqueous samples, SW-846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**61**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**2190**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**482**	ug/L	
7439965	Manganese	**12.2**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**4890**	ug/L	
7440246	Strontium	**28**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204340

Description : MW05GW

Sampling Date/Time : 5/20/2011 6:20:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**2530**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**9.90**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**1370**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**1900**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**778**	ug/L	
7439965	Manganese	**22.4**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	**710**	ug/L	
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1110**	ug/L	
7440246	Strontium	15	ug/L	U
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**177**	ug/L	
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204341

Description : MW06GW

Sampling Date/Time : 5/21/2011 11:58:00AM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**4360**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**2040**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**2190**	ug/L	
7439965	Manganese	**2970**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2070**	ug/L	
7440246	Strontium	**31**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204342

Description : MW07GW

Sampling Date/Time : 5/21/2011 1:15:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**204**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**9.90**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**32600**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**182**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**3880**	ug/L	
7439965	Manganese	**20.2**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**10100**	ug/L	
7440246	Strontium	15	ug/L	U
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**11**	ug/L	
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204343

Description : BG01SD

Sampling Date/Time : 5/18/2011 10:42:00AM
Matrix : Sediment
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Sediment **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**53000**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	UJ
7440382	Arsenic	4.5	mg/Kg	U
7440393	Barium	**137**	mg/Kg	
7440417	Beryllium	**0.813**	mg/Kg	
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**7900**	mg/Kg	
7440473	Chromium	**24.1**	mg/Kg	
7440484	Cobalt	**22.8**	mg/Kg	
7440508	Copper	**88.4**	mg/Kg	
7439896	Iron	**51700**	mg/Kg	
7439921	Lead	**6.7**	mg/Kg	
7439932	Lithium	**12.1**	mg/Kg	
7439954	Magnesium	**4630**	mg/Kg	
7439965	Manganese	**1140**	mg/Kg	
7439987	Molybdenum	0.60	mg/Kg	UJ
7440020	Nickel	**12.4**	mg/Kg	
7440097	Potassium	**886**	mg/Kg	
7782492	Selenium	**5.0**	mg/Kg	
7440224	Silver	0.99	mg/Kg	U
7440235	Sodium	**388**	mg/Kg	
7440246	Strontium	**105**	mg/Kg	
7440280	Thallium	**7.8**	mg/Kg	J
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2040**	mg/Kg	
7440622	Vanadium	**149**	mg/Kg	
7440666	Zinc	**84.5**	mg/Kg	

Sample Information

11204344

Description : MW09GW

Sampling Date/Time : 5/21/2011 2:15:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :** PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**7710**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**21.5**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**16800**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**3090**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**5240**	ug/L	
7439965	Manganese	**36.0**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	**740**	ug/L	
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**5420**	ug/L	
7440246	Strontium	**76.6**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**183**	ug/L	
7440622	Vanadium	**13**	ug/L	
7440666	Zinc	5.0	ug/L	U

Sample Information

11204345

Description : RS01WT

Sampling Date/Time : 5/21/2011 2:45:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**245**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**30**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	50	ug/L	U
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**210**	ug/L	
7440246	Strontium	15	ug/L	U
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204349

Description : MW08GW

Sampling Date/Time : 5/21/2011 1:30:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**2470**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1340**	ug/L	
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2160**	ug/L	
7440246	Strontium	**31**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204301 Sample Duplicate

Description : BG01SB

Sampling Date/Time : 5/17/2011 9:33:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil **Data Package :**PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**78600**	mg/Kg	
7440360	Antimony	4.4	mg/Kg	UJ L
7440382	Arsenic	4.4	mg/Kg	U
7440393	Barium	**151**	mg/Kg	
7440417	Beryllium	**1.21**	mg/Kg	
7440439	Cadmium	0.49	mg/Kg	U
7440702	Calcium	**1890**	mg/Kg	
7440473	Chromium	**37.3**	mg/Kg	
7440484	Cobalt	**27.8**	mg/Kg	
7440508	Copper	**122**	mg/Kg	
7439896	Iron	**76300**	mg/Kg	
7439921	Lead	**8.0**	mg/Kg	
7439932	Lithium	**18.3**	mg/Kg	
7439954	Magnesium	**4610**	mg/Kg	
7439965	Manganese	**635**	mg/Kg	
7439987	Molybdenum	0.59	mg/Kg	UJ L
7440020	Nickel	**17.5**	mg/Kg	
7440097	Potassium	**686**	mg/Kg	
7782492	Selenium	**6.3**	mg/Kg	
7440224	Silver	0.98	mg/Kg	U
7440235	Sodium	**246**	mg/Kg	
7440246	Strontium	**70.4**	mg/Kg	
7440280	Thallium	**5.9**	mg/Kg	J L
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	**2920**	mg/Kg	
7440622	Vanadium	**215**	mg/Kg	
7440666	Zinc	**80.8**	mg/Kg	

Sample Information

11204302 Sample Duplicate

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**1650**	ug/L	
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	**8.80**	ug/L	
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**3260**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	**1040**	ug/L	
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1730**	ug/L	
7439965	Manganese	**13.1**	ug/L	
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**2380**	ug/L	
7440246	Strontium	**37**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	**69.1**	ug/L	
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204303 Sample Duplicate

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	**2010**	ug/L	
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	**1120**	ug/L	
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	**1410**	ug/L	
7440246	Strontium	**28**	ug/L	
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

11204301 Matrix Spike

Description : BG01SB

Sampling Date/Time : 5/17/2011 9:33:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil

Data Package :PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum		No Unit	NA
7440360	Antimony	14	%Rec	
7440382	Arsenic	87	%Rec	
7440393	Barium	104	%Rec	
7440417	Beryllium	98	%Rec	
7440439	Cadmium	87	%Rec	
7440702	Calcium	105	%Rec	
7440473	Chromium	92	%Rec	
7440484	Cobalt	106	%Rec	
7440508	Copper	90	%Rec	
7439896	Iron		No Unit	NA
7439921	Lead	90	%Rec	
7439932	Lithium	103	%Rec	
7439954	Magnesium	109	%Rec	
7439965	Manganese		No Unit	NA
7439987	Molybdenum	68	%Rec	
7440020	Nickel	93	%Rec	
7440097	Potassium	106	%Rec	
7782492	Selenium	93	%Rec	
7440224	Silver	91	%Rec	
7440235	Sodium	101	%Rec	
7440246	Strontium	112	%Rec	
7440280	Thallium	71	%Rec	
7440315	Tin	78	%Rec	
7440326	Titanium		No Unit	NA
7440622	Vanadium	104	%Rec	
7440666	Zinc	106	%Rec	

Sample Information

11204302 Matrix Spike

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	199	%Rec	
7440360	Antimony	99	%Rec	
7440382	Arsenic	100	%Rec	
7440393	Barium	104	%Rec	
7440417	Beryllium	101	%Rec	
7440439	Cadmium	104	%Rec	
7440702	Calcium	130	%Rec	
7440473	Chromium	95	%Rec	
7440484	Cobalt	99	%Rec	
7440508	Copper	100	%Rec	
7439896	Iron	213	%Rec	
7439921	Lead	100	%Rec	
7439932	Lithium	97	%Rec	
7439954	Magnesium	114	%Rec	
7439965	Manganese	105	%Rec	
7439987	Molybdenum	103	%Rec	
7440020	Nickel	104	%Rec	
7440097	Potassium	104	%Rec	
7782492	Selenium	100	%Rec	
7440224	Silver	96	%Rec	
7440235	Sodium	127	%Rec	
7440246	Strontium	107	%Rec	
7440280	Thallium	100	%Rec	
7440315	Tin	97	%Rec	
7440326	Titanium	111	%Rec	
7440622	Vanadium	97	%Rec	
7440666	Zinc	100	%Rec	

Sample Information

11204303 Matrix Spike

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water **Data Package :**PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	100	%Rec	
7440360	Antimony	100	%Rec	
7440382	Arsenic	100	%Rec	
7440393	Barium	103	%Rec	
7440417	Beryllium	100	%Rec	
7440439	Cadmium	102	%Rec	
7440702	Calcium	96	%Rec	
7440473	Chromium	94	%Rec	
7440484	Cobalt	98	%Rec	
7440508	Copper	101	%Rec	
7439896	Iron	102	%Rec	
7439921	Lead	99	%Rec	
7439932	Lithium	100	%Rec	
7439954	Magnesium	98	%Rec	
7439965	Manganese	102	%Rec	
7439987	Molybdenum	103	%Rec	
7440020	Nickel	103	%Rec	
7440097	Potassium	104	%Rec	
7782492	Selenium	100	%Rec	
7440224	Silver	97	%Rec	
7440235	Sodium	106	%Rec	
7440246	Strontium	99	%Rec	
7440280	Thallium	100	%Rec	
7440315	Tin	97	%Rec	
7440326	Titanium	97	%Rec	
7440622	Vanadium	97	%Rec	
7440666	Zinc	98	%Rec	

Sample Information

11204301 Matrix Spike#2

Description : BG01SB

Sampling Date/Time : 5/17/2011 9:33:00AM
Matrix : Soil
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Soil

Data Package :PKG# 1155

Weight Basis : Dry
Fraction : Total
Preparation Method(s):
3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846
Analytical Method:
6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum		No Unit	NA
7440360	Antimony	14	%Rec	
7440382	Arsenic	87	%Rec	
7440393	Barium	102	%Rec	
7440417	Beryllium	97	%Rec	
7440439	Cadmium	86	%Rec	
7440702	Calcium	102	%Rec	
7440473	Chromium	95	%Rec	
7440484	Cobalt	103	%Rec	
7440508	Copper	91	%Rec	
7439896	Iron		No Unit	NA
7439921	Lead	88	%Rec	
7439932	Lithium	104	%Rec	
7439954	Magnesium	108	%Rec	
7439965	Manganese		No Unit	NA
7439987	Molybdenum	68	%Rec	
7440020	Nickel	92	%Rec	
7440097	Potassium	108	%Rec	
7782492	Selenium	92	%Rec	
7440224	Silver	95	%Rec	
7440235	Sodium	101	%Rec	
7440246	Strontium	102	%Rec	
7440280	Thallium	70	%Rec	
7440315	Tin	80	%Rec	
7440326	Titanium		No Unit	NA
7440622	Vanadium	102	%Rec	
7440666	Zinc	101	%Rec	

Sample Information

11204302 Matrix Spike#2

Description : BG02GW

Sampling Date/Time : 5/20/2011 3:11:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	119	%Rec	
7440360	Antimony	100	%Rec	
7440382	Arsenic	100	%Rec	
7440393	Barium	101	%Rec	
7440417	Beryllium	99	%Rec	
7440439	Cadmium	103	%Rec	
7440702	Calcium	97	%Rec	
7440473	Chromium	94	%Rec	
7440484	Cobalt	98	%Rec	
7440508	Copper	101	%Rec	
7439896	Iron	110	%Rec	
7439921	Lead	100	%Rec	
7439932	Lithium	98	%Rec	
7439954	Magnesium	97	%Rec	
7439965	Manganese	103	%Rec	
7439987	Molybdenum	104	%Rec	
7440020	Nickel	103	%Rec	
7440097	Potassium	104	%Rec	
7782492	Selenium	100	%Rec	
7440224	Silver	96	%Rec	
7440235	Sodium	103	%Rec	
7440246	Strontium	99	%Rec	
7440280	Thallium	100	%Rec	
7440315	Tin	98	%Rec	
7440326	Titanium	97	%Rec	
7440622	Vanadium	98	%Rec	
7440666	Zinc	100	%Rec	

Sample Information

11204303 Matrix Spike#2

Description : BG03GW

Sampling Date/Time : 5/20/2011 4:54:00PM
Matrix : Water
Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Water

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	100	%Rec	
7440360	Antimony	100	%Rec	
7440382	Arsenic	98	%Rec	
7440393	Barium	102	%Rec	
7440417	Beryllium	98	%Rec	
7440439	Cadmium	101	%Rec	
7440702	Calcium	94	%Rec	
7440473	Chromium	93	%Rec	
7440484	Cobalt	97	%Rec	
7440508	Copper	101	%Rec	
7439896	Iron	101	%Rec	
7439921	Lead	98	%Rec	
7439932	Lithium	101	%Rec	
7439954	Magnesium	97	%Rec	
7439965	Manganese	101	%Rec	
7439987	Molybdenum	103	%Rec	
7440020	Nickel	102	%Rec	
7440097	Potassium	105	%Rec	
7782492	Selenium	99	%Rec	
7440224	Silver	96	%Rec	
7440235	Sodium	107	%Rec	
7440246	Strontium	96	%Rec	
7440280	Thallium	99	%Rec	
7440315	Tin	96	%Rec	
7440326	Titanium	97	%Rec	
7440622	Vanadium	95	%Rec	
7440666	Zinc	96	%Rec	

Sample Information

IS060911A Blank

Description : Blank

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Unspecified

Data Package :PKG# 1155

Weight Basis : Dry

Fraction : Total

Preparation Method(s):

3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	**8.9**	mg/Kg	
7440360	Antimony	4.5	mg/Kg	U
7440382	Arsenic	4.5	mg/Kg	U
7440393	Barium	0.50	mg/Kg	U
7440417	Beryllium	0.10	mg/Kg	U
7440439	Cadmium	0.50	mg/Kg	U
7440702	Calcium	**4.1**	mg/Kg	
7440473	Chromium	1.0	mg/Kg	U
7440484	Cobalt	0.50	mg/Kg	U
7440508	Copper	0.50	mg/Kg	U
7439896	Iron	**5.5**	mg/Kg	
7439921	Lead	2.5	mg/Kg	U
7439932	Lithium	0.30	mg/Kg	U
7439954	Magnesium	5.0	mg/Kg	U
7439965	Manganese	0.30	mg/Kg	U
7439987	Molybdenum	0.60	mg/Kg	U
7440020	Nickel	1.0	mg/Kg	U
7440097	Potassium	70	mg/Kg	U
7782492	Selenium	5.0	mg/Kg	U
7440224	Silver	1.0	mg/Kg	U
7440235	Sodium	**16**	mg/Kg	
7440246	Strontium	1.5	mg/Kg	U
7440280	Thallium	5.0	mg/Kg	U
7440315	Tin	2.5	mg/Kg	U
7440326	Titanium	1.0	mg/Kg	U
7440622	Vanadium	1.0	mg/Kg	U
7440666	Zinc	0.50	mg/Kg	U

Sample Information

IW060611A Blank

Description : Blank

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Unspecified

Data Package :PKG# 1155

Weight Basis : N/A

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	30	ug/L	U
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	50	ug/L	U
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	100	ug/L	U
7440246	Strontium	15	ug/L	U
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

IW060611B Blank

Description : Blank

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Unspecified

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	30	ug/L	U
7440360	Antimony	45	ug/L	U
7440382	Arsenic	45	ug/L	U
7440393	Barium	5.0	ug/L	U
7440417	Beryllium	1.0	ug/L	U
7440439	Cadmium	3.0	ug/L	U
7440702	Calcium	30	ug/L	U
7440473	Chromium	10	ug/L	U
7440484	Cobalt	5.0	ug/L	U
7440508	Copper	5.0	ug/L	U
7439896	Iron	20	ug/L	U
7439921	Lead	25	ug/L	U
7439932	Lithium	3.0	ug/L	U
7439954	Magnesium	50	ug/L	U
7439965	Manganese	2.0	ug/L	U
7439987	Molybdenum	6.0	ug/L	U
7440020	Nickel	10	ug/L	U
7440097	Potassium	700	ug/L	U
7782492	Selenium	50	ug/L	U
7440224	Silver	10	ug/L	U
7440235	Sodium	100	ug/L	U
7440246	Strontium	15	ug/L	U
7440280	Thallium	50	ug/L	U
7440315	Tin	25	ug/L	U
7440326	Titanium	10	ug/L	U
7440622	Vanadium	10	ug/L	U
7440666	Zinc	5.0	ug/L	U

Sample Information

IS060911A Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Solid

Data Package :PKG# 1155

Weight Basis : Dry

Fraction : Total

Preparation Method(s):

3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	95	%Rec	
7440360	Antimony	91	%Rec	
7440382	Arsenic	91	%Rec	
7440393	Barium	96	%Rec	
7440417	Beryllium	91	%Rec	
7440439	Cadmium	94	%Rec	
7440702	Calcium	91	%Rec	
7440473	Chromium	90	%Rec	
7440484	Cobalt	92	%Rec	
7440508	Copper	93	%Rec	
7439896	Iron	95	%Rec	
7439921	Lead	91	%Rec	
7439932	Lithium	86	%Rec	
7439954	Magnesium	95	%Rec	
7439965	Manganese	95	%Rec	
7439987	Molybdenum	97	%Rec	
7440020	Nickel	95	%Rec	
7440097	Potassium	87	%Rec	
7782492	Selenium	93	%Rec	
7440224	Silver	88	%Rec	
7440235	Sodium	92	%Rec	
7440246	Strontium	91	%Rec	
7440280	Thallium	95	%Rec	
7440315	Tin	94	%Rec	
7440326	Titanium	94	%Rec	
7440622	Vanadium	94	%Rec	
7440666	Zinc	89	%Rec	

Sample Information

IW060611A Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Liquid

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7440393	Barium	103	ug/L	

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	100	%Rec	
7440360	Antimony	103	%Rec	
7440382	Arsenic	100	%Rec	
7440417	Beryllium	100	%Rec	
7440439	Cadmium	104	%Rec	
7440702	Calcium	98	%Rec	
7440473	Chromium	96	%Rec	
7440484	Cobalt	100	%Rec	
7440508	Copper	101	%Rec	
7439896	Iron	103	%Rec	
7439921	Lead	101	%Rec	
7439932	Lithium	99	%Rec	
7439954	Magnesium	100	%Rec	
7439965	Manganese	103	%Rec	
7439987	Molybdenum	105	%Rec	
7440020	Nickel	104	%Rec	
7440097	Potassium	102	%Rec	
7782492	Selenium	101	%Rec	
7440224	Silver	98	%Rec	
7440235	Sodium	107	%Rec	
7440246	Strontium	100	%Rec	
7440280	Thallium	101	%Rec	
7440315	Tin	98	%Rec	
7440326	Titanium	98	%Rec	
7440622	Vanadium	98	%Rec	

ICP-SAS

Spiked Compounds (cont.)

Analyte Code	Analyte Name	Result	Unit	Qual.
7440666	Zinc	**100**	%Rec	

Sample Information

IW060611B Lab Control Std

Description : Lab Control Standard

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Liquid

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Target Results

Analyte Code	Analyte Name	Result	Unit	Qual.
7440666	Zinc	96	ug/L	

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	99	%Rec	
7440360	Antimony	99	%Rec	
7440382	Arsenic	98	%Rec	
7440393	Barium	102	%Rec	
7440417	Beryllium	98	%Rec	
7440439	Cadmium	101	%Rec	
7440702	Calcium	95	%Rec	
7440473	Chromium	92	%Rec	
7440484	Cobalt	97	%Rec	
7440508	Copper	101	%Rec	
7439896	Iron	100	%Rec	
7439921	Lead	98	%Rec	
7439932	Lithium	101	%Rec	
7439954	Magnesium	98	%Rec	
7439965	Manganese	100	%Rec	
7439987	Molybdenum	102	%Rec	
7440020	Nickel	101	%Rec	
7440097	Potassium	103	%Rec	
7782492	Selenium	99	%Rec	
7440224	Silver	94	%Rec	
7440235	Sodium	108	%Rec	
7440246	Strontium	96	%Rec	
7440280	Thallium	98	%Rec	
7440315	Tin	94	%Rec	
7440326	Titanium	97	%Rec	

ICP-SAS

Spiked Compounds (cont.)

Analyte Code	Analyte Name	Result	Unit	Qual.
7440622	Vanadium	95	%Rec	

Sample Information

IS060911A Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Solid

Data Package :PKG# 1155

Weight Basis : Dry

Fraction : Total

Preparation Method(s):

3050B - Acid Digestion of Sediments, Sludges, and Soils, SW846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	95	%Rec	
7440360	Antimony	93	%Rec	
7440382	Arsenic	92	%Rec	
7440393	Barium	98	%Rec	
7440417	Beryllium	92	%Rec	
7440439	Cadmium	94	%Rec	
7440702	Calcium	91	%Rec	
7440473	Chromium	91	%Rec	
7440484	Cobalt	93	%Rec	
7440508	Copper	95	%Rec	
7439896	Iron	96	%Rec	
7439921	Lead	91	%Rec	
7439932	Lithium	88	%Rec	
7439954	Magnesium	98	%Rec	
7439965	Manganese	96	%Rec	
7439987	Molybdenum	99	%Rec	
7440020	Nickel	95	%Rec	
7440097	Potassium	89	%Rec	
7782492	Selenium	94	%Rec	
7440224	Silver	94	%Rec	
7440235	Sodium	94	%Rec	
7440246	Strontium	91	%Rec	
7440280	Thallium	96	%Rec	
7440315	Tin	94	%Rec	
7440326	Titanium	96	%Rec	
7440622	Vanadium	95	%Rec	
7440666	Zinc	88	%Rec	

Sample Information

IW060611A Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Liquid

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	100	%Rec	
7440360	Antimony	102	%Rec	
7440382	Arsenic	99	%Rec	
7440393	Barium	103	%Rec	
7440417	Beryllium	99	%Rec	
7440439	Cadmium	103	%Rec	
7440702	Calcium	97	%Rec	
7440473	Chromium	94	%Rec	
7440484	Cobalt	99	%Rec	
7440508	Copper	100	%Rec	
7439896	Iron	102	%Rec	
7439921	Lead	99	%Rec	
7439932	Lithium	98	%Rec	
7439954	Magnesium	99	%Rec	
7439965	Manganese	103	%Rec	
7439987	Molybdenum	105	%Rec	
7440020	Nickel	103	%Rec	
7440097	Potassium	100	%Rec	
7782492	Selenium	100	%Rec	
7440224	Silver	99	%Rec	
7440235	Sodium	106	%Rec	
7440246	Strontium	98	%Rec	
7440280	Thallium	100	%Rec	
7440315	Tin	97	%Rec	
7440326	Titanium	97	%Rec	
7440622	Vanadium	97	%Rec	
7440666	Zinc	99	%Rec	

Sample Information

IW060611B Lab Control Std#2

Description : Lab Control Standard Dup.

Sampling Date/Time :

Matrix : Unspecified

Field Sample ID :

ICP-SAS

Method Information

Lab Matrix : Liquid

Data Package :PKG# 1155

Weight Basis :

Fraction : Total

Preparation Method(s):

3010A - Acid Digestion, aqueous samples, SW-846

Analytical Method:

6010A - Inductively Coupled Plasma-Atomic Emission Spectrometry, SW-846 (22 elements)

Spiked Compounds

Analyte Code	Analyte Name	Result	Unit	Qual.
7429905	Aluminum	100	%Rec	
7440360	Antimony	100	%Rec	
7440382	Arsenic	99	%Rec	
7440393	Barium	102	%Rec	
7440417	Beryllium	100	%Rec	
7440439	Cadmium	102	%Rec	
7440702	Calcium	96	%Rec	
7440473	Chromium	93	%Rec	
7440484	Cobalt	98	%Rec	
7440508	Copper	101	%Rec	
7439896	Iron	101	%Rec	
7439921	Lead	99	%Rec	
7439932	Lithium	100	%Rec	
7439954	Magnesium	98	%Rec	
7439965	Manganese	101	%Rec	
7439987	Molybdenum	103	%Rec	
7440020	Nickel	103	%Rec	
7440097	Potassium	101	%Rec	
7782492	Selenium	100	%Rec	
7440224	Silver	95	%Rec	
7440235	Sodium	107	%Rec	
7440246	Strontium	97	%Rec	
7440280	Thallium	100	%Rec	
7440315	Tin	96	%Rec	
7440326	Titanium	97	%Rec	
7440622	Vanadium	97	%Rec	
7440666	Zinc	97	%Rec	

ecology and environment, inc.
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720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: October 4, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analyses for metals (EPA CLP SOW ISM01.2) were performed by A4 Scientific, The Woodlands, Texas.

The samples were numbered:

MJ8KQ6	MJ8KQ7	MJ8KQ8	MJ8KQ9	MJ8KR0	MJ8KR1
MJ8KR2	MJ8KR3	MJ8KR4	MJ8KR5	MJ8KR6	MJ8KR7
MJ8KR8	MJ8KR9	MJ8KS0	MJ8KS1	MJ8KS2	MJ8KS3
MJ8KS4	MJ8KS5				

The following discrepancy was noted:

The estimated thallium result in sample MJ8KQ8 did not have a bias qualifier.

The report was revised by the original validator.

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 3, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Revised Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KQ6

FROM: Donald Matheny, Chemist
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The revised quality assurance (QA) review of the analytical data generated from the analysis of twenty (20) soil samples, collected from the above referenced site, has been completed. This revision is due to a data qualifier that was included in the original report but omitted from the data. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria		Non-detect or <10% of Sample
Matrix Spike (MJ8KR7)	91 – 114%	Y*	75 - 125%
Sample Duplicate (MJ8KR7)	≤ 14%	Y*	≤ 20% RPD or ± CRQL
LCS (blank spike)	87 – 125%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KR7)	≤ 8%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Beryllium – MJ8KQ7 - MJ8KR4, MJ8KS0, MJ8KS4 **Cadmium** - MJ8KQ7 **Calcium** – MJ8KS2 **Nickel** - MJ8KQ8 - MJ8KR1, MJ8KS2 **Potassium** - MJ8KQ7, MJ8KQ8, MJ8KR0 - MJ8KR2, MJ8KR4 - MJ8KS0, MJ8KS3, MJ8KS4, MJ8KR7D
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Antimony, Selenium, Silver, Thallium – All samples
Duplicate
The following Duplicate or original sample results are less than or equal to 5xCRQL and the absolute difference between duplicate and original samples are greater than CRQL or sample results are greater than 5xCRQL and RPD is greater than 20%. The original sample results are greater than or equal to MDLs. Detected analytes are qualified JK. Non-detected analytes are qualified UJK.
Chromium – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. The detected analytes in samples with results greater than or equal to MDLs are qualified JL.
Aluminum, Iron, Manganese, Strontium, Titanium, Vanadium – All detected sample results

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KQ6	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ7	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ8	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ9	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR0	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR1	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR2	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR3	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR4	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR5	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR6	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR7	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR8	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KR9	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS0	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS1	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS2	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS3	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS4	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS5	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KQ6	Lab Code:	A4
Sample Number:	MJ8KQ6	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	OB05SS	pH:		Sample Date:	08232011	Sample Time:	14:25:00
% Moisture :				% Solids :	84.1		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	21800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.1	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.3	mg/kg	1			Yes	S4VEM
Barium	277	mg/kg	1			Yes	S4VEM
Beryllium	0.59	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	5880	mg/kg	1			Yes	S4VEM
Chromium	14.6	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	17.7	mg/kg	1			Yes	S4VEM
Copper	73.3	mg/kg	1			Yes	S4VEM
Iron	45900	mg/kg	1	E	JL	Yes	S4VEM
Lead	18.4	mg/kg	1			Yes	S4VEM
Magnesium	2990	mg/kg	1			Yes	S4VEM
Manganese	927	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.5	mg/kg	1			Yes	S4VEM
Potassium	1260	mg/kg	1			Yes	S4VEM
Selenium	4.1	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	589	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	140	mg/kg	1	E	JL	Yes	S4VEM
Zinc	48.3	mg/kg	1			Yes	S4VEM
Lithium	4.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.71	mg/kg	1	U	U	Yes	S4VEM
Strontium	199	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	1500	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KQ7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR12SS	pH:	Sample Date: 08232011	Sample Time: 14:28:00
% Moisture :		% Solids : 81	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27200	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.4	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.4	mg/kg	1			Yes	S4VEM
Barium	170	mg/kg	1			Yes	S4VEM
Beryllium	0.60	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.19	mg/kg	1	J	JQ	Yes	S4VEM
Calcium	5470	mg/kg	1			Yes	S4VEM
Chromium	21.0	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	26.7	mg/kg	1			Yes	S4VEM
Copper	73.4	mg/kg	1			Yes	S4VEM
Iron	44200	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.3	mg/kg	1			Yes	S4VEM
Magnesium	2670	mg/kg	1			Yes	S4VEM
Manganese	1160	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.1	mg/kg	1			Yes	S4VEM
Potassium	280	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	617	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	169	mg/kg	1	E	JL	Yes	S4VEM
Zinc	79.9	mg/kg	1			Yes	S4VEM
Lithium	5.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.74	mg/kg	1	U	U	Yes	S4VEM
Strontium	76.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.1	mg/kg	1	U	U	Yes	S4VEM
Titanium	1690	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KQ8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR13SS	pH:	Sample Date: 08232011	Sample Time: 14:40:00
% Moisture :		% Solids : 69.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.9	mg/kg	1			Yes	S4VEM
Barium	134	mg/kg	1			Yes	S4VEM
Beryllium	0.56	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.70	mg/kg	1	U	U	Yes	S4VEM
Calcium	3120	mg/kg	1			Yes	S4VEM
Chromium	22.6	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	11.5	mg/kg	1			Yes	S4VEM
Copper	48.9	mg/kg	1			Yes	S4VEM
Iron	47800	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.5	mg/kg	1			Yes	S4VEM
Magnesium	2110	mg/kg	1			Yes	S4VEM
Manganese	516	mg/kg	1	E	JL	Yes	S4VEM
Nickel	3.9	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	261	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.9	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	695	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	187	mg/kg	1	E	JL	Yes	S4VEM
Zinc	69.1	mg/kg	1			Yes	S4VEM
Lithium	6.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.83	mg/kg	1	U	U	Yes	S4VEM
Strontium	58.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1290	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KQ9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR14SS	pH:	Sample Date: 08232011	Sample Time: 14:52:00
% Moisture :		% Solids : 76.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	31200	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.8	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	142	mg/kg	1			Yes	S4VEM
Beryllium	0.46	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.65	mg/kg	1	U	U	Yes	S4VEM
Calcium	3130	mg/kg	1			Yes	S4VEM
Chromium	22.3	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	23.2	mg/kg	1			Yes	S4VEM
Copper	63.4	mg/kg	1			Yes	S4VEM
Iron	51400	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.3	mg/kg	1			Yes	S4VEM
Magnesium	2350	mg/kg	1			Yes	S4VEM
Manganese	1060	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.2	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	647	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	647	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	191	mg/kg	1	E	JL	Yes	S4VEM
Zinc	74.1	mg/kg	1			Yes	S4VEM
Lithium	5.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.78	mg/kg	1	U	U	Yes	S4VEM
Strontium	52.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1530	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR15SS	pH:	Sample Date: 08232011	Sample Time: 15:09:00
% Moisture :		% Solids : 74.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	29000	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.7	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	161	mg/kg	1			Yes	S4VEM
Beryllium	0.60	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.64	mg/kg	1	U	U	Yes	S4VEM
Calcium	3850	mg/kg	1			Yes	S4VEM
Chromium	22.4	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	12.3	mg/kg	1			Yes	S4VEM
Copper	46.4	mg/kg	1			Yes	S4VEM
Iron	47600	mg/kg	1	E	JL	Yes	S4VEM
Lead	17.2	mg/kg	1			Yes	S4VEM
Magnesium	2370	mg/kg	1			Yes	S4VEM
Manganese	620	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	246	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	642	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	188	mg/kg	1	E	JL	Yes	S4VEM
Zinc	90.5	mg/kg	1			Yes	S4VEM
Lithium	6.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.77	mg/kg	1	U	U	Yes	S4VEM
Strontium	70.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1250	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR16SS	pH:	Sample Date: 08232011	Sample Time: 15:25:00
% Moisture :		% Solids : 75.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	32100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.7	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.3	mg/kg	1			Yes	S4VEM
Barium	165	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.64	mg/kg	1	U	U	Yes	S4VEM
Calcium	4220	mg/kg	1			Yes	S4VEM
Chromium	25.0	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	17.2	mg/kg	1			Yes	S4VEM
Copper	57.5	mg/kg	1			Yes	S4VEM
Iron	57600	mg/kg	1	E	JL	Yes	S4VEM
Lead	16.8	mg/kg	1			Yes	S4VEM
Magnesium	2600	mg/kg	1			Yes	S4VEM
Manganese	1080	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.1	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	231	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	638	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	220	mg/kg	1	E	JL	Yes	S4VEM
Zinc	108	mg/kg	1			Yes	S4VEM
Lithium	7.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.77	mg/kg	1	U	U	Yes	S4VEM
Strontium	69.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1590	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP11SS	pH:	Sample Date: 08232011	Sample Time: 15:36:00
% Moisture :		% Solids : 77.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	16000	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.7	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	173	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.64	mg/kg	1	U	U	Yes	S4VEM
Calcium	1930	mg/kg	1			Yes	S4VEM
Chromium	16.8	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	22.2	mg/kg	1			Yes	S4VEM
Copper	35.4	mg/kg	1			Yes	S4VEM
Iron	30600	mg/kg	1	E	JL	Yes	S4VEM
Lead	19.0	mg/kg	1			Yes	S4VEM
Magnesium	1960	mg/kg	1			Yes	S4VEM
Manganese	1310	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.7	mg/kg	1			Yes	S4VEM
Potassium	410	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	642	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	88.7	mg/kg	1	E	JL	Yes	S4VEM
Zinc	61.6	mg/kg	1			Yes	S4VEM
Lithium	7.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.77	mg/kg	1	U	U	Yes	S4VEM
Strontium	25.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	587	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP12SS	pH:	Sample Date: 08232011	Sample Time: 15:47:00
% Moisture :		% Solids : 82.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	21600	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.4	mg/kg	1			Yes	S4VEM
Barium	179	mg/kg	1			Yes	S4VEM
Beryllium	0.51	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1540	mg/kg	1			Yes	S4VEM
Chromium	19.5	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	20.5	mg/kg	1			Yes	S4VEM
Copper	33.9	mg/kg	1			Yes	S4VEM
Iron	39000	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.4	mg/kg	1			Yes	S4VEM
Magnesium	2690	mg/kg	1			Yes	S4VEM
Manganese	1940	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.6	mg/kg	1			Yes	S4VEM
Potassium	648	mg/kg	1			Yes	S4VEM
Selenium	4.2	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	603	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	104	mg/kg	1	E	JL	Yes	S4VEM
Zinc	61.1	mg/kg	1			Yes	S4VEM
Lithium	9.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	22.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1110	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP13SS	pH:	Sample Date: 08232011	Sample Time: 15:58:00
% Moisture :		% Solids : 79.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	17000	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.4	mg/kg	1			Yes	S4VEM
Barium	156	mg/kg	1			Yes	S4VEM
Beryllium	0.47	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.61	mg/kg	1	U	U	Yes	S4VEM
Calcium	1670	mg/kg	1			Yes	S4VEM
Chromium	17.6	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	20.7	mg/kg	1			Yes	S4VEM
Copper	40.4	mg/kg	1			Yes	S4VEM
Iron	35300	mg/kg	1	E	JL	Yes	S4VEM
Lead	17.0	mg/kg	1			Yes	S4VEM
Magnesium	2310	mg/kg	1			Yes	S4VEM
Manganese	1710	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.9	mg/kg	1			Yes	S4VEM
Potassium	580	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	609	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	98.6	mg/kg	1	E	JL	Yes	S4VEM
Zinc	63.7	mg/kg	1			Yes	S4VEM
Lithium	7.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.73	mg/kg	1	U	U	Yes	S4VEM
Strontium	23.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	884	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP14SS	pH:	Sample Date: 08232011	Sample Time: 16:16:00
% Moisture :		% Solids : 81.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	17500	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	212	mg/kg	1			Yes	S4VEM
Beryllium	0.65	mg/kg	1			Yes	S4VEM
Cadmium	0.61	mg/kg	1	U	U	Yes	S4VEM
Calcium	1470	mg/kg	1			Yes	S4VEM
Chromium	17.4	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	24.3	mg/kg	1			Yes	S4VEM
Copper	29.8	mg/kg	1			Yes	S4VEM
Iron	32600	mg/kg	1	E	JL	Yes	S4VEM
Lead	20.3	mg/kg	1			Yes	S4VEM
Magnesium	2010	mg/kg	1			Yes	S4VEM
Manganese	2120	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.6	mg/kg	1			Yes	S4VEM
Potassium	492	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	605	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	86.4	mg/kg	1	E	JL	Yes	S4VEM
Zinc	78.9	mg/kg	1			Yes	S4VEM
Lithium	9.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.73	mg/kg	1	U	U	Yes	S4VEM
Strontium	17.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	548	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR6	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP15SS	pH:	Sample Date: 08232011	Sample Time: 16:33:00
% Moisture :		% Solids : 84	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	17000	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.1	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.5	mg/kg	1			Yes	S4VEM
Barium	196	mg/kg	1			Yes	S4VEM
Beryllium	0.74	mg/kg	1			Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1370	mg/kg	1			Yes	S4VEM
Chromium	17.6	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	21.7	mg/kg	1			Yes	S4VEM
Copper	28.4	mg/kg	1			Yes	S4VEM
Iron	34700	mg/kg	1	E	JL	Yes	S4VEM
Lead	15.8	mg/kg	1			Yes	S4VEM
Magnesium	1800	mg/kg	1			Yes	S4VEM
Manganese	2070	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.5	mg/kg	1			Yes	S4VEM
Potassium	426	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	595	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	92.8	mg/kg	1	E	JL	Yes	S4VEM
Zinc	58.5	mg/kg	1			Yes	S4VEM
Lithium	8.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.71	mg/kg	1	U	U	Yes	S4VEM
Strontium	20.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	488	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP16SS	pH:	Sample Date: 08232011	Sample Time: 17:02:00
% Moisture :		% Solids : 87.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	8670	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.6	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.0	mg/kg	1			Yes	S4VEM
Barium	123	mg/kg	1			Yes	S4VEM
Beryllium	0.55	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.55	mg/kg	1	U	U	Yes	S4VEM
Calcium	2970	mg/kg	1			Yes	S4VEM
Chromium	10.5	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	13.8	mg/kg	1			Yes	S4VEM
Copper	43.7	mg/kg	1			Yes	S4VEM
Iron	33200	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.5	mg/kg	1			Yes	S4VEM
Magnesium	2180	mg/kg	1			Yes	S4VEM
Manganese	369	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.8	mg/kg	1			Yes	S4VEM
Potassium	268	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.9	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	552	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	106	mg/kg	1	E	JL	Yes	S4VEM
Zinc	64.9	mg/kg	1			Yes	S4VEM
Lithium	2.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.66	mg/kg	1	U	U	Yes	S4VEM
Strontium	32.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	2090	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT01SS	pH:	Sample Date: 08242011	Sample Time: 10:07:00
% Moisture :		% Solids : 78.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	30400	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.6	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.8	mg/kg	1			Yes	S4VEM
Barium	146	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	2350	mg/kg	1			Yes	S4VEM
Chromium	29.3	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	36.0	mg/kg	1			Yes	S4VEM
Copper	69.6	mg/kg	1			Yes	S4VEM
Iron	51900	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.7	mg/kg	1			Yes	S4VEM
Magnesium	1790	mg/kg	1			Yes	S4VEM
Manganese	2510	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.2	mg/kg	1			Yes	S4VEM
Potassium	452	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	631	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	164	mg/kg	1	E	JL	Yes	S4VEM
Zinc	58.2	mg/kg	1			Yes	S4VEM
Lithium	5.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	25.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1740	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KR9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT02SS	pH:	Sample Date: 08242011	Sample Time: 10:26:00
% Moisture :		% Solids : 65.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	9.1	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.8	mg/kg	1			Yes	S4VEM
Barium	156	mg/kg	1			Yes	S4VEM
Beryllium	0.76	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.76	mg/kg	1	U	U	Yes	S4VEM
Calcium	2490	mg/kg	1			Yes	S4VEM
Chromium	30.3	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	41.3	mg/kg	1			Yes	S4VEM
Copper	81.8	mg/kg	1			Yes	S4VEM
Iron	56000	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.5	mg/kg	1			Yes	S4VEM
Magnesium	2860	mg/kg	1			Yes	S4VEM
Manganese	2780	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.7	mg/kg	1			Yes	S4VEM
Potassium	417	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	760	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	185	mg/kg	1	E	JL	Yes	S4VEM
Zinc	66.5	mg/kg	1			Yes	S4VEM
Lithium	6.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.91	mg/kg	1	U	U	Yes	S4VEM
Strontium	37.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	2480	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KS0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT03SS	pH:	Sample Date: 08242011	Sample Time: 10:46:00
% Moisture :		% Solids : 80.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	32100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.1	mg/kg	1			Yes	S4VEM
Barium	148	mg/kg	1			Yes	S4VEM
Beryllium	0.28	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	2560	mg/kg	1			Yes	S4VEM
Chromium	32.9	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	40.6	mg/kg	1			Yes	S4VEM
Copper	93.5	mg/kg	1			Yes	S4VEM
Iron	57000	mg/kg	1	E	JL	Yes	S4VEM
Lead	106	mg/kg	1			Yes	S4VEM
Magnesium	3050	mg/kg	1			Yes	S4VEM
Manganese	2930	mg/kg	1.5	D,E	JL	Yes	S4VEM
Nickel	8.4	mg/kg	1			Yes	S4VEM
Potassium	600	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	604	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	196	mg/kg	1	E	JL	Yes	S4VEM
Zinc	67.3	mg/kg	1			Yes	S4VEM
Lithium	7.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	45.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	2380	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KS1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT04SS	pH:	Sample Date: 08242011	Sample Time: 11:17:00
% Moisture :		% Solids : 79.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33200	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.5	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	150	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	791	mg/kg	1			Yes	S4VEM
Chromium	26.5	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	31.5	mg/kg	1			Yes	S4VEM
Copper	61.2	mg/kg	1			Yes	S4VEM
Iron	54000	mg/kg	1	E	JL	Yes	S4VEM
Lead	12.0	mg/kg	1			Yes	S4VEM
Magnesium	1760	mg/kg	1			Yes	S4VEM
Manganese	1570	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.6	mg/kg	1			Yes	S4VEM
Potassium	626	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	626	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	179	mg/kg	1	E	JL	Yes	S4VEM
Zinc	46.7	mg/kg	1			Yes	S4VEM
Lithium	5.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.75	mg/kg	1	U	U	Yes	S4VEM
Strontium	21.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.1	mg/kg	1	U	U	Yes	S4VEM
Titanium	2180	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KS2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT05SS	pH:	Sample Date: 08242011	Sample Time: 11:40:00
% Moisture :		% Solids : 78.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	36300	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.5	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.0	mg/kg	1			Yes	S4VEM
Barium	123	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	501	mg/kg	1	J	JQ	Yes	S4VEM
Chromium	26.8	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	29.5	mg/kg	1			Yes	S4VEM
Copper	53.3	mg/kg	1			Yes	S4VEM
Iron	60000	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.5	mg/kg	1			Yes	S4VEM
Magnesium	1540	mg/kg	1			Yes	S4VEM
Manganese	1820	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.8	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	625	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	625	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	197	mg/kg	1	E	JL	Yes	S4VEM
Zinc	40.4	mg/kg	1			Yes	S4VEM
Lithium	6.0	mg/kg	1			Yes	S4VEM
Molyhdenum	0.75	mg/kg	1	U	U	Yes	S4VEM
Strontium	11.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.1	mg/kg	1	U	U	Yes	S4VEM
Titanium	1950	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KS3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT06SS	pH:	Sample Date: 08242011	Sample Time: 13:20:00
% Moisture :		% Solids : 82.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	34900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	179	mg/kg	1			Yes	S4VEM
Beryllium	0.61	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.61	mg/kg	1	U	U	Yes	S4VEM
Calcium	1540	mg/kg	1			Yes	S4VEM
Chromium	29.4	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	40.5	mg/kg	1			Yes	S4VEM
Copper	74.5	mg/kg	1			Yes	S4VEM
Iron	60200	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.7	mg/kg	1			Yes	S4VEM
Magnesium	2140	mg/kg	1			Yes	S4VEM
Manganese	2130	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.7	mg/kg	1			Yes	S4VEM
Potassium	307	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	608	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	180	mg/kg	1	E	JL	Yes	S4VEM
Zinc	65.0	mg/kg	1			Yes	S4VEM
Lithium	6.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.73	mg/kg	1	U	U	Yes	S4VEM
Strontium	27.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	2250	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KS4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB06SS	pH:	Sample Date: 08242011	Sample Time: 13:42:00
% Moisture :		% Solids : 73.3	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	35800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.2	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.0	mg/kg	1			Yes	S4VEM
Barium	138	mg/kg	1			Yes	S4VEM
Beryllium	0.28	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.68	mg/kg	1	U	U	Yes	S4VEM
Calcium	5150	mg/kg	1			Yes	S4VEM
Chromium	33.6	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	31.5	mg/kg	1			Yes	S4VEM
Copper	66.2	mg/kg	1			Yes	S4VEM
Iron	52500	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.1	mg/kg	1			Yes	S4VEM
Magnesium	5810	mg/kg	1			Yes	S4VEM
Manganese	1770	mg/kg	1	E	JL	Yes	S4VEM
Nickel	12.2	mg/kg	1			Yes	S4VEM
Potassium	425	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.8	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	682	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	195	mg/kg	1	E	JL	Yes	S4VEM
Zinc	68.4	mg/kg	1			Yes	S4VEM
Lithium	10.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.82	mg/kg	1	U	U	Yes	S4VEM
Strontium	74.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.4	mg/kg	1	U	U	Yes	S4VEM
Titanium	1890	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KQ6	Lab Code: A4
Sample Number: MJ8KS5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB07SS	pH:	Sample Date: 08242011	Sample Time: 13:55:00
% Moisture :		% Solids : 76.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	46900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.6	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.1	mg/kg	1			Yes	S4VEM
Barium	161	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	6790	mg/kg	1			Yes	S4VEM
Chromium	20.8	mg/kg	1	*	JK	Yes	S4VEM
Cobalt	21.1	mg/kg	1			Yes	S4VEM
Copper	123	mg/kg	1			Yes	S4VEM
Iron	45300	mg/kg	1	E	JL	Yes	S4VEM
Lead	158	mg/kg	1			Yes	S4VEM
Magnesium	7520	mg/kg	1			Yes	S4VEM
Manganese	1400	mg/kg	1	E	JL	Yes	S4VEM
Nickel	23.7	mg/kg	1			Yes	S4VEM
Potassium	1170	mg/kg	1			Yes	S4VEM
Selenium	4.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	632	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	123	mg/kg	1	E	JL	Yes	S4VEM
Zinc	74.2	mg/kg	1			Yes	S4VEM
Lithium	9.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	110	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.0	mg/kg	1			Yes	S4VEM
Titanium	1800	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KQ6 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KQ6	Soil		Sample Location	0B05SS	OB05SS	Jennifer Crawford	11/22/11 12:09 PM	
MJ8KQ6	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KQ6	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ6	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 6:58 PM	
MJ8KQ7	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KQ7	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Cadmium	Validation Flag	J	JQ	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:27 AM	
MJ8KQ7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ7	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 6:59 PM	
MJ8KQ8	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KQ8	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KQ8	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/3/11 6:55 PM	
MJ8KQ8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ8	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:08 PM	
MJ8KQ9	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KQ9	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 7:09 PM	
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MJ8KQ9	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:09 PM	
MJ8KQ9	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:09 PM	
MJ8KR0	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KR0	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:10 PM	
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MJ8KR0	Soil	Beryllium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR0	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:10 PM	
MJ8KR1	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KR1	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Beryllium	Validation	J	JQ	Donald	9/22/11 7:11 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KR1	Soil	Beryllium	Flag	J	JQ	Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR1	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:11 PM	
MJ8KR2	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
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MJ8KR2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:12 PM	
MJ8KR2	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/22/11 7:12 PM	
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MJ8KR4	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KR4	Soil	Aluminum	Validation	J	JL	Donald	9/23/11 11:06 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8KR4	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:06 AM	
MJ8KR4	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:06 AM	
MJ8KR4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:06 AM	
MJ8KR4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:06 AM	
MJ8KR4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:06 AM	
MJ8KR4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:06 AM	
MJ8KR4	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:06 AM	
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MJ8KR5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:07 AM	
MJ8KR5	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:07 AM	
MJ8KR5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:07 AM	
MJ8KR5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:07 AM	
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MJ8KR5	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:07 AM	
MJ8KR5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:07 AM	
MJ8KR5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:07 AM	
MJ8KR5	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:07 AM	
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MJ8KR5	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:07 AM	
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MJ8KR6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:08 AM	
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MJ8KR6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR6	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:08 AM	
MJ8KR7	Soil		Validation		S4VEM	Donald	9/23/11 11:18 AM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8KR7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:09 AM	
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MJ8KR7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:09 AM	
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MJ8KR7D	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:09 AM	
MJ8KR7S	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KR8	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
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MJ8KR9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:12 AM	
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MJ8KR9	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:12 AM	
MJ8KR9	Soil	Titanium	Validation	J	JL	Donald	9/23/11 11:12 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8KS0	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
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MJ8KS0	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:13 AM	
MJ8KS0	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:13 AM	
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MJ8KS0	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:13 AM	
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MJ8KS1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:14 AM	
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MJ8KS2	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Titanium	Validation	J	JL	Donald	9/23/11 11:15 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KS2	Soil	Titanium	Flag	J	JL	Matheny	9/23/11 11:15 AM	
MJ8KS2	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:15 AM	
MJ8KS3	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KS3	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS3	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:16 AM	
MJ8KS4	Soil		Sample Location	0B06SS	OB06SS	Jennifer Crawford	11/22/11 12:10 PM	
MJ8KS4	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KS4	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS4	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:17 AM	
MJ8KS5	Soil		Sample Location	0B07SS	OB07SS	Jennifer Crawford	11/22/11 12:10 PM	
MJ8KS5	Soil		Validation Level		S4VEM	Donald Matheny	9/23/11 11:18 AM	Y
MJ8KS5	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Chromium	Validation Flag	J	JK	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Thallium	Validation	UJ	UJL	Donald	9/23/11 11:18 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KS5	Soil	Thallium	Flag	UJ	UJL	Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:18 AM	
MJ8KS5	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	9/23/11 11:18 AM	

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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KL2	MJ8KL3	MJ8KL4	MJ8KL5	MJ8KL6	MJ8KL7
MJ8KL8	MJ8KL9	MJ8KM0	MJ8KM1	MJ8KM2	MJ8KM3
MJ8KM4	MJ8KM5	MJ8KQ5	MJ8KS6	MJ8KS7	MJ8KS9
MJ8KT0	MJ8KT2				

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 6, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KL2

FROM: Donald Matheny, Chemist
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of twenty (20) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8KL2)	77 – 119%	Y*	75 - 125%
Sample Duplicate (MJ8KL2)	≤ 7%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	78 – 110%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KL2)	≤ 5%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Beryllium - MJ8KS9, MJ8KT0, MJ8KT2, MJ8KL4, MJ8KL5, MJ8KL6, MJ8KL8, MJ8KM0, MJ8KM3, MJ8KM5 **Calcium** - MJ8KL7 **Cobalt** - MJ8KL7 **Nickel** - MJ8KL7, MJ8KM4, MJ8KM5 **Potassium** - MJ8KS7, MJ8KQ5, MJ8KT0, MJ8KT2, MJ8KL4, MJ8KL5, MJ8KL8, MJ8KL9, MJ8KM2, MJ8KM5, MJ8KL2 **Sodium** - MJ8KQ5, MJ8KM4 **Tin** - MJ8KS6, MJ8KS7, MJ8KQ5, MJ8KS9
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Antimony, Silver – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. Detected analytes in samples with results greater than or equal to MDLs are qualified JL.
Iron, Manganese, Strontium, Titanium – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KL2	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL3	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL4	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL5	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL6	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL7	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL8	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KL9	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KM0	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KM1	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KM2	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KM3	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KM4	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KM5	Soil	8/22/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KQ5	Soil	8/23/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KS6	Soil	8/24/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KS7	Soil	8/24/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KS9	Soil	8/24/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KT0	Soil	8/24/2011	8/26/2011	9/07/2011	9/ 11–14 /2011
MJ8KT2	Soil	8/24/2011	8/26/2011	9/07/2011	9/ 11–14 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KL2	Lab Code:	A4
Sample Number:	MJ8KL2	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	FP01SS	pH:		Sample Date:	08222011	Sample Time:	11:45:00
% Moisture :				% Solids :	82		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	20600	mg/kg	1			Yes	S4VEM
Antimony	7.2	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.7	mg/kg	1			Yes	S4VEM
Barium	201	mg/kg	1			Yes	S4VEM
Beryllium	0.67	mg/kg	1			Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1790	mg/kg	1			Yes	S4VEM
Chromium	16.8	mg/kg	1			Yes	S4VEM
Cobalt	20.2	mg/kg	1			Yes	S4VEM
Copper	43.9	mg/kg	1			Yes	S4VEM
Iron	37200	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.3	mg/kg	1			Yes	S4VEM
Magnesium	2220	mg/kg	1			Yes	S4VEM
Manganese	1580	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.0	mg/kg	1			Yes	S4VEM
Potassium	602	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U	U	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	604	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U	U	Yes	S4VEM
Vanadium	122	mg/kg	1			Yes	S4VEM
Zinc	64.1	mg/kg	1			Yes	S4VEM
Lithium	7.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	32.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1370	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KL3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP02SS	pH:	Sample Date: 08222011	Sample Time: 13:05:00
% Moisture :		% Solids : 83	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	19900	mg/kg	1			Yes	S4VEM
Antimony	7.2	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	304	mg/kg	1			Yes	S4VEM
Beryllium	0.72	mg/kg	1			Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1670	mg/kg	1			Yes	S4VEM
Chromium	15.9	mg/kg	1			Yes	S4VEM
Cobalt	31.6	mg/kg	1			Yes	S4VEM
Copper	40.2	mg/kg	1			Yes	S4VEM
Iron	43800	mg/kg	1	E	JL	Yes	S4VEM
Lead	22.1	mg/kg	1			Yes	S4VEM
Magnesium	2190	mg/kg	1			Yes	S4VEM
Manganese	3110	mg/kg	1.6	D,E	JL	Yes	S4VEM
Nickel	8.0	mg/kg	1			Yes	S4VEM
Potassium	969	mg/kg	1			Yes	S4VEM
Selenium	4.2	mg/kg	1	U	U	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	596	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U	U	Yes	S4VEM
Vanadium	122	mg/kg	1			Yes	S4VEM
Zinc	77.2	mg/kg	1			Yes	S4VEM
Lithium	7.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	35.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1170	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4

Sample Number:	MJ8KL4	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	FP03SS	pH:		Sample Date:	08222011	Sample Time:	13:30:00
% Moisture :				% Solids :	72		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	18300	mg/kg	1			Yes	S4VEM
Antimony	8.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.6	mg/kg	1			Yes	S4VEM
Barium	185	mg/kg	1			Yes	S4VEM
Beryllium	0.53	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.69	mg/kg	1	U	U	Yes	S4VEM
Calcium	1080	mg/kg	1			Yes	S4VEM
Chromium	15.8	mg/kg	1			Yes	S4VEM
Cobalt	17.4	mg/kg	1			Yes	S4VEM
Copper	30.8	mg/kg	1			Yes	S4VEM
Iron	34100	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.9	mg/kg	1			Yes	S4VEM
Magnesium	2140	mg/kg	1			Yes	S4VEM
Manganese	1530	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.4	mg/kg	1			Yes	S4VEM
Potassium	617	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.9	mg/kg	1	U	U	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	694	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U	U	Yes	S4VEM
Vanadium	92.6	mg/kg	1			Yes	S4VEM
Zinc	116	mg/kg	1			Yes	S4VEM
Lithium	7.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.83	mg/kg	1	U	U	Yes	S4VEM
Strontium	22.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1180	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KL5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP04SS	pH:	Sample Date: 08222011	Sample Time: 14:05:00
% Moisture :		% Solids : 76.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	18200	mg/kg	1			Yes	S4VEM
Antimony	7.7	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.2	mg/kg	1			Yes	S4VEM
Barium	185	mg/kg	1			Yes	S4VEM
Beryllium	0.53	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.64	mg/kg	1	U	U	Yes	S4VEM
Calcium	1410	mg/kg	1			Yes	S4VEM
Chromium	15.4	mg/kg	1			Yes	S4VEM
Cobalt	18.4	mg/kg	1			Yes	S4VEM
Copper	32.4	mg/kg	1			Yes	S4VEM
Iron	35300	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.2	mg/kg	1			Yes	S4VEM
Magnesium	2340	mg/kg	1			Yes	S4VEM
Manganese	1480	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.0	mg/kg	1			Yes	S4VEM
Potassium	602	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.5	mg/kg	1	U	U	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	644	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U	U	Yes	S4VEM
Vanadium	91.7	mg/kg	1			Yes	S4VEM
Zinc	65.9	mg/kg	1			Yes	S4VEM
Lithium	7.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.77	mg/kg	1	U	U	Yes	S4VEM
Strontium	26.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1350	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KL6	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP05SS	pH:	Sample Date: 08222011	Sample Time: 14:30:00
% Moisture :		% Solids : 75.3	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	21300	mg/kg	1			Yes	S4VEM
Antimony	7.9	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.1	mg/kg	1			Yes	S4VEM
Barium	251	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.66	mg/kg	1	U	U	Yes	S4VEM
Calcium	1620	mg/kg	1			Yes	S4VEM
Chromium	17.1	mg/kg	1			Yes	S4VEM
Cobalt	34.7	mg/kg	1			Yes	S4VEM
Copper	45.4	mg/kg	1			Yes	S4VEM
Iron	44300	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.9	mg/kg	1			Yes	S4VEM
Magnesium	2230	mg/kg	1			Yes	S4VEM
Manganese	2550	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.5	mg/kg	1			Yes	S4VEM
Potassium	755	mg/kg	1			Yes	S4VEM
Selenium	4.6	mg/kg	1	U	U	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	657	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.3	mg/kg	1	U	U	Yes	S4VEM
Vanadium	126	mg/kg	1			Yes	S4VEM
Zinc	62.5	mg/kg	1			Yes	S4VEM
Lithium	8.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.79	mg/kg	1	U	U	Yes	S4VEM
Strontium	37.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1310	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4

Sample Number:	MJ8KL7	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PU01SD	pH:		Sample Date:	08222011	Sample Time:	14:27:00
% Moisture :				% Solids :	22.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	21500	mg/kg	1			Yes	S4VEM
Antimony	26.0	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.3	mg/kg	1	U	U	Yes	S4VEM
Barium	92.6	mg/kg	1			Yes	S4VEM
Beryllium	2.2	mg/kg	1	U	U	Yes	S4VEM
Cadmium	2.2	mg/kg	1	U	U	Yes	S4VEM
Calcium	1850	mg/kg	1	J	JQ	Yes	S4VEM
Chromium	18.4	mg/kg	1			Yes	S4VEM
Cobalt	11.0	mg/kg	1	J	JQ	Yes	S4VEM
Copper	47.1	mg/kg	1			Yes	S4VEM
Iron	28700	mg/kg	1	E	JL	Yes	S4VEM
Lead	26.6	mg/kg	1			Yes	S4VEM
Magnesium	2180	mg/kg	1			Yes	S4VEM
Manganese	282	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.4	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	2170	mg/kg	1	U	U	Yes	S4VEM
Selenium	15.2	mg/kg	1	U	U	Yes	S4VEM
Silver	4.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	2170	mg/kg	1	U	U	Yes	S4VEM
Thallium	10.8	mg/kg	1	U	U	Yes	S4VEM
Vanadium	103	mg/kg	1			Yes	S4VEM
Zinc	50.6	mg/kg	1			Yes	S4VEM
Lithium	5.5	mg/kg	1			Yes	S4VEM
Molybdenum	2.6	mg/kg	1	U	U	Yes	S4VEM
Strontium	33.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	10.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1150	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KL8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU02SD	pH:	Sample Date: 08222011	Sample Time: 14:30:00
% Moisture :		% Solids : 72.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	26400	mg/kg	1			Yes	S4VEM
Antimony	8.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.0	mg/kg	1			Yes	S4VEM
Barium	136	mg/kg	1			Yes	S4VEM
Beryllium	0.49	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.69	mg/kg	1	U	U	Yes	S4VEM
Calcium	1980	mg/kg	1			Yes	S4VEM
Chromium	26.3	mg/kg	1			Yes	S4VEM
Cobalt	15.7	mg/kg	1			Yes	S4VEM
Copper	45.2	mg/kg	1			Yes	S4VEM
Iron	44000	mg/kg	1	E	JL	Yes	S4VEM
Lead	26.9	mg/kg	1			Yes	S4VEM
Magnesium	3500	mg/kg	1			Yes	S4VEM
Manganese	687	mg/kg	1	E	JL	Yes	S4VEM
Nickel	11.6	mg/kg	1			Yes	S4VEM
Potassium	610	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.8	mg/kg	1	U	U	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	691	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U	U	Yes	S4VEM
Vanadium	108	mg/kg	1			Yes	S4VEM
Zinc	51.0	mg/kg	1			Yes	S4VEM
Lithium	8.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.83	mg/kg	1	U	U	Yes	S4VEM
Strontium	36.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1110	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KL9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU03SD	pH:	Sample Date: 08222011	Sample Time: 14:47:00
% Moisture :		% Solids : 78.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	32100	mg/kg	1			Yes	S4VEM
Antimony	7.6	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	162	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	1980	mg/kg	1			Yes	S4VEM
Chromium	32.8	mg/kg	1			Yes	S4VEM
Cobalt	22.9	mg/kg	1			Yes	S4VEM
Copper	69.3	mg/kg	1			Yes	S4VEM
Iron	60400	mg/kg	1	E	JL	Yes	S4VEM
Lead	9.4	mg/kg	1			Yes	S4VEM
Magnesium	3070	mg/kg	1			Yes	S4VEM
Manganese	778	mg/kg	1	E	JL	Yes	S4VEM
Nickel	11.9	mg/kg	1			Yes	S4VEM
Potassium	349	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.4	mg/kg	1	U	U	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	631	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U	U	Yes	S4VEM
Vanadium	152	mg/kg	1			Yes	S4VEM
Zinc	39.3	mg/kg	1			Yes	S4VEM
Lithium	7.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	55.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1510	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KM0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU04SD	pH:	Sample Date: 08222011	Sample Time: 14:58:00
% Moisture :		% Solids : 68.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	35100	mg/kg	1			Yes	S4VEM
Antimony	8.6	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.2	mg/kg	1			Yes	S4VEM
Barium	118	mg/kg	1			Yes	S4VEM
Beryllium	0.53	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.72	mg/kg	1	U	U	Yes	S4VEM
Calcium	1810	mg/kg	1			Yes	S4VEM
Chromium	20.9	mg/kg	1			Yes	S4VEM
Cobalt	23.1	mg/kg	1			Yes	S4VEM
Copper	94.5	mg/kg	1			Yes	S4VEM
Iron	71400	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.3	mg/kg	1			Yes	S4VEM
Magnesium	2410	mg/kg	1			Yes	S4VEM
Manganese	531	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.1	mg/kg	1			Yes	S4VEM
Potassium	717	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.0	mg/kg	1	U	U	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	717	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.6	mg/kg	1	U	U	Yes	S4VEM
Vanadium	188	mg/kg	1			Yes	S4VEM
Zinc	39.6	mg/kg	1			Yes	S4VEM
Lithium	4.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.86	mg/kg	1	U	U	Yes	S4VEM
Strontium	47.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.6	mg/kg	1	U	U	Yes	S4VEM
Titanium	1960	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KM1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU05SD	pH:	Sample Date: 08222011	Sample Time: 15:14:00
% Moisture :		% Solids : 68.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	38700	mg/kg	1			Yes	S4VEM
Antimony	8.6	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.8	mg/kg	1			Yes	S4VEM
Barium	150	mg/kg	1			Yes	S4VEM
Beryllium	0.84	mg/kg	1			Yes	S4VEM
Cadmium	0.72	mg/kg	1	U	U	Yes	S4VEM
Calcium	3070	mg/kg	1			Yes	S4VEM
Chromium	28.5	mg/kg	1			Yes	S4VEM
Cobalt	23.9	mg/kg	1			Yes	S4VEM
Copper	86.5	mg/kg	1			Yes	S4VEM
Iron	46400	mg/kg	1	E	JL	Yes	S4VEM
Lead	9.5	mg/kg	1			Yes	S4VEM
Magnesium	2630	mg/kg	1			Yes	S4VEM
Manganese	404	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.6	mg/kg	1			Yes	S4VEM
Potassium	720	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.0	mg/kg	1	U	U	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	720	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.6	mg/kg	1	U	U	Yes	S4VEM
Vanadium	212	mg/kg	1			Yes	S4VEM
Zinc	54.1	mg/kg	1			Yes	S4VEM
Lithium	6.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.86	mg/kg	1	U	U	Yes	S4VEM
Strontium	61.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.6	mg/kg	1	U	U	Yes	S4VEM
Titanium	1910	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KM2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU06SD	pH:	Sample Date: 08222011	Sample Time: 15:33:00
% Moisture :		% Solids : 77.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	38400	mg/kg	1			Yes	S4VEM
Antimony	7.8	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	162	mg/kg	1			Yes	S4VEM
Beryllium	0.67	mg/kg	1			Yes	S4VEM
Cadmium	0.65	mg/kg	1	U	U	Yes	S4VEM
Calcium	2830	mg/kg	1			Yes	S4VEM
Chromium	26.0	mg/kg	1			Yes	S4VEM
Cobalt	26.8	mg/kg	1			Yes	S4VEM
Copper	96.6	mg/kg	1			Yes	S4VEM
Iron	77600	mg/kg	1.4	D,E	JL	Yes	S4VEM
Lead	10.8	mg/kg	1			Yes	S4VEM
Magnesium	2600	mg/kg	1			Yes	S4VEM
Manganese	305	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.7	mg/kg	1			Yes	S4VEM
Potassium	230	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.5	mg/kg	1	U	U	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	649	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U	U	Yes	S4VEM
Vanadium	214	mg/kg	1			Yes	S4VEM
Zinc	48.6	mg/kg	1			Yes	S4VEM
Lithium	6.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.78	mg/kg	1	U	U	Yes	S4VEM
Strontium	66.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1800	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KM3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU07SD	pH:	Sample Date: 08222011	Sample Time: 16:12:00
% Moisture :		% Solids : 53.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	45100	mg/kg	1			Yes	S4VEM
Antimony	11.0	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.4	mg/kg	1			Yes	S4VEM
Barium	133	mg/kg	1			Yes	S4VEM
Beryllium	0.80	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.91	mg/kg	1	U	U	Yes	S4VEM
Calcium	2250	mg/kg	1			Yes	S4VEM
Chromium	26.6	mg/kg	1			Yes	S4VEM
Cobalt	26.3	mg/kg	1			Yes	S4VEM
Copper	109	mg/kg	1			Yes	S4VEM
Iron	80900	mg/kg	1	E	JL	Yes	S4VEM
Lead	9.6	mg/kg	1			Yes	S4VEM
Magnesium	2800	mg/kg	1			Yes	S4VEM
Manganese	460	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.0	mg/kg	1			Yes	S4VEM
Potassium	913	mg/kg	1	U	U	Yes	S4VEM
Selenium	6.4	mg/kg	1	U	U	Yes	S4VEM
Silver	1.8	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	913	mg/kg	1	U	U	Yes	S4VEM
Thallium	4.6	mg/kg	1	U	U	Yes	S4VEM
Vanadium	272	mg/kg	1			Yes	S4VEM
Zinc	44.2	mg/kg	1			Yes	S4VEM
Lithium	6.4	mg/kg	1			Yes	S4VEM
Molybdenum	1.1	mg/kg	1	U	U	Yes	S4VEM
Strontium	68.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.6	mg/kg	1	U	U	Yes	S4VEM
Titanium	2450	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KM4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU08SD	pH:	Sample Date: 08222011	Sample Time: 16:33:00
% Moisture :		% Solids : 63.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	29400	mg/kg	1			Yes	S4VEM
Antimony	9.5	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	4.7	mg/kg	1			Yes	S4VEM
Barium	80.6	mg/kg	1			Yes	S4VEM
Beryllium	0.84	mg/kg	1			Yes	S4VEM
Cadmium	0.79	mg/kg	1	U	U	Yes	S4VEM
Calcium	6500	mg/kg	1			Yes	S4VEM
Chromium	20.5	mg/kg	1			Yes	S4VEM
Cobalt	18.6	mg/kg	1			Yes	S4VEM
Copper	80.5	mg/kg	1			Yes	S4VEM
Iron	68400	mg/kg	1	E	JL	Yes	S4VEM
Lead	7.0	mg/kg	1			Yes	S4VEM
Magnesium	3020	mg/kg	1			Yes	S4VEM
Manganese	631	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.8	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	789	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.5	mg/kg	1	U	U	Yes	S4VEM
Silver	1.6	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	483	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.9	mg/kg	1	U	U	Yes	S4VEM
Vanadium	197	mg/kg	1			Yes	S4VEM
Zinc	64.0	mg/kg	1			Yes	S4VEM
Lithium	7.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.95	mg/kg	1	U	U	Yes	S4VEM
Strontium	69.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	1920	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KM5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU09SD	pH:	Sample Date: 08222011	Sample Time: 16:48:00
% Moisture :		% Solids : 27.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41300	mg/kg	1			Yes	S4VEM
Antimony	20.7	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	3.4	mg/kg	1			Yes	S4VEM
Barium	139	mg/kg	1			Yes	S4VEM
Beryllium	0.73	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	1.7	mg/kg	1	U	U	Yes	S4VEM
Calcium	8130	mg/kg	1			Yes	S4VEM
Chromium	27.3	mg/kg	1			Yes	S4VEM
Cobalt	22.6	mg/kg	1			Yes	S4VEM
Copper	116	mg/kg	1			Yes	S4VEM
Iron	63700	mg/kg	1	E	JL	Yes	S4VEM
Lead	107	mg/kg	1			Yes	S4VEM
Magnesium	2900	mg/kg	1			Yes	S4VEM
Manganese	476	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.8	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	549	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	12.1	mg/kg	1	U	U	Yes	S4VEM
Silver	3.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1720	mg/kg	1	U	U	Yes	S4VEM
Thallium	8.6	mg/kg	1	U	U	Yes	S4VEM
Vanadium	215	mg/kg	1			Yes	S4VEM
Zinc	56.4	mg/kg	1			Yes	S4VEM
Lithium	7.1	mg/kg	1			Yes	S4VEM
Molybdenum	2.1	mg/kg	1	U	U	Yes	S4VEM
Strontium	73.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	8.6	mg/kg	1	U	U	Yes	S4VEM
Titanium	2540	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KQ5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR11SS	pH:	Sample Date: 08232011	Sample Time: 14:17:00
% Moisture :		% Solids : 71.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	42700	mg/kg	1			Yes	S4VEM
Antimony	8.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.4	mg/kg	1			Yes	S4VEM
Barium	145	mg/kg	1			Yes	S4VEM
Beryllium	0.70	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.70	mg/kg	1	U	U	Yes	S4VEM
Calcium	3810	mg/kg	1			Yes	S4VEM
Chromium	45.1	mg/kg	1			Yes	S4VEM
Cobalt	31.6	mg/kg	1			Yes	S4VEM
Copper	105	mg/kg	1			Yes	S4VEM
Iron	58300	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.8	mg/kg	1			Yes	S4VEM
Magnesium	3030	mg/kg	1			Yes	S4VEM
Manganese	1810	mg/kg	1	E	JL	Yes	S4VEM
Nickel	12.5	mg/kg	1			Yes	S4VEM
Potassium	689	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.9	mg/kg	1	U	U	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	287	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.5	mg/kg	1	U	U	Yes	S4VEM
Vanadium	223	mg/kg	1			Yes	S4VEM
Zinc	75.4	mg/kg	1			Yes	S4VEM
Lithium	8.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.83	mg/kg	1	U	U	Yes	S4VEM
Strontium	32.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.3	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	3430	mg/kg	1.4	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KS6	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT09SS	pH:	Sample Date: 08242011	Sample Time: 14:25:00
% Moisture :		% Solids : 77.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	34500	mg/kg	1			Yes	S4VEM
Antimony	7.5	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.5	mg/kg	1			Yes	S4VEM
Barium	161	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1			Yes	S4VEM
Cadmium	0.62	mg/kg	1	U	U	Yes	S4VEM
Calcium	2200	mg/kg	1			Yes	S4VEM
Chromium	21.7	mg/kg	1			Yes	S4VEM
Cobalt	25.9	mg/kg	1			Yes	S4VEM
Copper	91.3	mg/kg	1			Yes	S4VEM
Iron	61100	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.0	mg/kg	1			Yes	S4VEM
Magnesium	3570	mg/kg	1			Yes	S4VEM
Manganese	1390	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.3	mg/kg	1			Yes	S4VEM
Potassium	664	mg/kg	1			Yes	S4VEM
Selenium	4.4	mg/kg	1	U	U	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	624	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.1	mg/kg	1	U	U	Yes	S4VEM
Vanadium	193	mg/kg	1			Yes	S4VEM
Zinc	70.0	mg/kg	1			Yes	S4VEM
Lithium	9.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.75	mg/kg	1	U	U	Yes	S4VEM
Strontium	41.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.5	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	2890	mg/kg	1.4	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KS7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT10SS	pH:	Sample Date: 08242011	Sample Time: 14:42:00
% Moisture :		% Solids : 80.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33500	mg/kg	1			Yes	S4VEM
Antimony	7.4	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.2	mg/kg	1			Yes	S4VEM
Barium	132	mg/kg	1			Yes	S4VEM
Beryllium	0.67	mg/kg	1			Yes	S4VEM
Cadmium	0.62	mg/kg	1	U	U	Yes	S4VEM
Calcium	2660	mg/kg	1			Yes	S4VEM
Chromium	38.8	mg/kg	1			Yes	S4VEM
Cobalt	41.5	mg/kg	1			Yes	S4VEM
Copper	105	mg/kg	1			Yes	S4VEM
Iron	72400	mg/kg	1.4	D,E	JL	Yes	S4VEM
Lead	9.6	mg/kg	1			Yes	S4VEM
Magnesium	3070	mg/kg	1			Yes	S4VEM
Manganese	1910	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.5	mg/kg	1			Yes	S4VEM
Potassium	556	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.3	mg/kg	1	U	U	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	616	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.1	mg/kg	1	U	U	Yes	S4VEM
Vanadium	253	mg/kg	1			Yes	S4VEM
Zinc	66.7	mg/kg	1			Yes	S4VEM
Lithium	6.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.74	mg/kg	1	U	U	Yes	S4VEM
Strontium	55.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.1	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	3020	mg/kg	1.4	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KS9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB08SS	pH:	Sample Date: 08242011	Sample Time: 14:43:00
% Moisture :		% Solids : 80.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	52600	mg/kg	1			Yes	S4VEM
Antimony	7.5	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	1.9	mg/kg	1			Yes	S4VEM
Barium	204	mg/kg	1			Yes	S4VEM
Beryllium	0.48	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.62	mg/kg	1	U	U	Yes	S4VEM
Calcium	7700	mg/kg	1			Yes	S4VEM
Chromium	23.6	mg/kg	1			Yes	S4VEM
Cobalt	24.9	mg/kg	1			Yes	S4VEM
Copper	91.9	mg/kg	1			Yes	S4VEM
Iron	46400	mg/kg	1	E	JL	Yes	S4VEM
Lead	38.5	mg/kg	1			Yes	S4VEM
Magnesium	4400	mg/kg	1			Yes	S4VEM
Manganese	1590	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.9	mg/kg	1			Yes	S4VEM
Potassium	699	mg/kg	1			Yes	S4VEM
Selenium	4.4	mg/kg	1	U	U	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	643	mg/kg	1			Yes	S4VEM
Thallium	3.1	mg/kg	1	U	U	Yes	S4VEM
Vanadium	155	mg/kg	1			Yes	S4VEM
Zinc	85.4	mg/kg	1			Yes	S4VEM
Lithium	6.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.75	mg/kg	1	U	U	Yes	S4VEM
Strontium	74.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.4	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1780	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4
Sample Number: MJ8KT0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB09SS	pH:	Sample Date: 08242011	Sample Time: 15:10:00
% Moisture :		% Solids : 70.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	35600	mg/kg	1			Yes	S4VEM
Antimony	8.4	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.3	mg/kg	1			Yes	S4VEM
Barium	161	mg/kg	1			Yes	S4VEM
Beryllium	0.54	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.70	mg/kg	1	U	U	Yes	S4VEM
Calcium	3280	mg/kg	1			Yes	S4VEM
Chromium	27.9	mg/kg	1			Yes	S4VEM
Cobalt	31.3	mg/kg	1			Yes	S4VEM
Copper	72.7	mg/kg	1			Yes	S4VEM
Iron	54600	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.4	mg/kg	1			Yes	S4VEM
Magnesium	3060	mg/kg	1			Yes	S4VEM
Manganese	2040	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.8	mg/kg	1			Yes	S4VEM
Potassium	554	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.9	mg/kg	1	U	U	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	699	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U	U	Yes	S4VEM
Vanadium	182	mg/kg	1			Yes	S4VEM
Zinc	58.1	mg/kg	1			Yes	S4VEM
Lithium	5.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.84	mg/kg	1	U	U	Yes	S4VEM
Strontium	54.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1660	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KL2	Lab Code: A4

Sample Number:	MJ8KT2	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	CT07SS	pH:		Sample Date:	08242011	Sample Time:	13:50:00
% Moisture :				% Solids :	81.7		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	35700	mg/kg	1			Yes	S4VEM
Antimony	7.3	mg/kg	1	UN	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	126	mg/kg	1			Yes	S4VEM
Beryllium	0.53	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.61	mg/kg	1	U	U	Yes	S4VEM
Calcium	1930	mg/kg	1			Yes	S4VEM
Chromium	31.8	mg/kg	1			Yes	S4VEM
Cobalt	23.3	mg/kg	1			Yes	S4VEM
Copper	74.3	mg/kg	1			Yes	S4VEM
Iron	53900	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.0	mg/kg	1			Yes	S4VEM
Magnesium	2140	mg/kg	1			Yes	S4VEM
Manganese	1130	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.0	mg/kg	1			Yes	S4VEM
Potassium	418	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.3	mg/kg	1	U	U	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	612	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.1	mg/kg	1	U	U	Yes	S4VEM
Vanadium	168	mg/kg	1			Yes	S4VEM
Zinc	48.8	mg/kg	1			Yes	S4VEM
Lithium	8.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.73	mg/kg	1	U	U	Yes	S4VEM
Strontium	23.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.1	mg/kg	1	U	U	Yes	S4VEM
Titanium	2300	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KL2 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KL2	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:06 PM	
MJ8KL2D	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL2D	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:20 PM	
MJ8KL2S	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL3	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:21 PM	
MJ8KL3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:21 PM	
MJ8KL3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:21 PM	
MJ8KL3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:21 PM	
MJ8KL3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:21 PM	
MJ8KL3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:21 PM	
MJ8KL4	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:23 PM	
MJ8KL4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:23 PM	
MJ8KL5	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:24 PM	
MJ8KL5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:24 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KL6	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:25 PM	
MJ8KL6	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:25 PM	
MJ8KL6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:25 PM	
MJ8KL6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:25 PM	
MJ8KL6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:25 PM	
MJ8KL6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:25 PM	
MJ8KL6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:25 PM	
MJ8KL7	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Calcium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Cobalt	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:26 PM	
MJ8KL7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:26 PM	
MJ8KL8	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL8	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:28 PM	
MJ8KL8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:28 PM	
MJ8KL9	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KL9	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:29 PM	
MJ8KL9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:29 PM	
MJ8KM0	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KM0	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM0	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:30 PM	
MJ8KM0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM0	Soil	Manganese	Validation	J	JL	Donald	10/6/11 4:30 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KM0	Soil	Manganese	Flag	J	JL	Matheny	10/6/11 4:30 PM	
MJ8KM0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM1	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KM1	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:30 PM	
MJ8KM2	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KM2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:32 PM	
MJ8KM2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:32 PM	
MJ8KM2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:32 PM	
MJ8KM2	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:32 PM	
MJ8KM2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:32 PM	
MJ8KM2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:32 PM	
MJ8KM2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:32 PM	
MJ8KM3	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KM3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:36 PM	
MJ8KM3	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:36 PM	
MJ8KM3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:36 PM	
MJ8KM3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:36 PM	
MJ8KM3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:36 PM	
MJ8KM3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:36 PM	
MJ8KM3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:36 PM	
MJ8KM4	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KM4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KM5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Manganese	Validation	J	JL	Donald	10/6/11 4:39 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KM5	Soil	Manganese	Flag	J	JL	Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KM5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:39 PM	
MJ8KQ5	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KQ5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:40 PM	
MJ8KQ5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:40 PM	
MJ8KS6	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KS6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS6	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:42 PM	
MJ8KS6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KS7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/6/11 4:42 PM	
MJ8KS7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 4:42 PM	
MJ8KS9	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KS9	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Strontium	Validation	J	JL	Donald	10/6/11 5:02 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KS9	Soil	Strontium	Flag	J	JL	Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/6/11 5:02 PM	
MJ8KS9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 5:02 PM	
MJ8KT0	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:04 PM	Y
MJ8KT0	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 5:03 PM	
MJ8KT0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 5:03 PM	
MJ8KT2	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 5:05 PM	Y
MJ8KT2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 5:04 PM	
MJ8KT2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 5:04 PM	

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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KM6	MJ8KM7	MJ8KM8	MJ8KM9	MJ8KN0	MJ8KN1
MJ8KN2	MJ8KN3	MJ8KN4	MJ8KN5	MJ8KW6	MJ8KW7
MJ8KW8	MJ8KW9	MJ8KX0	MJ8KX1	MJ8KX2	MJ8KX3
MJ8KX4	MJ8KX9				

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 11, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KM6

FROM: Donald Matheny, Chemist
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of twenty (20) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8KN2)	75 – 111%	Y*	75 - 125%
Sample Duplicate (MJ8KN2)	≤ 12%	Y*	≤ 20% RPD or ± CRQL
LCS (blank spike)	82 – 114%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KN2)	≤ 9%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Beryllium – MJ8KN1, MJ8KW7 - MJ8KX3 **Nickel** – MJ8KM7, MJ8KN5, MJ8KX3, MJ8KX4 **Potassium** – MJ8KM9, MJ8KN2 - MJ8KN5, MJ8KW6, MJ8KX0, MJ8KX1, MJ8KX3, MJ8KX4 **Sodium** – MJ8KM7, MJ8KN0, MJ8KN2, MJ8KX9 **Tin** - MJ8KN1, MJ8KN2, MJ8KN5
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Selenium, Silver, Thallium – All samples
Duplicates
The following Duplicate or original sample results are less than or equal to 5xCRQL and the absolute difference between duplicate and original samples are greater than CRQL. The original sample results are greater than or equal to MDLs. Detected analytes are qualified JK.
Calcium – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. Detected analytes in samples with results greater than or equal to MDLs are qualified JL.
Iron, Manganese, Strontium, Titanium – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KM6	Soil	8/22/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KM7	Soil	8/22/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KM8	Soil	8/22/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KM9	Soil	8/22/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KN0	Soil	8/23/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KN1	Soil	8/23/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KN2	Soil	8/23/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KN3	Soil	8/23/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KN4	Soil	8/23/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KN5	Soil	8/23/2011	8/26/2011	9/07/2011	9/16–18 /2011
MJ8KW6	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KW7	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KW8	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KW9	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KX0	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KX1	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KX2	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KX3	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KX4	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011
MJ8KX9	Soil	8/25/2011	8/30/2011	9/07/2011	9/16–18 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KM6	Lab Code:	A4
Sample Number:	MJ8KM6	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PU10SD	pH:		Sample Date:	08222011	Sample Time:	16:58:00
% Moisture :				% Solids :	70.1		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41900	mg/kg	1			Yes	S4VEM
Antimony	8.5	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.9	mg/kg	1			Yes	S4VEM
Barium	130	mg/kg	1			Yes	S4VEM
Beryllium	0.71	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.71	mg/kg	1	U	U	Yes	S4VEM
Calcium	1860	mg/kg	1	*	JK	Yes	S4VEM
Chromium	26.4	mg/kg	1			Yes	S4VEM
Cobalt	25.9	mg/kg	1			Yes	S4VEM
Copper	83.5	mg/kg	1			Yes	S4VEM
Iron	56100	mg/kg	1	E	JL	Yes	S4VEM
Lead	15.2	mg/kg	1			Yes	S4VEM
Magnesium	2820	mg/kg	1			Yes	S4VEM
Manganese	547	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.5	mg/kg	1			Yes	S4VEM
Potassium	706	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	706	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	193	mg/kg	1			Yes	S4VEM
Zinc	58.4	mg/kg	1			Yes	S4VEM
Lithium	6.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.85	mg/kg	1	U	U	Yes	S4VEM
Strontium	41.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1940	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KM7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU11SD	pH:	Sample Date: 08222011	Sample Time: 17:08:00
% Moisture :		% Solids : 54.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	50100	mg/kg	1			Yes	S4VEM
Antimony	10.8	mg/kg	1	U	U	Yes	S4VEM
Arsenic	4.8	mg/kg	1			Yes	S4VEM
Barium	122	mg/kg	1			Yes	S4VEM
Beryllium	0.90	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.90	mg/kg	1	U	U	Yes	S4VEM
Calcium	6550	mg/kg	1	*	JK	Yes	S4VEM
Chromium	26.4	mg/kg	1			Yes	S4VEM
Cobalt	33.5	mg/kg	1			Yes	S4VEM
Copper	99.2	mg/kg	1			Yes	S4VEM
Iron	80000	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.6	mg/kg	1			Yes	S4VEM
Magnesium	3020	mg/kg	1			Yes	S4VEM
Manganese	418	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	898	mg/kg	1	U	U	Yes	S4VEM
Selenium	6.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.8	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	648	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	4.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	237	mg/kg	1			Yes	S4VEM
Zinc	52.3	mg/kg	1			Yes	S4VEM
Lithium	5.9	mg/kg	1			Yes	S4VEM
Molybdenum	1.1	mg/kg	1	U	U	Yes	S4VEM
Strontium	65.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1830	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KM8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB01SS	pH:	Sample Date: 08222011	Sample Time: 16:30:00
% Moisture :		% Solids : 85.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	31100	mg/kg	1			Yes	S4VEM
Antimony	6.9	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	203	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	4150	mg/kg	1	*	JK	Yes	S4VEM
Chromium	20.2	mg/kg	1			Yes	S4VEM
Cobalt	48.4	mg/kg	1			Yes	S4VEM
Copper	93.7	mg/kg	1			Yes	S4VEM
Iron	56300	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.4	mg/kg	1			Yes	S4VEM
Magnesium	4070	mg/kg	1			Yes	S4VEM
Manganese	2130	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.0	mg/kg	1			Yes	S4VEM
Potassium	710	mg/kg	1			Yes	S4VEM
Selenium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	577	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	201	mg/kg	1			Yes	S4VEM
Zinc	76.7	mg/kg	1			Yes	S4VEM
Lithium	7.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.69	mg/kg	1	U	U	Yes	S4VEM
Strontium	88.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	2240	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KM9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PU12SD	pH:	Sample Date: 08222011	Sample Time: 17:22:00
% Moisture :		% Solids : 61.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33600	mg/kg	1			Yes	S4VEM
Antimony	9.5	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.5	mg/kg	1			Yes	S4VEM
Barium	119	mg/kg	1			Yes	S4VEM
Beryllium	0.80	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.80	mg/kg	1	U	U	Yes	S4VEM
Calcium	3000	mg/kg	1	*	JK	Yes	S4VEM
Chromium	22.0	mg/kg	1			Yes	S4VEM
Cobalt	22.3	mg/kg	1			Yes	S4VEM
Copper	78.1	mg/kg	1			Yes	S4VEM
Iron	48000	mg/kg	1	E	JL	Yes	S4VEM
Lead	19.9	mg/kg	1			Yes	S4VEM
Magnesium	2720	mg/kg	1			Yes	S4VEM
Manganese	421	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.5	mg/kg	1			Yes	S4VEM
Potassium	293	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.6	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	796	mg/kg	1	U	U	Yes	S4VEM
Thallium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	182	mg/kg	1			Yes	S4VEM
Zinc	54.9	mg/kg	1			Yes	S4VEM
Lithium	4.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.95	mg/kg	1	U	U	Yes	S4VEM
Strontium	51.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1900	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KN0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR01SS	pH:	Sample Date: 08232011	Sample Time: 09:01:00
% Moisture :		% Solids : 91.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	14600	mg/kg	1			Yes	S4VEM
Antimony	6.6	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.2	mg/kg	1			Yes	S4VEM
Barium	96.2	mg/kg	1			Yes	S4VEM
Beryllium	0.55	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.55	mg/kg	1	U	U	Yes	S4VEM
Calcium	3920	mg/kg	1	*	JK	Yes	S4VEM
Chromium	13.1	mg/kg	1			Yes	S4VEM
Cobalt	18.7	mg/kg	1			Yes	S4VEM
Copper	46.9	mg/kg	1			Yes	S4VEM
Iron	34700	mg/kg	1	E	JL	Yes	S4VEM
Lead	121	mg/kg	1			Yes	S4VEM
Magnesium	3780	mg/kg	1			Yes	S4VEM
Manganese	611	mg/kg	1	E	JL	Yes	S4VEM
Nickel	13.3	mg/kg	1			Yes	S4VEM
Potassium	650	mg/kg	1			Yes	S4VEM
Selenium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	193	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	2.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	114	mg/kg	1			Yes	S4VEM
Zinc	65.9	mg/kg	1			Yes	S4VEM
Lithium	3.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.66	mg/kg	1	U	U	Yes	S4VEM
Strontium	41.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.7	mg/kg	1	U	U	Yes	S4VEM
Titanium	2430	mg/kg	1.4	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4

Sample Number:	MJ8KN1	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	FR02SS	pH:		Sample Date:	08232011	Sample Time:	09:13:00
% Moisture :				% Solids :	84.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	36200	mg/kg	1.3	D		Yes	S4VEM
Antimony	7.0	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.4	mg/kg	1			Yes	S4VEM
Barium	209	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	4350	mg/kg	1	*	JK	Yes	S4VEM
Chromium	25.9	mg/kg	1			Yes	S4VEM
Cobalt	32.6	mg/kg	1			Yes	S4VEM
Copper	268	mg/kg	1			Yes	S4VEM
Iron	55700	mg/kg	1	E	JL	Yes	S4VEM
Lead	750	mg/kg	1			Yes	S4VEM
Magnesium	3230	mg/kg	1			Yes	S4VEM
Manganese	1220	mg/kg	1	E	JL	Yes	S4VEM
Nickel	35.7	mg/kg	1			Yes	S4VEM
Potassium	587	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	587	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	210	mg/kg	1			Yes	S4VEM
Zinc	97.7	mg/kg	1			Yes	S4VEM
Lithium	7.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	83.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.4	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	2190	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KN2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR03SS	pH:	Sample Date: 08232011	Sample Time: 09:22:00
% Moisture :		% Solids : 74.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	38300	mg/kg	1			Yes	S4VEM
Antimony	7.9	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.1	mg/kg	1			Yes	S4VEM
Barium	147	mg/kg	1			Yes	S4VEM
Beryllium	0.65	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.65	mg/kg	1	U	U	Yes	S4VEM
Calcium	3780	mg/kg	1	*	JK	Yes	S4VEM
Chromium	21.2	mg/kg	1			Yes	S4VEM
Cobalt	41.5	mg/kg	1			Yes	S4VEM
Copper	446	mg/kg	1			Yes	S4VEM
Iron	59500	mg/kg	1	E	JL	Yes	S4VEM
Lead	2310	mg/kg	1			Yes	S4VEM
Magnesium	3560	mg/kg	1			Yes	S4VEM
Manganese	1630	mg/kg	1	E	JL	Yes	S4VEM
Nickel	61.1	mg/kg	1			Yes	S4VEM
Potassium	231	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	228	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	193	mg/kg	1			Yes	S4VEM
Zinc	100	mg/kg	1			Yes	S4VEM
Lithium	5.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.79	mg/kg	1	U	U	Yes	S4VEM
Strontium	43.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.4	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	2000	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4

Sample Number:	MJ8KN3	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	FR04SS	pH:		Sample Date:	08232011	Sample Time:	09:30:00
% Moisture :				% Solids :	78.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	34400	mg/kg	1			Yes	S4VEM
Antimony	7.6	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.4	mg/kg	1			Yes	S4VEM
Barium	152	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	2200	mg/kg	1	*	JK	Yes	S4VEM
Chromium	25.9	mg/kg	1			Yes	S4VEM
Cobalt	39.7	mg/kg	1			Yes	S4VEM
Copper	281	mg/kg	1			Yes	S4VEM
Iron	61700	mg/kg	1	E	JL	Yes	S4VEM
Lead	1280	mg/kg	1			Yes	S4VEM
Magnesium	3540	mg/kg	1			Yes	S4VEM
Manganese	1760	mg/kg	1	E	JL	Yes	S4VEM
Nickel	34.4	mg/kg	1			Yes	S4VEM
Potassium	281	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	631	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	225	mg/kg	1			Yes	S4VEM
Zinc	89.5	mg/kg	1			Yes	S4VEM
Lithium	5.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	34.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	2240	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KN4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR05SS	pH:	Sample Date: 08232011	Sample Time: 09:41:00
% Moisture :		% Solids : 83.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	36800	mg/kg	1.3	D		Yes	S4VEM
Antimony	7.2	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.2	mg/kg	1			Yes	S4VEM
Barium	117	mg/kg	1			Yes	S4VEM
Beryllium	0.60	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1610	mg/kg	1	*	JK	Yes	S4VEM
Chromium	25.8	mg/kg	1			Yes	S4VEM
Cobalt	28.1	mg/kg	1			Yes	S4VEM
Copper	112	mg/kg	1			Yes	S4VEM
Iron	57400	mg/kg	1	E	JL	Yes	S4VEM
Lead	139	mg/kg	1			Yes	S4VEM
Magnesium	4310	mg/kg	1			Yes	S4VEM
Manganese	1050	mg/kg	1	E	JL	Yes	S4VEM
Nickel	17.3	mg/kg	1			Yes	S4VEM
Potassium	342	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	597	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	180	mg/kg	1			Yes	S4VEM
Zinc	72.7	mg/kg	1			Yes	S4VEM
Lithium	8.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	29.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1960	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KN5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR06SS	pH:	Sample Date: 08232011	Sample Time: 09:50:00
% Moisture :		% Solids : 90	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	12400	mg/kg	1			Yes	S4VEM
Antimony	6.5	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.0	mg/kg	1			Yes	S4VEM
Barium	80.1	mg/kg	1			Yes	S4VEM
Beryllium	0.54	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.54	mg/kg	1	U	U	Yes	S4VEM
Calcium	8980	mg/kg	1	*	JK	Yes	S4VEM
Chromium	3.8	mg/kg	1			Yes	S4VEM
Cobalt	18.4	mg/kg	1			Yes	S4VEM
Copper	148	mg/kg	1			Yes	S4VEM
Iron	39900	mg/kg	1	E	JL	Yes	S4VEM
Lead	39.0	mg/kg	1			Yes	S4VEM
Magnesium	2990	mg/kg	1			Yes	S4VEM
Manganese	390	mg/kg	1	E	JL	Yes	S4VEM
Nickel	1.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	361	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1720	mg/kg	1			Yes	S4VEM
Thallium	2.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	186	mg/kg	1			Yes	S4VEM
Zinc	69.0	mg/kg	1			Yes	S4VEM
Lithium	7.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.65	mg/kg	1	U	U	Yes	S4VEM
Strontium	99.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.4	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	3350	mg/kg	1.9	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4

Sample Number:	MJ8KW6	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT12SS	pH:		Sample Date:	08252011	Sample Time:	09:05:00
% Moisture :				% Solids :	88		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	43400	mg/kg	1.5	D		Yes	S4VEM
Antimony	6.8	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.8	mg/kg	1			Yes	S4VEM
Barium	161	mg/kg	1			Yes	S4VEM
Beryllium	0.56	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	2410	mg/kg	1	*	JK	Yes	S4VEM
Chromium	25.4	mg/kg	1			Yes	S4VEM
Cobalt	26.1	mg/kg	1			Yes	S4VEM
Copper	87.1	mg/kg	1			Yes	S4VEM
Iron	50600	mg/kg	1	E	JL	Yes	S4VEM
Lead	93.3	mg/kg	1			Yes	S4VEM
Magnesium	2950	mg/kg	1			Yes	S4VEM
Manganese	490	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.9	mg/kg	1			Yes	S4VEM
Potassium	211	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	563	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	193	mg/kg	1			Yes	S4VEM
Zinc	68.4	mg/kg	1			Yes	S4VEM
Lithium	6.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.68	mg/kg	1	U	U	Yes	S4VEM
Strontium	49.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	2030	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4

Sample Number:	MJ8KW7	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT13SS	pH:		Sample Date:	08252011	Sample Time:	09:15:00
% Moisture :				% Solids :	86.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	44900	mg/kg	1.5	D		Yes	S4VEM
Antimony	6.8	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	135	mg/kg	1			Yes	S4VEM
Beryllium	0.37	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	2850	mg/kg	1	*	JK	Yes	S4VEM
Chromium	26.6	mg/kg	1			Yes	S4VEM
Cobalt	33.9	mg/kg	1			Yes	S4VEM
Copper	87.1	mg/kg	1			Yes	S4VEM
Iron	52000	mg/kg	1	E	JL	Yes	S4VEM
Lead	20.3	mg/kg	1			Yes	S4VEM
Magnesium	3040	mg/kg	1			Yes	S4VEM
Manganese	747	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.4	mg/kg	1			Yes	S4VEM
Potassium	562	mg/kg	1	U	U	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	562	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	206	mg/kg	1			Yes	S4VEM
Zinc	72.3	mg/kg	1			Yes	S4VEM
Lithium	6.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.68	mg/kg	1	U	U	Yes	S4VEM
Strontium	69.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	2250	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KW8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT14SS	pH:	Sample Date: 08252011	Sample Time: 09:24:00
% Moisture :		% Solids : 85	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	40200	mg/kg	1.4	D		Yes	S4VEM
Antimony	6.9	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.5	mg/kg	1			Yes	S4VEM
Barium	145	mg/kg	1			Yes	S4VEM
Beryllium	0.19	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.57	mg/kg	1	U	U	Yes	S4VEM
Calcium	2470	mg/kg	1	*	JK	Yes	S4VEM
Chromium	30.6	mg/kg	1			Yes	S4VEM
Cobalt	20.7	mg/kg	1			Yes	S4VEM
Copper	96.2	mg/kg	1			Yes	S4VEM
Iron	51900	mg/kg	1	E	JL	Yes	S4VEM
Lead	21.1	mg/kg	1			Yes	S4VEM
Magnesium	2930	mg/kg	1			Yes	S4VEM
Manganese	278	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.6	mg/kg	1			Yes	S4VEM
Potassium	571	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	571	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	228	mg/kg	1			Yes	S4VEM
Zinc	67.8	mg/kg	1			Yes	S4VEM
Lithium	6.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.69	mg/kg	1	U	U	Yes	S4VEM
Strontium	51.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	2270	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KW9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT15SS	pH:	Sample Date: 08252011	Sample Time: 09:35:00
% Moisture :		% Solids : 84.3	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41800	mg/kg	1.4	D		Yes	S4VEM
Antimony	7.0	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.5	mg/kg	1			Yes	S4VEM
Barium	144	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	2910	mg/kg	1	*	JK	Yes	S4VEM
Chromium	27.2	mg/kg	1			Yes	S4VEM
Cobalt	22.9	mg/kg	1			Yes	S4VEM
Copper	94.4	mg/kg	1			Yes	S4VEM
Iron	56900	mg/kg	1	E	JL	Yes	S4VEM
Lead	12.3	mg/kg	1			Yes	S4VEM
Magnesium	3220	mg/kg	1			Yes	S4VEM
Manganese	453	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.8	mg/kg	1			Yes	S4VEM
Potassium	581	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	581	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	215	mg/kg	1			Yes	S4VEM
Zinc	75.6	mg/kg	1			Yes	S4VEM
Lithium	6.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	72.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	2440	mg/kg	1.3	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KX0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT16SS	pH:	Sample Date: 08252011	Sample Time: 09:40:00
% Moisture :		% Solids : 89.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	28000	mg/kg	1			Yes	S4VEM
Antimony	6.7	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	131	mg/kg	1			Yes	S4VEM
Beryllium	0.23	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	1630	mg/kg	1	*	JK	Yes	S4VEM
Chromium	26.5	mg/kg	1			Yes	S4VEM
Cobalt	22.4	mg/kg	1			Yes	S4VEM
Copper	195	mg/kg	1			Yes	S4VEM
Iron	42600	mg/kg	1	E	JL	Yes	S4VEM
Lead	444	mg/kg	1			Yes	S4VEM
Magnesium	2940	mg/kg	1			Yes	S4VEM
Manganese	807	mg/kg	1	E	JL	Yes	S4VEM
Nickel	26.3	mg/kg	1			Yes	S4VEM
Potassium	394	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	561	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	129	mg/kg	1			Yes	S4VEM
Zinc	79.3	mg/kg	1			Yes	S4VEM
Lithium	8.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.67	mg/kg	1	U	U	Yes	S4VEM
Strontium	35.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1020	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4

Sample Number:	MJ8KX1	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT17SS	pH:		Sample Date:	08252011	Sample Time:	09:45:00
% Moisture :				% Solids :	88.4		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33100	mg/kg	1			Yes	S4VEM
Antimony	6.7	mg/kg	1	U	U	Yes	S4VEM
Arsenic	1.6	mg/kg	1			Yes	S4VEM
Barium	144	mg/kg	1			Yes	S4VEM
Beryllium	0.44	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	2170	mg/kg	1	*	JK	Yes	S4VEM
Chromium	24.7	mg/kg	1			Yes	S4VEM
Cobalt	18.7	mg/kg	1			Yes	S4VEM
Copper	67.5	mg/kg	1			Yes	S4VEM
Iron	33000	mg/kg	1	E	JL	Yes	S4VEM
Lead	27.5	mg/kg	1			Yes	S4VEM
Magnesium	2430	mg/kg	1			Yes	S4VEM
Manganese	213	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.9	mg/kg	1			Yes	S4VEM
Potassium	180	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	560	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	152	mg/kg	1			Yes	S4VEM
Zinc	72.8	mg/kg	1			Yes	S4VEM
Lithium	6.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.67	mg/kg	1	U	U	Yes	S4VEM
Strontium	47.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1970	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4

Sample Number:	MJ8KX2	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT18SS	pH:		Sample Date:	08252011	Sample Time:	09:52:00
% Moisture :				% Solids :	86.9		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	32800	mg/kg	1			Yes	S4VEM
Antimony	6.8	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.5	mg/kg	1			Yes	S4VEM
Barium	167	mg/kg	1			Yes	S4VEM
Beryllium	0.25	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	1580	mg/kg	1	*	JK	Yes	S4VEM
Chromium	26.6	mg/kg	1			Yes	S4VEM
Cobalt	17.5	mg/kg	1			Yes	S4VEM
Copper	42.3	mg/kg	1			Yes	S4VEM
Iron	49500	mg/kg	1	E	JL	Yes	S4VEM
Lead	16.5	mg/kg	1			Yes	S4VEM
Magnesium	1720	mg/kg	1			Yes	S4VEM
Manganese	329	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.9	mg/kg	1			Yes	S4VEM
Potassium	564	mg/kg	1	U	U	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	564	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	221	mg/kg	1			Yes	S4VEM
Zinc	45.8	mg/kg	1			Yes	S4VEM
Lithium	5.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.68	mg/kg	1	U	U	Yes	S4VEM
Strontium	43.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1270	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KX3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC01SD	pH:	Sample Date: 08252011	Sample Time: 10:00:00
% Moisture :		% Solids : 68.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27800	mg/kg	1			Yes	S4VEM
Antimony	8.7	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.3	mg/kg	1			Yes	S4VEM
Barium	159	mg/kg	1			Yes	S4VEM
Beryllium	0.34	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.72	mg/kg	1	U	U	Yes	S4VEM
Calcium	3400	mg/kg	1	*	JK	Yes	S4VEM
Chromium	14.4	mg/kg	1			Yes	S4VEM
Cobalt	16.9	mg/kg	1			Yes	S4VEM
Copper	26.7	mg/kg	1			Yes	S4VEM
Iron	38200	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.6	mg/kg	1			Yes	S4VEM
Magnesium	1660	mg/kg	1			Yes	S4VEM
Manganese	436	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	228	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	722	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	119	mg/kg	1			Yes	S4VEM
Zinc	46.5	mg/kg	1			Yes	S4VEM
Lithium	3.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.87	mg/kg	1	U	U	Yes	S4VEM
Strontium	63.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.6	mg/kg	1	U	U	Yes	S4VEM
Titanium	1200	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KX4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC02SD	pH:	Sample Date: 08252011	Sample Time: 10:50:00
% Moisture :		% Solids : 59.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27900	mg/kg	1			Yes	S4VEM
Antimony	10.1	mg/kg	1	U	U	Yes	S4VEM
Arsenic	2.2	mg/kg	1			Yes	S4VEM
Barium	129	mg/kg	1			Yes	S4VEM
Beryllium	0.84	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.84	mg/kg	1	U	U	Yes	S4VEM
Calcium	4110	mg/kg	1	*	JK	Yes	S4VEM
Chromium	15.1	mg/kg	1			Yes	S4VEM
Cobalt	13.3	mg/kg	1			Yes	S4VEM
Copper	40.3	mg/kg	1			Yes	S4VEM
Iron	31700	mg/kg	1	E	JL	Yes	S4VEM
Lead	5.4	mg/kg	1			Yes	S4VEM
Magnesium	2210	mg/kg	1			Yes	S4VEM
Manganese	315	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.4	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	264	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.7	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	840	mg/kg	1	U	U	Yes	S4VEM
Thallium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	107	mg/kg	1			Yes	S4VEM
Zinc	43.6	mg/kg	1			Yes	S4VEM
Lithium	4.3	mg/kg	1			Yes	S4VEM
Molybdenum	1.0	mg/kg	1	U	U	Yes	S4VEM
Strontium	92.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1150	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KM6	Lab Code: A4
Sample Number: MJ8KX9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC05SD	pH:	Sample Date: 08252011	Sample Time: 11:50:00
% Moisture :		% Solids : 86.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33000	mg/kg	1			Yes	S4VEM
Antimony	7.0	mg/kg	1	U	U	Yes	S4VEM
Arsenic	3.0	mg/kg	1			Yes	S4VEM
Barium	115	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	7710	mg/kg	1	*	JK	Yes	S4VEM
Chromium	18.3	mg/kg	1			Yes	S4VEM
Cobalt	22.6	mg/kg	1			Yes	S4VEM
Copper	52.9	mg/kg	1			Yes	S4VEM
Iron	39800	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.8	mg/kg	1			Yes	S4VEM
Magnesium	2610	mg/kg	1			Yes	S4VEM
Manganese	1210	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.5	mg/kg	1			Yes	S4VEM
Potassium	580	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	289	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	138	mg/kg	1			Yes	S4VEM
Zinc	53.7	mg/kg	1			Yes	S4VEM
Lithium	5.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	69.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	1760	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KM6 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KM6	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KM6	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:34 AM	
MJ8KM6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:34 AM	
MJ8KM6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:34 AM	
MJ8KM6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:46 AM	
MJ8KM6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:46 AM	
MJ8KM6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:46 AM	
MJ8KM6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:46 AM	
MJ8KM6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:46 AM	
MJ8KM7	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KM7	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:35 AM	
MJ8KM7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:35 AM	
MJ8KM7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:35 AM	
MJ8KM7	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:35 AM	
MJ8KM7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM7	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:47 AM	
MJ8KM7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM8	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KM8	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:35 AM	
MJ8KM8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:35 AM	
MJ8KM8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:35 AM	
MJ8KM8	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM8	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:47 AM	
MJ8KM9	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KM9	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:36 AM	
MJ8KM9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:36 AM	
MJ8KM9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:36 AM	
MJ8KM9	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:36 AM	
MJ8KM9	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:48 AM	
MJ8KM9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:48 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KM9	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:48 AM	
MJ8KM9	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:48 AM	
MJ8KM9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:48 AM	
MJ8KN0	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN0	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:36 AM	
MJ8KN0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:36 AM	
MJ8KN0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:36 AM	
MJ8KN0	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:48 AM	
MJ8KN0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:48 AM	
MJ8KN0	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:48 AM	
MJ8KN0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:48 AM	
MJ8KN0	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:48 AM	
MJ8KN0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:48 AM	
MJ8KN1	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN1	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:37 AM	
MJ8KN1	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:37 AM	
MJ8KN1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:37 AM	
MJ8KN1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:37 AM	
MJ8KN1	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:49 AM	
MJ8KN1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:49 AM	
MJ8KN1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:49 AM	
MJ8KN1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:49 AM	
MJ8KN1	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:49 AM	
MJ8KN1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:49 AM	
MJ8KN2	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN2	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:37 AM	
MJ8KN2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:37 AM	
MJ8KN2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:37 AM	
MJ8KN2	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:37 AM	
MJ8KN2	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN2D	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN2S	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN3	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN3	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:38 AM	
MJ8KN3	Soil	Iron	Validation	J	JL	Donald	10/10/11 10:38 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KN3	Soil	Iron	Flag	J	JL	Matheny	10/10/11 10:38 AM	
MJ8KN3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:38 AM	
MJ8KN3	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:38 AM	
MJ8KN3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN3	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:50 AM	
MJ8KN4	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN4	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:38 AM	
MJ8KN4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:38 AM	
MJ8KN4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:38 AM	
MJ8KN4	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:38 AM	
MJ8KN4	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN5	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KN5	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:39 AM	
MJ8KN5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:39 AM	
MJ8KN5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:39 AM	
MJ8KN5	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:39 AM	
MJ8KN5	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:39 AM	
MJ8KN5	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN5	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:51 AM	
MJ8KN5	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:51 AM	
MJ8KN5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:51 AM	
MJ8KW6	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KW6	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:39 AM	
MJ8KW6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:39 AM	
MJ8KW6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:39 AM	
MJ8KW6	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:39 AM	
MJ8KW6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:52 AM	
MJ8KW6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:52 AM	
MJ8KW6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:52 AM	
MJ8KW6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:52 AM	
MJ8KW6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:52 AM	
MJ8KW7	Soil		Validation		S4VEM	Donald	10/11/11 8:36 AM	Y

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KW7	Soil		Level		S4VEM	Matheny	10/11/11 8:36 AM	Y
MJ8KW7	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:40 AM	
MJ8KW7	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:40 AM	
MJ8KW7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:40 AM	
MJ8KW7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:40 AM	
MJ8KW7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:53 AM	
MJ8KW7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:53 AM	
MJ8KW7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:53 AM	
MJ8KW7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:53 AM	
MJ8KW7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:53 AM	
MJ8KW8	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KW8	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:40 AM	
MJ8KW8	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:40 AM	
MJ8KW8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:40 AM	
MJ8KW8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:40 AM	
MJ8KW8	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:00 AM	
MJ8KW8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:00 AM	
MJ8KW8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:00 AM	
MJ8KW8	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:00 AM	
MJ8KW8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:00 AM	
MJ8KW9	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KW9	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:41 AM	
MJ8KW9	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:41 AM	
MJ8KW9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:41 AM	
MJ8KW9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:41 AM	
MJ8KW9	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:05 AM	
MJ8KW9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:05 AM	
MJ8KW9	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:05 AM	
MJ8KW9	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:05 AM	
MJ8KW9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:05 AM	
MJ8KX0	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KX0	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:42 AM	
MJ8KX0	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:42 AM	
MJ8KX0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:42 AM	
MJ8KX0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:42 AM	
MJ8KX0	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:42 AM	
MJ8KX0	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:05 AM	
MJ8KX0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:05 AM	
MJ8KX0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:05 AM	
MJ8KX0	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:05 AM	
MJ8KX0	Soil	Titanium	Validation	J	JL	Donald	10/10/11 11:05 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KX0	Soil	Titanium	Flag	J	JL	Matheny	10/10/11 11:05 AM	
MJ8KX1	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KX1	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:42 AM	
MJ8KX1	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:42 AM	
MJ8KX1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:42 AM	
MJ8KX1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:42 AM	
MJ8KX1	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:42 AM	
MJ8KX1	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX2	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KX2	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:43 AM	
MJ8KX2	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:43 AM	
MJ8KX2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:43 AM	
MJ8KX2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:43 AM	
MJ8KX2	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX2	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:06 AM	
MJ8KX3	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KX3	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:43 AM	
MJ8KX3	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:43 AM	
MJ8KX3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:43 AM	
MJ8KX3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:43 AM	
MJ8KX3	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:43 AM	
MJ8KX3	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:43 AM	
MJ8KX3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX3	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX4	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KX4	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:44 AM	
MJ8KX4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:44 AM	
MJ8KX4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:44 AM	
MJ8KX4	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:44 AM	
MJ8KX4	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:44 AM	
MJ8KX4	Soil	Selenium	Validation	UJ	UJL	Donald	10/10/11 11:07 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KX4	Soil	Selenium	Flag	UJ	UJL	Matheny	10/10/11 11:07 AM	
MJ8KX4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 11:07 AM	
MJ8KX9	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:36 AM	Y
MJ8KX9	Soil	Calcium	Validation Flag	J	JK	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:45 AM	
MJ8KX9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:45 AM	

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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KN6	MJ8KN7	MJ8KN8	MJ8KN9	MJ8KP0	MJ8KP1
MJ8KP2	MJ8KP3	MJ8KP4	MJ8KP5	MJ8KP6	MJ8KP7
MJ8KP8	MJ8KP9	MJ8KQ0	MJ8KQ1	MJ8KQ2	MJ8KQ3
MJ8KQ4	MJ8KS8				

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 6, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KN6

FROM: Donald Matheny, Chemist
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of twenty (20) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8KS8)	83 – 121%	Y*	75 - 125%
Sample Duplicate (MJ8KS8)	≤ 7%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	90 – 111%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KS8)	≤ 5%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Beryllium - MJ8KS8, MJ8KN6 - MJ8KP0, MJ8KP2, MJ8KP4, MJ8KP8, MJ8KQ1, MJ8KQ3, MJ8KQ4 **Cadmium** - MJ8KP9 **Cobalt** - MJ8KP0, MJ8KP4 **Nickel** - MJ8KS8, MJ8KN6, MJ8KN9, MJ8KP0, MJ8KP2, MJ8KP8, MJ8KQ1 **Potassium** - MJ8KS8, MJ8KN6 - MJ8KP1, MJ8KP3 - MJ8KP9, MJ8KQ3
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Antimony, Selenium, Silver, Thallium, Tin – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. Detected analytes in samples with results greater than or equal to MDLs are qualified JL.
Aluminum, Chromium, Copper, Iron, Manganese, Strontium, Titanium, Vanadium – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KN6	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KN7	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KN8	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KN9	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP0	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP1	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP2	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP3	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP4	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP5	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP6	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP7	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP8	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KP9	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ0	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ1	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ2	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ3	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KQ4	Soil	8/23/2011	8/26/2011	9/02/2011	9/ 7–14 /2011
MJ8KS8	Soil	8/24/2011	8/26/2011	9/02/2011	9/ 7–14 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KN6	Lab Code:	A4
Sample Number:	MJ8KN6	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	FP06SS	pH:		Sample Date:	08232011	Sample Time:	09:46:00
% Moisture :				% Solids :	84.2		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	14100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	110	mg/kg	1			Yes	S4VEM
Beryllium	0.27	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	3100	mg/kg	1			Yes	S4VEM
Chromium	10.4	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	8.4	mg/kg	1			Yes	S4VEM
Copper	27.4	mg/kg	1	E	JL	Yes	S4VEM
Iron	37000	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.3	mg/kg	1			Yes	S4VEM
Magnesium	1530	mg/kg	1			Yes	S4VEM
Manganese	851	mg/kg	1	E	JL	Yes	S4VEM
Nickel	2.3	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	247	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	588	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	135	mg/kg	1	E	JL	Yes	S4VEM
Zinc	47.6	mg/kg	1			Yes	S4VEM
Lithium	3.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.71	mg/kg	1	U	U	Yes	S4VEM
Strontium	42.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	583	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KN7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR07SS	pH:	Sample Date: 08232011	Sample Time: 09:55:00
% Moisture :		% Solids : 86.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	20800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.4	mg/kg	1			Yes	S4VEM
Barium	122	mg/kg	1			Yes	S4VEM
Beryllium	0.24	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.57	mg/kg	1	U	U	Yes	S4VEM
Calcium	3100	mg/kg	1			Yes	S4VEM
Chromium	18.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	25.6	mg/kg	1			Yes	S4VEM
Copper	92.5	mg/kg	1	E	JL	Yes	S4VEM
Iron	46000	mg/kg	1	E	JL	Yes	S4VEM
Lead	110	mg/kg	1			Yes	S4VEM
Magnesium	2990	mg/kg	1			Yes	S4VEM
Manganese	1100	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.3	mg/kg	1			Yes	S4VEM
Potassium	302	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	567	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	157	mg/kg	1	E	JL	Yes	S4VEM
Zinc	74.0	mg/kg	1			Yes	S4VEM
Lithium	4.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.68	mg/kg	1	U	U	Yes	S4VEM
Strontium	55.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.1	mg/kg	1	JN	JL	Yes	S4VEM
Titanium	1710	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KN8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR08SS	pH:	Sample Date: 08232011	Sample Time: 10:05:00
% Moisture :		% Solids : 87	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	18600	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.5	mg/kg	1			Yes	S4VEM
Barium	115	mg/kg	1			Yes	S4VEM
Beryllium	0.21	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	3920	mg/kg	1			Yes	S4VEM
Chromium	18.6	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	22.4	mg/kg	1			Yes	S4VEM
Copper	67.1	mg/kg	1	E	JL	Yes	S4VEM
Iron	41700	mg/kg	1	E	JL	Yes	S4VEM
Lead	83.8	mg/kg	1			Yes	S4VEM
Magnesium	3070	mg/kg	1			Yes	S4VEM
Manganese	961	mg/kg	1	E	JL	Yes	S4VEM
Nickel	9.8	mg/kg	1			Yes	S4VEM
Potassium	389	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	558	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	142	mg/kg	1	E	JL	Yes	S4VEM
Zinc	69.6	mg/kg	1			Yes	S4VEM
Lithium	4.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.67	mg/kg	1	U	U	Yes	S4VEM
Strontium	57.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	2020	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KN9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP07SS	pH:	Sample Date: 08232011	Sample Time: 10:05:00
% Moisture :		% Solids : 69.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	17500	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.2	mg/kg	1			Yes	S4VEM
Barium	97.4	mg/kg	1			Yes	S4VEM
Beryllium	0.24	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.71	mg/kg	1	U	U	Yes	S4VEM
Calcium	3180	mg/kg	1			Yes	S4VEM
Chromium	13.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	10.8	mg/kg	1			Yes	S4VEM
Copper	32.7	mg/kg	1	E	JL	Yes	S4VEM
Iron	35800	mg/kg	1	E	JL	Yes	S4VEM
Lead	20.2	mg/kg	1			Yes	S4VEM
Magnesium	1670	mg/kg	1			Yes	S4VEM
Manganese	657	mg/kg	1	E	JL	Yes	S4VEM
Nickel	3.1	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	236	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	713	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	131	mg/kg	1	E	JL	Yes	S4VEM
Zinc	49.8	mg/kg	1			Yes	S4VEM
Lithium	3.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.86	mg/kg	1	U	U	Yes	S4VEM
Strontium	49.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.6	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	888	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP08SS	pH:	Sample Date: 08232011	Sample Time: 10:30:00
% Moisture :		% Solids : 80.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	12900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.7	mg/kg	1			Yes	S4VEM
Barium	106	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	2750	mg/kg	1			Yes	S4VEM
Chromium	9.8	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	3.9	mg/kg	1	J	JQ	Yes	S4VEM
Copper	23.5	mg/kg	1	E	JL	Yes	S4VEM
Iron	28200	mg/kg	1	E	JL	Yes	S4VEM
Lead	16.7	mg/kg	1			Yes	S4VEM
Magnesium	1340	mg/kg	1			Yes	S4VEM
Manganese	324	mg/kg	1	E	JL	Yes	S4VEM
Nickel	3.7	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	254	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	603	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	102	mg/kg	1	E	JL	Yes	S4VEM
Zinc	41.0	mg/kg	1			Yes	S4VEM
Lithium	3.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	44.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	422	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FB01SS	pH:	Sample Date: 08232011	Sample Time: 10:55:00
% Moisture :		% Solids : 75.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	26300	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.9	mg/kg	1	*,N	JL	Yes	S4VEM
Arsenic	4.4	mg/kg	1			Yes	S4VEM
Barium	151	mg/kg	1			Yes	S4VEM
Beryllium	0.65	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.65	mg/kg	1	U	U	Yes	S4VEM
Calcium	1700	mg/kg	1			Yes	S4VEM
Chromium	21.7	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	41.5	mg/kg	1			Yes	S4VEM
Copper	498	mg/kg	1	E	JL	Yes	S4VEM
Iron	63400	mg/kg	1	E	JL	Yes	S4VEM
Lead	2820	mg/kg	1			Yes	S4VEM
Magnesium	3240	mg/kg	1			Yes	S4VEM
Manganese	1720	mg/kg	1	E	JL	Yes	S4VEM
Nickel	70.4	mg/kg	1			Yes	S4VEM
Potassium	249	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	653	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	218	mg/kg	1	E	JL	Yes	S4VEM
Zinc	86.0	mg/kg	1			Yes	S4VEM
Lithium	5.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.78	mg/kg	1	U	U	Yes	S4VEM
Strontium	33.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.4	mg/kg	1	JN	JL	Yes	S4VEM
Titanium	2220	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP09SS	pH:	Sample Date: 08232011	Sample Time: 10:53:00
% Moisture :		% Solids : 87.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	14700	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	116	mg/kg	1			Yes	S4VEM
Beryllium	0.20	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	2090	mg/kg	1			Yes	S4VEM
Chromium	10.9	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	9.1	mg/kg	1			Yes	S4VEM
Copper	22.3	mg/kg	1	E	JL	Yes	S4VEM
Iron	55000	mg/kg	1	E	JL	Yes	S4VEM
Lead	25.2	mg/kg	1			Yes	S4VEM
Magnesium	1920	mg/kg	1			Yes	S4VEM
Manganese	630	mg/kg	1	E	JL	Yes	S4VEM
Nickel	3.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	560	mg/kg	1	U	U	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	560	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	138	mg/kg	1	E	JL	Yes	S4VEM
Zinc	45.3	mg/kg	1			Yes	S4VEM
Lithium	5.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.67	mg/kg	1	U	U	Yes	S4VEM
Strontium	46.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	549	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FB02SS	pH:	Sample Date: 08232011	Sample Time: 11:00:00
% Moisture :		% Solids : 72.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	28900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.6	mg/kg	1	J*,N	JL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	197	mg/kg	1			Yes	S4VEM
Beryllium	0.66	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.66	mg/kg	1	U	U	Yes	S4VEM
Calcium	2600	mg/kg	1			Yes	S4VEM
Chromium	23.1	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	29.1	mg/kg	1			Yes	S4VEM
Copper	322	mg/kg	1	E	JL	Yes	S4VEM
Iron	52100	mg/kg	1	E	JL	Yes	S4VEM
Lead	1830	mg/kg	1			Yes	S4VEM
Magnesium	1970	mg/kg	1			Yes	S4VEM
Manganese	1830	mg/kg	1	E	JL	Yes	S4VEM
Nickel	44.9	mg/kg	1			Yes	S4VEM
Potassium	365	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	661	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	182	mg/kg	1	E	JL	Yes	S4VEM
Zinc	75.6	mg/kg	1			Yes	S4VEM
Lithium	6.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.79	mg/kg	1	U	U	Yes	S4VEM
Strontium	27.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.3	mg/kg	1	JN	JL	Yes	S4VEM
Titanium	2590	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FP10SS	pH:	Sample Date: 08232011	Sample Time: 11:09:00
% Moisture :		% Solids : 80.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	13100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	104	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	2210	mg/kg	1			Yes	S4VEM
Chromium	10.1	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	4.6	mg/kg	1	J	JQ	Yes	S4VEM
Copper	38.2	mg/kg	1	E	JL	Yes	S4VEM
Iron	29100	mg/kg	1	E	JL	Yes	S4VEM
Lead	40.2	mg/kg	1			Yes	S4VEM
Magnesium	1240	mg/kg	1			Yes	S4VEM
Manganese	335	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.3	mg/kg	1			Yes	S4VEM
Potassium	222	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	600	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	99.9	mg/kg	1	E	JL	Yes	S4VEM
Zinc	43.5	mg/kg	1			Yes	S4VEM
Lithium	3.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	38.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	428	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FB03SS	pH:	Sample Date: 08232011	Sample Time: 11:09:00
% Moisture :		% Solids : 73.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	29900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	13.5	mg/kg	1	*,N	JL	Yes	S4VEM
Arsenic	4.2	mg/kg	1			Yes	S4VEM
Barium	122	mg/kg	1			Yes	S4VEM
Beryllium	0.67	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.67	mg/kg	1	U	U	Yes	S4VEM
Calcium	2260	mg/kg	1			Yes	S4VEM
Chromium	21.6	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	31.4	mg/kg	1			Yes	S4VEM
Copper	443	mg/kg	1	E	JL	Yes	S4VEM
Iron	60300	mg/kg	1	E	JL	Yes	S4VEM
Lead	1990	mg/kg	1			Yes	S4VEM
Magnesium	3210	mg/kg	1			Yes	S4VEM
Manganese	1200	mg/kg	1	E	JL	Yes	S4VEM
Nickel	46.7	mg/kg	1			Yes	S4VEM
Potassium	262	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	665	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	197	mg/kg	1	E	JL	Yes	S4VEM
Zinc	79.8	mg/kg	1			Yes	S4VEM
Lithium	5.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.80	mg/kg	1	U	U	Yes	S4VEM
Strontium	44.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.5	mg/kg	1	JN	JL	Yes	S4VEM
Titanium	2030	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP6	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FB04SS	pH:	Sample Date: 08232011	Sample Time: 11:18:00
% Moisture :		% Solids : 79.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	32400	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	128	mg/kg	1			Yes	S4VEM
Beryllium	0.61	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.61	mg/kg	1	U	U	Yes	S4VEM
Calcium	1940	mg/kg	1			Yes	S4VEM
Chromium	19.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	34.8	mg/kg	1			Yes	S4VEM
Copper	288	mg/kg	1	E	JL	Yes	S4VEM
Iron	58300	mg/kg	1	E	JL	Yes	S4VEM
Lead	851	mg/kg	1			Yes	S4VEM
Magnesium	4250	mg/kg	1			Yes	S4VEM
Manganese	1360	mg/kg	1	E	JL	Yes	S4VEM
Nickel	33.0	mg/kg	1			Yes	S4VEM
Potassium	275	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	606	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	172	mg/kg	1	E	JL	Yes	S4VEM
Zinc	74.1	mg/kg	1			Yes	S4VEM
Lithium	5.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.73	mg/kg	1	U	U	Yes	S4VEM
Strontium	44.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	1740	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FB05SS	pH:	Sample Date: 08232011	Sample Time: 11:26:00
% Moisture :		% Solids : 75.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	29100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	146	mg/kg	1			Yes	S4VEM
Beryllium	0.66	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.66	mg/kg	1	U	U	Yes	S4VEM
Calcium	2620	mg/kg	1			Yes	S4VEM
Chromium	19.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	35.1	mg/kg	1			Yes	S4VEM
Copper	184	mg/kg	1	E	JL	Yes	S4VEM
Iron	60800	mg/kg	1	E	JL	Yes	S4VEM
Lead	588	mg/kg	1			Yes	S4VEM
Magnesium	4890	mg/kg	1			Yes	S4VEM
Manganese	2020	mg/kg	1	E	JL	Yes	S4VEM
Nickel	18.5	mg/kg	1			Yes	S4VEM
Potassium	246	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	661	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	180	mg/kg	1	E	JL	Yes	S4VEM
Zinc	74.3	mg/kg	1			Yes	S4VEM
Lithium	5.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.79	mg/kg	1	U	U	Yes	S4VEM
Strontium	46.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.3	mg/kg	1	JN	JL	Yes	S4VEM
Titanium	1690	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OP01SS	pH:	Sample Date: 08232011	Sample Time: 11:35:00
% Moisture :		% Solids : 62	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	16800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	9.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	131	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.78	mg/kg	1	U	U	Yes	S4VEM
Calcium	4180	mg/kg	1			Yes	S4VEM
Chromium	13.4	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	10.9	mg/kg	1			Yes	S4VEM
Copper	38.0	mg/kg	1	E	JL	Yes	S4VEM
Iron	38900	mg/kg	1	E	JL	Yes	S4VEM
Lead	20.0	mg/kg	1			Yes	S4VEM
Magnesium	2000	mg/kg	1			Yes	S4VEM
Manganese	668	mg/kg	1	E	JL	Yes	S4VEM
Nickel	3.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	256	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.6	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	783	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	143	mg/kg	1	E	JL	Yes	S4VEM
Zinc	56.0	mg/kg	1			Yes	S4VEM
Lithium	3.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.94	mg/kg	1	U	U	Yes	S4VEM
Strontium	69.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.9	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	972	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KP9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB02SS	pH:	Sample Date: 08232011	Sample Time: 13:45:00
% Moisture :		% Solids : 66.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	25800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.4	mg/kg	1			Yes	S4VEM
Barium	353	mg/kg	1			Yes	S4VEM
Beryllium	0.74	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.64	mg/kg	1	J	JQ	Yes	S4VEM
Calcium	4380	mg/kg	1			Yes	S4VEM
Chromium	15.7	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	25.3	mg/kg	1			Yes	S4VEM
Copper	123	mg/kg	1	E	JL	Yes	S4VEM
Iron	61600	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.8	mg/kg	1			Yes	S4VEM
Magnesium	3830	mg/kg	1			Yes	S4VEM
Manganese	983	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.9	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	558	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	740	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	208	mg/kg	1	E	JL	Yes	S4VEM
Zinc	77.2	mg/kg	1			Yes	S4VEM
Lithium	5.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.89	mg/kg	1	U	U	Yes	S4VEM
Strontium	212	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.7	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	2650	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KQ0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FB06SS	pH:	Sample Date: 08232011	Sample Time: 11:33:00
% Moisture :		% Solids : 80.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.1	mg/kg	1			Yes	S4VEM
Barium	167	mg/kg	1			Yes	S4VEM
Beryllium	0.60	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1450	mg/kg	1			Yes	S4VEM
Chromium	22.1	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	38.1	mg/kg	1			Yes	S4VEM
Copper	81.1	mg/kg	1	E	JL	Yes	S4VEM
Iron	58100	mg/kg	1	E	JL	Yes	S4VEM
Lead	25.2	mg/kg	1			Yes	S4VEM
Magnesium	1900	mg/kg	1			Yes	S4VEM
Manganese	2380	mg/kg	1.2	D,E	JL	Yes	S4VEM
Nickel	7.0	mg/kg	1			Yes	S4VEM
Potassium	600	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	600	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	188	mg/kg	1	E	JL	Yes	S4VEM
Zinc	64.9	mg/kg	1			Yes	S4VEM
Lithium	5.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	20.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	2030	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KQ1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR09SS	pH:	Sample Date: 08232011	Sample Time: 13:45:00
% Moisture :		% Solids : 77.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	26100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	149	mg/kg	1			Yes	S4VEM
Beryllium	0.49	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	4430	mg/kg	1			Yes	S4VEM
Chromium	22.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	26.0	mg/kg	1			Yes	S4VEM
Copper	68.9	mg/kg	1	E	JL	Yes	S4VEM
Iron	45900	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.0	mg/kg	1			Yes	S4VEM
Magnesium	2750	mg/kg	1			Yes	S4VEM
Manganese	1350	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.7	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	663	mg/kg	1			Yes	S4VEM
Selenium	4.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	632	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	174	mg/kg	1	E	JL	Yes	S4VEM
Zinc	89.0	mg/kg	1			Yes	S4VEM
Lithium	5.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	65.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	1810	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KQ2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB03SS	pH:	Sample Date: 08232011	Sample Time: 13:58:00
% Moisture :		% Solids : 85	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	20800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.8	mg/kg	1			Yes	S4VEM
Barium	206	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	4790	mg/kg	1			Yes	S4VEM
Chromium	13.8	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	24.7	mg/kg	1			Yes	S4VEM
Copper	108	mg/kg	1	E	JL	Yes	S4VEM
Iron	58200	mg/kg	1	E	JL	Yes	S4VEM
Lead	10.4	mg/kg	1			Yes	S4VEM
Magnesium	3160	mg/kg	1			Yes	S4VEM
Manganese	1270	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.0	mg/kg	1			Yes	S4VEM
Potassium	772	mg/kg	1			Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	582	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	200	mg/kg	1	E	JL	Yes	S4VEM
Zinc	64.9	mg/kg	1			Yes	S4VEM
Lithium	4.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	98.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	2250	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KQ3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: FR10SS	pH:	Sample Date: 08232011	Sample Time: 14:08:00
% Moisture :		% Solids : 81.3	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	30600	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.3	mg/kg	1			Yes	S4VEM
Barium	153	mg/kg	1			Yes	S4VEM
Beryllium	0.47	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	3560	mg/kg	1			Yes	S4VEM
Chromium	23.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	27.8	mg/kg	1			Yes	S4VEM
Copper	74.9	mg/kg	1	E	JL	Yes	S4VEM
Iron	49300	mg/kg	1	E	JL	Yes	S4VEM
Lead	14.9	mg/kg	1			Yes	S4VEM
Magnesium	2720	mg/kg	1			Yes	S4VEM
Manganese	1340	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.3	mg/kg	1			Yes	S4VEM
Potassium	458	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	597	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	184	mg/kg	1	E	JL	Yes	S4VEM
Zinc	93.6	mg/kg	1			Yes	S4VEM
Lithium	6.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	57.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	2040	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KQ4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: OB04SS	pH:	Sample Date: 08232011	Sample Time: 14:10:00
% Moisture :		% Solids : 86.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	18400	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	141	mg/kg	1			Yes	S4VEM
Beryllium	0.24	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	4200	mg/kg	1			Yes	S4VEM
Chromium	14.9	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	21.0	mg/kg	1			Yes	S4VEM
Copper	47.2	mg/kg	1	E	JL	Yes	S4VEM
Iron	38900	mg/kg	1	E	JL	Yes	S4VEM
Lead	13.5	mg/kg	1			Yes	S4VEM
Magnesium	3020	mg/kg	1			Yes	S4VEM
Manganese	1050	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.7	mg/kg	1			Yes	S4VEM
Potassium	846	mg/kg	1			Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	556	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	125	mg/kg	1	E	JL	Yes	S4VEM
Zinc	59.1	mg/kg	1			Yes	S4VEM
Lithium	6.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.67	mg/kg	1	U	U	Yes	S4VEM
Strontium	90.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.8	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	1380	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KN6	Lab Code: A4
Sample Number: MJ8KS8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: CT11SS	pH:	Sample Date: 08242011	Sample Time: 15:13:00
% Moisture :		% Solids : 80.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	29800	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	133	mg/kg	1			Yes	S4VEM
Beryllium	0.46	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	3400	mg/kg	1			Yes	S4VEM
Chromium	24.7	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	19.0	mg/kg	1			Yes	S4VEM
Copper	62.5	mg/kg	1	E	JL	Yes	S4VEM
Iron	51100	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.9	mg/kg	1			Yes	S4VEM
Magnesium	2600	mg/kg	1			Yes	S4VEM
Manganese	684	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.4	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	405	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	602	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	219	mg/kg	1	E	JL	Yes	S4VEM
Zinc	71.3	mg/kg	1			Yes	S4VEM
Lithium	5.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	62.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	UN	UJL	Yes	S4VEM
Titanium	1570	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KN6 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KN6	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:21 PM	Y
MJ8KN6	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:04 PM	
MJ8KN6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN6	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:04 PM	
MJ8KN6	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:49 PM	
MJ8KN7	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:21 PM	Y
MJ8KN7	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:50 PM	
MJ8KN7	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:50 PM	
MJ8KN7	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:50 PM	
MJ8KN7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:50 PM	
MJ8KN7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 6:53 PM	
MJ8KN7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:50 PM	
MJ8KN7	Soil	Tin	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Tin	Validation Flag	J-	J	Donald Matheny	10/6/11 6:50 PM	
MJ8KN7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN7	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:51 PM	
MJ8KN8	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:20 PM	Y
MJ8KN8	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KN8	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:04 PM	
MJ8KN8	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
MJ8KN8	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 6:52 PM	
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MJ8KP0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 7:06 PM	
MJ8KP0	Soil	Nickel	Validation	J	JQ	Donald	10/6/11 7:06 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8KP5	Soil	Manganese	Validation	J	JL	Donald	10/6/11 7:11 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8KQ0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:16 PM	
MJ8KQ0	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:58 PM	
MJ8KQ0	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 6:58 PM	
MJ8KQ0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:16 PM	
MJ8KQ0	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:16 PM	
MJ8KQ1	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:21 PM	Y
MJ8KQ1	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ1	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ1	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ1	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:17 PM	
MJ8KQ2	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:20 PM	Y
MJ8KQ2	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ2	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ2	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ2	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:01 PM	
MJ8KQ2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ2	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:21 PM	Y
MJ8KQ3	Soil	Aluminum	Validation	J	JL	Donald	10/6/11 7:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KQ3	Soil	Aluminum	Flag	J	JL	Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ3	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ3	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ3	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:18 PM	
MJ8KQ4	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:21 PM	Y
MJ8KQ4	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ4	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ4	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KQ4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KQ4	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:19 PM	
MJ8KS8	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:20 PM	Y
MJ8KS8	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KS8	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Copper	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Selenium	Validation	UJ	UJL	Donald	10/6/11 7:02 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KS8	Soil	Selenium	Flag	UJ	UJL	Matheny	10/6/11 7:02 PM	
MJ8KS8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KS8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KS8	Soil	Tin	Validation Flag	UJ	UJL	Donald Matheny	10/6/11 7:02 PM	
MJ8KS8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/6/11 7:20 PM	
MJ8KS8D	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:20 PM	Y
MJ8KS8S	Soil		Validation Level		S4VEM	Donald Matheny	10/6/11 7:21 PM	Y

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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KT1	MJ8KT3	MJ8KT4	MJ8KT5	MJ8KT6	MJ8KT7
MJ8KT8	MJ8KT9	MJ8KW0	MJ8KW1	MJ8KW2	MJ8KW3
MJ8KY5	MJ8L01	MJ8L07	MJ8L10	MJ8L13	MJ8L14
MJ8L17	MJ8L18				

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 11, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KT1

FROM: Donald Matheny, Chemist DM
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of twenty (20) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8L01)	84 – 123%	Y*	75 - 125%
Sample Duplicate (MJ8L01)	≤ 18%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	83 – 116%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8L01)	≤ 4%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Beryllium - MJ8L13, MJ8KT7 - MJ8KT9, MJ8KW0 - MJ8KW2 **Nickel** - MJ8L07, MJ8L13, MJ8L14, MJ8L17 **Potassium** - MJ8L10, MJ8L14, MJ8KT1, MJ8KT8, MJ8KT9, MJ8KW0, MJ8KW2, MJ8KW3 **Sodium** - MJ8L10, MJ8L01, MJ8L18, MJ8KT1 **Tin** - MJ8KT3 - MJ8KT5, MJ8KT8 - , MJ8KT9, MJ8KW0, MJ8KW1
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Antimony, Selenium, Silver, Thallium – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. Detected analytes in samples with results greater than or equal to MDLs are qualified JL.
Aluminum, Iron, Manganese, Strontium, Titanium – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KT1	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT3	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT4	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT5	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT6	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT7	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT8	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KT9	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KW0	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KW1	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KW2	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KW3	Soil	8/24/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY5	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L01	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L07	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L10	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L13	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L14	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L17	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L18	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KT1	Lab Code:	A4
Sample Number:	MJ8KT1	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	EF01SD	pH:		Sample Date:	08242011	Sample Time:	15:59:00
% Moisture :				% Solids :	67.1		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	50500	mg/kg	1.4	D,E	JL	Yes	S4VEM
Antimony	8.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	8.4	mg/kg	1			Yes	S4VEM
Barium	180	mg/kg	1			Yes	S4VEM
Beryllium	0.74	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.74	mg/kg	1	U	U	Yes	S4VEM
Calcium	8100	mg/kg	1			Yes	S4VEM
Chromium	34.6	mg/kg	1			Yes	S4VEM
Cobalt	35.8	mg/kg	1			Yes	S4VEM
Copper	114	mg/kg	1			Yes	S4VEM
Iron	84900	mg/kg	1.3	D,E	JL	Yes	S4VEM
Lead	5.9	mg/kg	1			Yes	S4VEM
Magnesium	8100	mg/kg	1			Yes	S4VEM
Manganese	1250	mg/kg	1	E	JL	Yes	S4VEM
Nickel	12.2	mg/kg	1			Yes	S4VEM
Potassium	302	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	486	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	283	mg/kg	1			Yes	S4VEM
Zinc	99.0	mg/kg	1			Yes	S4VEM
Lithium	10.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.89	mg/kg	1	U	U	Yes	S4VEM
Strontium	139	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.7	mg/kg	1	U	U	Yes	S4VEM
Titanium	3930	mg/kg	1.7	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8KT3	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	CT08SS	pH:		Sample Date:	08242011	Sample Time:	14:05:00
% Moisture :				% Solids :	78.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	45700	mg/kg	1.4	D,E	JL	Yes	S4VEM
Antimony	7.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.4	mg/kg	1			Yes	S4VEM
Barium	175	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	1930	mg/kg	1			Yes	S4VEM
Chromium	32.6	mg/kg	1			Yes	S4VEM
Cobalt	18.3	mg/kg	1			Yes	S4VEM
Copper	72.1	mg/kg	1			Yes	S4VEM
Iron	43200	mg/kg	1	E	JL	Yes	S4VEM
Lead	26.2	mg/kg	1			Yes	S4VEM
Magnesium	1980	mg/kg	1			Yes	S4VEM
Manganese	1270	mg/kg	1	E	JL	Yes	S4VEM
Nickel	17.2	mg/kg	1			Yes	S4VEM
Potassium	632	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	632	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	155	mg/kg	1			Yes	S4VEM
Zinc	74.7	mg/kg	1			Yes	S4VEM
Lithium	6.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	21.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.4	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1990	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8KT4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT01SS	pH:	Sample Date: 08242011	Sample Time: 16:16:00
% Moisture :		% Solids : 84.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33900	mg/kg	1.2	D,E	JL	Yes	S4VEM
Antimony	6.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.3	mg/kg	1			Yes	S4VEM
Barium	221	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	2290	mg/kg	1			Yes	S4VEM
Chromium	25.3	mg/kg	1			Yes	S4VEM
Cobalt	28.1	mg/kg	1			Yes	S4VEM
Copper	361	mg/kg	1			Yes	S4VEM
Iron	41200	mg/kg	1	E	JL	Yes	S4VEM
Lead	1020	mg/kg	1			Yes	S4VEM
Magnesium	2730	mg/kg	1			Yes	S4VEM
Manganese	1870	mg/kg	1	E	JL	Yes	S4VEM
Nickel	38.9	mg/kg	1			Yes	S4VEM
Potassium	689	mg/kg	1			Yes	S4VEM
Selenium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	577	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	131	mg/kg	1			Yes	S4VEM
Zinc	83.6	mg/kg	1			Yes	S4VEM
Lithium	6.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.69	mg/kg	1	U	U	Yes	S4VEM
Strontium	54.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.1	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1660	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8KT5	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT02SS	pH:		Sample Date:	08242011	Sample Time:	16:30:00
% Moisture :				% Solids :	84.3		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	36200	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.1	mg/kg	1			Yes	S4VEM
Barium	224	mg/kg	1			Yes	S4VEM
Beryllium	0.59	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	1580	mg/kg	1			Yes	S4VEM
Chromium	28.0	mg/kg	1			Yes	S4VEM
Cobalt	32.8	mg/kg	1			Yes	S4VEM
Copper	231	mg/kg	1			Yes	S4VEM
Iron	46300	mg/kg	1	E	JL	Yes	S4VEM
Lead	1090	mg/kg	1			Yes	S4VEM
Magnesium	2890	mg/kg	1			Yes	S4VEM
Manganese	2000	mg/kg	1	E	JL	Yes	S4VEM
Nickel	28.8	mg/kg	1			Yes	S4VEM
Potassium	733	mg/kg	1			Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	587	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	147	mg/kg	1			Yes	S4VEM
Zinc	98.6	mg/kg	1			Yes	S4VEM
Lithium	7.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	46.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.8	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1900	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8KT6	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	EF02SD	pH:		Sample Date:	08242011	Sample Time:	16:40:00
% Moisture :				% Solids :	84.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	34100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	8.0	mg/kg	1			Yes	S4VEM
Barium	115	mg/kg	1			Yes	S4VEM
Beryllium	0.59	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	7910	mg/kg	1			Yes	S4VEM
Chromium	18.4	mg/kg	1			Yes	S4VEM
Cobalt	25.5	mg/kg	1			Yes	S4VEM
Copper	76.6	mg/kg	1			Yes	S4VEM
Iron	55900	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.6	mg/kg	1			Yes	S4VEM
Magnesium	5580	mg/kg	1			Yes	S4VEM
Manganese	821	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.3	mg/kg	1			Yes	S4VEM
Potassium	591	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	784	mg/kg	1			Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	202	mg/kg	1			Yes	S4VEM
Zinc	66.9	mg/kg	1			Yes	S4VEM
Lithium	11.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.71	mg/kg	1	U	U	Yes	S4VEM
Strontium	96.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	2490	mg/kg	1.3	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8KT7	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT03SS	pH:		Sample Date:	08242011	Sample Time:	16:40:00
% Moisture :				% Solids :	82.1		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	31100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.8	mg/kg	1			Yes	S4VEM
Barium	208	mg/kg	1			Yes	S4VEM
Beryllium	0.23	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1330	mg/kg	1			Yes	S4VEM
Chromium	25.3	mg/kg	1			Yes	S4VEM
Cobalt	31.9	mg/kg	1			Yes	S4VEM
Copper	79.3	mg/kg	1			Yes	S4VEM
Iron	41500	mg/kg	1	E	JL	Yes	S4VEM
Lead	263	mg/kg	1			Yes	S4VEM
Magnesium	2150	mg/kg	1			Yes	S4VEM
Manganese	1800	mg/kg	1	E	JL	Yes	S4VEM
Nickel	12.6	mg/kg	1			Yes	S4VEM
Potassium	643	mg/kg	1			Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	597	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	136	mg/kg	1			Yes	S4VEM
Zinc	66.4	mg/kg	1			Yes	S4VEM
Lithium	5.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	40.0	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1220	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8KT8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT04SS	pH:	Sample Date: 08242011	Sample Time: 16:55:00
% Moisture :		% Solids : 80.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	28000	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.7	mg/kg	1			Yes	S4VEM
Barium	195	mg/kg	1			Yes	S4VEM
Beryllium	0.23	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	1600	mg/kg	1			Yes	S4VEM
Chromium	25.3	mg/kg	1			Yes	S4VEM
Cobalt	28.5	mg/kg	1			Yes	S4VEM
Copper	243	mg/kg	1			Yes	S4VEM
Iron	39800	mg/kg	1	E	JL	Yes	S4VEM
Lead	750	mg/kg	1			Yes	S4VEM
Magnesium	2300	mg/kg	1			Yes	S4VEM
Manganese	1720	mg/kg	1	E	JL	Yes	S4VEM
Nickel	30.1	mg/kg	1			Yes	S4VEM
Potassium	477	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	601	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	128	mg/kg	1			Yes	S4VEM
Zinc	73.8	mg/kg	1			Yes	S4VEM
Lithium	6.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	41.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.8	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1410	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8KT9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT06SS	pH:	Sample Date: 08242011	Sample Time: 17:20:00
% Moisture :		% Solids : 85	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	25900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.5	mg/kg	1			Yes	S4VEM
Barium	171	mg/kg	1			Yes	S4VEM
Beryllium	0.21	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.57	mg/kg	1	U	U	Yes	S4VEM
Calcium	1880	mg/kg	1			Yes	S4VEM
Chromium	25.5	mg/kg	1			Yes	S4VEM
Cobalt	36.9	mg/kg	1			Yes	S4VEM
Copper	66.4	mg/kg	1			Yes	S4VEM
Iron	41600	mg/kg	1	E	JL	Yes	S4VEM
Lead	235	mg/kg	1			Yes	S4VEM
Magnesium	2350	mg/kg	1			Yes	S4VEM
Manganese	2180	mg/kg	1	E	JL	Yes	S4VEM
Nickel	15.1	mg/kg	1			Yes	S4VEM
Potassium	475	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	571	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	133	mg/kg	1			Yes	S4VEM
Zinc	58.5	mg/kg	1			Yes	S4VEM
Lithium	6.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.69	mg/kg	1	U	U	Yes	S4VEM
Strontium	33.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.6	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1140	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8KW0	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT07SS	pH:		Sample Date:	08242011	Sample Time:	17:23:00
% Moisture :				% Solids :	87.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	25200	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.6	mg/kg	1			Yes	S4VEM
Barium	143	mg/kg	1			Yes	S4VEM
Beryllium	0.21	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.55	mg/kg	1	U	U	Yes	S4VEM
Calcium	1640	mg/kg	1			Yes	S4VEM
Chromium	24.7	mg/kg	1			Yes	S4VEM
Cobalt	27.4	mg/kg	1			Yes	S4VEM
Copper	392	mg/kg	1			Yes	S4VEM
Iron	36400	mg/kg	1	E	JL	Yes	S4VEM
Lead	669	mg/kg	1			Yes	S4VEM
Magnesium	2460	mg/kg	1			Yes	S4VEM
Manganese	1630	mg/kg	1	E	JL	Yes	S4VEM
Nickel	54.4	mg/kg	1			Yes	S4VEM
Potassium	533	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	548	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	118	mg/kg	1			Yes	S4VEM
Zinc	65.5	mg/kg	1			Yes	S4VEM
Lithium	6.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.66	mg/kg	1	U	U	Yes	S4VEM
Strontium	34.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.2	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1070	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8KW1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT05SS	pH:	Sample Date: 08242011	Sample Time: 17:08:00
% Moisture :		% Solids : 85	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.7	mg/kg	1			Yes	S4VEM
Barium	184	mg/kg	1			Yes	S4VEM
Beryllium	0.21	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	1970	mg/kg	1			Yes	S4VEM
Chromium	24.6	mg/kg	1			Yes	S4VEM
Cobalt	30.0	mg/kg	1			Yes	S4VEM
Copper	57.5	mg/kg	1			Yes	S4VEM
Iron	38600	mg/kg	1	E	JL	Yes	S4VEM
Lead	278	mg/kg	1			Yes	S4VEM
Magnesium	2510	mg/kg	1			Yes	S4VEM
Manganese	2000	mg/kg	1	E	JL	Yes	S4VEM
Nickel	12.3	mg/kg	1			Yes	S4VEM
Potassium	732	mg/kg	1			Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	582	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	123	mg/kg	1			Yes	S4VEM
Zinc	64.4	mg/kg	1			Yes	S4VEM
Lithium	6.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	36.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	1.7	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	1270	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8KW2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT09SS	pH:	Sample Date: 08242011	Sample Time: 17:36:00
% Moisture :		% Solids : 80.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	20000	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.5	mg/kg	1			Yes	S4VEM
Barium	78.5	mg/kg	1			Yes	S4VEM
Beryllium	0.57	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	2520	mg/kg	1			Yes	S4VEM
Chromium	41.3	mg/kg	1			Yes	S4VEM
Cobalt	28.9	mg/kg	1			Yes	S4VEM
Copper	540	mg/kg	1			Yes	S4VEM
Iron	32700	mg/kg	1	E	JL	Yes	S4VEM
Lead	314	mg/kg	1			Yes	S4VEM
Magnesium	2160	mg/kg	1			Yes	S4VEM
Manganese	1370	mg/kg	1	E	JL	Yes	S4VEM
Nickel	35.7	mg/kg	1			Yes	S4VEM
Potassium	267	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	602	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	139	mg/kg	1			Yes	S4VEM
Zinc	49.4	mg/kg	1			Yes	S4VEM
Lithium	4.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	39.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	894	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8KW3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT10SS	pH:	Sample Date: 08242011	Sample Time: 18:05:00
% Moisture :		% Solids : 83.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	36500	mg/kg	1.2	D,E	JL	Yes	S4VEM
Antimony	7.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.2	mg/kg	1			Yes	S4VEM
Barium	114	mg/kg	1			Yes	S4VEM
Beryllium	0.59	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	2190	mg/kg	1			Yes	S4VEM
Chromium	27.8	mg/kg	1			Yes	S4VEM
Cobalt	21.5	mg/kg	1			Yes	S4VEM
Copper	61.0	mg/kg	1			Yes	S4VEM
Iron	46100	mg/kg	1	E	JL	Yes	S4VEM
Lead	48.1	mg/kg	1			Yes	S4VEM
Magnesium	3260	mg/kg	1			Yes	S4VEM
Manganese	700	mg/kg	1	E	JL	Yes	S4VEM
Nickel	11.5	mg/kg	1			Yes	S4VEM
Potassium	279	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	592	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	157	mg/kg	1			Yes	S4VEM
Zinc	56.6	mg/kg	1			Yes	S4VEM
Lithium	7.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.71	mg/kg	1	U	U	Yes	S4VEM
Strontium	32.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1870	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8KY5	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	BC01SD	pH:		Sample Date:	08252011	Sample Time:	14:35:00
% Moisture :				% Solids :	69.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	31100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.4	mg/kg	1			Yes	S4VEM
Barium	115	mg/kg	1			Yes	S4VEM
Beryllium	0.70	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.70	mg/kg	1	U	U	Yes	S4VEM
Calcium	2730	mg/kg	1			Yes	S4VEM
Chromium	28.2	mg/kg	1			Yes	S4VEM
Cobalt	32.4	mg/kg	1			Yes	S4VEM
Copper	60.4	mg/kg	1			Yes	S4VEM
Iron	48800	mg/kg	1	E	JL	Yes	S4VEM
Lead	9.4	mg/kg	1			Yes	S4VEM
Magnesium	2140	mg/kg	1			Yes	S4VEM
Manganese	1190	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.6	mg/kg	1			Yes	S4VEM
Potassium	698	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	698	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	180	mg/kg	1			Yes	S4VEM
Zinc	47.7	mg/kg	1			Yes	S4VEM
Lithium	5.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.84	mg/kg	1	U	U	Yes	S4VEM
Strontium	47.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1950	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8L01	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: DC03SD	pH:	Sample Date: 08252011	Sample Time: 17:27:00
% Moisture :		% Solids : 64.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	44400	mg/kg	1.2	D,E	JL	Yes	S4VEM
Antimony	9.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.4	mg/kg	1			Yes	S4VEM
Barium	146	mg/kg	1			Yes	S4VEM
Beryllium	0.76	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.76	mg/kg	1	U	U	Yes	S4VEM
Calcium	4700	mg/kg	1			Yes	S4VEM
Chromium	23.2	mg/kg	1			Yes	S4VEM
Cobalt	27.6	mg/kg	1			Yes	S4VEM
Copper	72.6	mg/kg	1			Yes	S4VEM
Iron	60200	mg/kg	1	E	JL	Yes	S4VEM
Lead	7.4	mg/kg	1			Yes	S4VEM
Magnesium	3300	mg/kg	1			Yes	S4VEM
Manganese	573	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.4	mg/kg	1			Yes	S4VEM
Potassium	756	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	259	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	195	mg/kg	1			Yes	S4VEM
Zinc	45.1	mg/kg	1			Yes	S4VEM
Lithium	5.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.91	mg/kg	1	U	U	Yes	S4VEM
Strontium	85.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1600	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8L07	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: BG02SD	pH:	Sample Date: 08262011	Sample Time: 10:15:00
% Moisture :		% Solids : 38.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	39900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	15.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.5	mg/kg	1			Yes	S4VEM
Barium	121	mg/kg	1			Yes	S4VEM
Beryllium	1.3	mg/kg	1	U	U	Yes	S4VEM
Cadmium	1.3	mg/kg	1	U	U	Yes	S4VEM
Calcium	2340	mg/kg	1			Yes	S4VEM
Chromium	17.3	mg/kg	1			Yes	S4VEM
Cobalt	21.6	mg/kg	1			Yes	S4VEM
Copper	53.0	mg/kg	1			Yes	S4VEM
Iron	50200	mg/kg	1	E	JL	Yes	S4VEM
Lead	10.0	mg/kg	1			Yes	S4VEM
Magnesium	1860	mg/kg	1			Yes	S4VEM
Manganese	1240	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.4	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	1260	mg/kg	1	U	U	Yes	S4VEM
Selenium	8.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	2.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1260	mg/kg	1	U	U	Yes	S4VEM
Thallium	6.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	150	mg/kg	1			Yes	S4VEM
Zinc	44.5	mg/kg	1			Yes	S4VEM
Lithium	5.9	mg/kg	1			Yes	S4VEM
Molybdenum	1.5	mg/kg	1	U	U	Yes	S4VEM
Strontium	29.5	mg/kg	1	E	JL	Yes	S4VEM
Tin	6.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1790	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8L10	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF03SD	pH:	Sample Date: 08262011	Sample Time: 10:34:00
% Moisture :		% Solids : 79	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	50300	mg/kg	1.5	D,E	JL	Yes	S4VEM
Antimony	7.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	5.9	mg/kg	1			Yes	S4VEM
Barium	121	mg/kg	1			Yes	S4VEM
Beryllium	0.61	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.61	mg/kg	1	U	U	Yes	S4VEM
Calcium	6870	mg/kg	1			Yes	S4VEM
Chromium	24.0	mg/kg	1			Yes	S4VEM
Cobalt	28.5	mg/kg	1			Yes	S4VEM
Copper	70.0	mg/kg	1			Yes	S4VEM
Iron	72300	mg/kg	1.3	D,E	JL	Yes	S4VEM
Lead	4.5	mg/kg	1			Yes	S4VEM
Magnesium	4900	mg/kg	1			Yes	S4VEM
Manganese	1120	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.8	mg/kg	1			Yes	S4VEM
Potassium	301	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	381	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	190	mg/kg	1			Yes	S4VEM
Zinc	69.7	mg/kg	1			Yes	S4VEM
Lithium	6.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.74	mg/kg	1	U	U	Yes	S4VEM
Strontium	168	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.1	mg/kg	1	U	U	Yes	S4VEM
Titanium	1640	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8L13	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF04SD	pH:	Sample Date: 08262011	Sample Time: 12:00:00
% Moisture :		% Solids : 75.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	24600	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.6	mg/kg	1			Yes	S4VEM
Barium	81.6	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.66	mg/kg	1	U	U	Yes	S4VEM
Calcium	3630	mg/kg	1			Yes	S4VEM
Chromium	15.3	mg/kg	1			Yes	S4VEM
Cobalt	16.1	mg/kg	1			Yes	S4VEM
Copper	54.4	mg/kg	1			Yes	S4VEM
Iron	37400	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.3	mg/kg	1			Yes	S4VEM
Magnesium	2630	mg/kg	1			Yes	S4VEM
Manganese	617	mg/kg	1	E	JL	Yes	S4VEM
Nickel	2.9	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	658	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	658	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	129	mg/kg	1			Yes	S4VEM
Zinc	46.7	mg/kg	1			Yes	S4VEM
Lithium	5.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.79	mg/kg	1	U	U	Yes	S4VEM
Strontium	49.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1460	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4

Sample Number:	MJ8L14	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	BG01SS	pH:		Sample Date:	08262011	Sample Time:	11:30:00
% Moisture :				% Solids :	69.5		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	43800	mg/kg	1.2	D,E	JL	Yes	S4VEM
Antimony	8.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	5.1	mg/kg	1			Yes	S4VEM
Barium	205	mg/kg	1			Yes	S4VEM
Beryllium	0.72	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.72	mg/kg	1	U	U	Yes	S4VEM
Calcium	2390	mg/kg	1			Yes	S4VEM
Chromium	21.3	mg/kg	1			Yes	S4VEM
Cobalt	38.0	mg/kg	1			Yes	S4VEM
Copper	99.4	mg/kg	1			Yes	S4VEM
Iron	59600	mg/kg	1	E	JL	Yes	S4VEM
Lead	9.9	mg/kg	1			Yes	S4VEM
Magnesium	3680	mg/kg	1			Yes	S4VEM
Manganese	2290	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.3	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	589	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	719	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	219	mg/kg	1			Yes	S4VEM
Zinc	99.1	mg/kg	1			Yes	S4VEM
Lithium	7.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.86	mg/kg	1	U	U	Yes	S4VEM
Strontium	30.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.6	mg/kg	1	U	U	Yes	S4VEM
Titanium	3130	mg/kg	1.4	D,E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8L17	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF05SD	pH:	Sample Date: 08262011	Sample Time: 12:35:00
% Moisture :		% Solids : 34.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	17.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.0	mg/kg	1			Yes	S4VEM
Barium	137	mg/kg	1			Yes	S4VEM
Beryllium	1.5	mg/kg	1	U	U	Yes	S4VEM
Cadmium	1.5	mg/kg	1	U	U	Yes	S4VEM
Calcium	5370	mg/kg	1			Yes	S4VEM
Chromium	19.5	mg/kg	1			Yes	S4VEM
Cobalt	21.4	mg/kg	1			Yes	S4VEM
Copper	60.1	mg/kg	1			Yes	S4VEM
Iron	41800	mg/kg	1	E	JL	Yes	S4VEM
Lead	8.6	mg/kg	1			Yes	S4VEM
Magnesium	3110	mg/kg	1			Yes	S4VEM
Manganese	722	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.1	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	1470	mg/kg	1	U	U	Yes	S4VEM
Selenium	10.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	2.9	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1470	mg/kg	1	U	U	Yes	S4VEM
Thallium	7.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	153	mg/kg	1			Yes	S4VEM
Zinc	74.7	mg/kg	1			Yes	S4VEM
Lithium	5.3	mg/kg	1			Yes	S4VEM
Molybdenum	1.8	mg/kg	1	U	U	Yes	S4VEM
Strontium	71.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	7.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1920	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KT1	Lab Code: A4
Sample Number: MJ8L18	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: BG03SD	pH:	Sample Date: 08262011	Sample Time: 12:48:00
% Moisture :		% Solids : 73.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	37900	mg/kg	1	E	JL	Yes	S4VEM
Antimony	7.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	8.1	mg/kg	1			Yes	S4VEM
Barium	116	mg/kg	1			Yes	S4VEM
Beryllium	0.66	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.66	mg/kg	1	U	U	Yes	S4VEM
Calcium	6730	mg/kg	1			Yes	S4VEM
Chromium	14.5	mg/kg	1			Yes	S4VEM
Cobalt	27.6	mg/kg	1			Yes	S4VEM
Copper	79.5	mg/kg	1			Yes	S4VEM
Iron	54600	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.2	mg/kg	1			Yes	S4VEM
Magnesium	7320	mg/kg	1			Yes	S4VEM
Manganese	943	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.9	mg/kg	1			Yes	S4VEM
Potassium	658	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	353	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	184	mg/kg	1			Yes	S4VEM
Zinc	93.5	mg/kg	1			Yes	S4VEM
Lithium	12.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.79	mg/kg	1	U	U	Yes	S4VEM
Strontium	80.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	2630	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KT1 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KT1	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT1	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:02 PM	
MJ8KT3	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT3	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:03 PM	
MJ8KT3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT4	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:03 PM	
MJ8KT4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:03 PM	
MJ8KT5	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT5	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KT5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:04 PM	
MJ8KT5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:04 PM	
MJ8KT6	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT6	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT7	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:05 PM	
MJ8KT8	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KT8	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Thallium	Validation	UJ	UJL	Donald	10/10/11 1:06 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KT8	Soil	Thallium	Flag	UJ	UJL	Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:06 PM	
MJ8KT8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:06 PM	
MJ8KT9	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
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MJ8KT9	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:07 PM	
MJ8KT9	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:07 PM	
MJ8KT9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:07 PM	
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MJ8KW1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:09 PM	
MJ8KW1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:09 PM	
MJ8KW1	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:09 PM	
MJ8KW1	Soil	Titanium	Validation	J	JL	Donald	10/10/11 1:09 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KW1	Soil	Titanium	Flag	J	JL	Matheny	10/10/11 1:09 PM	
MJ8KW2	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 9:55 AM	Y
MJ8KW2	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 1:09 PM	
MJ8KW2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:09 PM	
MJ8KW2	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 1:09 PM	
MJ8KW2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:09 PM	
MJ8KW2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 1:09 PM	
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MJ8KW2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:09 PM	
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MJ8L01	Soil	Silver	Validation	U	UJL	Donald	10/10/11 1:11 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8L07	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 1:12 PM	
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MJ8L13	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:14 PM	
MJ8L13	Soil	Thallium	Validation	UJ	UJL	Donald	10/10/11 1:14 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8L13	Soil	Thallium	Flag	UJ	UJL	Matheny	10/10/11 1:14 PM	
MJ8L13	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 1:14 PM	
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MJ8L14	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 1:14 PM	
MJ8L14	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 1:14 PM	
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International Specialists in the Environment
720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 6 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KW4	MJ8KW5	MJ8KY2	MJ8L23	MJ8L26	MJ8L29

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 11, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KW4

FROM: Donald Matheny, Chemist DM
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of six (6) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8L26)	92 – 124%	Y*	75 - 125%
Sample Duplicate (MJ8L26)	≤ 15%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	84 – 116%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8L26)	≤ 5%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Beryllium - MJ8L29, MJ8KW5 **Nickel** - MJ8L29, MJ8L23 **Potassium** - MJ8L29, MJ8KW5 **Tin** - MJ8KW4
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Antimony, Selenium, Silver, Thallium – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. Detected analytes in samples with results greater than or equal to MDLs are qualified JL.
Aluminum, Chromium, Iron, Manganese, Titanium, Vanadium – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KW4	Soil	8/24/2011	8/30/2011	9/12/2011	9/14–18 /2011
MJ8KW5	Soil	8/24/2011	8/30/2011	9/12/2011	9/14–18 /2011
MJ8KY2	Soil	8/25/2011	8/30/2011	9/12/2011	9/14–18 /2011
MJ8L23	Soil	8/26/2011	8/30/2011	9/12/2011	9/14–18 /2011
MJ8L26	Soil	8/23/2011	8/30/2011	9/12/2011	9/14–18 /2011
MJ8L29	Soil	8/23/2011	8/30/2011	9/12/2011	9/14–18 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KW4	Lab Code:	A4
Sample Number:	MJ8KW4	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	PT11SS	pH:		Sample Date:	08242011	Sample Time:	18:03:00
% Moisture :				% Solids :	87.8		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	39300	mg/kg	1.4	D,E	JL	Yes	S4VEM
Antimony	6.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.3	mg/kg	1			Yes	S4VEM
Barium	153	mg/kg	1			Yes	S4VEM
Beryllium	0.56	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.56	mg/kg	1	U	U	Yes	S4VEM
Calcium	1130	mg/kg	1			Yes	S4VEM
Chromium	31.6	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	37.6	mg/kg	1			Yes	S4VEM
Copper	244	mg/kg	1			Yes	S4VEM
Iron	61800	mg/kg	1	E	JL	Yes	S4VEM
Lead	542	mg/kg	1			Yes	S4VEM
Magnesium	2230	mg/kg	1			Yes	S4VEM
Manganese	1220	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.9	mg/kg	1			Yes	S4VEM
Potassium	564	mg/kg	1	U	U	Yes	S4VEM
Selenium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.1	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	564	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	217	mg/kg	1	E	JL	Yes	S4VEM
Zinc	68.0	mg/kg	1			Yes	S4VEM
Lithium	5.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.68	mg/kg	1	U	U	Yes	S4VEM
Strontium	30.0	mg/kg	1			Yes	S4VEM
Tin	1.2	mg/kg	1	J	JQ	Yes	S4VEM
Titanium	2370	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KW4	Lab Code: A4
Sample Number: MJ8KW5	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: PT08SS	pH:	Sample Date: 08242011	Sample Time: 17:30:00
% Moisture :		% Solids : 86.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	23400	mg/kg	1	E	JL	Yes	S4VEM
Antimony	6.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.7	mg/kg	1			Yes	S4VEM
Barium	111	mg/kg	1			Yes	S4VEM
Beryllium	0.24	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	1900	mg/kg	1			Yes	S4VEM
Chromium	29.1	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	29.7	mg/kg	1			Yes	S4VEM
Copper	48.8	mg/kg	1			Yes	S4VEM
Iron	38600	mg/kg	1	E	JL	Yes	S4VEM
Lead	48.5	mg/kg	1			Yes	S4VEM
Magnesium	2480	mg/kg	1			Yes	S4VEM
Manganese	1380	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.0	mg/kg	1			Yes	S4VEM
Potassium	438	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	577	mg/kg	1	U	U	Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	130	mg/kg	1	E	JL	Yes	S4VEM
Zinc	56.0	mg/kg	1			Yes	S4VEM
Lithium	7.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.69	mg/kg	1	U	U	Yes	S4VEM
Strontium	38.6	mg/kg	1			Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	1220	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KW4	Lab Code: A4
Sample Number: MJ8KY2	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC08SD	pH:	Sample Date: 08252011	Sample Time: 13:25:00
% Moisture :		% Solids : 82.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	37300	mg/kg	1.3	D,E	JL	Yes	S4VEM
Antimony	7.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	111	mg/kg	1			Yes	S4VEM
Beryllium	0.59	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.59	mg/kg	1	U	U	Yes	S4VEM
Calcium	11100	mg/kg	1			Yes	S4VEM
Chromium	17.9	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	24.1	mg/kg	1			Yes	S4VEM
Copper	73.7	mg/kg	1			Yes	S4VEM
Iron	40800	mg/kg	1	E	JL	Yes	S4VEM
Lead	3.8	mg/kg	1			Yes	S4VEM
Magnesium	3570	mg/kg	1			Yes	S4VEM
Manganese	571	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.3	mg/kg	1			Yes	S4VEM
Potassium	591	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	800	mg/kg	1			Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	147	mg/kg	1	E	JL	Yes	S4VEM
Zinc	55.3	mg/kg	1			Yes	S4VEM
Lithium	6.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.71	mg/kg	1	U	U	Yes	S4VEM
Strontium	111	mg/kg	1			Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1920	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KW4	Lab Code: A4

Sample Number:	MJ8L23	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	NF08SD	pH:		Sample Date:	08262011	Sample Time:	14:56:00
% Moisture :				% Solids :	71.6		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	30100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.0	mg/kg	1			Yes	S4VEM
Barium	107	mg/kg	1			Yes	S4VEM
Beryllium	0.68	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.68	mg/kg	1	U	U	Yes	S4VEM
Calcium	4300	mg/kg	1			Yes	S4VEM
Chromium	20.9	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	21.3	mg/kg	1			Yes	S4VEM
Copper	108	mg/kg	1			Yes	S4VEM
Iron	51000	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.2	mg/kg	1			Yes	S4VEM
Magnesium	3750	mg/kg	1			Yes	S4VEM
Manganese	693	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.0	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	685	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	685	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	167	mg/kg	1	E	JL	Yes	S4VEM
Zinc	61.0	mg/kg	1			Yes	S4VEM
Lithium	6.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.82	mg/kg	1	U	U	Yes	S4VEM
Strontium	58.5	mg/kg	1			Yes	S4VEM
Tin	3.4	mg/kg	1	U	U	Yes	S4VEM
Titanium	1980	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KW4	Lab Code: A4
Sample Number: MJ8L26	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF09SD	pH:	Sample Date: 08262011	Sample Time: 15:31:00
% Moisture :		% Solids : 67.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41100	mg/kg	1	E	JL	Yes	S4VEM
Antimony	8.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.3	mg/kg	1			Yes	S4VEM
Barium	109	mg/kg	1			Yes	S4VEM
Beryllium	0.73	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.73	mg/kg	1	U	U	Yes	S4VEM
Calcium	899	mg/kg	1			Yes	S4VEM
Chromium	34.1	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	32.2	mg/kg	1			Yes	S4VEM
Copper	81.1	mg/kg	1			Yes	S4VEM
Iron	62600	mg/kg	1	E	JL	Yes	S4VEM
Lead	10.7	mg/kg	1			Yes	S4VEM
Magnesium	1720	mg/kg	1			Yes	S4VEM
Manganese	828	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.1	mg/kg	1			Yes	S4VEM
Potassium	734	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	734	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	226	mg/kg	1	E	JL	Yes	S4VEM
Zinc	61.9	mg/kg	1			Yes	S4VEM
Lithium	7.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.88	mg/kg	1	U	U	Yes	S4VEM
Strontium	13.3	mg/kg	1			Yes	S4VEM
Tin	3.7	mg/kg	1	U	U	Yes	S4VEM
Titanium	2620	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KW4	Lab Code: A4
Sample Number: MJ8L29	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: BG04SD	pH:	Sample Date: 08262011	Sample Time: 16:05:00
% Moisture :		% Solids : 62.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	37400	mg/kg	1	E	JL	Yes	S4VEM
Antimony	9.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.7	mg/kg	1			Yes	S4VEM
Barium	119	mg/kg	1			Yes	S4VEM
Beryllium	0.26	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.77	mg/kg	1	U	U	Yes	S4VEM
Calcium	5620	mg/kg	1			Yes	S4VEM
Chromium	23.2	mg/kg	1	E	JL	Yes	S4VEM
Cobalt	22.9	mg/kg	1			Yes	S4VEM
Copper	55.5	mg/kg	1			Yes	S4VEM
Iron	54400	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.3	mg/kg	1			Yes	S4VEM
Magnesium	3750	mg/kg	1			Yes	S4VEM
Manganese	934	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.2	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	265	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	772	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	181	mg/kg	1	E	JL	Yes	S4VEM
Zinc	68.3	mg/kg	1			Yes	S4VEM
Lithium	7.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.93	mg/kg	1	U	U	Yes	S4VEM
Strontium	77.3	mg/kg	1			Yes	S4VEM
Tin	3.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	1840	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KW4 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KW4	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8KW4	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Tin	Validation Flag	J	JQ	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW4	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/10/11 9:59 AM	
MJ8KW5	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8KW5	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Beryllium	Validation Flag	JL	JQ	Donald Matheny	10/10/11 10:05 AM	
MJ8KW5	Soil	Beryllium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KW5	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8KY2	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:00 AM	
MJ8KY2	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KY2	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:00 AM	
MJ8L23	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8L23	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:01 AM	
MJ8L23	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:01 AM	
MJ8L26	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8L26	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:02 AM	
MJ8L26D	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8L26S	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8L29	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:34 AM	Y
MJ8L29	Soil	Aluminum	Validation Flag	J	JL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Chromium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:04 AM	
MJ8L29	Soil	Vanadium	Validation Flag	J	JL	Donald Matheny	10/10/11 10:04 AM	

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720 Third Avenue, Suite 1700, Seattle, WA 98104
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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 11 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KX5	MJ8KY7	MJ8KZ1	MJ8KZ4	MJ8L04	MJ8L08
MJ8L11	MJ8L15	MJ8L20	MJ8L24	MJ8L27	

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 11, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KX5

FROM: Donald Matheny, Chemist
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of eleven (11) water samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8KY7)	91 – 120%	Y*	75 - 125%
Sample Duplicate (MJ8KY7)	≤ 4%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	83 – 114%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KY7)	NA (All < 50xMDL)	N	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Aluminum - MJ8L08, MJ8L15, MJ8L24, MJ8KX5, MJ8KY7, MJ8KZ4, MJ8L04, MJ8KZ1 **Arsenic** - MJ8L11, MJ8KZ4 **Magnesium** - MJ8L08, MJ8L11, MJ8L15, MJ8L20, MJ8L27, MJ8L24, MJ8KX5, MJ8KY7, MJ8KZ4, MJ8L04, MJ8KZ1 **Manganese** - MJ8L08, MJ8KX5 **Sodium** - MJ8L08, MJ8L11, MJ8L15, MJ8L20, MJ8L27, MJ8L24, MJ8KX5, MJ8KY7, MJ8KZ4, MJ8L04, MJ8KZ1 **Titanium** - MJ8L08, MJ8L11, MJ8L15, MJ8L20, MJ8L27, MJ8L24, MJ8KX5, MJ8KY7, MJ8KZ4, MJ8L04, MJ8KZ1
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Silver - All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KX5	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8KY7	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8KZ1	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8KZ4	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L04	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L08	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L11	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L15	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L20	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L24	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L27	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KX5	Lab Code:	A4
Sample Number:	MJ8KX5	Method:	ICP_AES	Matrix:	Water	MA Number:	2175.0
Sample Location:	LC03SW	pH:	1.5	Sample Date:	08252011	Sample Time:	10:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	78.9	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7730	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	421	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2180	ug/L	1	J	JQ	Yes	S4VEM
Manganese	10.8	ug/L	1	J	JQ	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3790	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	34.3	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.1	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8KY7	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: LC11SW	pH: 1.5	Sample Date: 08252011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	104	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7940	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	326	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2230	ug/L	1	J	JQ	Yes	S4VEM
Manganese	22.5	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3770	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	33.4	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	3.6	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8KZ1	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: LC14SW	pH: 1.5	Sample Date: 08252011	Sample Time: 15:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	111	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7130	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	352	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2100	ug/L	1	J	JQ	Yes	S4VEM
Manganese	15.4	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3420	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	35.2	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.0	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8KZ4	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: LC15SW	pH: 1.5	Sample Date: 08252011	Sample Time: 16:25:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	73.1	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	3.3	ug/L	1	J	JQ	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7380	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	404	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2140	ug/L	1	J	JQ	Yes	S4VEM
Manganese	15.0	ug/L	1	U	U	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3470	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.5	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.2	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8L04	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF02SW	pH: 1.5	Sample Date: 08262011	Sample Time: 09:48:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	79.7	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7580	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	461	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2280	ug/L	1	J	JQ	Yes	S4VEM
Manganese	17.2	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3550	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	35.5	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.0	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8L08	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF03SW	pH: 1.5	Sample Date: 08262011	Sample Time: 10:32:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	67.2	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7540	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	487	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2220	ug/L	1	J	JQ	Yes	S4VEM
Manganese	12.6	ug/L	1	J	JQ	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3580	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	35.1	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	3.8	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8L11	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF04SW	pH: 1.5	Sample Date: 08262011	Sample Time: 11:50:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	4.1	ug/L	1	J	JQ	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7490	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	504	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2250	ug/L	1	J	JQ	Yes	S4VEM
Manganese	16.4	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3580	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.4	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	3.9	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8L15	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF05SW	pH: 1.5	Sample Date: 08262011	Sample Time: 12:29:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	73.2	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7380	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	508	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2180	ug/L	1	J	JQ	Yes	S4VEM
Manganese	16.3	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3540	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	35.7	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	3.6	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8L20	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF07SW	pH: 1.5	Sample Date: 08262011	Sample Time: 14:29:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7270	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	436	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2100	ug/L	1	J	JQ	Yes	S4VEM
Manganese	15.4	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3560	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	35.7	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	3.7	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4
Sample Number: MJ8L24	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF09SW	pH: 1.5	Sample Date: 08262011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	79.4	ug/L	1	J	JQ	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	6970	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	263	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	1890	ug/L	1	J	JQ	Yes	S4VEM
Manganese	15.0	ug/L	1	U	U	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3410	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	32.3	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.1	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX5	Lab Code: A4

Sample Number:	MJ8L27	Method:	ICP_AES	Matrix:	Water	MA Number:	2175.0
Sample Location:	BG04SW	pH:	1.5	Sample Date:	08262011	Sample Time:	16:10:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	6960	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	267	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	1980	ug/L	1	J	JQ	Yes	S4VEM
Manganese	15.0	ug/L	1	U	U	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3360	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	32.2	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	3.6	ug/L	1	J	JQ	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KX5 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KX5	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8KX5	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:13 AM	
MJ8KX5	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:13 AM	
MJ8KX5	Water	Manganese	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:13 AM	
MJ8KX5	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:13 AM	
MJ8KX5	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:13 AM	
MJ8KX5	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:13 AM	
MJ8KY7	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8KY7	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:14 AM	
MJ8KY7	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:14 AM	
MJ8KY7	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:14 AM	
MJ8KY7	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:14 AM	
MJ8KY7	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:14 AM	
MJ8KY7D	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8KY7S	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8KZ1	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8KZ1	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:15 AM	
MJ8KZ1	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:15 AM	
MJ8KZ1	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:15 AM	
MJ8KZ1	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:15 AM	
MJ8KZ1	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:15 AM	
MJ8KZ4	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8KZ4	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8KZ4	Water	Arsenic	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8KZ4	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8KZ4	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:16 AM	
MJ8KZ4	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8KZ4	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8L04	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L04	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8L04	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8L04	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:16 AM	
MJ8L04	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8L04	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:16 AM	
MJ8L08	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L08	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:17 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8L08	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:17 AM	
MJ8L08	Water	Manganese	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:17 AM	
MJ8L08	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:17 AM	
MJ8L08	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:17 AM	
MJ8L08	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:17 AM	
MJ8L11	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L11	Water	Arsenic	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:18 AM	
MJ8L11	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:18 AM	
MJ8L11	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:18 AM	
MJ8L11	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:18 AM	
MJ8L11	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:18 AM	
MJ8L15	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L15	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L15	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L15	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:19 AM	
MJ8L15	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L15	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L20	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L20	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L20	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:19 AM	
MJ8L20	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L20	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:19 AM	
MJ8L24	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L24	Water	Aluminum	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	
MJ8L24	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	
MJ8L24	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:20 AM	
MJ8L24	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	
MJ8L24	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	
MJ8L27	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 8:30 AM	Y
MJ8L27	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	
MJ8L27	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 2:20 AM	
MJ8L27	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	
MJ8L27	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 2:20 AM	

ecology and environment, inc.
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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 11 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KX6	MJ8KY8	MJ8KZ2	MJ8KZ5	MJ8L05	MJ8L09
MJ8L12	MJ8L16	MJ8L21	MJ8K25	MJ8K28	

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 11, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KX6

FROM: Donald Matheny, Chemist
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of eleven (11) water samples, collected from the above referenced site, has been completed. These samples were analyzed for dissolved metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8KY8)	86 – 117%	Y*	75 - 125%
Sample Duplicate (MJ8KY8)	≤ 2%	N	≤ 20% RPD or ± CRQL
LCS (blank spike)	85 – 117%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KY8)	NA (All < 50xMDL)	N	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Arsenic - MJ8L25 **Magnesium** – All samples **Manganese** - MJ8KZ5, MJ8L28 **Sodium** – All samples **Titanium** – All samples
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples bave percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Silver – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in the sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KX6	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8KY8	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8KZ2	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8KZ5	Water	8/25/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L05	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L09	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L12	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L16	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L21	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L25	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011
MJ8L28	Water	8/26/2011	8/30/2011	9/06/2011	9/ 7–16 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KX6	Lab Code:	A4
Sample Number:	MJ8KX6	Method:	ICP_AES	Matrix:	Water	MA Number:	2175.0
Sample Location:	LC03SW-D	pH:	1.5	Sample Date:	08252011	Sample Time:	10:50:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7520	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	574	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2140	ug/L	1	J	JQ	Yes	S4VEM
Manganese	16.2	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3760	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	37.1	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.7	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8KY8	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: LC11SW-D	pH: 1.5	Sample Date: 08252011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7540	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	494	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2140	ug/L	1	J	JQ	Yes	S4VEM
Manganese	30.6	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3690	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	34.8	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	5.6	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8KZ2	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: LC14SW-D	pH: 1.5	Sample Date: 08252011	Sample Time: 15:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	6910	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	492	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2000	ug/L	1	J	JQ	Yes	S4VEM
Manganese	31.4	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3410	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.1	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	5.4	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4

Sample Number:	MJ8KZ5	Method:	ICP_AES	Matrix:	Water	MA Number:	2175.0
Sample Location:	LC015SW-D	pH:	1.5	Sample Date:	08252011	Sample Time:	16:25:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7240	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	532	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2130	ug/L	1	J	JQ	Yes	S4VEM
Manganese	13.9	ug/L	1	J	JQ	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3610	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.3	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	5.2	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8L05	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF02SW-D	pH: 1.5	Sample Date: 08262011	Sample Time: 09:48:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7320	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes.	S4VEM
Iron	635	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2170	ug/L	1	J	JQ	Yes	S4VEM
Manganese	26.3	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3580	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.8	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.8	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8L09	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF03SW-D	pH: 1.5	Sample Date: 08262011	Sample Time: 10:32:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7310	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	608	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2100	ug/L	1	J	JQ	Yes	S4VEM
Manganese	19.9	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3580	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.6	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.4	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8L12	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF04SW-D	pH: 1.5	Sample Date: 08262011	Sample Time: 11:50:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7350	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	641	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2180	ug/L	1	J	JQ	Yes	S4VEM
Manganese	21.8	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3630	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.6	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	5.0	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4

Sample Number:	MJ8L16	Method:	ICP_AES	Matrix:	Water	MA Number:	2175.0
Sample Location:	NF05SW-D	pH:	1.5	Sample Date:	08262011	Sample Time:	12:29:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7340	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	627	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2220	ug/L	1	J	JQ	Yes	S4VEM
Manganese	24.2	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3620	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	36.3	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.6	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8L21	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF07SW-D	pH: 1.5	Sample Date: 08262011	Sample Time: 14:29:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	7230	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	550	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	2060	ug/L	1	J	JQ	Yes	S4VEM
Manganese	21.2	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3580	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	35.1	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.6	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8L25	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: NF09SW-D	pH: 1.5	Sample Date: 08262011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	3.3	ug/L	1	J	JQ	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	6870	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	346	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	1950	ug/L	1	J	JQ	Yes	S4VEM
Manganese	16.1	ug/L	1			Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3450	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	33.0	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.5	ug/L	1	J	JQ	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX6	Lab Code: A4
Sample Number: MJ8L28	Method: ICP_AES	Matrix: Water	MA Number: 2175.0
Sample Location: BG04SW-D	pH: 1.5	Sample Date: 08262011	Sample Time: 16:10:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	200	ug/L	1	U	U	Yes	S4VEM
Antimony	60.0	ug/L	1	U	U	Yes	S4VEM
Arsenic	10.0	ug/L	1	U	U	Yes	S4VEM
Barium	200	ug/L	1	U	U	Yes	S4VEM
Beryllium	5.0	ug/L	1	U	U	Yes	S4VEM
Cadmium	5.0	ug/L	1	U	U	Yes	S4VEM
Calcium	6900	ug/L	1			Yes	S4VEM
Chromium	10.0	ug/L	1	U	U	Yes	S4VEM
Cobalt	50.0	ug/L	1	U	U	Yes	S4VEM
Copper	25.0	ug/L	1	U	U	Yes	S4VEM
Iron	333	ug/L	1			Yes	S4VEM
Lead	10.0	ug/L	1	U	U	Yes	S4VEM
Magnesium	1900	ug/L	1	J	JQ	Yes	S4VEM
Manganese	11.7	ug/L	1	J	JQ	Yes	S4VEM
Nickel	40.0	ug/L	1	U	U	Yes	S4VEM
Potassium	5000	ug/L	1	U	U	Yes	S4VEM
Selenium	35.0	ug/L	1	U	U	Yes	S4VEM
Silver	10.0	ug/L	1	UN	UJL	Yes	S4VEM
Sodium	3430	ug/L	1	J	JQ	Yes	S4VEM
Thallium	25.0	ug/L	1	U	U	Yes	S4VEM
Vanadium	50.0	ug/L	1	U	U	Yes	S4VEM
Zinc	60.0	ug/L	1	U	U	Yes	S4VEM
Lithium	3.0	ug/L	1	U	U	Yes	S4VEM
Molybdenum	6.0	ug/L	1	U	U	Yes	S4VEM
Strontium	32.0	ug/L	1			Yes	S4VEM
Tin	25.0	ug/L	1	U	U	Yes	S4VEM
Titanium	4.4	ug/L	1	J	JQ	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KX6 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KX6	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8KX6	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:25 AM	
MJ8KX6	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:25 AM	
MJ8KX6	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:25 AM	
MJ8KX6	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:25 AM	
MJ8KY8	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8KY8	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:26 AM	
MJ8KY8	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:26 AM	
MJ8KY8	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:26 AM	
MJ8KY8	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:26 AM	
MJ8KY8D	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8KY8S	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8KZ2	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8KZ2	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:26 AM	
MJ8KZ2	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:26 AM	
MJ8KZ2	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:26 AM	
MJ8KZ2	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:26 AM	
MJ8KZ5	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8KZ5	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:27 AM	
MJ8KZ5	Water	Manganese	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:27 AM	
MJ8KZ5	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:27 AM	
MJ8KZ5	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:27 AM	
MJ8KZ5	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:27 AM	
MJ8L05	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L05	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:28 AM	
MJ8L05	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:28 AM	
MJ8L05	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:28 AM	
MJ8L05	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:28 AM	
MJ8L09	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L09	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:29 AM	
MJ8L09	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:29 AM	
MJ8L09	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:29 AM	
MJ8L09	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:29 AM	
MJ8L12	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L12	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:29 AM	
MJ8L12	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:29 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8L12	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:29 AM	
MJ8L12	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:29 AM	
MJ8L16	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L16	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:30 AM	
MJ8L16	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:30 AM	
MJ8L16	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:30 AM	
MJ8L16	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:30 AM	
MJ8L21	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L21	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:30 AM	
MJ8L21	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:30 AM	
MJ8L21	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:30 AM	
MJ8L21	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:30 AM	
MJ8L25	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L25	Water	Arsenic	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:31 AM	
MJ8L25	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:31 AM	
MJ8L25	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:31 AM	
MJ8L25	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:31 AM	
MJ8L25	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:31 AM	
MJ8L28	Water		Validation Level		S4VEM	Donald Matheny	10/11/11 9:56 AM	Y
MJ8L28	Water	Magnesium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:32 AM	
MJ8L28	Water	Manganese	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:32 AM	
MJ8L28	Water	Silver	Validation Flag	U	UJL	Donald Matheny	10/10/11 11:32 AM	
MJ8L28	Water	Sodium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:32 AM	
MJ8L28	Water	Titanium	Validation Flag	J	JQ	Donald Matheny	10/10/11 11:32 AM	

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MEMORANDUM

DATE: October 12, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Inorganic Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for target analyte list metals (EPA CLP SOW ISM01.2) was performed by A4 Scientific, Inc., The Woodlands, Texas.

The samples were numbered:

MJ8KX7	MJ8KX8	MJ8KY0	MJ8KY1	MJ8KY3	MJ8KY4
MJ8KY6	MJ8KY9	MJ8KZ0	MJ8KZ3	MJ8KZ6	MJ8KZ7
MJ8KZ8	MJ8KZ9	MJ8L00	MJ8L02	MJ8L03	MJ8L06
MJ8L19	MJ8L22				

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

October 11, 2011

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation Report for Metals Analysis of Samples Collected for the Camp Bonneville Phase II Expanded Site Inspection- Case 41603, SDG: MJ8KX7

FROM: Donald Matheny, Chemist DM
Office of Environmental Assessment, Environmental Services Unit

TO: Monica Tonel, Site Assessment Manager

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of twenty (20) soil samples, collected from the above referenced site, has been completed. These samples were analyzed for total metals by A4 Scientific located in The Woodlands, TX.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted according to the Quality Control Specifications outlined in the Sampling & Quality Assurance Project Plan for the *Addendum 1 Sampling and Quality Assurance Plan Camp Bonneville* (August, 2011), the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Inorganic Analyses (ISM01.2), the National Functional Guidelines for Inorganic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. Some data may be qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is attached along with the validated data.

I. QUALITY CONTROL RESULTS SUMMARY

Quality Control Test	Result Ranges	Outliers?	Evaluation Criteria
Blanks	Within criteria	N	Non-detect or <10% of Sample
Matrix Spike (MJ8KZ0)	83 – 107%	Y*	75 - 125%
Sample Duplicate (MJ8KZ0)	≤ 18%	Y*	≤ 20% RPD or ± CRQL
LCS (blank spike)	78 – 112%	N	70 - 130%; (Ag, Sb 50 - 150%)
Serial Dilution (MJ8KZ0)	≤ 9%	Y*	≤ 10% Difference

*See the "*Data Qualifications*" section below for excursions and qualification of affected data.

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data qualifications were applied:

Detection Limit
The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified JQ.
Arsenic - MJ8L06 **Beryllium** - MJ8KX7, MJ8KY0, MJ8KY4, MJ8KY6, MJ8KY9, MJ8L02 **Nickel** - MJ8KX7, MJ8KX8, MJ8KY0, MJ8KY1, MJ8KY4, MJ8KZ7, MJ8KY6, MJ8L19, MJ8L22 **Potassium** MJ8KY3, MJ8KZ3, MJ8KZ6, MJ8L00, MJ8L02, MJ8L22 **Sodium** - MJ8KX8, MJ8KY3, MJ8KZ7, MJ8KY6, MJ8L19
Matrix Spike
The following Matrix Spike samples have percent recoveries in the range of 30-74% and post-digestion spike samples have percent recoveries greater than 75%. Detected analytes are qualified JL. Non-detected analytes are qualified UJL.
Antimony, Selenium, Silver, Thallium – All samples
Duplicate
The following Duplicate or original sample results are less than or equal to 5xCRQL and the absolute difference between duplicate and original samples are greater than CRQL. The original sample results are greater than or equal to MDLs. Detected analytes are qualified JK. Non-detected analytes are qualified UJK.
Lead – All samples
Serial Dilution
The following ICP Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. Detected **copper** values were qualified JH. All other affected analytes in samples with results greater than or equal to MDLs are qualified JL. The affected analytes are listed below.
Copper, Iron, Manganese. Strontium, Titanium – All samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers	
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The associated value is an estimated quantity.
UJ	The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The analyte may or may not be present in tbe sample.
Project Specific Data Qualifiers	
L	Low bias.
H	High bias.
K	Unknown Bias.
Q	Detected concentration is below the MRL / CRQL but is above the MDL.

III. SAMPLE INDEX

Sample Number	Matrix	Sampling Date	Date Received	ICP-AES Analysis	
				Prep. Date	Analysis Date
MJ8KX7	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KX8	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY0	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY1	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY3	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY4	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY6	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KY9	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KZ0	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KZ3	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KZ6	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KZ7	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KZ8	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8KZ9	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L00	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L02	Soil	8/25/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L03	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L06	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L19	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011
MJ8L22	Soil	8/26/2011	8/30/2011	9/05/2011	9/16–18 /2011

Sample Summary Report

Case No:	41603	Contract:	EPW09035	SDG No:	MJ8KX7	Lab Code:	A4
Sample Number:	MJ8KX7	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	LC03SD	pH:		Sample Date:	08252011	Sample Time:	11:00:00
% Moisture :				% Solids :	76.1		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	19500	mg/kg	1			Yes	S4VEM
Antimony	7.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	105	mg/kg	1			Yes	S4VEM
Beryllium	0.21	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.64	mg/kg	1	U	U	Yes	S4VEM
Calcium	3770	mg/kg	1			Yes	S4VEM
Chromium	11.8	mg/kg	1			Yes	S4VEM
Cobalt	20.3	mg/kg	1			Yes	S4VEM
Copper	31.3	mg/kg	1	E	JH	Yes	S4VEM
Iron	30100	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.3	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	1700	mg/kg	1			Yes	S4VEM
Manganese	847	mg/kg	1	E	JL	Yes	S4VEM
Nickel	3.7	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	202	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	644	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	110	mg/kg	1			Yes	S4VEM
Zinc	42.2	mg/kg	1			Yes	S4VEM
Lithium	3.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.77	mg/kg	1	U	U	Yes	S4VEM
Strontium	62.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	918	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KX8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC04SD	pH:	Sample Date: 08252011	Sample Time: 12:17:00
% Moisture :		% Solids : 82.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	25900	mg/kg	1			Yes	S4VEM
Antimony	7.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.5	mg/kg	1			Yes	S4VEM
Barium	108	mg/kg	1			Yes	S4VEM
Beryllium	0.60	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.60	mg/kg	1	U	U	Yes	S4VEM
Calcium	5600	mg/kg	1			Yes	S4VEM
Chromium	16.3	mg/kg	1			Yes	S4VEM
Cobalt	18.0	mg/kg	1			Yes	S4VEM
Copper	41.6	mg/kg	1	E	JH	Yes	S4VEM
Iron	35900	mg/kg	1	E	JL	Yes	S4VEM
Lead	2.8	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2420	mg/kg	1			Yes	S4VEM
Manganese	357	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.7	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	599	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.2	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	571	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	124	mg/kg	1			Yes	S4VEM
Zinc	40.7	mg/kg	1			Yes	S4VEM
Lithium	4.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.72	mg/kg	1	U	U	Yes	S4VEM
Strontium	57.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.0	mg/kg	1	U	U	Yes	S4VEM
Titanium	1500	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KY0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC06SD	pH:	Sample Date: 08252011	Sample Time: 13:05:00
% Moisture :		% Solids : 72.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27300	mg/kg	1			Yes	S4VEM
Antimony	8.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.5	mg/kg	1			Yes	S4VEM
Barium	126	mg/kg	1			Yes	S4VEM
Beryllium	0.29	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.68	mg/kg	1	U	U	Yes	S4VEM
Calcium	3630	mg/kg	1			Yes	S4VEM
Chromium	15.1	mg/kg	1			Yes	S4VEM
Cobalt	14.4	mg/kg	1			Yes	S4VEM
Copper	37.6	mg/kg	1	E	JH	Yes	S4VEM
Iron	28600	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.8	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2190	mg/kg	1			Yes	S4VEM
Manganese	323	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.6	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	684	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.8	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	684	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	107	mg/kg	1			Yes	S4VEM
Zinc	41.5	mg/kg	1			Yes	S4VEM
Lithium	3.9	mg/kg	1			Yes	S4VEM
Molybdenum	0.82	mg/kg	1	U	U	Yes	S4VEM
Strontium	83.3	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.4	mg/kg	1	U	U	Yes	S4VEM
Titanium	1130	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KY1	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC07SD	pH:	Sample Date: 08252011	Sample Time: 13:28:00
% Moisture :		% Solids : 58.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	30900	mg/kg	1			Yes	S4VEM
Antimony	10.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.8	mg/kg	1			Yes	S4VEM
Barium	137	mg/kg	1			Yes	S4VEM
Beryllium	0.86	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.86	mg/kg	1	U	U	Yes	S4VEM
Calcium	4630	mg/kg	1			Yes	S4VEM
Chromium	17.0	mg/kg	1			Yes	S4VEM
Cobalt	17.9	mg/kg	1			Yes	S4VEM
Copper	45.3	mg/kg	1	E	JH	Yes	S4VEM
Iron	33700	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.5	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2980	mg/kg	1			Yes	S4VEM
Manganese	503	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.6	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	859	mg/kg	1	U	U	Yes	S4VEM
Selenium	6.0	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.7	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	859	mg/kg	1	U	U	Yes	S4VEM
Thallium	4.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	122	mg/kg	1			Yes	S4VEM
Zinc	54.0	mg/kg	1			Yes	S4VEM
Lithium	4.6	mg/kg	1			Yes	S4VEM
Molybdenum	1.0	mg/kg	1	U	U	Yes	S4VEM
Strontium	89.7	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1320	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4

Sample Number:	MJ8KY3	Method:	ICP_AES	Matrix:	Soil	MA Number:	2175.0
Sample Location:	LC09SD	pH:		Sample Date:	08252011	Sample Time:	13:43:00
% Moisture :				% Solids :	73		

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	34300	mg/kg	1			Yes	S4VEM
Antimony	8.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	132	mg/kg	1			Yes	S4VEM
Beryllium	0.68	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.68	mg/kg	1	U	U	Yes	S4VEM
Calcium	7260	mg/kg	1			Yes	S4VEM
Chromium	18.6	mg/kg	1			Yes	S4VEM
Cobalt	21.7	mg/kg	1			Yes	S4VEM
Copper	52.4	mg/kg	1	E	JH	Yes	S4VEM
Iron	37400	mg/kg	1	E	JL	Yes	S4VEM
Lead	5.5	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	3380	mg/kg	1			Yes	S4VEM
Manganese	516	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.2	mg/kg	1			Yes	S4VEM
Potassium	278	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.8	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	629	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	138	mg/kg	1			Yes	S4VEM
Zinc	55.2	mg/kg	1			Yes	S4VEM
Lithium	6.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.82	mg/kg	1	U	U	Yes	S4VEM
Strontium	102	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.4	mg/kg	1	U	U	Yes	S4VEM
Titanium	1690	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KY4	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC10SD	pH:	Sample Date: 08252011	Sample Time: 14:21:00
% Moisture :		% Solids : 68	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	25800	mg/kg	1			Yes	S4VEM
Antimony	8.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.9	mg/kg	1			Yes	S4VEM
Barium	107	mg/kg	1			Yes	S4VEM
Beryllium	0.23	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.71	mg/kg	1	U	U	Yes	S4VEM
Calcium	4470	mg/kg	1			Yes	S4VEM
Chromium	15.1	mg/kg	1			Yes	S4VEM
Cobalt	16.0	mg/kg	1			Yes	S4VEM
Copper	37.3	mg/kg	1	E	JH	Yes	S4VEM
Iron	30800	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.1	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2660	mg/kg	1			Yes	S4VEM
Manganese	563	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.6	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	707	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.9	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	707	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	112	mg/kg	1			Yes	S4VEM
Zinc	45.4	mg/kg	1			Yes	S4VEM
Lithium	4.0	mg/kg	1			Yes	S4VEM
Molybdenum	0.85	mg/kg	1	U	U	Yes	S4VEM
Strontium	76.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1180	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KY6	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC12SD	pH:	Sample Date: 08252011	Sample Time: 14:30:00
% Moisture :		% Solids : 57.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	33800	mg/kg	1			Yes	S4VEM
Antimony	10.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	144	mg/kg	1			Yes	S4VEM
Beryllium	0.32	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.84	mg/kg	1	U	U	Yes	S4VEM
Calcium	6320	mg/kg	1			Yes	S4VEM
Chromium	19.2	mg/kg	1			Yes	S4VEM
Cobalt	22.4	mg/kg	1			Yes	S4VEM
Copper	53.3	mg/kg	1	E	JH	Yes	S4VEM
Iron	36800	mg/kg	1	E	JL	Yes	S4VEM
Lead	6.6	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	3490	mg/kg	1			Yes	S4VEM
Manganese	675	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	843	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.9	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.7	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	280	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	4.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	148	mg/kg	1			Yes	S4VEM
Zinc	58.3	mg/kg	1			Yes	S4VEM
Lithium	4.9	mg/kg	1			Yes	S4VEM
Molybdenum	1.0	mg/kg	1	U	U	Yes	S4VEM
Strontium	75.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1430	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KY9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC11SD	pH:	Sample Date: 08252011	Sample Time: 15:12:00
% Moisture :		% Solids : 54.8	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41400	mg/kg	1			Yes	S4VEM
Antimony	10.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.2	mg/kg	1			Yes	S4VEM
Barium	165	mg/kg	1			Yes	S4VEM
Beryllium	0.32	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.89	mg/kg	1	U	U	Yes	S4VEM
Calcium	5840	mg/kg	1			Yes	S4VEM
Chromium	26.0	mg/kg	1			Yes	S4VEM
Cobalt	28.4	mg/kg	1			Yes	S4VEM
Copper	74.1	mg/kg	1	E	JH	Yes	S4VEM
Iron	55200	mg/kg	1	E	JL	Yes	S4VEM
Lead	7.0	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	4380	mg/kg	1			Yes	S4VEM
Manganese	897	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.3	mg/kg	1			Yes	S4VEM
Potassium	895	mg/kg	1	U	U	Yes	S4VEM
Selenium	6.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.8	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	895	mg/kg	1	U	U	Yes	S4VEM
Thallium	4.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	195	mg/kg	1			Yes	S4VEM
Zinc	74.5	mg/kg	1			Yes	S4VEM
Lithium	6.3	mg/kg	1			Yes	S4VEM
Molybdenum	1.1	mg/kg	1	U	U	Yes	S4VEM
Strontium	104	mg/kg	1	E	JL	Yes	S4VEM
Tin	4.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	2040	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KZ0	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC13SD	pH:	Sample Date: 08252011	Sample Time: 15:30:00
% Moisture :		% Solids : 83.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	24200	mg/kg	1			Yes	S4VEM
Antimony	7.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.4	mg/kg	1			Yes	S4VEM
Barium	70.6	mg/kg	1			Yes	S4VEM
Beryllium	0.58	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.58	mg/kg	1	U	U	Yes	S4VEM
Calcium	6250	mg/kg	1			Yes	S4VEM
Chromium	13.8	mg/kg	1			Yes	S4VEM
Cobalt	17.6	mg/kg	1			Yes	S4VEM
Copper	44.9	mg/kg	1	E	JH	Yes	S4VEM
Iron	29400	mg/kg	1	E	JL	Yes	S4VEM
Lead	2.8	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	3230	mg/kg	1			Yes	S4VEM
Manganese	394	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.7	mg/kg	1			Yes	S4VEM
Potassium	582	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.1	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	686	mg/kg	1			Yes	S4VEM
Thallium	2.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	111	mg/kg	1			Yes	S4VEM
Zinc	45.9	mg/kg	1			Yes	S4VEM
Lithium	4.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.70	mg/kg	1	U	U	Yes	S4VEM
Strontium	56.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	2.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	1640	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KZ3	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC14SD	pH:	Sample Date: 08252011	Sample Time: 15:50:00
% Moisture :		% Solids : 74.6	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41300	mg/kg	1.2	D		Yes	S4VEM
Antimony	8.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	115	mg/kg	1			Yes	S4VEM
Beryllium	0.66	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.66	mg/kg	1	U	U	Yes	S4VEM
Calcium	11100	mg/kg	1			Yes	S4VEM
Chromium	15.8	mg/kg	1			Yes	S4VEM
Cobalt	22.9	mg/kg	1			Yes	S4VEM
Copper	62.1	mg/kg	1	E	JH	Yes	S4VEM
Iron	40000	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.1	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	4690	mg/kg	1			Yes	S4VEM
Manganese	351	mg/kg	1	E	JL	Yes	S4VEM
Nickel	6.9	mg/kg	1			Yes	S4VEM
Potassium	266	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.6	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1560	mg/kg	1			Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	135	mg/kg	1			Yes	S4VEM
Zinc	57.0	mg/kg	1			Yes	S4VEM
Lithium	7.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.80	mg/kg	1	U	U	Yes	S4VEM
Strontium	113	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1920	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KZ6	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: LC15SD	pH:	Sample Date: 08252011	Sample Time: 16:30:00
% Moisture :		% Solids : 76.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	46400	mg/kg	1.4	D		Yes	S4VEM
Antimony	7.6	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	120	mg/kg	1			Yes	S4VEM
Beryllium	0.63	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.63	mg/kg	1	U	U	Yes	S4VEM
Calcium	8570	mg/kg	1			Yes	S4VEM
Chromium	21.5	mg/kg	1			Yes	S4VEM
Cobalt	38.0	mg/kg	1			Yes	S4VEM
Copper	64.8	mg/kg	1	E	JH	Yes	S4VEM
Iron	47500	mg/kg	1	E	JL	Yes	S4VEM
Lead	5.7	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	6830	mg/kg	1			Yes	S4VEM
Manganese	1220	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.4	mg/kg	1			Yes	S4VEM
Potassium	340	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	719	mg/kg	1			Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	149	mg/kg	1			Yes	S4VEM
Zinc	56.6	mg/kg	1			Yes	S4VEM
Lithium	8.5	mg/kg	1			Yes	S4VEM
Molybdenum	0.76	mg/kg	1	U	U	Yes	S4VEM
Strontium	136	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	2150	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KZ7	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: DC01SD	pH:	Sample Date: 08252011	Sample Time: 16:30:00
% Moisture :		% Solids : 76.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	24500	mg/kg	1			Yes	S4VEM
Antimony	7.7	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.4	mg/kg	1			Yes	S4VEM
Barium	83.9	mg/kg	1			Yes	S4VEM
Beryllium	0.64	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.64	mg/kg	1	U	U	Yes	S4VEM
Calcium	4950	mg/kg	1			Yes	S4VEM
Chromium	14.2	mg/kg	1			Yes	S4VEM
Cobalt	13.8	mg/kg	1			Yes	S4VEM
Copper	32.8	mg/kg	1	E	JH	Yes	S4VEM
Iron	30700	mg/kg	1	E	JL	Yes	S4VEM
Lead	7.3	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2190	mg/kg	1			Yes	S4VEM
Manganese	404	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.5	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	643	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	290	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	103	mg/kg	1			Yes	S4VEM
Zinc	35.4	mg/kg	1			Yes	S4VEM
Lithium	4.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.77	mg/kg	1	U	U	Yes	S4VEM
Strontium	55.8	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1100	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KZ8	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: DC02SD	pH:	Sample Date: 08252011	Sample Time: 16:50:00
% Moisture :		% Solids : 65.1	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	32600	mg/kg	1			Yes	S4VEM
Antimony	9.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	1.7	mg/kg	1			Yes	S4VEM
Barium	121	mg/kg	1			Yes	S4VEM
Beryllium	0.77	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.77	mg/kg	1	U	U	Yes	S4VEM
Calcium	3580	mg/kg	1			Yes	S4VEM
Chromium	18.4	mg/kg	1			Yes	S4VEM
Cobalt	17.2	mg/kg	1			Yes	S4VEM
Copper	70.3	mg/kg	1	E	JH	Yes	S4VEM
Iron	30200	mg/kg	1	E	JL	Yes	S4VEM
Lead	7.2	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	3100	mg/kg	1			Yes	S4VEM
Manganese	208	mg/kg	1	E	JL	Yes	S4VEM
Nickel	8.4	mg/kg	1			Yes	S4VEM
Potassium	768	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	768	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	163	mg/kg	1			Yes	S4VEM
Zinc	47.5	mg/kg	1			Yes	S4VEM
Lithium	4.6	mg/kg	1			Yes	S4VEM
Molybdenum	0.92	mg/kg	1	U	U	Yes	S4VEM
Strontium	67.4	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1430	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8KZ9	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: EF03SD	pH:	Sample Date: 08252011	Sample Time: 16:50:00
% Moisture :		% Solids : 80.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	27400	mg/kg	1			Yes	S4VEM
Antimony	7.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.7	mg/kg	1			Yes	S4VEM
Barium	96.1	mg/kg	1			Yes	S4VEM
Beryllium	0.62	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.62	mg/kg	1	U	U	Yes	S4VEM
Calcium	7810	mg/kg	1			Yes	S4VEM
Chromium	22.4	mg/kg	1			Yes	S4VEM
Cobalt	41.8	mg/kg	1			Yes	S4VEM
Copper	53.6	mg/kg	1	E	JH	Yes	S4VEM
Iron	51400	mg/kg	1	E	JL	Yes	S4VEM
Lead	5.3	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	4200	mg/kg	1			Yes	S4VEM
Manganese	1340	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.7	mg/kg	1			Yes	S4VEM
Potassium	616	mg/kg	1	U	U	Yes	S4VEM
Selenium	4.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.2	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	729	mg/kg	1			Yes	S4VEM
Thallium	3.1	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	164	mg/kg	1			Yes	S4VEM
Zinc	55.3	mg/kg	1			Yes	S4VEM
Lithium	4.1	mg/kg	1			Yes	S4VEM
Molybdenum	0.74	mg/kg	1	U	U	Yes	S4VEM
Strontium	82.6	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.1	mg/kg	1	U	U	Yes	S4VEM
Titanium	1650	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8L00	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF01SD	pH:	Sample Date: 08252011	Sample Time: 17:24:00
% Moisture :		% Solids : 63.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	54200	mg/kg	1.2	D		Yes	S4VEM
Antimony	9.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.2	mg/kg	1			Yes	S4VEM
Barium	166	mg/kg	1			Yes	S4VEM
Beryllium	0.77	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.77	mg/kg	1	U	U	Yes	S4VEM
Calcium	5820	mg/kg	1			Yes	S4VEM
Chromium	27.2	mg/kg	1			Yes	S4VEM
Cobalt	29.9	mg/kg	1			Yes	S4VEM
Copper	83.1	mg/kg	1	E	JH	Yes	S4VEM
Iron	54000	mg/kg	1	E	JL	Yes	S4VEM
Lead	5.5	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	6660	mg/kg	1			Yes	S4VEM
Manganese	1070	mg/kg	1	E	JL	Yes	S4VEM
Nickel	10.9	mg/kg	1			Yes	S4VEM
Potassium	414	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	5.4	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	775	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	173	mg/kg	1			Yes	S4VEM
Zinc	73.3	mg/kg	1			Yes	S4VEM
Lithium	6.3	mg/kg	1			Yes	S4VEM
Molybdenum	0.93	mg/kg	1	U	U	Yes	S4VEM
Strontium	128	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	2420	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8L02	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: DC04SD	pH:	Sample Date: 08252011	Sample Time: 17:48:00
% Moisture :		% Solids : 76.9	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	36200	mg/kg	1			Yes	S4VEM
Antimony	7.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	115	mg/kg	1			Yes	S4VEM
Beryllium	0.22	mg/kg	1	J	JQ	Yes	S4VEM
Cadmium	0.65	mg/kg	1	U	U	Yes	S4VEM
Calcium	7620	mg/kg	1			Yes	S4VEM
Chromium	20.2	mg/kg	1			Yes	S4VEM
Cobalt	22.0	mg/kg	1			Yes	S4VEM
Copper	56.1	mg/kg	1	E	JH	Yes	S4VEM
Iron	55500	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.2	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	3280	mg/kg	1			Yes	S4VEM
Manganese	1110	mg/kg	1	E	JL	Yes	S4VEM
Nickel	5.4	mg/kg	1			Yes	S4VEM
Potassium	298	mg/kg	1	J	JK	Yes	S4VEM
Selenium	4.6	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.3	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	693	mg/kg	1			Yes	S4VEM
Thallium	3.3	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	175	mg/kg	1			Yes	S4VEM
Zinc	55.6	mg/kg	1			Yes	S4VEM
Lithium	5.8	mg/kg	1			Yes	S4VEM
Molybdenum	0.78	mg/kg	1	U	U	Yes	S4VEM
Strontium	71.1	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.3	mg/kg	1	U	U	Yes	S4VEM
Titanium	1660	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8L03	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: BG01SD	pH:	Sample Date: 08262011	Sample Time: 09:40:00
% Moisture :		% Solids : 62.7	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	44300	mg/kg	1			Yes	S4VEM
Antimony	9.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.3	mg/kg	1			Yes	S4VEM
Barium	135	mg/kg	1			Yes	S4VEM
Beryllium	0.79	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.79	mg/kg	1	U	U	Yes	S4VEM
Calcium	1070	mg/kg	1			Yes	S4VEM
Chromium	23.4	mg/kg	1			Yes	S4VEM
Cobalt	21.6	mg/kg	1			Yes	S4VEM
Copper	71.0	mg/kg	1	E	JH	Yes	S4VEM
Iron	50200	mg/kg	1	E	JL	Yes	S4VEM
Lead	11.5	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2080	mg/kg	1			Yes	S4VEM
Manganese	1380	mg/kg	1	E	JL	Yes	S4VEM
Nickel	7.7	mg/kg	1			Yes	S4VEM
Potassium	790	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.5	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.6	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	790	mg/kg	1	U	U	Yes	S4VEM
Thallium	3.9	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	182	mg/kg	1			Yes	S4VEM
Zinc	58.2	mg/kg	1			Yes	S4VEM
Lithium	7.4	mg/kg	1			Yes	S4VEM
Molybdenum	0.95	mg/kg	1	U	U	Yes	S4VEM
Strontium	13.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.9	mg/kg	1	U	U	Yes	S4VEM
Titanium	2230	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8L06	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF02SD	pH:	Sample Date: 08262011	Sample Time: 09:50:00
% Moisture :		% Solids : 26.5	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	28000	mg/kg	1			Yes	S4VEM
Antimony	22.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	2.2	mg/kg	1	J	JQ	Yes	S4VEM
Barium	122	mg/kg	1			Yes	S4VEM
Beryllium	1.8	mg/kg	1	U	U	Yes	S4VEM
Cadmium	1.8	mg/kg	1	U	U	Yes	S4VEM
Calcium	6090	mg/kg	1			Yes	S4VEM
Chromium	17.8	mg/kg	1			Yes	S4VEM
Cobalt	24.1	mg/kg	1			Yes	S4VEM
Copper	52.3	mg/kg	1	E	JH	Yes	S4VEM
Iron	36800	mg/kg	1	E	JL	Yes	S4VEM
Lead	9.0	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	2670	mg/kg	1			Yes	S4VEM
Manganese	1510	mg/kg	1	E	JL	Yes	S4VEM
Nickel	14.8	mg/kg	1	U	U	Yes	S4VEM
Potassium	1850	mg/kg	1	U	U	Yes	S4VEM
Selenium	12.9	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	3.7	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1850	mg/kg	1	U	U	Yes	S4VEM
Thallium	9.2	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	136	mg/kg	1			Yes	S4VEM
Zinc	68.0	mg/kg	1			Yes	S4VEM
Lithium	4.4	mg/kg	1			Yes	S4VEM
Molybdenum	2.2	mg/kg	1	U	U	Yes	S4VEM
Strontium	74.2	mg/kg	1	E	JL	Yes	S4VEM
Tin	9.2	mg/kg	1	U	U	Yes	S4VEM
Titanium	1480	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8L19	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF06SD	pH:	Sample Date: 08262011	Sample Time: 14:00:00
% Moisture :		% Solids : 66.4	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	35200	mg/kg	1			Yes	S4VEM
Antimony	9.0	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	3.9	mg/kg	1			Yes	S4VEM
Barium	126	mg/kg	1			Yes	S4VEM
Beryllium	0.75	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.75	mg/kg	1	U	U	Yes	S4VEM
Calcium	6570	mg/kg	1			Yes	S4VEM
Chromium	23.0	mg/kg	1			Yes	S4VEM
Cobalt	26.6	mg/kg	1			Yes	S4VEM
Copper	57.5	mg/kg	1	E	JH	Yes	S4VEM
Iron	49200	mg/kg	1	E	JL	Yes	S4VEM
Lead	5.1	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	3740	mg/kg	1			Yes	S4VEM
Manganese	996	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.4	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	753	mg/kg	1	U	U	Yes	S4VEM
Selenium	5.3	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.5	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	541	mg/kg	1	J	JQ	Yes	S4VEM
Thallium	3.8	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	173	mg/kg	1			Yes	S4VEM
Zinc	65.0	mg/kg	1			Yes	S4VEM
Lithium	6.7	mg/kg	1			Yes	S4VEM
Molybdenum	0.90	mg/kg	1	U	U	Yes	S4VEM
Strontium	74.9	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.8	mg/kg	1	U	U	Yes	S4VEM
Titanium	1900	mg/kg	1	E	JL	Yes	S4VEM

Case No: 41603	Contract: EPW09035	SDG No: MJ8KX7	Lab Code: A4
Sample Number: MJ8L22	Method: ICP_AES	Matrix: Soil	MA Number: 2175.0
Sample Location: NF07SD	pH:	Sample Date: 08262011	Sample Time: 14:22:00
% Moisture :		% Solids : 70.2	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Aluminum	41900	mg/kg	1			Yes	S4VEM
Antimony	8.4	mg/kg	1	U*,N	UJL	Yes	S4VEM
Arsenic	4.1	mg/kg	1			Yes	S4VEM
Barium	106	mg/kg	1			Yes	S4VEM
Beryllium	0.70	mg/kg	1	U	U	Yes	S4VEM
Cadmium	0.70	mg/kg	1	U	U	Yes	S4VEM
Calcium	11800	mg/kg	1			Yes	S4VEM
Chromium	22.7	mg/kg	1			Yes	S4VEM
Cobalt	22.7	mg/kg	1			Yes	S4VEM
Copper	81.2	mg/kg	1	E	JH	Yes	S4VEM
Iron	48000	mg/kg	1	E	JL	Yes	S4VEM
Lead	4.6	mg/kg	1	*	JK	Yes	S4VEM
Magnesium	4670	mg/kg	1			Yes	S4VEM
Manganese	848	mg/kg	1	E	JL	Yes	S4VEM
Nickel	4.9	mg/kg	1	J	JQ	Yes	S4VEM
Potassium	302	mg/kg	1	J	JQ	Yes	S4VEM
Selenium	4.9	mg/kg	1	UN	UJL	Yes	S4VEM
Silver	1.4	mg/kg	1	UN	UJL	Yes	S4VEM
Sodium	1320	mg/kg	1			Yes	S4VEM
Thallium	3.5	mg/kg	1	U*,N	UJL	Yes	S4VEM
Vanadium	169	mg/kg	1			Yes	S4VEM
Zinc	57.5	mg/kg	1			Yes	S4VEM
Lithium	8.2	mg/kg	1			Yes	S4VEM
Molybdenum	0.84	mg/kg	1	U	U	Yes	S4VEM
Strontium	100	mg/kg	1	E	JL	Yes	S4VEM
Tin	3.5	mg/kg	1	U	U	Yes	S4VEM
Titanium	1810	mg/kg	1	E	JL	Yes	S4VEM

Edit History Report

Case No: 41603 Contract: EPW09035 SDG No: MJ8KX7 Lab Code: A4

Method: ICP_AES

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KX7	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KX7	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Potassium	Validated Result	100	202	Donald Matheny	10/9/11 11:17 AM	
MJ8KX7	Soil	Potassium	Validated Result	ND	100	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Potassium	Validation Flag	U	JQ	Donald Matheny	10/9/11 11:17 AM	
MJ8KX7	Soil	Potassium	Validation Flag	J	U	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX7	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 10:41 AM	
MJ8KX8	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KX8	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:19 AM	
MJ8KX8	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:19 AM	
MJ8KY0	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KY0	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:21 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KY0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:21 AM	
MJ8KY1	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KY1	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY1	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:22 AM	
MJ8KY3	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KY3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY3	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:23 AM	
MJ8KY4	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KY4	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Selenium	Validation	UJ	UJL	Donald	10/9/11 11:24 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KY4	Soil	Selenium	Flag	UJ	UJL	Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY4	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:24 AM	
MJ8KY6	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KY6	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY6	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:28 AM	
MJ8KY9	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KY9	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Beryllium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:29 AM	
MJ8KY9	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:29 AM	
MJ8KZ0	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KZ0	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Thallium	Validation	UJ	UJL	Donald	10/9/11 11:31 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8KZ0	Soil	Thallium	Flag	UJ	UJL	Matheny	10/9/11 11:31 AM	
MJ8KZ0	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:31 AM	
MJ8KZ0D	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KZ0D	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:32 AM	
MJ8KZ0S	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KZ3	Soil		Validation Level		S4VEM	Donald Matheny	10/11/11 8:26 AM	Y
MJ8KZ3	Soil	Antimony	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:38 AM	
MJ8KZ3	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:38 AM	
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MJ8KZ6	Soil	Potassium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:40 AM	
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MJ8KZ6	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:40 AM	
MJ8KZ6	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:40 AM	
MJ8KZ6	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:40 AM	
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MJ8KZ7	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:41 AM	
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MJ8KZ7	Soil	Nickel	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:41 AM	
MJ8KZ7	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:41 AM	
MJ8KZ7	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:41 AM	
MJ8KZ7	Soil	Sodium	Validation Flag	J	JQ	Donald Matheny	10/9/11 11:41 AM	
MJ8KZ7	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:41 AM	
MJ8KZ7	Soil	Thallium	Validation	UJ	UJL	Donald	10/9/11 11:41 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
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MJ8KZ8	Soil	Copper	Validation Flag	J	JH	Donald Matheny	10/9/11 11:43 AM	
MJ8KZ8	Soil	Iron	Validation Flag	J	JL	Donald Matheny	10/9/11 11:43 AM	
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MJ8L00	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:45 AM	
MJ8L00	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:45 AM	
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MJ8L02	Soil	Selenium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:47 AM	
MJ8L02	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:47 AM	
MJ8L02	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:47 AM	
MJ8L02	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:47 AM	
MJ8L02	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:47 AM	
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MJ8L03	Soil	Lead	Validation Flag	J	JK	Donald Matheny	10/9/11 11:48 AM	
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MJ8L19	Soil	Manganese	Validation Flag	J	JL	Donald Matheny	10/9/11 11:51 AM	
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Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
MJ8L19	Soil	Silver	Flag	U	UJL	Matheny	10/9/11 11:51 AM	
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MJ8L19	Soil	Strontium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:51 AM	
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MJ8L22	Soil	Silver	Validation Flag	U	UJL	Donald Matheny	10/9/11 11:52 AM	
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MJ8L22	Soil	Thallium	Validation Flag	UJ	UJL	Donald Matheny	10/9/11 11:52 AM	
MJ8L22	Soil	Titanium	Validation Flag	J	JL	Donald Matheny	10/9/11 11:52 AM	

ecology and environment, inc.
International Specialists in the Environment
720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: July 5, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 20 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analyses for volatile organic compounds and semivolatile organic compounds (EPA CLP SOW SOM01.2) were performed by KAP Technologies, Inc., The Woodlands, Texas.

The samples were numbered:

JDQ50	JDQ54	JDQ55	JDQ56	JDQ58	JDQ60
JDQ62	JDQ64	JDQ66	JDQ68	JDQ78	JDQ80
JDQ82	JDQ84	JDQ86	JDQ94	JDQ95	JDQ96
JDQ97	JDQ98				

The following discrepancy was noted. The bias qualifier "K" was inadvertently not applied for bromomethane in sample JDQ80. The report was revised by the original validator.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Date: June 28, 2011

Reply to:
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Volatile Organic (VOC) and Semivolatile Organic (SVOC) analyses of water samples collected from the Camp Bonneville SI Site
Case Number: 41270 SDG: JDQ96

From: Raymond Wu, QA Chemist 6/28/11
Office of Environmental Assessment (OEA - 095), USEPA Region 10

To: Monica Tonel, Task Monitor
Office of Environmental Clean-up (ECL – 112), USEPA Region 10

CC: Renee Nordeen,
Project Manager, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 20 water samples collected from the above referenced site has been completed. These samples were analyzed for VOA & SVOC in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2) by KAP Technologies, located in The Woodlands, Texas.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Camp Bonneville (in Vancouver, Washington) dated April 2011, the technical specifications of USEPA CLP SOW for Organic Data Review, the Contract Laboratory Program's National Functional Guidelines for Organic Data Review and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Sample Index Table found at the end of this report.

The conclusions presented herein are based on the information provided for the review.
(Please note that two of the five coolers sent by Ecology & Environment did not have custody seals present on the outside of the cooler.)

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I. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Please find them in the "Sample Summary Report Section" of this report.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the data in addition to the above data qualifiers when necessary to allow for data analysis and interpretation using Pre-Score software calculations for National Priority Listing Hazard Rankling Scoring (NPL-HRS).

Bias Qualifiers		
	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

II. DATA REVIEW

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
1	X			Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	X			Requested analytical methods were performed and the analysis dates are present.
3	X			Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4	X			Requested target analyte result units are reported
5	X			Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	X			Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	X			Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
8	X			Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	X			Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	X			Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	X			Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	X			Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).
13	X			Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract
				Stage 2A – Data Validation QC Data
14	X			method blanks
15	X			surrogate recoveries/deuterated monitoring compounds (DMC) recoveries

16	X			laboratory control sample (LCS) recoveries
17	X			matrix spike and matrix spike duplicate recoveries
18			X	serial dilutions
19			X	post digestion spikes
20	X			standard reference materials
21		X		equipment blanks
22	X			trip blanks

Stage 2B – Data Validation

Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.

	Verified		N/A	QC Procedure or Check
	YES	NO		
23	X			Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, the associated percent recovery (or percent difference, as appropriate) is present.
24	X			Appropriate number and concentration of initial calibration standards are present.
25	X			Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26				Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27	X			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).
28	X			Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	Verified		N/A	QC Procedure or Check
	YES	NO		
29	X			Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, DDT/Endrin breakdowns, inter-element correction factors, and Florisil cartridge checks).
30	X			Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).

31	X			Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	X			Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	X			Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.
34	X			Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	X			Recalculation of percent ratios for each (or selected) tune from the instrument response, as appropriate.
36	X			Compliance check of recalculated percent ratio for each (or selected) tune from the instrument response.
37	X			Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	X			Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	X			Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	X			Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	X			Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation

Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.

	Verified		N/A	QC Procedure or Check
	YES	NO		
42	X			All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	X			Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	X			Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.

Note: Selection of instrument outputs for the Stage 4 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including, but not limited to, the type of verification and validation being performed (electronic or manual), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Attachments:

Sample Index Table:

Sample Summary Report
Electronic Data Review Results (Report #3)
Analytical Sample Listing (Report #6)
Identification Summary for Single & Multi Component Analytes (Report #11)

Sample Summary Report

Case No:	41270	Contract:	EPW11031	SDG No:	JDQ96	Lab Code:	KAP
Sample Number:	JDQ50	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	BG01GW	pH:	4.8	Sample Date:	05/18/2011	Sample Time:	11:09:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	13	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ50	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: BG01GW	pH: 2	Sample Date: 05/18/2011	Sample Time: 11:09:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ54	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: BG03GW	pH: 5.0	Sample Date: 05/20/2011	Sample Time: 16:54:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-ethylhexyl)	2.1	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.1	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ54	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: BG03GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 16:54:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0		U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ55	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: RS02WT	pH: 5.9	Sample Date: 05/21/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ55	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: RS02WT	pH: 2	Sample Date: 05/21/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ56	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF01GW	pH: 2	Sample Date: 05/18/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ56	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF01GW	pH: 5.4	Sample Date: 05/18/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	100	UG/L	1.0	E	R	No	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	100	UG/L	1.0	E	R	No	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
9-Octadecenamide, (Z)-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ56DL	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 5.4	Sample Date: 05/18/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	25	UG/L	5.0	U	U	No	S4VEM
Phenol	25	UG/L	5.0	U	U	No	S4VEM
Bis(2-chloroethyl)ether	25	UG/L	5.0	U	U	No	S4VEM
2-Chlorophenol	25	UG/L	5.0	U	U	No	S4VEM
2-Methylphenol	25	UG/L	5.0	U	U	No	S4VEM
2,2'-Oxybis(1-chloropropane)	25	UG/L	5.0	U	U	No	S4VEM
Acetophenone	25	UG/L	5.0	U	U	No	S4VEM
4-Methylphenol	25	UG/L	5.0	U	U	No	S4VEM
N-Nitroso-di-n-propylamine	25	UG/L	5.0	U	U	No	S4VEM
Hexachloroethane	25	UG/L	5.0	U	U	No	S4VEM
Nitrobenzene	25	UG/L	5.0	U	U	No	S4VEM
Isophorone	25	UG/L	5.0	U	U	No	S4VEM
2-Nitrophenol	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dimethylphenol	25	UG/L	5.0	U	U	No	S4VEM
Bis(2-chloroethoxy)methane	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dichlorophenol	25	UG/L	5.0	U	U	No	S4VEM
Naphthalene	25	UG/L	5.0	U	U	No	S4VEM
4-Chloroaniline	25	UG/L	5.0	U	U	No	S4VEM
Hexachlorobutadiene	25	UG/L	5.0	U	U	No	S4VEM
Caprolactam	25	UG/L	5.0	U	U	No	S4VEM
4-Chloro-3-methylphenol	25	UG/L	5.0	U	U	No	S4VEM
2-Methylnaphthalene	25	UG/L	5.0	U	U	No	S4VEM
Hexachlorocyclopentadiene	25	UG/L	5.0	U	U	No	S4VEM
2,4,6-Trichlorophenol	25	UG/L	5.0	U	U	No	S4VEM
2,4,5-Trichlorophenol	25	UG/L	5.0	U	U	No	S4VEM
1,1'-Biphenyl	25	UG/L	5.0	U	U	No	S4VEM
2-Chloronaphthalene	25	UG/L	5.0	U	U	No	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	50	UG/L	5.0	U	U	No	S4VEM
Dimethylphthalate	25	UG/L	5.0	U	U	No	S4VEM
2,6-Dinitrotoluene	25	UG/L	5.0	U	U	No	S4VEM
Acenaphthylene	25	UG/L	5.0	U	U	No	S4VEM
3-Nitroaniline	50	UG/L	5.0	U	U	No	S4VEM
Acenaphthene	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dinitrophenol	50	UG/L	5.0	U	U	No	S4VEM
4-Nitrophenol	50	UG/L	5.0	U	U	No	S4VEM
Dibenzofuran	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dinitrotoluene	25	UG/L	5.0	U	U	No	S4VEM
Diethylphthalate	25	UG/L	5.0	U	U	No	S4VEM
Fluorene	25	UG/L	5.0	U	U	No	S4VEM
4-Chlorophenyl-phenylether	25	UG/L	5.0	U	U	No	S4VEM
4-Nitroaniline	50	UG/L	5.0	U	U	No	S4VEM
4,6-Dinitro-2-methylphenol	50	UG/L	5.0	U	U	No	S4VEM
N-Nitrosodiphenylamine	25	UG/L	5.0	U	U	No	S4VEM
1,2,4,5-Tetrachlorobenzene	25	UG/L	5.0	U	U	No	S4VEM
4-Bromophenyl-phenylether	25	UG/L	5.0	U	U	No	S4VEM
Hexachlorobenzene	25	UG/L	5.0	U	U	No	S4VEM
Atrazine	25	UG/L	5.0	U	U	No	S4VEM
Pentachlorophenol	50	UG/L	5.0	U	U	No	S4VEM
Phenanthrene	25	UG/L	5.0	U	U	No	S4VEM
Anthracene	25	UG/L	5.0	U	U	No	S4VEM
Carbazole	25	UG/L	5.0	U	U	No	S4VEM
Di-n-butylphthalate	25	UG/L	5.0	U	U	No	S4VEM
Fluoranthene	25	UG/L	5.0	U	U	No	S4VEM
Pyrene	25	UG/L	5.0	U	U	No	S4VEM
Butylbenzylphthalate	25	UG/L	5.0	U	U	No	S4VEM
3,3'-Dichlorobenzidine	25	UG/L	5.0	U	U	No	S4VEM
Benzo(a)anthracene	25	UG/L	5.0	U	U	No	S4VEM
Chrysene	25	UG/L	5.0	U	U	No	S4VEM
Bis(2-ethylhexyl)	110	UG/L	5.0	D		Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	110	UG/L	5.0	D		Yes	S4VEM
Di-n-octylphthalate	25	UG/L	5.0	U	U	No	S4VEM
Benzo(b)fluoranthene	25	UG/L	5.0	U	U	No	S4VEM
Benzo(k)fluoranthene	25	UG/L	5.0	U	U	No	S4VEM
Benzo(a)pyrene	25	UG/L	5.0	U	U	No	S4VEM
Indeno(1,2,3-cd)pyrene	25	UG/L	5.0	U	U	No	S4VEM
Dibenzo(a,h)anthracene	25	UG/L	5.0	U	U	No	S4VEM
Benzo(g,h,i)perylene	25	UG/L	5.0	U	U	No	S4VEM
2,3,4,6-Tetrachlorophenol	25	UG/L	5.0	U	U	No	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ58	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF02GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 09:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ58	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF02GW	pH: 5.6	Sample Date: 05/19/2011	Sample Time: 09:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.9	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.9	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ60	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF03GW	pH: 5.0	Sample Date: 05/19/2011	Sample Time: 09:56:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	4.9	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	4.9	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ60	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF03GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 09:56:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ62	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF04GW	pH: 4.5	Sample Date: 05/19/2011	Sample Time: 10:25:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carhazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	2.1	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.1	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ62	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF04GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 10:25:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ64	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF05GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ64	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF05GW	pH: 4.6	Sample Date: 05/19/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	130	UG/L	1.0	E	R	No	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	130	UG/L	1.0	E	R	No	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ64DL	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 4.6	Sample Date: 05/19/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	25	UG/L	5.0	U	U	No	S4VEM
Phenol	25	UG/L	5.0	U	U	No	S4VEM
Bis(2-chloroethyl)ether	25	UG/L	5.0	U	U	No	S4VEM
2-Chlorophenol	25	UG/L	5.0	U	U	No	S4VEM
2-Methylphenol	25	UG/L	5.0	U	U	No	S4VEM
2,2'-Oxybis(1-chloropropane)	25	UG/L	5.0	U	U	No	S4VEM
Acetophenone	25	UG/L	5.0	U	U	No	S4VEM
4-Methylphenol	25	UG/L	5.0	U	U	No	S4VEM
N-Nitroso-di-n-propylamine	25	UG/L	5.0	U	U	No	S4VEM
Hexachloroethane	25	UG/L	5.0	U	U	No	S4VEM
Nitrobenzene	25	UG/L	5.0	U	U	No	S4VEM
Isophorone	25	UG/L	5.0	U	U	No	S4VEM
2-Nitrophenol	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dimethylphenol	25	UG/L	5.0	U	U	No	S4VEM
Bis(2-chloroethoxy)methane	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dichlorophenol	25	UG/L	5.0	U	U	No	S4VEM
Naphthalene	25	UG/L	5.0	U	U	No	S4VEM
4-Chloroaniline	25	UG/L	5.0	U	U	No	S4VEM
Hexachlorobutadiene	25	UG/L	5.0	U	U	No	S4VEM
Caprolactam	25	UG/L	5.0	U	U	No	S4VEM
4-Chloro-3-methylphenol	25	UG/L	5.0	U	U	No	S4VEM
2-Methylnaphthalene	25	UG/L	5.0	U	U	No	S4VEM
Hexachlorocyclopentadiene	25	UG/L	5.0	U	U	No	S4VEM
2,4,6-Trichlorophenol	25	UG/L	5.0	U	U	No	S4VEM
2,4,5-Trichlorophenol	25	UG/L	5.0	U	U	No	S4VEM
1,1'-Biphenyl	25	UG/L	5.0	U	U	No	S4VEM
2-Chloronaphthalene	25	UG/L	5.0	U	U	No	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	50	UG/L	5.0	U	U	No	S4VEM
Dimethylphthalate	25	UG/L	5.0	U	U	No	S4VEM
2,6-Dinitrotoluene	25	UG/L	5.0	U	U	No	S4VEM
Acenaphthylene	25	UG/L	5.0	U	U	No	S4VEM
3-Nitroaniline	50	UG/L	5.0	U	U	No	S4VEM
Acenaphthene	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dinitrophenol	50	UG/L	5.0	U	U	No	S4VEM
4-Nitrophenol	50	UG/L	5.0	U	U	No	S4VEM
Dibenzofuran	25	UG/L	5.0	U	U	No	S4VEM
2,4-Dinitrotoluene	25	UG/L	5.0	U	U	No	S4VEM
Diethylphthalate	25	UG/L	5.0	U	U	No	S4VEM
Fluorene	25	UG/L	5.0	U	U	No	S4VEM
4-Chlorophenyl-phenylether	25	UG/L	5.0	U	U	No	S4VEM
4-Nitroaniline	50	UG/L	5.0	U	U	No	S4VEM
4,6-Dinitro-2-methylphenol	50	UG/L	5.0	U	U	No	S4VEM
N-Nitrosodiphenylamine	25	UG/L	5.0	U	U	No	S4VEM
1,2,4,5-Tetrachlorobenzene	25	UG/L	5.0	U	U	No	S4VEM
4-Bromophenyl-phenylether	25	UG/L	5.0	U	U	No	S4VEM
Hexachlorobenzene	25	UG/L	5.0	U	U	No	S4VEM
Atrazine	25	UG/L	5.0	U	U	No	S4VEM
Pentachlorophenol	50	UG/L	5.0	U	U	No	S4VEM
Phenanthrene	25	UG/L	5.0	U	U	No	S4VEM
Anthracene	25	UG/L	5.0	U	U	No	S4VEM
Carbazole	25	UG/L	5.0	U	U	No	S4VEM
Di-n-butylphthalate	25	UG/L	5.0	U	U	No	S4VEM
Fluoranthene	25	UG/L	5.0	U	U	No	S4VEM
Pyrene	25	UG/L	5.0	U	U	No	S4VEM
Butylbenzylphthalate	25	UG/L	5.0	U	U	No	S4VEM
3,3'-Dichlorobenzidine	25	UG/L	5.0	U	U	No	S4VEM
Benzo(a)anthracene	25	UG/L	5.0	U	U	No	S4VEM
Chrysene	25	UG/L	5.0	U	U	No	S4VEM
Bis(2-ethylhexyl)	94	UG/L	5.0	D	R	No	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	94	UG/L	5.0	D	R	No	S4VEM
Di-n-octylphthalate	25	UG/L	5.0	U	U	No	S4VEM
Benzo(b)fluoranthene	25	UG/L	5.0	U	UJ	No	S4VEM
Benzo(k)fluoranthene	25	UG/L	5.0	U	U	No	S4VEM
Benzo(a)pyrene	25	UG/L	5.0	U	U	No	S4VEM
Indeno(1,2,3-cd)pyrene	25	UG/L	5.0	U	U	No	S4VEM
Dibenzo(a,h)anthracene	25	UG/L	5.0	U	U	No	S4VEM
Benzo(g,h,i)perylene	25	UG/L	5.0	U	U	No	S4VEM
2,3,4,6-Tetrachlorophenol	25	UG/L	5.0	U	U	No	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ66	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF06GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 11:35:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ66	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF06GW	pH: 4.8	Sample Date: 05/19/2011	Sample Time: 11:35:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	2.9	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.9	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ68	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF07GW	pH: 4.9	Sample Date: 05/19/2011	Sample Time: 12:07:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	2.8	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.8	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ68	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF07GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 12:07:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ78	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF12GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 08:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ78	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF12GW	pH: 5.6	Sample Date: 05/19/2011	Sample Time: 08:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	47	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	47	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclooctacosane			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ80	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF13GW	pH: 4.9	Sample Date: 05/18/2011	Sample Time: 14:15:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	6.7	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	6.7	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ80	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF13GW	pH: 2	Sample Date: 05/18/2011	Sample Time: 14:15:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ82	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF14GW	pH: 2	Sample Date: 05/18/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S3VE
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S3VE
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Acetone	10	UG/L	1.0	U	UJK	Yes	S3VE
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S3VE
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S3VE
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S3VE
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S3VE
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S3VE
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S3VE
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S3VE
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S3VE
Chloroform	5.0	UG/L	1.0	U	U	Yes	S3VE
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S3VE
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S3VE
Benzene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S3VE
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S3VE
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S3VE
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S3VE

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S3VE
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S3VE
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S3VE
Toluene	5.0	UG/L	1.0	U	U	Yes	S3VE
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S3VE
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S3VE
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S3VE
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S3VE
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S3VE
Styrene	5.0	UG/L	1.0	U	U	Yes	S3VE
Bromoform	5.0	UG/L	1.0	U	U	Yes	S3VE
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S3VE
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S3VE
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S3VE

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ82	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF14GW	pH: 4.6	Sample Date: 05/18/2011	Sample Time: 14:55:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	7.4	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	7.4	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ84	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: LF15GW	pH: 5.2	Sample Date: 05/19/2011	Sample Time: 14:10:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	2.9	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.9	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ84	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: LF15GW	pH: 2	Sample Date: 05/19/2011	Sample Time: 14:10:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ86	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW01GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 10:00:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ86	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW01GW	pH: 4.9	Sample Date: 05/20/2011	Sample Time: 10:00:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ94	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW09GW	pH: 2	Sample Date: 05/21/2011	Sample Time: 14:15:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ94	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW09GW	pH: 5.8	Sample Date: 05/21/2011	Sample Time: 14:15:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ95	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: RS01WT	pH: 5.6	Sample Date: 05/21/2011	Sample Time: 14:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ95	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: RS01WT	pH: 2	Sample Date: 05/21/2011	Sample Time: 14:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ96	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: TB01WT	pH: 2	Sample Date: 05/16/2011	Sample Time: 10:20:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ97	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: TB02WT	pH: 2	Sample Date: 05/18/2011	Sample Time: 10:20:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Silane, methoxytrimethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ96	Lab Code: KAP
Sample Number: JDQ98	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: TB03WT	pH: 2	Sample Date: 05/19/2011	Sample Time: 08:45:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

National Functional Guidelines Report # 3

4:03 Sat, Jun 18, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Data Review Results

Blanks

Blanks	**VOA_LOW_MED**
VLB12	The following volatile samples have analyte concentrations reported less than the CRQL. The associated method blank concentration is less than the concentration criteria. Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.
	Tolueue JDQ80
Blanks	**VOA_LOW_MED**
VLB46	The following volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated storage blank common contaminant concentration is less than 2x the concentration criteria Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.
	Methylene chloride JDQ54, JDQ54MS, JDQ56, JDQ58, JDQ60, JDQ62, JDQ78, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Data Review Results

Continuing Calibration Verification

Continuing Calibration Verification	**BNA**
BC10	The following semivolatile samples are associated with incorrect initial calibration sequence. Detected compounds are qualified J. Nondetected compounds are qualified UJ. Use professional judgment to qualify the data.
	JDQ64DL, JDQ66, SBLK99
	Benzo (b) fluoranthene SSTD02071, SSTD02075
	JDQ64DL, JDQ66, SBLK99
Continuing Calibration Verification	**VOA_LOW_MED**
VC8	The following volatile samples are associated with an opening or closing CCV percent difference (%D) outside criteria. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	JDQ50, JDQ54MS, JDQ54MSD, JDQ80, JDQ96, JDQ97, VBLK1Y, VBLK2J
	Bromomethane VSTD0501Y
	JDQ50, JDQ80, JDQ96, JDQ97, VBLK1Y
	1,1,2,2-Tetrachloroethane VSTD0502J
	JDQ54MS, JDQ54MSD, VBLK2J

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Data Review Results

DMC/Surrogate

DMC/Surrogate	**BNA**
BDSS14	The following semivolatile samples have deuterated monitoring compound recovery above the upper limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are not qualified.
	Anthracene-d10 JDQ68, JDQ86, JDQ95
	Anthracene, Atrazine, Hexachlorobenzene, Phenanthrene
	Acenaphthylene-d8 JDQ68, JDQ86
	2-Chloronaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Naphthalene
DMC/Surrogate	**BNA**
BDSS15	The following semivolatile samples have deuterated monitoring compound recovery below the lower limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	Pyrene-d10 JDQ54, JDQ54MS, JDQ54MSD
	Benzo(a)anthracene, Chrysene, Fluoranthene, Pyrene
	Phenol-d5 JDQ54, JDQ54MS, JDQ54MSD
	Benzaldehyde, Phenol
DMC/Surrogate	**VOA_LOW_MED**
VDSS3	The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are not qualified.
	JDQ54, JDQ54MSD, JDQ80, JDQ98
	1,2-Dichloroethane-d4 JDQ80
	1,1,1-Trichloroethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,2-Dibromoethane, 1,2-Dichloroethane, Carbon tetrachloride, Methyl acetate, Methyl tert-butyl ether, Methylene chloride, Trichlorofluoromethane
	Chloroethane-d5 JDQ54, JDQ98
	Bromomethane, Carbon disulfide, Chloroethane, Chloromethane, Dichlorodifluoromethane
	1,1-Dichloroethene-d2 JDQ54MSD
	1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene
DMC/Surrogate	**VOA_LOW_MED**
VDSS4	The following volatile samples have one or more DMC/SMC recovery values is less than the primary lower limit but greater than or equal to the expanded lower limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	1,1,2,2-Tetrachloroethane-d2 JDQ55, JDQ64
	1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane

Data Review Results

Detection Limit

Detection Limit	**BNA**
BDL1	The following semivolatile samples have analyte concentrations below the quantitaion limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	Bis (2-Ethylhexyl) phthalate JDQ54, JDQ60, JDQ62, JDQ66, JDQ68, JDQ84
Detection Limit	**VOA_LOW_MED**
VDL1	The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	JDQ54MS, JDQ56, JDQ58, JDQ60, JDQ62, JDQ78, JDQ80, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95, JDQ98, VBLK1Y, VBLK56, VHBLK01
	Toluene JDQ80, VBLK1Y
	Methylene chloride JDQ54MS, JDQ56, JDQ58, JDQ60, JDQ62, JDQ78, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95, JDQ98, VBLK56, VHBLK01

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Data Review Results

Initial Calibration

Initial Calibration	**VOA_LOW_MED**
VC6	The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detected compounds are qualified J. Nondetected compounds are not qualified. Use professional judgement to qualify non-detected compounds.
	JDQ54, JDQ54MS, JDQ54MSD, JDQ55, JDQ56, JDQ58, JDQ60, JDQ62, JDQ64, JDQ66, JDQ68, JDQ78, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95, JDQ98, VBLK2G, VBLK2J
	Bromomethane VSTD0052F
	JDQ54, JDQ54MS, JDQ54MSD, JDQ55, JDQ56, JDQ58, JDQ60, JDQ62, JDQ64, JDQ66, JDQ68, JDQ78, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95, JDQ98, VBLK2G, VBLK2J

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Data Review Results

Matrix Spikes

Matrix Spikes	**VOA_LOW_MED**
VMS2	The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria. Detected compounds are qualified J. Nondetected compounds are not qualified.
	Toluene JDQ54MS, JDQ54MSD
	Chlorobenzene JDQ54MS, JDQ54MSD
	Benzene JDQ54MS, JDQ54MSD
	1,1-Dichloroethene JDQ54MS, JDQ54MSD
	Trichloroethene JDQ54MS, JDQ54MSD
Matrix Spikes	**VOA_LOW_MED**
VMS5	The following volatile matrix spike/matrix spike duplicate samples have percent recovery greater than or equal to the expanded lower acceptance limit but less than the primary lower acceptance limit Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	Toluene JDQ54MS
	Benzene JDQ54MS
	Trichloroethene JDQ54MS

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Data Review Results

TIC

TIC	BNA
BTIC1	A library search indicates a match at or above 85% for a TIC compound in the semivolatile sample Detected compounds are qualified NJ. Nondetected compounds are not qualified.
	JDQ56, JDQ78
	000297-24-5 JDQ78
	000301-02-0 JDQ56
TIC	**BNA**
BTIC2	A library search indicates a match below 85% for a TIC compound in the semivolatile sample Detected compounds are qualified J. Nondetected compounds are not qualified.
	Unknown-01 JDQ50, JDQ55, JDQ56, JDQ56DL, JDQ58, JDQ60, JDQ62, JDQ66, JDQ68, JDQ80, JDQ86, SBLK99
	Unknown-02 JDQ56, JDQ68
	Unknown-03 JDQ68
TIC	**VOA_LOW_MED**
VTIC1	A library search indicates a match at or above 85% for a TIC compound in the volatile sample Detected compounds are qualified NJ. Nondetected compounds are not qualified.
	JDQ50, JDQ58, JDQ66, JDQ68, JDQ78, JDQ80, JDQ84, JDQ97, VBLK56
	000541-05-9 VBLK56
	001825-61-2 JDQ50, JDQ58, JDQ66, JDQ68, JDQ78, JDQ80, JDQ84, JDQ97
	Unknown-01 JDQ58
TIC	**VOA_LOW_MED**
VTIC2	A library search indicates a match below 85% for a TIC compound in the volatile sample Detected compounds are qualified J. Nondetected compounds are not qualified.
	JDQ50, JDQ54, JDQ54MS, JDQ55, JDQ56, JDQ58, JDQ60, JDQ62, JDQ64, JDQ66, JDQ68, JDQ78, JDQ80, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95, JDQ96, JDQ97, JDQ98, VBLK1Y, VBLK2G, VBLK2J, VBLK56
	Unknown-01 JDQ50, JDQ54, JDQ54MS, JDQ55, JDQ56, JDQ60, JDQ62, JDQ64, JDQ66, JDQ68, JDQ78, JDQ80, JDQ82, JDQ84, JDQ86, JDQ94, JDQ95, JDQ96, JDQ97, JDQ98, VBLK1Y, VBLK2G, VBLK2J, VBLK56
	Unknown-02 JDQ54, JDQ58, JDQ66, JDQ68, JDQ78, JDQ84, JDQ94, JDQ95, JDQ96, JDQ98
	Unknown-03 JDQ54, JDQ58, JDQ98

National Functional Guidelines Report # 6

4:31 Sat, Jun 18, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Analytical Sample Listing

VOA_Low_Med

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date**	**Date/Time**	**GC Column**	**Intstrument**
JDQ50	Field_Sample	Water	LOW	05/18/2011 11:09:00	05/19/2011 10:15:00			05/28/2011 22:22:00	RTX-VMS	G-5973
JDQ54	Field_Sample	Water	LOW	05/20/2011 16:54:00	05/24/2011 10:25:00			05/31/2011 19:19:00	RTX-VMS	G-5973
JDQ54MS	Matrix_Spike	Water	LOW	05/20/2011 16:54:00	05/24/2011 10:25:00			06/01/2011 12:38:00	RTX-VMS	G-5973
JDQ54MSD	Matrix_Spike_Duplicate	Water	LOW	05/20/2011 16:54:00	05/24/2011 10:25:00			06/01/2011 13:08:00	RTX-VMS	G-5973
JDQ55	Field_Sample	Water	LOW	05/21/2011 14:55:00	05/24/2011 10:25:00			05/31/2011 11:02:00	RTX-VMS	G-5973
JDQ56	Field_Sample	Water	LOW	05/18/2011 15:40:00	05/24/2011 10:25:00			05/31/2011 11:38:00	RTX-VMS	G-5973
JDQ58	Field_Sample	Water	LOW	05/19/2011 09:45:00	05/24/2011 10:25:00			05/31/2011 12:08:00	RTX-VMS	G-5973
JDQ60	Field_Sample	Water	LOW	05/19/2011 09:56:00	05/24/2011 10:25:00			05/31/2011 12:38:00	RTX-VMS	G-5973
JDQ62	Field_Sample	Water	LOW	05/19/2011 10:25:00	05/24/2011 10:25:00			05/31/2011 13:08:00	RTX-VMS	G-5973
JDQ64	Field_Sample	Water	LOW	05/19/2011 14:55:00	05/24/2011 10:25:00			05/31/2011 13:39:00	RTX-VMS	G-5973
JDQ66	Field_Sample	Water	LOW	05/19/2011 11:35:00	05/24/2011 10:25:00			05/31/2011 14:09:00	RTX-VMS	G-5973
JDQ68	Field_Sample	Water	LOW	05/19/2011 12:07:00	05/24/2011 10:25:00			05/31/2011 14:40:00	RTX-VMS	G-5973
JDQ78	Field_Sample	Water	LOW	05/19/2011 08:55:00	05/24/2011 10:25:00			05/31/2011 15:11:00	RTX-VMS	G-5973
JDQ80	Field_Sample	Water	LOW	05/18/2011 14:15:00	05/19/2011 10:15:00			05/28/2011 22:54:00	RTX-VMS	G-5973
JDQ82	Field_Sample	Water	LOW	05/18/2011 14:55:00	05/24/2011 10:25:00			05/31/2011 15:42:00	RTX-VMS	G-5973
JDQ84	Field_Sample	Water	LOW	05/19/2011 14:10:00	05/24/2011 10:25:00			05/31/2011 16:13:00	RTX-VMS	G-5973
JDQ86	Field_Sample	Water	LOW	05/20/2011 10:00:00	05/24/2011 10:25:00			05/31/2011 16:44:00	RTX-VMS	G-5973
JDQ94	Field_Sample	Water	LOW	05/21/2011 14:15:00	05/24/2011 10:25:00			05/31/2011 17:46:00	RTX-VMS	G-5973
JDQ95	Field_Sample	Water	LOW	05/21/2011 14:45:00	05/24/2011 10:25:00			05/31/2011 18:17:00	RTX-VMS	G-5973
JDQ96	Field_Blank	Water	LOW	05/16/2011 10:20:00	05/18/2011 10:05:00			05/28/2011 21:51:00	RTX-VMS	G-5973
JDQ97	Field_Blank	Water	LOW	05/18/2011 10:20:00	05/19/2011 10:15:00			05/28/2011 23:25:00	RTX-VMS	G-5973
JDQ98	Field_Blank	Water	LOW	05/19/2011 08:45:00	05/24/2011 10:25:00			05/31/2011 18:48:00	RTX-VMS	G-5973

National Functional Guidelines Report # 6

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Analytical Sample Listing

BNA

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date**	**Date/Time**	**GC Column**	**Intstrumeut**
JDQ50	Field_Sample	Water	LOW	05/18/2011 11:09:00	05/19/2011 10:15:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 15:40:00	RTX-5MS	F-5973
JDQ54	Field_Sample	Water	LOW	05/20/2011 16:54:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 12:00:00	RTX-5MS	D-5973
JDQ54MS	Matrix_Spike	Water	LOW	05/20/2011 16:54:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 12:32:00	RTX-5MS	D-5973
JDQ54MSD	Matrix_Spike_Duplicate	Water	LOW	05/20/2011 16:54:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 13:03:00	RTX-5MS	D-5973
JDQ55	Field_Sample	Water	LOW	05/21/2011 14:55:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 13:34:00	RTX-5MS	D-5973
JDQ56	Field_Sample	Water	LOW	05/18/2011 15:40:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 18:44:00	RTX-5MS	F-5973
JDQ56DL	Field_Sample	Water	LOW	05/18/2011 15:40:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/27/2011 15:25:00	RTX-5MS	F-5973
JDQ58	Field_Sample	Water	LOW	05/19/2011 09:45:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 19:13:00	RTX-5MS	F-5973
JDQ60	Field_Sample	Water	LOW	05/19/2011 09:56:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 19:43:00	RTX-5MS	F-5973
JDQ62	Field_Sample	Water	LOW	05/19/2011 10:25:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 14:05:00	RTX-5MS	D-5973
JDQ64	Field_Sample	Water	LOW	05/19/2011 14:55:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 14:36:00	RTX-5MS	D-5973
JDQ64DL	Field_Sample	Water	LOW	05/19/2011 14:55:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/10/2011 13:14:00	RTX-5MS	F-5973
JDQ66	Field_Sample	Water	LOW	05/19/2011 11:35:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/10/2011 13:46:00	RTX-5MS	F-5973
JDQ68	Field_Sample	Water	LOW	05/19/2011 12:07:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 15:39:00	RTX-5MS	D-5973
JDQ78	Field_Sample	Water	LOW	05/19/2011 08:55:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 20:13:00	RTX-5MS	F-5973
JDQ80	Field_Sample	Water	LOW	05/18/2011 14:15:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 20:42:00	RTX-5MS	F-5973
JDQ82	Field_Sample	Water	LOW	05/18/2011 14:55:00	05/20/2011 10:20:00	Liq_Liq	05/22/2011 10:35:00	05/26/2011 21:12:00	RTX-5MS	F-5973
JDQ84	Field_Sample	Water	LOW	05/19/2011 14:10:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 16:10:00	RTX-5MS	D-5973
JDQ86	Field_Sample	Water	LOW	05/20/2011 10:00:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 16:41:00	RTX-5MS	D-5973
JDQ94	Field_Sample	Water	LOW	05/21/2011 14:15:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 17:12:00	RTX-5MS	D-5973
JDQ95	Field_Sample	Water	LOW	05/21/2011 14:45:00	05/24/2011 10:25:00	Liq_Liq	05/25/2011 13:10:00	06/09/2011 17:43:00	RTX-5MS	D-5973

National Functional Guidelines Report # 11

4:27 Sat, Jun 18, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ96 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123999 **SOW** SOM01.2

Identification Summary for Single & Multi Component Analytes

#byval1 Sample=#byval2

NONE FOUND

Edit History Report

Case No: 41270 Contract: EPW11031 SDG No: JDQ96 Lab Code: KAP

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ50	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ50	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ50	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:56 PM	
JDQ54	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzo(a)anthracene	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Chrysene	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Fluoranthene	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Pyrene	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:58 PM	
JDQ54	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MS	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MS	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MS	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:58 PM	
JDQ54MSD	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MSD	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MSD	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ54MSD	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:59 PM	
JDQ55	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ55	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ55	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ55	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:00 PM	
JDQ56	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	9-Octadecenamide, (Z)-	Validation Level		S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Bis(2-ethylhexyl)phthal	Reportable	Y	N	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Bis(2-ethylhexyl)phthal	Validation Flag		R	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:02 PM	
JDQ56DL	Water	1,1'-Biphenyl	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	1,2,4,5-Tetrachlorobenzene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56DL	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,2'-Oxybis(1-chloropropane)	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,3,4,6-Tetrachlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4,5-Trichlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4,6-Trichlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dichlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dimethylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dinitrophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dinitrotoluene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,6-Dinitrotoluene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Chloronaphthalene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Chlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Nitroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Nitrophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	3,3'-Dichlorobenzidine	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	3-Nitroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4,6-Dinitro-2-	Reportable	Y	N	Raymond	6/28/11 7:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56DL	Water	methylphenol	Reportable	Y	N	Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Bromophenyl-phenylether	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Chloro-3-methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Chloroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Chlorophenyl-phenylether	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Nitroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Nitrophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Acenaphthene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Acetophenone	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Anthracene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Atrazine	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzaldehyde	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Bis(2-chloroethoxy)methane	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Bis(2-chloroethoxy)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56DL	Water	methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Bis(2-chloroethyl)ether	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Butylbenzylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Caprolactam	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Carbazole	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Chrysene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Di-n-butylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Di-n-octylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Dibenzofuran	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Diethylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Dimethylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Fluoranthene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Fluorene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachlorobenzene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachlorobutadiene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachlorocyclopentadiene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachloroethane	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Isophorone	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	N-Nitroso-di-n-	Reportable	Y	N	Raymond	6/28/11 7:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56DL	Water	propylamine	Reportable	Y	N	Wu	6/28/11 7:04 PM	
JDQ56DL	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	N-Nitrosodiphenylamine	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Naphthalene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Nitrobenzene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Phenanthrene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Phenol	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Pyrene	Reportable	Y	N	Raymond Wu	6/28/11 7:04 PM	
JDQ56DL	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:04 PM	
JDQ58	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ58	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	N-Nitrosodiphenyla	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ58	Water	mine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ58	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:05 PM	
JDQ60	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ60	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ60	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:06 PM	
JDQ62	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ62	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ62	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ62	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:07 PM	
JDQ64	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Bis(2-ethylhexyl)phthal	Reportable	Y	N	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Bis(2-ethylhexyl)phthal	Validation Flag		R	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:08 PM	
JDQ64DL	Water	1,1'-Biphenyl	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	1,2,4,5-Tetrachlorobenzene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,2'-Oxybis(1-chloropropane)	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,3,4,6-Tetrachlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4,5-Trichlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4,6-Trichlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dichlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dimethylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dinitrophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64DL	Water	2,4-Dinitrotoluene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,6-Dinitrotoluene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Chloronaphthalene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Chlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Methylnaphthalene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Nitroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Nitrophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	3,3'-Dichlorobenzidine	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	3-Nitroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4,6-Dinitro-2-methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Bromophenyl-phenylether	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Chloro-3-methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Chloroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Chlorophenyl-phenylether	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Methylphenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Nitroaniline	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Nitrophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Acenaphthene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64DL	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Acenaphthylene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Acetophenone	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Anthracene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Atrazine	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzaldehyde	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(a)anthracene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(a)pyrene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(b)fluoranthene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(g,h,i)perylene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(k)fluoranthene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-chloroethoxy)methane	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-chloroethyl)ether	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-ethylhexyl)phthal	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-ethylhexyl)phthal	Validation Flag		R	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Butylbenzylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Caprolactam	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Carbazole	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Chrysene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Di-n-butylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Di-n-octylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64DL	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Dibenzo(a,h)anthracene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Dibenzofuran	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Diethylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Dimethylphthalate	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Fluoranthene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Fluorene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachlorobenzene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachlorobutadiene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachlorocyclopentadiene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachloroethane	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Indeno(1,2,3-cd)pyrene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Isophorone	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	N-Nitroso-di-n-propylamine	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	N-Nitrosodiphenylamine	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Naphthalene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Nitrobenzene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Pentachlorophenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Phenanthrene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Phenol	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64DL	Water	Pyrene	Reportable	Y	N	Raymond Wu	6/28/11 7:10 PM	
JDQ64DL	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:10 PM	
JDQ66	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzaldehyde	Validation Flag	U	UJK	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ66	Water	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ66	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:11 PM	
JDQ68	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ68	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ68	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ68	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:12 PM	
JDQ78	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ78	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Cyclooctacosane	Validation Level		S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ78	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ78	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:13 PM	
JDQ80	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ80	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ80	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ80	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:14 PM	
JDQ82	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ82	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ82	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:15 PM	
JDQ84	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ84	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ84	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ84	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:16 PM	
JDQ86	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ86	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ86	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ86	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:17 PM	
JDQ94	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ94	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ94	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ94	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:18 PM	
JDQ95	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ95	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	
JDQ95	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 7:19 PM	

Method: VOA_Low_Med

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ50	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Bromomethane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ50	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Silane, methoxytrimethyl -	Validation Level		S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ50	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:47 PM	
JDQ54	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:48 PM	
JDQ54MS	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MS	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	cis-1,2-	Validation	S3VE	S4VEM	Raymond	6/28/11 4:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MS	Water	Dichloroethene	Level	S3VE	S4VEM	Wu	6/28/11 4:49 PM	
JDQ54MS	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MS	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:49 PM	
JDQ54MSD	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Dichlorodifluoro	Validation	S3VE	S4VEM	Raymond	6/28/11 4:50 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ54MSD	Water	methane	Level	S3VE	S4VEM	Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ54MSD	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:50 PM	
JDQ55	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ55	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ55	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:51 PM	
JDQ56	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ56	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ56	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:53 PM	
JDQ58	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ58	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Silane, methoxytrimethyl-	Validation Level		S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ58	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 4:55 PM	
JDQ60	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ60	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Trichloroethene	Validation	S3VE	S4VEM	Raymond	6/28/11 6:31 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ60	Water	Trichloroethene	Level	S3VE	S4VEM	Wu	6/28/11 6:31 PM	
JDQ60	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ60	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:31 PM	
JDQ62	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Chloroethane	Validation	S3VE	S4VEM	Raymond	6/28/11 6:33 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ62	Water	Chloroethane	Level	S3VE	S4VEM	Wu	6/28/11 6:33 PM	
JDQ62	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ62	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:33 PM	
JDQ64	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	o-Xylene	Validation	S3VE	S4VEM	Raymond	6/28/11 6:34 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ64	Water	o-Xylene	Level	S3VE	S4VEM	Wu	6/28/11 6:34 PM	
JDQ64	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ64	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:34 PM	
JDQ66	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Dichlorodifluoro	Validation	S3VE	S4VEM	Raymond	6/28/11 6:35 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ66	Water	methane	Level	S3VE	S4VEM	Wu	6/28/11 6:35 PM	
JDQ66	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Silane, methoxytrimethyl-	Validation Level		S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ66	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:35 PM	
JDQ68	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ68	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Silane, methoxytrimethyl-	Validation Level		S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ68	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:37 PM	
JDQ78	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ78	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:38 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ78	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Silane, methoxytrimethyl-	Validation Level		S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ78	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:38 PM	
JDQ80	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ80	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Bromomethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 12:54 PM	
JDQ80	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Silane, methoxytrimethyl-	Validation Level		S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ80	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:39 PM	
JDQ82	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:41 PM	
JDQ82	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:41 PM	
JDQ82	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:41 PM	
JDQ82	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:41 PM	
JDQ84	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ84	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ84	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Silane, methoxytrimethyl-	Validation Level		S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ84	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:43 PM	
JDQ86	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ86	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ86	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:44 PM	
JDQ94	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ94	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Trichloroethene	Validation	S3VE	S4VEM	Raymond	6/28/11 6:45 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ94	Water	Trichloroethene	Level	S3VE	S4VEM	Wu	6/28/11 6:45 PM	
JDQ94	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ94	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:45 PM	
JDQ95	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Chlorobenzene	Validation	S3VE	S4VEM	Raymond	6/28/11 6:47 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ95	Water	Chlorobenzene	Level	S3VE	S4VEM	Wu	6/28/11 6:47 PM	
JDQ95	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ95	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:47 PM	
JDQ96	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,3-	Validation	S3VE	S4VEM	Raymond	6/28/11 6:48 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ96	Water	Dichlorobenzene	Level	S3VE	S4VEM	Wu	6/28/11 6:48 PM	
JDQ96	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Bromomethane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ96	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:48 PM	
JDQ97	Water	1,1,1-	Validation	S3VE	S4VEM	Raymond	6/28/11 6:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ97	Water	Trichloroethane	Level	S3VE	S4VEM	Wu	6/28/11 6:49 PM	
JDQ97	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Bromomethane	Validation Flag	UJ	UJK	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Methylcyclohexa	Validation	S3VE	S4VEM	Raymond	6/28/11 6:49 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ97	Water	ne	Level	S3VE	S4VEM	Wu	6/28/11 6:49 PM	
JDQ97	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Silane, methoxytrimethyl -	Validation Level		S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ97	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:49 PM	
JDQ98	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	2-Butanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ98	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methyl acetate	Validation Flag	U	UJK	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methylene chloride	Validated Result	4.2	5.0	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methylene chloride	Validation Flag	J	U	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	
JDQ98	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/28/11 6:51 PM	

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MEMORANDUM

DATE: July 5, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 16 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analyses for volatile organic compounds and semivolatile organic compounds (EPA CLP SOW SOM01.2) were performed by KAP Technologies, Inc., The Woodlands, Texas.

The samples were numbered:

JDQ51	JDQ57	JDQ59	JDQ61	JDQ63	JDQ65
JDQ67	JDQ69	JDQ72	JDQ73	JDQ76	JDQ77
JDQ79	JDQ81	JDQ83	JDQA3		

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Date: June 21, 2011

Reply to:
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Volatile Organic (VOC) and Semivolatile Organic (SVOC) analyses of soil samples collected from the Camp Bonneville SI Site
Case Number: 41270 SDG: JDQ51

From: Raymond Wu, QA Chemist 6/21/11
Office of Environmental Assessment (OEA - 095), USEPA Region 10

To: Monica Tonel, Task Monitor
Office of Environmental Clean-up (ECL – 112), USEPA Region 10

CC: Renee Nordeen,
Project Manager, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 16 soil samples collected from the above referenced site has been completed. These samples were analyzed for VOA & SVOC in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2) by KAP Technologies, located in The Woodlands, Texas.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Camp Bonneville (in Vancouver, Washington) dated April 2011, the technical specifications of USEPA CLP SOW for Organic Data Review, the Contract Laboratory Program's National Functional Guidelines for Organic Data Review and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Sample Index Table found at the end of this report.

The conclusions presented herein are based on the information provided for the review.

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I. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Please find them in the "Sample Summary Report Section" of this report.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the data in addition to the above data qualifiers when necessary to allow for data analysis and interpretation using Pre-Score software calculations for National Priority Listing Hazard Rankling Scoring (NPL-HRS).

Bias Qualifiers		
	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

II. DATA REVIEW

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
1	X			Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	X			Requested analytical methods were performed and the analysis dates are present.
3	X			Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4	X			Requested target analyte result units are reported
5	X			Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	X			Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	X			Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
8	X			Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	X			Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	X			Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	X			Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	X			Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).
13	X			Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract
				Stage 2A – Data Validation QC Data
14	X			method blanks
15	X			surrogate recoveries/deuterated monitoring compounds (DMC) recoveries
16	X			laboratory control sample (LCS) recoveries
17	X			matrix spike and matrix spike duplicate recoveries

18			X	serial dilutions
19			X	post digestion spikes
20	X			standard reference materials
21		X		equipment blanks
22	X			trip blanks

Stage 2B – Data Validation

Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.

	Verified		N/A	QC Procedure or Check
	YES	NO		
23	X			Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, tbe associated percent recovery (or percent difference, as appropriate) is present.
24	X			Appropriate number and concentration of initial calibration standards are present.
25	X			Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26				Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27	X			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).
28	X			Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	Verified		N/A	QC Procedure or Check
	YES	NO		
29	X			Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, DDT/Endrin breakdowns, inter-element correction factors, and Florisil cartridge checks).
30	X			Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).

31	X			Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	X			Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	X			Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.
34	X			Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	X			Recalculation of percent ratios for each (or selected) tune from the instrument response, as appropriate.
36	X			Compliance check of recalculated percent ratio for each (or selected) tune from the instrument response.
37	X			Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	X			Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	X			Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	X			Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	X			Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation

Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.

	Verified		N/A	QC Procedure or Check
	YES	NO		
42	X			All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	X			Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	X			Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.

Note: Selection of instrument outputs for the Stage 4 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including, but not limited to, the type of verification and validation being performed (electronic or manual), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Attachments:

Sample Index Table:

Sample Summary Report
Electronic Data Review Results (Report #3)
Analytical Sample Listing (Report #6)
Identification Summary for Single & Multi Component Analytes (Report #11)

Sample Summary Report

Case No:	41270	Contract:	EPW11031	SDG No:	JDQ51	Lab Code:	KAP
Sample Number:	JDQ51	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	BG01SB	pH:	5.1	Sample Date:	05/17/2011	Sample Time:	09:33:00
% Moisture :	41			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	21	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	21	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	210	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Methylcyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	21	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	21	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	11	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ51	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	BG01SB	pH:	5.1	Sample Date:	05/17/2011	Sample Time:	09:33:00
% Moisture :	41			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	290	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	290	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	290	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	290	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	290	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	560	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	290	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ51MS	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location:	pH: 5.1	Sample Date: 05/17/2011	Sample Time: 09:33:00
% Moisture : 41		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	2400	UG/KG	1.0			Yes	S4VEM
Benzaldehyde	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	2300	UG/KG	1.0			Yes	S4VEM
N-Nitroso-di-n-propylamine	1800	UG/KG	1.0			Yes	S4VEM
Bis(2-chloroethyl)ether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	2500	UG/KG	1.0			Yes	S4VEM
Acenaphthene	1700	UG/KG	1.0			Yes	S4VEM
2-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	2600	UG/KG	1.0			Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	290	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	1700	UG/KG	1.0			Yes	S4VEM
4-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	2500	UG/KG	1.0			Yes	S4VEM
Pyrene	1600	UG/KG	1.0			Yes	S4VEM
Hexachloroethane	290	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	290	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	290	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	560	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	290	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ51MS	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location:	pH: 5	Sample Date: 05/17/2011	Sample Time: 09:33:00
% Moisture : 41		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	79	UG/KG	1.0			Yes	S4VEM
Dichlorodifluoromethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	75	UG/KG	1.0			Yes	S4VEM
Vinyl chloride	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Trichloroethene	74	UG/KG	1.0			Yes	S4VEM
Toluene	84	UG/KG	1.0			Yes	S4VEM
Bromomethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	92	UG/KG	1.0			Yes	S4VEM
Trichlorofluoromethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	19	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	9.4	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	190	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexane	9.4	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichloromethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	19	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	9.4	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	9.4	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ51MSD	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location:	pH: 5.1	Sample Date: 05/17/2011	Sample Time: 09:33:00
% Moisture : 41		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	2500	UG/KG	1.0			Yes	S4VEM
Benzaldehyde	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	2300	UG/KG	1.0			Yes	S4VEM
N-Nitroso-di-n-propylamine	1700	UG/KG	1.0			Yes	S4VEM
Bis(2-chloroethyl)ether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	2500	UG/KG	1.0			Yes	S4VEM
Acenaphthene	1700	UG/KG	1.0			Yes	S4VEM
2-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	2700	UG/KG	1.0			Yes	S4VEM
2,4-Dinitrotoluene	1700	UG/KG	1.0			Yes	S4VEM
Acetophenone	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	2700	UG/KG	1.0			Yes	S4VEM
Pyrene	1600	UG/KG	1.0			Yes	S4VEM
Hexachloroethane	290	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	290	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	290	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	560	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	290	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ51MSD	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location:	pH: 5	Sample Date: 05/17/2011	Sample Time: 09:33:00
% Moisture : 41		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	77	UG/KG	1.0			Yes	S4VEM
Chloromethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	79	UG/KG	1.0			Yes	S4VEM
Vinyl chloride	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Trichloroethene	81	UG/KG	1.0			Yes	S4VEM
Bromomethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	86	UG/KG	1.0			Yes	S4VEM
Chlorobenzene	96	UG/KG	1.0			Yes	S4VEM
Chloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	20	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	9.9	UG/KG	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	200	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	9.9	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichloromethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	20	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ57	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF01SB	pH: 5.0	Sample Date: 05/16/2011	Sample Time: 11:40:00
% Moisture : 32		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	250	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	250	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	250	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	250	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	250	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	480	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	250	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	480	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	480	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	480	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	480	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	480	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	250	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	480	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	250	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	110	UG/KG	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	110	UG/KG	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ57	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	LF01SB	pH:	5.0	Sample Date:	05/16/2011	Sample Time:	11:40:00
% Moisture :	32			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	22	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	220	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	11	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	11	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ59	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	LF02SB	pH:	5.5	Sample Date:	05/16/2011	Sample Time:	12:35:00
% Moisture :	45			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	310	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	310	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	310	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	310	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	310	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	310	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	310	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	310	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	310	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	310	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	590	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	310	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	310	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	310	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	310	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	310	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	310	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	310	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	310	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	400	UG/KG	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	400	UG/KG	1.0			Yes	S4VEM
Di-n-octylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	310	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
1-Heptadecanol			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ59	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF02SB	pH: 5.5	Sample Date: 05/16/2011	Sample Time: 12:35:00
% Moisture : 45		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	14	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	14	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	14	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	14	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	14	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	28	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	14	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	14	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	14	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	14	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	14	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	14	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	28	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	14	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	14	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	14	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	14	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	280	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	14	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	14	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	14	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	14	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	14	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	28	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	14	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	14	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	28	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	14	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	14	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	14	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	14	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	14	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	14	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	14	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	14	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ61	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF03SB	pH: 5.2	Sample Date: 05/16/2011	Sample Time: 14:03:00
% Moisture : 33		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	7.5	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	7.5	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	15	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	7.5	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	150	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	7.5	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	7.5	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	7.5	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ61	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	LF03SB	pH:	5.2	Sample Date:	05/16/2011	Sample Time:	14:03:00
% Moisture :	33			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	250	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	250	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	250	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	250	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	250	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	490	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	250	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	490	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	490	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	490	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	490	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	490	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	250	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	490	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	250	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	130	UG/KG	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	130	UG/KG	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ63	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	LF04SB	pH:	4.7	Sample Date:	05/16/2011	Sample Time:	14:32:00
% Moisture :	36			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	22	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	220	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	11	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chlorohenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	11	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ63	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF04SB	pH: 4.7	Sample Date: 05/16/2011	Sample Time: 14:32:00
% Moisture : 36		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	260	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	260	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	260	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	260	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	260	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	260	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	260	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	510	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	260	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	260	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	510	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	510	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	510	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	260	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	510	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	510	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	260	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	260	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	260	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	510	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	260	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	260	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	260	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	260	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	260	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	1600	UG/KG	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1600	UG/KG	1.0			Yes	S4VEM
Di-n-octylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	260	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Cyclotetradecane			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ65	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	LF05SB	pH:	4.8	Sample Date:	05/16/2011	Sample Time:	15:05:00
% Moisture :	43			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	300	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	300	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	300	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	300	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	300	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	580	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	300	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	300	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	580	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	580	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	580	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	300	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	580	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	580	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	300	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	300	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	580	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	1200	UG/KG	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1200	UG/KG	1.0			Yes	S4VEM
Di-n-octylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Trichloroacetic acid, hexadecyl ester			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ65	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	LF05SB	pH:	4.8	Sample Date:	05/16/2011	Sample Time:	15:05:00
% Moisture :	43			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	7.8	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	7.8	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	16	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	7.8	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	160	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	7.8	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Ethylhenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	7.8	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	7.8	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ67	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	LF06SB	pH:	5.1	Sample Date:	05/16/2011	Sample Time:	15:34:00
% Moisture :	28			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	240	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	240	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	240	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	240	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	240	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	240	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	240	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	240	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	240	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	240	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	240	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	240	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	240	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	240	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	240	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	240	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	240	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	240	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	240	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	240	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	240	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	240	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	240	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	240	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	240	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	240	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	240	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	460	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	240	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	240	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	240	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	460	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	240	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	460	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	460	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	240	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	240	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	240	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	240	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	240	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	460	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	460	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	240	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	240	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	240	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	240	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	240	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	460	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	240	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	240	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	240	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	240	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	240	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	240	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	240	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	240	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	240	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	240	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	240	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	240	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	240	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	240	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	240	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	240	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	240	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	240	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	240	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	240	UG/KG	1.0	U	U	Yes	S4VEM
7-Hexadecene, (Z)-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ67	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF06SB	pH: 5.1	Sample Date: 05/16/2011	Sample Time: 15:34:00
% Moisture : 28		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	8.3	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	8.3	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	17	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	8.3	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	17	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	170	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	8.3	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	17	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	17	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	8.3	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	8.3	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ69	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF07SB	pH: 4.8	Sample Date: 05/17/2011	Sample Time: 10:52:00
% Moisture : 38		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	9.6	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	9.6	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	19	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	9.6	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	190	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	9.6	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ69	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF07SB	pH: 4.8	Sample Date: 05/17/2011	Sample Time: 10:52:00
% Moisture : 38		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	270	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	270	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	270	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	270	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	530	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	270	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	270	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	530	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	530	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	530	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	270	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	530	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	530	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	270	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	270	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	530	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	270	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	270	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Total Alkanes			1.0	J		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ72	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF08SB	pH: 5.0	Sample Date: 05/17/2011	Sample Time: 11:32:00
% Moisture : 47		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	320	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	320	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	320	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	320	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	320	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	320	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	620	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	320	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	320	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	620	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	620	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	620	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	320	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	620	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	620	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	320	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	320	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	320	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	620	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	320	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	320	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	320	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	320	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	320	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	140	UG/KG	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	140	UG/KG	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	320	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Thunbergol			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ72	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	LF08SB	pH:	5.0	Sample Date:	05/17/2011	Sample Time:	11:32:00
% Moisture :	47			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	11	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	22	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	220	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	11	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	11	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ73	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	LF09SB	pH:	5.3	Sample Date:	05/17/2011	Sample Time:	13:43:00
% Moisture :	41			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	290	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	290	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	290	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	290	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	560	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	290	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Heptadecane, 2,6,10,15-tetramethyl-			1.0	NJ		Yes	S4VEM
Total Alkanes			1.0	J		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ73	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF09SB	pH: 5.3	Sample Date: 05/17/2011	Sample Time: 13:43:00
% Moisture : 41		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	9.6	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	9.6	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	19	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	14	UG/KG	1.0	B	U	Yes	S4VEM
trans-1,2-Dichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	190	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	9.6	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	19	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	9.6	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	9.6	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ76	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF01SD	pH: 5.3	Sample Date: 05/18/2011	Sample Time: 08:55:00
% Moisture : 37		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	270	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	270	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	270	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	270	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	520	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	270	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	270	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	520	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	520	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	520	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	270	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	520	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	520	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	270	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	270	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	520	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	270	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	270	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Phenol, 4,4'-(1-methylethylidene)bis-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ76	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF01SD	pH: 5.3	Sample Date: 05/18/2011	Sample Time: 08:55:00
% Moisture : 37		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	8.6	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	8.6	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	17	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	B	U	Yes	S4VEM
trans-1,2-Dichloroethene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	17	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	170	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	8.6	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	17	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	17	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	8.6	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	8.6	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ77	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: PP01SD	pH: 6.4	Sample Date: 05/18/2011	Sample Time: 09:11:00
% Moisture : 31		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	8.2	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	8.2	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	16	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	13	UG/KG	1.0	B	U	Yes	S4VEM
trans-1,2-Dichloroethene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	160	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	8.2	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	8.2	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	8.2	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ77	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: PP01SD	pH: 6.4	Sample Date: 05/18/2011	Sample Time: 09:11:00
% Moisture : 31		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	250	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	250	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	250	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	250	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	480	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	250	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	480	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	480	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	480	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	480	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	480	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	250	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	480	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	250	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	1900	UG/KG	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1900	UG/KG	1.0			Yes	S4VEM
Di-n-octylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexadecane			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ79	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: LF12SB	pH: 5.3	Sample Date: 05/17/2011	Sample Time: 15:11:00
% Moisture : 39		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	10	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	10	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	10	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	10	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	10	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	20	UG/KG	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	10	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	10	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	10	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	10	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	10	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	10	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	10	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	10	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	10	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	10	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	200	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	10	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	10	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	10	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	10	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	10	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	10	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	10	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	20	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	10	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	10	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	10	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	10	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	10	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	10	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	10	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	10	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ79	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF12SB	pH: 5.3	Sample Date: 05/17/2011	Sample Time: 15:11:00
% Moisture : 39		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	280	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	280	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	280	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	280	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	280	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	280	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	280	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	280	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	280	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	280	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	280	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	280	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	280	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	280	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	280	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	280	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	280	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	280	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	280	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	280	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	280	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	280	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	280	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	280	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	280	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	280	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	280	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	540	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	280	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	280	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	280	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	540	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	280	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	540	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	540	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	280	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	280	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	280	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	280	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	280	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	540	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	540	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	280	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	280	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	280	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	280	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	280	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	540	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	280	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	280	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	280	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	280	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	280	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	280	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	280	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	280	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	280	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	280	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	280	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	280	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	280	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	280	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	280	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	280	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	280	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	280	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	280	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	280	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ81	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	LF13SB	pH:	4.7	Sample Date:	05/17/2011	Sample Time:	15:38:00
% Moisture :	51			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	15	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	15	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	450	UG/KG	1.0		JK	Yes	S4VEM
Carbon disulfide	15	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	15	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	15	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	30	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	15	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	15	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	300	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	15	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	15	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	15	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	30	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	15	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	30	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	15	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	15	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	15	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQ81	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: LF13SB	pH: 4.7	Sample Date: 05/17/2011	Sample Time: 15:38:00
% Moisture : 51		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	340	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	340	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	340	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	340	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	340	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	340	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	340	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	340	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	340	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	340	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	340	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	340	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	340	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	340	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	340	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	340	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	340	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	340	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	340	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	340	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	340	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	340	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	340	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	340	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	340	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	340	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	340	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	670	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	340	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	340	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	340	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	670	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	340	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	670	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	670	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	340	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	340	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	340	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	340	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	340	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	670	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	670	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	340	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	340	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	340	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	340	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	340	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	670	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	340	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	340	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	340	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	340	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	340	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	340	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	340	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	340	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	340	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	340	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	1400	UG/KG	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	1400	UG/KG	1.0			Yes	S4VEM
Di-n-octylphthalate	340	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	340	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	340	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	340	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	340	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	340	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	340	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	340	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ83	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	LF14SB	pH:	4.8	Sample Date:	05/17/2011	Sample Time:	15:58:00
% Moisture :	36			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	8.1	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	8.1	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	140	UG/KG	1.0		JK	Yes	S4VEM
Carbon disulfide	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	8.1	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	160	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	8.1	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	16	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	4.9	UG/KG	1.0	J	JQ	Yes	S4VEM
trans-1,3-Dichloropropene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	16	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	8.1	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	8.1	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQ83	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	LF14SB	pH:	4.8	Sample Date:	05/17/2011	Sample Time:	15:58:00
% Moisture :	36			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	270	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	270	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	270	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	270	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	270	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	270	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	520	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	270	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	270	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	520	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	520	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	520	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	270	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	270	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	520	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	520	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	270	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	270	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	270	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	270	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	520	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	270	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	270	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	270	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	270	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	270	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	270	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	270	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP

Sample Number:	JDQA3	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	BG01SD	pH:	6.2	Sample Date:	05/18/2011	Sample Time:	10:42:00
% Moisture :	69			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	550	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	550	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	550	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	550	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	550	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	550	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	550	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	550	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	550	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	550	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	550	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	550	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	550	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	550	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	550	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	550	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	550	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	550	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	550	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	550	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	550	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	550	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	550	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	550	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	550	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	550	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	550	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	1100	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	550	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	550	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	550	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	1100	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	550	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	1100	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	1100	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	550	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	550	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	550	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	550	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	550	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	1100	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	1100	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	550	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	550	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	550	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	550	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	550	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	1100	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	550	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	550	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	550	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	550	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	550	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	550	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	550	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	550	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	550	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	550	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	550	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	550	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	550	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	550	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	550	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	550	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	550	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	550	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	550	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	550	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ51	Lab Code: KAP
Sample Number: JDQA3	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: BG01SD	pH: 6.2	Sample Date: 05/18/2011	Sample Time: 10:42:00
% Moisture : 69		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	22	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	22	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	13	UG/KG	1.0	J	JQ	Yes	S4VEM
Chloroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	22	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	470	UG/KG	1.0		JK	Yes	S4VEM
Carbon disulfide	22	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	22	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	22	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	22	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	22	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	22	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	45	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	22	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.4	UG/KG	1.0	J	JQ	Yes	S4VEM
1,1,1-Trichloroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	22	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	22	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	450	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichloroethene	22	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	22	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	22	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	22	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	22	UG/KG	1.0	J	U	Yes	S4VEM
Toluene	9.7	UG/KG	1.0	J	JQ	Yes	S4VEM
trans-1,3-Dichloropropene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	22	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	45	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	22	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	22	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	22	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	22	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	22	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	22	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	22	UG/KG	1.0	U	U	Yes	S4VEM

National Functional Guidelines Report # 3

4:37 Thu, Jun 9, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Data Review Results

Blanks

Blanks	**VOA_LOW_MED**
VLB11	The following volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated method blank common contaminant concentration is less than 2x the concentration criteria Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrationshave been elevated to the CRQL.
	Methylene chloride JDQ51MS, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, JDQ73, JDQ76, JDQ77
Blanks	**VOA_LOW_MED**
VLB46	The following volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated storage blank common contaminant concentration is less than 2x the concentration criteria Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.
	Methylene chloride JDQ51MS, JDQ51MSD, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, JDQ73, JDQ76, JDQ77

National Functional Guidelines Report # 3

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Data Review Results

DMC/Surrogate

DMC/Surrogate	**VOA_LOW_MED**
VDSS3	The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are not qualified.
	Chloroethane-d5 JDQA3
	Bromomethane, Carbon disulfide, Chloroethane, Chloromethane, Dichlorodifluoromethane
	Vinyl chloride-d3 JDQA3
	Vinyl chloride
DMC/Surrogate	**VOA_LOW_MED**
VDSS4	The following volatile samples have one or more DMC/SMC recovery values is less than the primary lower limit but greater than or equal to the expanded lower limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	1,4-Dioxane-d8 JDQ67, JDQ79, JDQ83
	1,4-Dioxane

National Functional Guidelines Report # 3

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Data Review Results

Detection Limit

Detection Limit	**BNA**
BDL1	The following semivolatile samples have analyte concentrations below the quantitaion limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	Bis (2-Ethylhexyl) phthalate JDQ57, JDQ61, JDQ72
Detection Limit	**VOA_LOW_MED**
VDL1	The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	JDQ51MS, JDQ51MSD, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, JDQ83, JDQA3, VHBLK01
	4-Methyl-2-pentanone JDQA3
	Toluene JDQ83, JDQA3
	Chloroform JDQA3
	Bromomethane JDQA3
	Methylene chloride JDQ51MS, JDQ51MSD, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, VHBLK01

National Functional Guidelines Report # 3

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Data Review Results

Initial Calibration

Initial Calibration	**VOA_LOW_MED**
VC6	The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detected compounds are qualified J. Nondetected compounds are not qualified. Use professional judgement to qualify non-detected compounds.
	JDQ51, JDQ51MS, JDQ51MSD, JDQ57, JDQ59, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, JDQ73, JDQ76, JDQ77, JDQ79, JDQ81, JDQ83, JDQA3, VBLKAB, VBLKAD, VBLKAF, VHBLK01
	Bromomethane VSTD2.5AB
	JDQ51, JDQ51MS, JDQ51MSD, JDQ57, JDQ59, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, JDQ73, JDQ76, JDQ77, JDQ79, JDQ81, JDQ83, JDQA3, VBLKAB, VBLKAD, VBLKAF, VHBLK01

National Functional Guidelines Report # 3

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Data Review Results

TIC

TIC	**BNA**
BTIC1	A library search indicates a match at or above 85% for a TIC compound in the semivolatile sample Detected compounds are qualified NJ. Nondetected compounds are not qualified.
	JDQ59, JDQ63, JDQ65, JDQ67, JDQ72, JDQ73, JDQ76, JDQ77
	000080-05-7 JDQ76
	000295-17-0 JDQ63
	000295-65-8 JDQ77
	001454-85-9 JDQ59
	025269-17-4 JDQ72
	035507-09-6 JDQ67
	054833-48-6 JDQ73
	074339-54-1 JDQ65
TIC	**BNA**
BTIC2	A library search indicates a match below 85% for a TIC compound in the semivolatile sample Detected compounds are qualified J. Nondetected compounds are not qualified.
	Unknown-01 JDQ51, JDQ57, JDQ59, JDQ61, JDQ63, JDQ65, JDQ67, JDQ72, JDQ73, JDQ77, JDQ79, JDQ81, JDQ83, JDQA3
	Unknown-02 JDQ59, JDQ63, JDQ65, JDQ67, JDQ72, JDQ77, JDQ81
	Unknown-03 JDQ81
TIC	**VOA_LOW_MED**
VTIC2	A library search indicates a match below 85% for a TIC compound in the volatile sample Detected compounds are qualified J. Nondetected compounds are not qualified.
	Unknown-01 JDQ51, JDQ57, JDQ59, JDQ61, JDQ63, JDQ65, JDQ67, JDQ69, JDQ72, JDQ73, JDQ76, JDQ77, JDQ79, JDQ81, JDQ83, JDQA3, VBLKAB, VBLKAD, VBLKAF
	Unknown-02 JDQ51, JDQ59, JDQ63, JDQ67, JDQ69, JDQ76, JDQ79, JDQ81, JDQA3, VBLKAF

National Functional Guidelines Report # 6

5:01 Thu, Jun 9, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Analytical Sample Listing

VOA_Low_Med

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date**	**Date/Time**	**GC Column**	**Intstrument**
JDQ51	Field_Sample	Soil	LOW	05/17/2011 09:33:00	05/18/2011 10:05:00			05/25/2011 17:14:00	RTX-VMS	A-5973
JDQ51MS	Matrix_Spike	Soil	LOW	05/17/2011 09:33:00	05/18/2011 10:05:00			05/26/2011 17:25:00	RTX-VMS	A-5973
JDQ51MSD	Matrix_Spike_Duplicate	Soil	LOW	05/17/2011 09:33:00	05/18/2011 10:05:00			05/27/2011 13:24:00	RTX-VMS	A-5973
JDQ57	Field_Sample	Soil	LOW	05/16/2011 11:40:00	05/18/2011 10:05:00			05/25/2011 17:45:00	RTX-VMS	A-5973
JDQ59	Field_Sample	Soil	LOW	05/16/2011 12:35:00	05/18/2011 10:05:00			05/25/2011 18:15:00	RTX-VMS	A-5973
JDQ61	Field_Sample	Soil	LOW	05/16/2011 14:03:00	05/18/2011 10:05:00			05/26/2011 10:46:00	RTX-VMS	A-5973
JDQ63	Field_Sample	Soil	LOW	05/16/2011 14:32:00	05/18/2011 10:05:00			05/26/2011 11:15:00	RTX-VMS	A-5973
JDQ65	Field_Sample	Soil	LOW	05/16/2011 15:05:00	05/18/2011 10:05:00			05/26/2011 11:49:00	RTX-VMS	A-5973
JDQ67	Field_Sample	Soil	LOW	05/16/2011 15:34:00	05/18/2011 10:05:00			05/26/2011 12:19:00	RTX-VMS	A-5973
JDQ69	Field_Sample	Soil	LOW	05/17/2011 10:52:00	05/18/2011 10:05:00			05/26/2011 12:49:00	RTX-VMS	A-5973
JDQ72	Field_Sample	Soil	LOW	05/17/2011 11:32:00	05/18/2011 10:05:00			05/26/2011 13:19:00	RTX-VMS	A-5973
JDQ73	Field_Sample	Soil	LOW	05/17/2011 13:43:00	05/19/2011 10:15:00			05/26/2011 18:25:00	RTX-VMS	A-5973
JDQ76	Field_Sample	Soil	LOW	05/18/2011 08:55:00	05/19/2011 10:15:00			05/26/2011 18:55:00	RTX-VMS	A-5973
JDQ77	Field_Sample	Soil	LOW	05/18/2011 09:11:00	05/19/2011 10:15:00			05/26/2011 19:25:00	RTX-VMS	A-5973
JDQ79	Field_Sample	Soil	LOW	05/17/2011 15:11:00	05/19/2011 10:15:00			05/27/2011 11:23:00	RTX-VMS	A-5973
JDQ81	Field_Sample	Soil	LOW	05/17/2011 15:38:00	05/19/2011 10:15:00			05/27/2011 11:53:00	RTX-VMS	A-5973
JDQ83	Field_Sample	Soil	LOW	05/17/2011 15:58:00	05/19/2011 10:15:00			05/27/2011 12:22:00	RTX-VMS	A-5973
JDQA3	Field_Sample	Soil	LOW	05/18/2011 10:42:00	05/19/2011 10:15:00			05/27/2011 12:53:00	RTX-VMS	A-5973

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5:01 Thu, Jun 9, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Analytical Sample Listing

BNA

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date**	**Date/Time**	**GC Column**	**Intstrument**
JDQ51	Field_Sample	SOIL	LOW	05/17/2011 09:33:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 17:19:00	RTX-5MS	D-5973
JDQ51MS	Matrix_Spike	SOIL	LOW	05/17/2011 09:33:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/06/2011 10:31:00	RTX-5MS	D-5973
JDQ51MSD	Matrix_Spike_Duplicate	SOIL	LOW	05/17/2011 09:33:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/06/2011 11:02:00	RTX-5MS	D-5973
JDQ57	Field_Sample	SOIL	LOW	05/16/2011 11:40:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 17:50:00	RTX-5MS	D-5973
JDQ59	Field_Sample	SOIL	LOW	05/16/2011 12:35:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 18:21:00	RTX-5MS	D-5973
JDQ61	Field_Sample	SOIL	LOW	05/16/2011 14:03:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 18:53:00	RTX-5MS	D-5973
JDQ63	Field_Sample	SOIL	LOW	05/16/2011 14:32:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 19:24:00	RTX-5MS	D-5973
JDQ65	Field_Sample	SOIL	LOW	05/16/2011 15:05:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 19:55:00	RTX-5MS	D-5973
JDQ67	Field_Sample	SOIL	LOW	05/16/2011 15:34:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 20:26:00	RTX-5MS	D-5973
JDQ69	Field_Sample	SOIL	LOW	05/17/2011 10:52:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 22:09:00	RTX-5MS	D-5973
JDQ72	Field_Sample	SOIL	LOW	05/17/2011 11:32:00	05/18/2011 10:05:00	Sonication	05/27/2011 13:10:00	06/04/2011 22:40:00	RTX-5MS	D-5973
JDQ73	Field_Sample	SOIL	LOW	05/17/2011 13:43:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/04/2011 23:12:00	RTX-5MS	D-5973
JDQ76	Field_Sample	SOIL	LOW	05/18/2011 08:55:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/04/2011 23:43:00	RTX-5MS	D-5973
JDQ77	Field_Sample	SOIL	LOW	05/18/2011 09:11:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/05/2011 00:14:00	RTX-5MS	D-5973
JDQ79	Field_Sample	SOIL	LOW	05/17/2011 15:11:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/05/2011 00:45:00	RTX-5MS	D-5973
JDQ81	Field_Sample	SOIL	LOW	05/17/2011 15:38:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/05/2011 01:16:00	RTX-5MS	D-5973
JDQ83	Field_Sample	SOIL	LOW	05/17/2011 15:58:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/05/2011 01:47:00	RTX-5MS	D-5973
JDQA3	Field_Sample	SOIL	LOW	05/18/2011 10:42:00	05/19/2011 10:15:00	Sonication	05/27/2011 13:10:00	06/05/2011 02:18:00	RTX-5MS	D-5973

National Functional Guidelines Report # 11

4:53 Thu, Jun 9, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ51 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123018 **SOW** SOM01.2

Identification Summary for Single & Multi Component Analytes

#byval1 Sample=#byval2

NONE FOUND

Edit History Report

Case No: 41270 Contract: EPW11031 SDG No: JDQ51 Lab Code: KAP

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:41 PM	
JDQ51MS	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,3,4,6-Tetrachloropheno	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MS	SOIL	l	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MS	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MS	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:42 PM	
JDQ51MSD	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MSD	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MSD	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ51MSD	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:43 PM	
JDQ57	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ57	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ57	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ57	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:44 PM	
JDQ59	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	1-Heptadecanol	Validation Level		S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ59	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ59	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ59	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:45 PM	
JDQ61	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ61	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ61	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:47 PM	
JDQ63	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ63	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ63	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Cyclotetradecane	Validation Level		S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ63	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:48 PM	
JDQ65	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ65	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ65	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ65	SOIL	Trichloroacetic acid, hexadecyl ester	Validation Level		S4VEM	Raymond Wu	6/21/11 12:50 PM	
JDQ67	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ67	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	7-Hexadecene, (Z)-	Validation Level		S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Hexachlorocyclopentadiene	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ67	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ67	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:51 PM	
JDQ69	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ69	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ69	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ69	SOIL	Total Alkanes	Validation Level		S4VEM	Raymond Wu	6/21/11 12:52 PM	
JDQ72	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ72	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ72	SOIL	Thunbergol	Validation Level		S4VEM	Raymond Wu	6/21/11 12:57 PM	
JDQ73	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ73	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ73	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Heptadecane, 2,6,10,15-tetramethyl-	Validation Level		S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ73	SOIL	Total Alkanes	Validation Level		S4VEM	Raymond Wu	6/21/11 12:59 PM	
JDQ76	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ76	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ76	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Phenol, 4,4'-(1-methylethylidene)bis-	Validation Level		S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ76	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:00 PM	
JDQ77	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ77	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Cyclohexadecane	Validation Level		S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ77	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ77	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:01 PM	
JDQ79	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ79	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ79	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:03 PM	
JDQ81	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ81	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ81	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ81	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:04 PM	
JDQ83	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2-Chloronaphthalen	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ83	SOIL	e	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ83	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQ83	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:06 PM	
JDQA3	SOIL	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQA3	SOIL	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQA3	SOIL	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	
JDQA3	SOIL	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 1:07 PM	

Method: VOA_Low_Med

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:14 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:14 AM	
JDQ51MS	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MS	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	trans-1,2-	Validation	S3VE	S4VEM	Raymond	6/21/11 12:24 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MS	Soil	Dichloroethene	Level	S3VE	S4VEM	Wu	6/21/11 12:24 PM	
JDQ51MS	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:24 PM	
JDQ51MSD	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Methyl tert-butyl	Validation	S3VE	S4VEM	Raymond	6/21/11 12:25 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ51MSD	Soil	ether	Level	S3VE	S4VEM	Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ51MSD	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:25 PM	
JDQ57	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Bromoform	Validation	S3VE	S4VEM	Raymond	6/21/11 11:16 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ57	Soil	Bromoform	Level	S3VE	S4VEM	Wu	6/21/11 11:16 AM	
JDQ57	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ57	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:16 AM	
JDQ59	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2-Dibromo-3-	Validation	S3VE	S4VEM	Raymond	6/21/11 11:17 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ59	Soil	chloropropane	Level	S3VE	S4VEM	Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	Vinyl chloride	Validation	S3VE	S4VEM	Raymond	6/21/11 11:17 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ59	Soil	Vinyl chloride	Level	S3VE	S4VEM	Wu	6/21/11 11:17 AM	
JDQ59	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ59	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:17 AM	
JDQ61	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Chloromethane	Validation	U	UJK	Raymond	6/21/11 11:19 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ61	Soil	Chloromethane	Flag	U	UJK	Wu	6/21/11 11:19 AM	
JDQ61	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ61	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:19 AM	
JDQ63	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	1,4-Dioxane	Validation	S3VE	S4VEM	Raymond	6/21/11 11:21 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ63	Soil	1,4-Dioxane	Level	S3VE	S4VEM	Wu	6/21/11 11:21 AM	
JDQ63	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ63	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:21 AM	
JDQ65	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,1,2,2-	Validation	S3VE	S4VEM	Raymond	6/21/11 11:23 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ65	Soil	Tetrachloroethane	Level	S3VE	S4VEM	Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ65	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ65	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:23 AM	
JDQ67	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,4-Dioxane	Validation Flag	UJ	UJK	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ67	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ67	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:37 AM	
JDQ69	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ69	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	cis-1,2-	Validation	S3VE	S4VEM	Raymond	6/21/11 11:38 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ69	Soil	Dichloroethene	Level	S3VE	S4VEM	Wu	6/21/11 11:38 AM	
JDQ69	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ69	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:38 AM	
JDQ72	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Chloromethane	Validation	S3VE	S4VEM	Raymond	6/21/11 11:53 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ72	Soil	Chloromethane	Level	S3VE	S4VEM	Wu	6/21/11 11:53 AM	
JDQ72	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ72	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:53 AM	
JDQ73	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	2-Butanone	Validation	S3VE	S4VEM	Raymond	6/21/11 11:59 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ73	Soil	2-Butanone	Level	S3VE	S4VEM	Wu	6/21/11 11:59 AM	
JDQ73	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Methylene chloride	Validated Result	9.6	14	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ73	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 11:59 AM	
JDQ76	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,1,2,2-	Validation	S3VE	S4VEM	Raymond	6/21/11 12:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ76	Soil	Tetrachloroethane	Level	S3VE	S4VEM	Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ76	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Methylene chloride	Validated Result	8.6	11	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ76	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:08 PM	
JDQ77	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ77	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Methylene chloride	Validated Result	8.2	13	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ77	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:13 PM	
JDQ79	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ79	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,4-Dioxane	Validation Flag	UJ	UJK	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Acetone	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Toluene	Validation	S3VE	S4VEM	Raymond	6/21/11 12:16 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ79	Soil	Toluene	Level	S3VE	S4VEM	Wu	6/21/11 12:16 PM	
JDQ79	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ79	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:16 PM	
JDQ81	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Acetone	Validation Flag		JK	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Carbon disulfide	Validation	S3VE	S4VEM	Raymond	6/21/11 12:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ81	Soil	Carbon disulfide	Level	S3VE	S4VEM	Wu	6/21/11 12:18 PM	
JDQ81	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ81	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:18 PM	
JDQ83	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2-	Validation	S3VE	S4VEM	Raymond	6/21/11 12:20 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ83	Soil	Dichloroethane	Level	S3VE	S4VEM	Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,4-Dioxane	Validation Flag	UJ	UJK	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Acetone	Validation Flag		JK	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Bromomethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	Vinyl chloride	Validation	S3VE	S4VEM	Raymond	6/21/11 12:20 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ83	Soil	Vinyl chloride	Level	S3VE	S4VEM	Wu	6/21/11 12:20 PM	
JDQ83	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQ83	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:20 PM	
JDQA3	Soil	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	4-Methyl-2-pentanone	Validated Result	11	22	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	4-Methyl-2-pentanone	Validation Flag	J	U	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Acetone	Validation Flag		JK	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Bromomethane	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Carbon	Validation	S3VE	S4VEM	Raymond	6/21/11 12:23 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQA3	Soil	tetrachloride	Level	S3VE	S4VEM	Wu	6/21/11 12:23 PM	
JDQA3	Soil	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Chloroform	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Chloromethane	Validation Flag	U	UJK	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Toluene	Validation Flag	J	JQ	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	
JDQA3	Soil	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/21/11 12:23 PM	

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MEMORANDUM

DATE: July 5, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 8 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analyses for volatile organic compounds and semivolatile organic compounds (EPA CLP SOW SOM01.2) were performed by KAP Technologies, Inc., The Woodlands, Texas.

The samples were numbered:

JDQ52 JDQ87 JDQ88 JDQ89 JDQ90 JDQ91 JDQ92 JDQ93

The following discrepancy was noted. The bias qualifier "K" was inadvertently not applied for 1,1,2,2-tetrachloroethane in several samples. The report was revised by the original validator.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Date: June 24, 2011

Reply to:
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Volatile Organic (VOC) and Semivolatile Organic (SVOC) analyses of water samples collected from the Camp Bonneville SI Site
Case Number: 41270 SDG: JDQ52

From: Raymond Wu, QA Chemist 6/24/11
Office of Environmental Assessment (OEA - 095), USEPA Region 10

To: Monica Tonel, Task Monitor
Office of Environmental Clean-up (ECL – 112), USEPA Region 10

CC: Renee Nordeen,
Project Manager, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 8 water samples collected from the above referenced site has been completed. These samples were analyzed for VOA & SVOC in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2) by KAP Technologies, located in The Woodlands, Texas.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Camp Bonneville (in Vancouver, Washington) dated April 2011, the technical specifications of USEPA CLP SOW for Organic Data Review, the Contract Laboratory Program's National Functional Guidelines for Organic Data Review and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified based on the professional judgment of the reviewer.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Sample Index Table found at the end of this report.

The conclusions presented herein are based on the information provided for the review.

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I. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Please find them in the "Sample Summary Report Section" of this report.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the data in addition to the above data qualifiers when necessary to allow for data analysis and interpretation using Pre-Score software calculations for National Priority Listing Hazard Rankling Scoring (NPL-HRS).

Bias Qualifiers		
	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

II. DATA REVIEW

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
1	X			Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	X			Requested analytical methods were performed and the analysis dates are present.
3	X			Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4	X			Requested target analyte result units are reported
5	X			Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	X			Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	X			Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
8	X			Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	X			Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	X			Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	X			Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	X			Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).
13	X			Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract
				Stage 2A – Data Validation QC Data
14	X			method blanks
15	X			surrogate recoveries/deuterated monitoring compounds (DMC) recoveries
16	X			laboratory control sample (LCS) recoveries
17	X			matrix spike and matrix spike duplicate recoveries

18			X	serial dilutions
19			X	post digestion spikes
20	X			standard reference materials
21		X		equipment blanks
22	X			trip blanks

Stage 2B – Data Validation

Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.

	Verified		N/A	QC Procedure or Check
	YES	NO		
23	X			Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, the associated percent recovery (or percent difference, as appropriate) is present.
24	X			Appropriate number and concentration of initial calibration standards are present.
25	X			Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26				Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27	X			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).
28	X			Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	Verified		N/A	QC Procedure or Check
	YES	NO		
29	X			Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, DDT/Endrin breakdowns, inter-element correction factors, and Florisil cartridge checks).
30	X			Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).

31	X			Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	X			Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	X			Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.
34	X			Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	X			Recalculation of percent ratios for each (or selected) tune from the instrument response, as appropriate.
36	X			Compliance check of recalculated percent ratio for each (or selected) tune from the instrument response.
37	X			Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	X			Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	X			Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	X			Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	X			Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation

Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.

	Verified		N/A	QC Procedure or Check
	YES	NO		
42	X			All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	X			Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	X			Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.

Note: Selection of instrument outputs for the Stage 4 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including, but not limited to, the type of verification and validation being performed (electronic or manual), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Attachments:

Sample Index Table:

Sample Summary Report
Electronic Data Review Results (Report #3)
Analytical Sample Listing (Report #6)
Identification Summary for Single & Multi Component Analytes (Report #11)

Sample Summary Report

Case No:	41270	Contract:	EPW11031	SDG No:	JDQ52	Lab Code:	KAP
Sample Number:	JDQ52	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	BG02GW	pH:	5.0	Sample Date:	05/20/2011	Sample Time:	15:11:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)phthalate	13	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ52	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: BG02GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 15:11:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ87	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW02GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 12:20:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ87	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW02GW	pH: 5.2	Sample Date: 05/20/2011	Sample Time: 12:20:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ88	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW03GW	pH: 4.8	Sample Date: 05/20/2011	Sample Time: 13:35:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	2.6	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	2.6	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ88	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW03GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 13:35:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ89	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW04GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 17:00:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ89	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW04GW	pH: 4.5	Sample Date: 05/20/2011	Sample Time: 17:00:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	4.6	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	4.6	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ90	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW05GW	pH: 2	Sample Date: 05/20/2011	Sample Time: 18:20:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ90	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW05GW	pH: 4.8	Sample Date: 05/20/2011	Sample Time: 18:20:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	7.7	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	7.7	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ91	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW06GW	pH: 5.2	Sample Date: 05/21/2011	Sample Time: 11:58:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	4.4	UG/L	1.0	J	JQ	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	4.4	UG/L	1.0	J	JQ	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ91	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW06GW	pH: 2	Sample Date: 05/21/2011	Sample Time: 11:58:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	19	UG/L	1.0			Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	3.7	UG/L	1.0	J	JQ	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	44	UG/L	1.0			Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	15	UG/L	1.0			Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	8.1	UG/L	1.0			Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ92	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW07GW	pH: 6.9	Sample Date: 05/21/2011	Sample Time: 13:15:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	78	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	78	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ92	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW07GW	pH: 2	Sample Date: 05/21/2011	Sample Time: 13:15:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ93	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: MW08GW	pH: 2	Sample Date: 05/21/2011	Sample Time: 13:30:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	14	UG/L	1.0			Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	UJK	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ		Yes	S4VEM

Case No: 41270	Contract: EPW11031	SDG No: JDQ52	Lab Code: KAP
Sample Number: JDQ93	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: MW08GW	pH: 5.0	Sample Date: 05/21/2011	Sample Time: 13:30:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	7.6	UG/L	1.0			Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	7.6	UG/L	1.0			Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

National Functional Guidelines Report # 3

10:27 Fri, Jun 17, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Data Review Results

Blanks

Blanks	**VOA_LOW_MED**
VLB11	The following volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated method blank common contaminant concentration is less than 2x the concentration criteria Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrationshave been elevated to the CRQL.
	Methylene chloride JDQ52MSD
Blanks	**VOA_LOW_MED**
VLB46	The following volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated storage blank common contaminant concentration is less than 2x the concentration criteria Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.
	Methylene chloride JDQ52MSD, JDQ89, JDQ90, JDQ91, JDQ93

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Data Review Results

Continuing Calibration Verification

Continuing Calibration Verification	**BNA**
BC10	The following semivolatile samples are associated with incorrect initial calibration sequence. Detected compounds are qualified J. Nondetected compounds are qualified UJ. Use professional judgment to qualify the data.
	SBLK03
	Benzo (b) fluoranthene SSTD02075
	SBLK03
Continuing Calibration Verification	**VOA_LOW_MED**
VC8	The following volatile samples are associated with an opening or closing CCV percent difference (%D) outside criteria. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	JDQ52, JDQ87, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93, VBLK2J
	1,1,2,2-Tetrachloroethane VSTD0502J
	JDQ52, JDQ87, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93, VBLK2J

National Functional Guidelines Report # 3

10:27 Fri, Jun 17, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Data Review Results

DMC/Surrogate

DMC/Surrogate	**BNA**
BDSS15	The following semivolatile samples have deuterated monitoring compound recovery below the lower limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	JDQ52, JDQ52MS, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93
	Pyrene-d10 JDQ52MS
	Benzo(a)anthracene, Chrysene, Fluoranthene, Pyrene
	Phenol-d5 JDQ52, JDQ52MS, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93
	Benzaldehyde, Phenol
DMC/Surrogate	**VOA_LOW_MED**
VDSS3	The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are not qualified.
	1,1-Dichloroethene-d2 JDQ52MSD
	1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene
DMC/Surrogate	**VOA_LOW_MED**
VDSS4	The following volatile samples have one or more DMC/SMC recovery values is less than the primary lower limit but greater than or equal to the expanded lower limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	1,4-Dioxane-d8 JDQ52MSD
	1,4-Dioxane

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Data Review Results

Detection Limit

Detection Limit	**BNA**
BDL1	The following semivolatile samples have analyte concentrations below the quantitaion limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	Bis (2-Ethylhexyl) phthalate JDQ88, JDQ89, JDQ91
Detection Limit	**VOA_LOW_MED**
VDL1	The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	Methylene chloride JDQ52MSD, JDQ89, JDQ90, JDQ91, JDQ93, VBLK2N, VBLK56, VHBLK01
	1,1-Dichloroethene JDQ91

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Data Review Results

Initial Calibration

Initial Calibration	**VOA_LOW_MED**
VC6	The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. Detected compounds are qualified J. Nondetected compounds are not qualified. Use professional judgement to qualify non-detected compounds.
	JDQ52, JDQ52MS, JDQ52MSD, JDQ87, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93, VBLK2J, VBLK2N
	Bromomethane VSTD0052F
	JDQ52, JDQ52MS, JDQ52MSD, JDQ87, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93, VBLK2J, VBLK2N

Data Review Results

Matrix Spikes

Matrix Spikes	**BNA**
BMS2	The following semivolatile matrix spike/matrix spike duplicate samples have percent recoveries greater than the upper acceptance criteria. Detected compounds are qualified J. Nondetected compounds are not qualified.
	4-Nitrophenol JDQ52MS, JDQ52MSD
Matrix Spikes	**VOA_LOW_MED**
VMS2	The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria. Detected compounds are qualified J. Nondetected compounds are not qualified.
	Toluene JDQ52MS, JDQ52MSD
	Chlorobenzene JDQ52MS, JDQ52MSD
	Benzene JDQ52MS, JDQ52MSD
	Trichloroethene JDQ52MS, JDQ52MSD
Matrix Spikes	**VOA_LOW_MED**
VMS5	The following volatile matrix spike/matrix spike duplicate samples have percent recovery greater than or equal to the expanded lower acceptance limit but less than the primary lower acceptance limit Detected compounds are qualified J. Nondetected compounds are qualified UJ.
	Benzene JDQ52MS, JDQ52MSD
	Trichloroethene JDQ52MS

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Data Review Results

TIC

TIC	**VOA_LOW_MED**
VTIC1	A library search indicates a match at or above 85% for a TIC compound in the volatile sample Detected compounds are qualified NJ. Nondetected compounds are not qualified.
	JDQ92, JDQ93, VBLK56
	000541-05-9 VBLK56
	000556-67-2 JDQ92, JDQ93
TIC	**VOA_LOW_MED**
VTIC2	A library search indicates a match below 85% for a TIC compound in the volatile sample Detected compounds are qualified J. Nondetected compounds are not qualified.
	Unknown-01 JDQ52, JDQ87, JDQ88, JDQ89, JDQ90, JDQ91, JDQ92, JDQ93, VBLK2J, VBLK2N, VBLK56
	Unknown-02 JDQ89, JDQ90, JDQ91
	Unknown-03 JDQ89, JDQ90

National Functional Guidelines Report # 6

10:37 Fri, Jun 17, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Analytical Sample Listing

VOA_Low_Med

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date**	**Date/Time**	**GC Column**	**Intstrument**
JDQ52	Field_Sample	Water	LOW	05/20/2011 15:11:00	05/24/2011 10:25:00			06/01/2011 14:39:00	RTX-VMS	G-5973
JDQ52MS	Matrix_Spike	Water	LOW	05/20/2011 15:11:00	05/24/2011 10:25:00			06/02/2011 11:39:00	RTX-VMS	G-5973
JDQ52MSD	Matrix_Spike_Duplicate	Water	LOW	05/20/2011 15:11:00	05/24/2011 10:25:00			06/02/2011 12:10:00	RTX-VMS	G-5973
JDQ87	Field_Sample	Water	LOW	05/20/2011 12:20:00	05/24/2011 10:25:00			06/01/2011 15:09:00	RTX-VMS	G-5973
JDQ88	Field_Sample	Water	LOW	05/20/2011 13:35:00	05/24/2011 10:25:00			06/01/2011 15:40:00	RTX-VMS	G-5973
JDQ89	Field_Sample	Water	LOW	05/20/2011 17:00:00	05/24/2011 10:25:00			06/01/2011 16:11:00	RTX-VMS	G-5973
JDQ90	Field_Sample	Water	LOW	05/20/2011 18:20:00	05/24/2011 10:25:00			06/01/2011 16:43:00	RTX-VMS	G-5973
JDQ91	Field_Sample	Water	LOW	05/21/2011 11:58:00	05/24/2011 10:25:00			06/01/2011 17:14:00	RTX-VMS	G-5973
JDQ92	Field_Sample	Water	LOW	05/21/2011 13:15:00	05/24/2011 10:25:00			06/01/2011 13:38:00	RTX-VMS	G-5973
JDQ93	Field_Sample	Water	LOW	05/21/2011 13:30:00	05/24/2011 10:25:00			06/01/2011 14:09:00	RTX-VMS	G-5973

National Functional Guidelines Report # 6

10:37 Fri, Jun 17, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Analytical Sample Listing

BNA

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date**	**Date/Time**	**GC Column**	**Intstrument**
JDQ52	Field_Sample	Water	LOW	05/20/2011 15:11:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 20:40:00	RTX-5MS	D-5973
JDQ52MS	Matrix_Spike	Water	LOW	05/20/2011 15:11:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/10/2011 00:49:00	RTX-5MS	D-5973
JDQ52MSD	Matrix_Spike_Duplicate	Water	LOW	05/20/2011 15:11:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/10/2011 01:20:00	RTX-5MS	D-5973
JDQ87	Field_Sample	Water	LOW	05/20/2011 12:20:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 21:11:00	RTX-5MS	D-5973
JDQ88	Field_Sample	Water	LOW	05/20/2011 13:35:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 21:42:00	RTX-5MS	D-5973
JDQ89	Field_Sample	Water	LOW	05/20/2011 17:00:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 22:13:00	RTX-5MS	D-5973
JDQ90	Field_Sample	Water	LOW	05/20/2011 18:20:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 22:44:00	RTX-5MS	D-5973
JDQ91	Field_Sample	Water	LOW	05/21/2011 11:58:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 23:15:00	RTX-5MS	D-5973
JDQ92	Field_Sample	Water	LOW	05/21/2011 13:15:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/09/2011 23:47:00	RTX-5MS	D-5973
JDQ93	Field_Sample	Water	LOW	05/21/2011 13:30:00	05/24/2011 10:25:00	Liq_Liq	05/28/2011 13:10:00	06/10/2011 00:18:00	RTX-5MS	D-5973

National Functional Guidelines Report # 11

10:33 Fri, Jun 17, 2011

Lab KAP (KAP Technologies Inc) **SDG** JDQ52 **Case** 41270 **Contract** EPW11031 **Region** 10 **DDTID** 123792 **SOW** SOM01.2

Identification Summary for Single & Multi Component Analytes

#byval1 Sample=#byval2

NONE FOUND

Edit History Report

Case No: 41270 Contract: EPW11031 SDG No: JDQ52 Lab Code: KAP

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:12 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:12 PM	
JDQ52MS	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MS	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MS	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MS	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:13 PM	
JDQ52MSD	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MSD	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MSD	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ52MSD	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:15 PM	
JDQ87	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ87	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	N-Nitrosodiphenyla	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ87	Water	mine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ87	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:17 PM	
JDQ88	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ88	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	
JDQ88	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ89	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ89	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ89	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:19 PM	
JDQ90	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ90	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ90	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ90	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:21 PM	
JDQ91	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ91	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Bis(2-ethylhexyl)phthal	Validation Flag	J	JQ	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ91	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ91	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:22 PM	
JDQ92	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ92	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ92	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ92	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:23 PM	
JDQ93	Water	1,1'-Biphenyl	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	1,2,4,5-Tetrachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,2'-Oxybis(1-chloropropane)	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,3,4,6-Tetrachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,4,5-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,4,6-Trichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,4-Dichlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,4-Dimethylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,4-Dinitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,4-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2,6-Dinitrotoluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2-Chloronaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2-Chlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2-Methylnaphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	2-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	3,3'-Dichlorobenzidine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	3-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4,6-Dinitro-2-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Bromophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Chloro-3-methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Chloroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Chlorophenyl-phenylether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Methylphenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Nitroaniline	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	4-Nitrophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ93	Water	Acenaphthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Acenaphthylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Acetophenone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Atrazine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzaldehyde	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzaldehyde	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzo(a)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzo(a)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzo(b)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzo(g,h,i)perylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Benzo(k)fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Bis(2-chloroethoxy)methane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Bis(2-chloroethyl)ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Bis(2-ethylhexyl)phthal	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Butylbenzylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Caprolactam	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Carbazole	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Chrysene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Di-n-butylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Di-n-octylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Dibenzo(a,h)anthracene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Dibenzofuran	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Diethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Dimethylphthalate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Fluoranthene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Fluorene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Hexachlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Hexachlorobutadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Hexachlorocyclopentadiene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Hexachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Indeno(1,2,3-cd)pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Isophorone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	N-Nitroso-di-n-propylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	N-Nitrosodiphenylamine	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Naphthalene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Nitrobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Pentachlorophenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Phenanthrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ93	Water	Phenol	Validation Flag	UJ	UJK	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Phenol	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	
JDQ93	Water	Pyrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:25 PM	

Method: VOA_Low_Med

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 11:56 AM	
JDQ52	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MS	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	cis-1,3-	Validation	S3VE	S4VEM	Raymond	6/24/11 12:52 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MS	Water	Dichloropropene	Level	S3VE	S4VEM	Wu	6/24/11 12:52 PM	
JDQ52MS	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MS	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:52 PM	
JDQ52MSD	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Ethylbenzene	Validation	S3VE	S4VEM	Raymond	6/24/11 12:53 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ52MSD	Water	Ethylbenzene	Level	S3VE	S4VEM	Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ52MSD	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:53 PM	
JDQ87	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 11:57 AM	
JDQ87	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:55 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ87	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ87	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:55 PM	
JDQ88	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 11:58 AM	
JDQ88	Water	1,1,2,2-Tetrachloroethan	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ88	Water	e	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ88	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ88	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:57 PM	
JDQ89	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 11:58 AM	
JDQ89	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:59 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ89	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ89	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 12:59 PM	
JDQ90	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 11:59 AM	
JDQ90	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ90	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Methylene	Validation	S3VE	S4VEM	Raymond	6/24/11 1:01 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ90	Water	chloride	Level	S3VE	S4VEM	Wu	6/24/11 1:01 PM	
JDQ90	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ90	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:01 PM	
JDQ91	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 12:00 PM	
JDQ91	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,1-Dichloroethene	Validation Flag	J	JQ	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:04 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ91	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ91	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:04 PM	
JDQ92	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 12:00 PM	
JDQ92	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ92	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Acetone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Cyclotetrasiloxane, octamethyl-	Validation Level		S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Methylene	Validation	S3VE	S4VEM	Raymond	6/24/11 1:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ92	Water	chloride	Level	S3VE	S4VEM	Wu	6/24/11 1:07 PM	
JDQ92	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ92	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:07 PM	
JDQ93	Water	1,1,1-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Raymond Wu	7/5/11 12:01 PM	
JDQ93	Water	1,1,2,2-Tetrachloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,1,2-Trichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,1-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,1-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2,3-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2,4-Trichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2-Dibromo-3-chloropropane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2-Dibromo-3-chloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2-Dibromoethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2-Dichloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,2-Dichloropropane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,3-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,4-Dichlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,4-Dioxane	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	1,4-Dioxane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	2-Butanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	2-Hexanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	2-Hexanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	4-Methyl-2-pentanone	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	4-Methyl-2-pentanone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Acetone	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Benzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
JDQ93	Water	Bromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Bromodichloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Bromoform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Bromomethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Carbon disulfide	Validation Flag	U	UJK	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Carbon disulfide	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Carbon tetrachloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Chlorobenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Chloroethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Chloroform	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Chloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Cyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Cyclotetrasiloxane, octamethyl-	Validation Level		S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Dibromochloromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Dichlorodifluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Ethylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Isopropylbenzene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Methyl acetate	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Methyl tert-butyl ether	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Methylcyclohexane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Methylene chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Styrene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Tetrachloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Toluene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Trichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Trichlorofluoromethane	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	Vinyl chloride	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	cis-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	cis-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	m,p-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	o-Xylene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	trans-1,2-Dichloroethene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	
JDQ93	Water	trans-1,3-Dichloropropene	Validation Level	S3VE	S4VEM	Raymond Wu	6/24/11 1:09 PM	

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MEMORANDUM

DATE: September 28, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Summary Check,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 9 soil and 8 water samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analyses for volatile organic compounds and semivolatile organic compounds (EPA CLP SOW SOM01.2) were performed by KAP Technologies, Inc., The Woodlands, Texas.

The samples were numbered:

J8L04	J8L06	J8L08	J8L10	J8L11	J8L13
J8L15	J8L17	J8L19	J8L20	J8L22	J8L23
J8L24	J8L26	J8L27	J8L29	J8L30	

Two discrepancies were noted. The primary data reviewer corrected and reissued the entire report.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

September 28, 2011

Reply to: Donald M. Brown
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Organic Analyses of the Samples Collected from the Camp Bonneville Site Inspection Phase II - Case Number 41603, SDG J8L04

From: Donald M. Brown, QA Chemist DMB
USEPA Region 10, Office of Environmental Assessment, Environmental Services Unit

To: Monica Tonel, Site Assessment Manager
USEPA Region 10, Office of Environmental Cleanup

CC: Renee Nordeen, Ecology & Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of seven (7) water samples, nine (9) soil samples, and one (1) trip blank collected from the above referenced site has been completed. The trip blank was analyzed for Volatile Organic Compounds (VOCs) only and soil sample J8L23 was analyzed for Semivolatile Organic Compounds (SVOCs) only. The remaining samples were analyzed for both VOCs and SVOCs. All samples were analyzed by KAP Technologies, Inc. located in The Woodlands, Texas.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validation was conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in Addendum 1 to the Sampling & Quality Assurance Plan for Camp Bonneville (August 2011) and the Sampling & Quality Assurance Plan for Camp Bonneville (April 2011); the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2); the Contract Laboratory Program's National Functional Guidelines for Organic Data Review; and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified using the reviewer's professional judgment. The conclusions presented herein are based on the information provided for the review.

Sample J8L17 for the volatile and semivolatile analyses exceeded the percent moisture requirement (i.e. greater than 70% moisture). The results associated with this sample were considered estimates and qualified "JK" or "UJK".

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction, and analyses is attached along with the validated data.

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I. QUALITY CONTROL RESULTS SUMMARY

Volatile Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	Y*	Non-detect or < 5X Blank†
Initial Calibration	Y*	RRF < 0.05 or ≤ 30% RSD
Continuing Calibration Verification	Y*	RRF < 0.05 or Open: ≤ 25% D, Close: ≤ 50% D
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard
Semivolatile Organic Analysis		
Quality Control Test	**Outliers?**	**Evaluation Criteria**
Blanks	N	Non-detect or < 5X Blank†
Initial Calibration	N	RRF < 0.05‡ or ≤ 30% RSD
Continuing Calibration Verification	Y*	RRF < 0.05‡ or Open: ≤ 25% D, Close: ≤ 50% D
Deuterated Monitoring Compounds	Y*	Varies by Compound
Internal Standards	N	50 – 200% of 12-hour standard

*See the Manual/Electronic Data Review Results section below for outliers and qualification of affected data.
†10X Blank for ketones or solvents.
‡RRF < 0.01 for semivolatile target compounds exhibiting poor response (see Organic CLP NFGs Table 28).
(Note: RRF = Relative Response Factor, RSD = Relative Standard Deviation, D = Difference)

II. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

Data qualifications applied after the manual and electronic data review can be found in the attached "Manual/Electronic Data Review Results" section of this report.

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the data in addition to the above data qualifiers when necessary to allow for data analysis and interpretation using Pre-Score software calculations for National Priority Listing Hazard Rankling Scoring (NPL-HRS).

Bias Qualifiers		
	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown bias.

Attachments:
Sample Summary Report
Manual/Electronic Data Review Results
Analytical Sample Listing (Report #6)

Sample Summary Report

Case No:	41603	Contract:	EPW11031	SDG No:	J8L04	Lab Code:	KAP
Sample Number:	J8L04	Method:	VOA_Low_Med	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	NF02SW	pH:	2	Sample Date:	08/26/2011	Sample Time:	09:48:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Methylcyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ	R	No	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L04	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: NF02SW	pH: 7.1	Sample Date: 08/26/2011	Sample Time: 09:48:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	8.2	UG/L	1.0			Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Benzenedicarboxylic acid, butyl 2-methylpropyl ester			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L06	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: NF02SD	pH: 6.3	Sample Date: 08/26/2011	Sample Time: 09:50:00
% Moisture : 47		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	26	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	26	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	26	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	71	UG/KG	1.0			Yes	S4VEM
Carbon disulfide	26	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	26	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	26	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	26	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	26	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	26	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	52	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	26	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	26	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	26	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	26	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	520	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	26	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	26	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	26	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	26	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	26	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	52	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	26	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	26	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	52	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	26	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	26	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	26	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	26	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	26	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	26	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	26	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane, 1-methyl-4-(1-methylethylidene)-			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L06	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	NF02SD	pH:	6.3	Sample Date:	08/26/2011	Sample Time:	09:50:00
% Moisture :	47			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	320	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	320	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	320	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	320	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	320	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	320	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	320	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	620	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	320	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	320	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	620	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	620	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	620	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	320	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	320	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	620	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	620	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	320	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	320	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	320	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	320	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	320	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	620	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	320	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	320	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	320	UG/KG	1.0	U	UJK	Yes	S4VEM
Pyrene	320	UG/KG	1.0	U	UJK	Yes	S4VEM
Butylbenzylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	320	UG/KG	1.0	U	UJK	Yes	S4VEM
Chrysene	320	UG/KG	1.0	U	UJK	Yes	S4VEM
Bis(2-ethylhexyl)	320	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	320	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	320	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	320	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	320	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	320	UG/KG	1.0	U	U	Yes	S4VEM
Longipinane, (E)-			1.0	NJ	JN	Yes	S4VEM
Lup-20(29)-en-3-one			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L08	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: NF03SW	pH: 6.9	Sample Date: 08/26/2011	Sample Time: 10:32:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	2.9	UG/L	1.0	J	JQ	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L08	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: NF03SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 10:32:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	44	UG/L	1.0			Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotrisiloxane, hexamethyl-			1.0	NJ	R	No	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L10	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	NF03SD	pH:	6.8	Sample Date:	08/26/2011	Sample Time:	10:34:00
% Moisture :	23			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	120	UG/KG	1.0			Yes	S4VEM
Carbon disulfide	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	7.4	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	150	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	7.4	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	7.4	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	7.4	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L10	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	NF03SD	pH:	6.8	Sample Date:	08/26/2011	Sample Time:	10:34:00
% Moisture :	23			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	220	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	220	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	220	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	220	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	220	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	220	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	220	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	220	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	220	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	220	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	220	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	220	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	220	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	220	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	220	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	220	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	220	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	220	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	220	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	220	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	220	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	220	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	220	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	220	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	220	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	220	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	430	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	220	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	220	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	430	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	220	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	430	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	430	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	220	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	220	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	220	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	220	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	220	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	430	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	430	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	220	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	220	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	220	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	220	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	220	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	430	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	220	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	220	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	220	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	220	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	220	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	220	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	220	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	220	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	220	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	220	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	220	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	220	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	220	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	220	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	220	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	220	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	220	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	220	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	220	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	220	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L11	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: NF04SW	pH: 6.9	Sample Date: 08/26/2011	Sample Time: 11:50:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L11	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: NF04SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 11:50:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	J	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotrisiloxane, hexamethyl-			1.0	NJ	R	No	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L13	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: NF04SD	pH: 6.0	Sample Date: 08/26/2011	Sample Time: 12:00:00
% Moisture : 34		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	76	UG/KG	1.0			Yes	S4VEM
Carbon disulfide	15	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	15	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	15	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	29	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	15	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	15	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	290	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	15	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	15	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	15	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	29	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	15	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	15	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	29	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	15	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	15	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	15	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	15	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	15	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L13	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	NF04SD	pH:	6.0	Sample Date:	08/26/2011	Sample Time:	12:00:00
% Moisture :	34			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	260	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	260	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	260	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	260	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	260	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	260	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	260	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	500	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	260	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	260	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	500	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	500	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	500	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	260	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	260	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	500	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	500	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	260	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	260	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	260	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	260	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	260	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	500	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	260	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	260	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	260	UG/KG	1.0	U	UJK	Yes	S4VEM
Pyrene	260	UG/KG	1.0	U	UJK	Yes	S4VEM
Butylbenzylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	260	UG/KG	1.0	U	UJK	Yes	S4VEM
Chrysene	260	UG/KG	1.0	U	UJK	Yes	S4VEM
Bis(2-ethylhexyl)	260	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	260	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	260	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	260	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	260	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	260	UG/KG	1.0	U	U	Yes	S4VEM
D:C-Friedoolean-8-en-3-one			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L15	Method:	BNA	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	NF05SW	pH:	6.8	Sample Date:	08/26/2011	Sample Time:	12:29:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L15	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: NF05SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 12:29:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotrisiloxane, hexamethyl-			1.0	NJ	R	No	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ	R	No	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L17	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	NF05SD	pH:	6.1	Sample Date:	08/26/2011	Sample Time:	12:35:00
% Moisture :	81			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloromethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Vinyl chloride	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Bromomethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Trichlorofluorom ethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1-Dichloroethene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Acetone	1100	UG/KG	1.0		JK	Yes	S4VEM
Carbon disulfide	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Methyl acetate	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Methylene chloride	29	UG/KG	1.0	U	UJK	Yes	S4VEM
trans-1,2-Dichloroethene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Methyl tert-butyl ether	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1-Dichloroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
cis-1,2-Dichloroethene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Butanone	510	UG/KG	1.0		JK	Yes	S4VEM
Bromochloromet hane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Chloroform	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1,1-Trichloroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Cyclohexane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Carbon tetrachloride	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2-Dichloroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,4-Dioxane	580	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Methylcyclohexa ne	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2-Dichloropropane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Bromodichlorom	29	UG/KG	1.0	U	UJK	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
cis-1,3-Dichloropropene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Methyl-2-pentanone	58	UG/KG	1.0	U	UJK	Yes	S4VEM
Toluene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
trans-1,3-Dichloropropene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1,2-Trichloroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Tetrachloroethene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Hexanone	58	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2-Dibromoethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Chlorobenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Ethylbenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
o-Xylene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
m,p-Xylene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Styrene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Bromoform	29	UG/KG	1.0	U	UJK	Yes	S4VEM
Isopropylbenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1,2,2-Tetrachloroethane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,3-Dichlorobenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,4-Dichlorobenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2-Dichlorobenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2-Dibromo-3-chloropropane	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2,4-Trichlorobenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2,3-Trichlorobenzene	29	UG/KG	1.0	U	UJK	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L17	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: NF05SD	pH: 6.1	Sample Date: 08/26/2011	Sample Time: 12:35:00
% Moisture : 81		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Phenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethyl)ether	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Chlorophenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Methylphenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Acetophenone	890	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Methylphenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
N-Nitroso-di-n-propylamine	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Hexachloroethane	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Nitrobenzene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Isophorone	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Nitrophenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4-Dimethylphenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Bis(2-chloroethoxy)methane	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4-Dichlorophenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Naphthalene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Chloroaniline	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Hexachlorobutadiene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Caprolactam	890	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Chloro-3-methylphenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Methylnaphthalene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Hexachlorocyclopentadiene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,6-Trichlorophenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4,5-Trichlorophenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
1,1'-Biphenyl	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2-Chloronaphthalene	890	UG/KG	1.0	U	UJK	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
Dimethylphthalate	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,6-Dinitrotoluene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Acenaphthylene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
3-Nitroaniline	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
Acenaphthene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4-Dinitrophenol	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Nitrophenol	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibenzofuran	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,4-Dinitrotoluene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Diethylphthalate	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Fluorene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Chlorophenyl-phenylether	890	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Nitroaniline	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
4,6-Dinitro-2-methylphenol	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
N-Nitrosodiphenylamine	890	UG/KG	1.0	U	UJK	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
4-Bromophenyl-phenylether	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Hexachlorobenzene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Atrazine	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Pentachlorophenol	1700	UG/KG	1.0	U	UJK	Yes	S4VEM
Phenanthrene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Anthracene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Carbazole	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Di-n-butylphthalate	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Fluoranthene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Pyrene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Butylbenzylphthalate	890	UG/KG	1.0	U	UJK	Yes	S4VEM
3,3'-Dichlorobenzidine	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(a)anthracene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Chrysene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Bis(2-ethylhexyl)	890	UG/KG	1.0	U	UJK	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Di-n-octylphthalate	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(b)fluoranthene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(a)pyrene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Dibenzo(a,h)anthracene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(g,h,i)perylene	890	UG/KG	1.0	U	UJK	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	890	UG/KG	1.0	U	UJK	Yes	S4VEM
Lup-20(29)-en-3-one			1.0	NJ	JN	Yes	S4VEM
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H			1.0	NJ	JN	Yes	S4VEM
1,19-Eicosadiene			1.0	NJ	JN	Yes	S4VEM
Total Alkanes			1.0	J	JN	Yes	S4VEM
Oxirane, hexadecyl-			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L19	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: NF06SD	pH: 6.2	Sample Date: 08/26/2011	Sample Time: 14:00:00
% Moisture : 41		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	17	UG/KG	1.0		JK	Yes	S4VEM
Carbon disulfide	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	7.6	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	150	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	7.6	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	15	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	7.6	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	7.6	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L19	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	NF06SD	pH:	6.2	Sample Date:	08/26/2011	Sample Time:	14:00:00
% Moisture :	41			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	290	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	290	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	290	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	290	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	290	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	290	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	290	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	560	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	560	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	290	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	290	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	290	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	290	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	560	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	290	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	290	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	290	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	290	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	290	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	290	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	290	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L20	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: NF07SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 14:29:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	UJK	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ	R	No	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L20	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: NF07SW	pH: 6.9	Sample Date: 08/26/2011	Sample Time: 14:29:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L22	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	NF07SD	pH:	6.4	Sample Date:	08/26/2011	Sample Time:	14:22:00
% Moisture :	33			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	12	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	12	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	12	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	25	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	12	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	12	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	12	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	12	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	12	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	12	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	25	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	12	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	12	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	12	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	12	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	250	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	12	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	12	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	12	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	12	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	12	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	25	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	12	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	12	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	25	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	12	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	12	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	12	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	12	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	12	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	12	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	12	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	12	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L22	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	NF07SD	pH:	6.4	Sample Date:	08/26/2011	Sample Time:	14:22:00
% Moisture :	33			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	250	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	250	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	250	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	250	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	250	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	250	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	490	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	250	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	490	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	490	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	490	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	250	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	250	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	490	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	490	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	250	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	250	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	250	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	250	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	490	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	250	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	250	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	250	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	250	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	250	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	250	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	250	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	250	UG/KG	1.0	U	U	Yes	S4VEM
D:C-Friedoolean-8-en-3-one			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L23	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: NF08SD	pH: 6.5	Sample Date: 08/26/2011	Sample Time: 14:56:00
% Moisture : 26		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	230	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	230	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	230	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	230	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	230	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	230	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	230	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	230	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	230	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	230	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	230	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	230	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	230	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	230	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	230	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	230	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	230	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	230	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	230	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	230	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	230	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	230	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	230	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	230	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	230	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	230	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	230	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	450	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	230	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	230	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	230	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	450	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	230	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	450	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	450	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	230	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	230	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	230	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	230	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	230	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	450	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	450	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	230	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	230	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	230	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	230	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	230	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	450	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	230	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	230	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	230	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	230	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	230	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	230	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	230	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	230	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	230	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	230	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	230	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	230	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	230	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	230	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	230	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	230	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	230	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	230	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	230	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	230	UG/KG	1.0	U	U	Yes	S4VEM
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H			1.0	NJ	JN	Yes	S4VEM
Lup-20(29)-en-3-one			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L24	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: NF09SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L24	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: NF09SW	pH: 6.9	Sample Date: 08/26/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L24MS	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: NF09SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	24	UG/L	1.0		J	Yes	S4VEM
Dichlorodifluoromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	UJ	Yes	S4VEM
Benzene	22	UG/L	1.0		J	Yes	S4VEM
Trichloroethene	27	UG/L	1.0		J	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	UJ	Yes	S4VEM
Toluene	48	UG/L	1.0		J	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	49	UG/L	1.0		J	Yes	S4VEM
Trichlorofluoromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L24MS	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 6.9	Sample Date: 08/26/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	33	UG/L	1.0			Yes	S4VEM
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	30	UG/L	1.0			Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	25	UG/L	1.0			Yes	S4VEM
4-Chloro-3-methylphenol	32	UG/L	1.0			Yes	S4VEM
Acenaphthene	23	UG/L	1.0			Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	37	UG/L	1.0		J	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	22	UG/L	1.0			Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	27	UG/L	1.0		J	Yes	S4VEM
Pyrene	24	UG/L	1.0			Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L24MSD	Method:	VOA_Low_Med	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	NF09SW	pH:	2	Sample Date:	08/26/2011	Sample Time:	15:40:00
% Moisture :				% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	24	UG/L	1.0		J	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Benzene	32	UG/L	1.0		J	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichloroethene	38	UG/L	1.0		J	Yes	S4VEM
Toluene	66	UG/L	1.0		J	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	UJ	Yes	S4VEM
Chlorobenzene	58	UG/L	1.0		J	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	U	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L24MSD	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH: 6.9	Sample Date: 08/26/2011	Sample Time: 15:40:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	31	UG/L	1.0			Yes	S4VEM
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	26	UG/L	1.0			Yes	S4VEM
N-Nitroso-di-n-propylamine	23	UG/L	1.0			Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	28	UG/L	1.0			Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	22	UG/L	1.0			Yes	S4VEM
4-Nitrophenol	32	UG/L	1.0		J	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	22	UG/L	1.0			Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	25	UG/L	1.0		J	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	23	UG/L	1.0			Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L26	Method:	BNA	Matrix:	SOIL	MA Number:	DEFAULT
Sample Location:	NF09SD	pH:	6.1	Sample Date:	08/26/2011	Sample Time:	15:31:00
% Moisture :	44			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	300	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	300	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	300	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	300	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	300	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	300	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	300	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	590	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	300	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	300	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	300	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Phenol, 4,4'-(1-methylethylidene)bis-			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L26	Method: VOA_Low_Med	Matrix: Soil	MA Number: DEFAULT
Sample Location: NF09SD	pH: 6.1	Sample Date: 08/26/2011	Sample Time: 15:31:00
% Moisture : 44		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	18	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	9.1	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	18	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	180	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	9.1	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	18	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	18	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	9.1	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	9.1	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L26MS	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location:	pH: 6.1	Sample Date: 08/26/2011	Sample Time: 15:31:00
% Moisture : 44		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	1000	UG/KG	1.0			Yes	S4VEM
Benzaldehyde	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	900	UG/KG	1.0			Yes	S4VEM
N-Nitroso-di-n-propylamine	1400	UG/KG	1.0			Yes	S4VEM
Bis(2-chloroethyl)ether	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	970	UG/KG	1.0			Yes	S4VEM
Acenaphthene	1300	UG/KG	1.0			Yes	S4VEM
2-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	1300	UG/KG	1.0			Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	300	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	1300	UG/KG	1.0			Yes	S4VEM
Pentachlorophenol	930	UG/KG	1.0			Yes	S4VEM
4-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	1200	UG/KG	1.0			Yes	S4VEM
Hexachloroethane	300	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	300	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	300	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	300	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	300	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	590	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	300	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	300	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	300	UG/KG	1.0	U	UJ	Yes	S4VEM
Benzo(k)fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L26MS	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	NF09SD	pH:	6	Sample Date:	08/26/2011	Sample Time:	15:31:00
% Moisture :	44			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,1-Dichloroethene	71	UG/KG	1.0			Yes	S4VEM
Dichlorodifluoro methane	11	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	90	UG/KG	1.0			Yes	S4VEM
Chloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichloroethene	96	UG/KG	1.0			Yes	S4VEM
Bromomethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	110	UG/KG	1.0			Yes	S4VEM
Chlorobenzene	130	UG/KG	1.0			Yes	S4VEM
Chloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	22	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	220	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	11	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	22	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	22	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	11	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L26MSD	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location:	pH: 6.1	Sample Date: 08/26/2011	Sample Time: 15:31:00
% Moisture : 44		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Phenol	1100	UG/KG	1.0			Yes	S4VEM
Benzaldehyde	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	920	UG/KG	1.0			Yes	S4VEM
N-Nitroso-di-n-propylamine	1400	UG/KG	1.0			Yes	S4VEM
Bis(2-chloroethyl)ether	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	980	UG/KG	1.0			Yes	S4VEM
2-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	1300	UG/KG	1.0			Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	1200	UG/KG	1.0			Yes	S4VEM
Acetophenone	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	1300	UG/KG	1.0			Yes	S4VEM
Pentachlorophenol	900	UG/KG	1.0			Yes	S4VEM
4-Methylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	1200	UG/KG	1.0		J	Yes	S4VEM
Hexachloroethane	300	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	300	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2,4,6-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	300	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	300	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	300	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	590	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	300	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	590	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	590	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	300	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	300	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	300	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	300	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	300	UG/KG	1.0	U	UJ	Yes	S4VEM
Butylbenzylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	300	UG/KG	1.0	U	UJ	Yes	S4VEM
Chrysene	300	UG/KG	1.0	U	UJ	Yes	S4VEM
Bis(2-ethylhexyl)	300	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	300	UG/KG	1.0	U	UJ	Yes	S4VEM
Benzo(k)fluoranthene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	300	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	300	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	300	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	300	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L26MSD	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	NF09SD	pH:	6	Sample Date:	08/26/2011	Sample Time:	15:31:00
% Moisture :	44			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	71	UG/KG	1.0			Yes	S4VEM
Benzene	96	UG/KG	1.0			Yes	S4VEM
Chloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Trichloroethene	100	UG/KG	1.0			Yes	S4VEM
Vinyl chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	120	UG/KG	1.0			Yes	S4VEM
Chloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	130	UG/KG	1.0			Yes	S4VEM
Trichlorofluorom ethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	23	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	11	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	11	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	23	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	11	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	11	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	230	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	11	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
1,2-Dichloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	23	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	11	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	23	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	11	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	11	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	11	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	11	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	11	UG/KG	1.0	U	U	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L27	Method: BNA	Matrix: Water	MA Number: DEFAULT
Sample Location: BG04SW	pH: 7.0	Sample Date: 08/26/2011	Sample Time: 16:10:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	5.0	UG/L	1.0	U	U	Yes	S4VEM
Phenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetophenone	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Nitrobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isophorone	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Nitrophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Naphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloroaniline	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Caprolactam	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Dimethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
3-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
Acenaphthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
4-Nitrophenol	10	UG/L	1.0	U	U	Yes	S4VEM
Dibenzofuran	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Diethylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluorene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Nitroaniline	10	UG/L	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	10	UG/L	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	5.0	UG/L	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Atrazine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pentachlorophenol	10	UG/L	1.0	U	UJK	Yes	S4VEM
Phenanthrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbazole	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chrysene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(k)fluoranthene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)-			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L27	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: BG04SW	pH: 2	Sample Date: 08/26/2011	Sample Time: 16:10:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ	R	No	S4VEM
Cyclotrisiloxane, hexamethyl-			1.0	NJ	R	No	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L29	Method: BNA	Matrix: SOIL	MA Number: DEFAULT
Sample Location: BG04SD	pH: 6.0	Sample Date: 08/26/2011	Sample Time: 16:05:00
% Moisture : 46		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Benzaldehyde	310	UG/KG	1.0	U	U	Yes	S4VEM
Phenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethyl)ether	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Chlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2,2'-Oxybis(1-chloropropane)	310	UG/KG	1.0	U	U	Yes	S4VEM
Acetophenone	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Methylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitroso-di-n-propylamine	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachloroethane	310	UG/KG	1.0	U	U	Yes	S4VEM
Nitrobenzene	310	UG/KG	1.0	U	U	Yes	S4VEM
Isophorone	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Nitrophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dimethylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-chloroethoxy)methane	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dichlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Naphthalene	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloroaniline	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobutadiene	310	UG/KG	1.0	U	U	Yes	S4VEM
Caprolactam	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Chloro-3-methylphenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Methylnaphthalene	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorocyclopentadiene	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4,6-Trichlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4,5-Trichlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
1,1'-Biphenyl	310	UG/KG	1.0	U	U	Yes	S4VEM
2-Chloronaphthalene	310	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
2-Nitroaniline	610	UG/KG	1.0	U	U	Yes	S4VEM
Dimethylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
2,6-Dinitrotoluene	310	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthylene	310	UG/KG	1.0	U	U	Yes	S4VEM
3-Nitroaniline	610	UG/KG	1.0	U	U	Yes	S4VEM
Acenaphthene	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrophenol	610	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitrophenol	610	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzofuran	310	UG/KG	1.0	U	U	Yes	S4VEM
2,4-Dinitrotoluene	310	UG/KG	1.0	U	U	Yes	S4VEM
Diethylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Fluorene	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Chlorophenyl-phenylether	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Nitroaniline	610	UG/KG	1.0	U	U	Yes	S4VEM
4,6-Dinitro-2-methylphenol	610	UG/KG	1.0	U	U	Yes	S4VEM
N-Nitrosodiphenylamine	310	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4,5-Tetrachlorobenzene	310	UG/KG	1.0	U	U	Yes	S4VEM
4-Bromophenyl-phenylether	310	UG/KG	1.0	U	U	Yes	S4VEM
Hexachlorobenzene	310	UG/KG	1.0	U	U	Yes	S4VEM
Atrazine	310	UG/KG	1.0	U	U	Yes	S4VEM
Pentachlorophenol	610	UG/KG	1.0	U	U	Yes	S4VEM
Phenanthrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Anthracene	310	UG/KG	1.0	U	U	Yes	S4VEM
Carbazole	310	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-butylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Fluoranthene	310	UG/KG	1.0	U	U	Yes	S4VEM
Pyrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Butylbenzylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
3,3'-Dichlorobenzidine	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)anthracene	310	UG/KG	1.0	U	U	Yes	S4VEM
Chrysene	310	UG/KG	1.0	U	U	Yes	S4VEM
Bis(2-ethylhexyl)	310	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
phthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Di-n-octylphthalate	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(b)fluoranthene	310	UG/KG	1.0	U	UJK	Yes	S4VEM
Benzo(k)fluoranthene	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(a)pyrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Indeno(1,2,3-cd)pyrene	310	UG/KG	1.0	U	U	Yes	S4VEM
Dibenzo(a,h)anthracene	310	UG/KG	1.0	U	U	Yes	S4VEM
Benzo(g,h,i)perylene	310	UG/KG	1.0	U	U	Yes	S4VEM
2,3,4,6-Tetrachlorophenol	310	UG/KG	1.0	U	U	Yes	S4VEM
Lup-20(29)-en-3-one			1.0	NJ	JN	Yes	S4VEM
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP

Sample Number:	J8L29	Method:	VOA_Low_Med	Matrix:	Soil	MA Number:	DEFAULT
Sample Location:	BG04SD	pH:	6.0	Sample Date:	08/26/2011	Sample Time:	16:05:00
% Moisture :	46			% Solids :			

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Chloromethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Vinyl chloride	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Bromomethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Chloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Acetone	20	UG/KG	1.0	U	U	Yes	S4VEM
Carbon disulfide	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methyl acetate	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methylene chloride	9.9	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,2-Dichloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
2-Butanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Bromochloromet hane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Chloroform	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Cyclohexane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Carbon tetrachloride	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Benzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dioxane	200	UG/KG	1.0	U	R	Yes	S4VEM
Trichloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichloropropane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Bromodichlorom	9.9	UG/KG	1.0	U	U	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
cis-1,3-Dichloropropene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Toluene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Tetrachloroethene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
2-Hexanone	20	UG/KG	1.0	U	U	Yes	S4VEM
Dibromochloromethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Chlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Ethylbenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
o-Xylene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
m,p-Xylene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Styrene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Bromoform	9.9	UG/KG	1.0	U	U	Yes	S4VEM
Isopropylbenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	9.9	UG/KG	1.0	U	U	Yes	S4VEM
1R-.alpha.-Pinene			1.0	NJ	JN	Yes	S4VEM
Camphene			1.0	NJ	JN	Yes	S4VEM
Benzene, 1-methyl-4-(1-methylethyl)-			1.0	NJ	JN	Yes	S4VEM
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)-			1.0	NJ	JN	Yes	S4VEM

Case No: 41603	Contract: EPW11031	SDG No: J8L04	Lab Code: KAP
Sample Number: J8L30	Method: VOA_Low_Med	Matrix: Water	MA Number: DEFAULT
Sample Location: TB01WT	pH: 2	Sample Date: 08/29/2011	Sample Time: 13:50:00
% Moisture :		% Solids :	

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
Dichlorodifluoro methane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloromethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Vinyl chloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromomethane	5.0	UG/L	1.0	JB	U	Yes	S4VEM
Chloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Trichlorofluorom ethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Acetone	10	UG/L	1.0	U	U	Yes	S4VEM
Carbon disulfide	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl acetate	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylene chloride	5.0	UG/L	1.0	JB	U	Yes	S4VEM
trans-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methyl tert-butyl ether	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
cis-1,2-Dichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Butanone	10	UG/L	1.0	U	U	Yes	S4VEM
Bromochloromet hane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chloroform	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,1-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclohexane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Carbon tetrachloride	5.0	UG/L	1.0	U	U	Yes	S4VEM
Benzene	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2-Dichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dioxane	100	UG/L	1.0	U	R	Yes	S4VEM
Trichloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Methylcyclohexa ne	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
1,2-Dichloropropane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
Bromodichlorom	5.0	UG/L	1.0	U	UJK	Yes	S4VEM

Analyte Name	Result	Units	Dilution Factor	Lab Flag	Validation	Reportable	Validation Level
ethane	5.0	UG/L	1.0	U	UJK	Yes	S4VEM
cis-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
4-Methyl-2-pentanone	10	UG/L	1.0	U	U	Yes	S4VEM
Toluene	5.0	UG/L	1.0	U	U	Yes	S4VEM
trans-1,3-Dichloropropene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2-Trichloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Tetrachloroethene	5.0	UG/L	1.0	U	U	Yes	S4VEM
2-Hexanone	10	UG/L	1.0	U	UJK	Yes	S4VEM
Dibromochloromethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromoethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
Chlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Ethylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
o-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
m,p-Xylene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Styrene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Bromoform	5.0	UG/L	1.0	U	U	Yes	S4VEM
Isopropylbenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,1,2,2-Tetrachloroethane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,3-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,4-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2-Dibromo-3-chloropropane	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,4-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
1,2,3-Trichlorobenzene	5.0	UG/L	1.0	U	U	Yes	S4VEM
Cyclotetrasiloxane, octamethyl-			1.0	NJ	R	No	S4VEM
Cyclotrisiloxane, hexamethyl-			1.0	NJ	R	No	S4VEM

Manual/Electronic Data Review Results

VOLATILE ORGANIC ANALYSIS
Blanks Qualification Summary
The following samples have analyte concentrations reported less than ten times (<10X) the associated method/storage blank for common contaminants (i.e. solvent or ketone) or less than five times (<5X) the associated method/storage blank for other contaminants. Detected compounds are qualified U. Non-detected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.
Chloromethane – J8L04, J8L15, J8L20, J8L24, J8L27, J8L30 Bromomethane – J8L04, J8L08, J8L11, J8L15, J8L20, J8L24, J8L27, J8L30 Methylene Chloride – J8L04, J8L15, J8L20, J8L24, J8L27, J8L30 Toluene – J8L11
Initial Calibration Qualification Summary
The following samples are associated with an initial calibration with relative response factors (RRFs) outside criteria (i.e. RRF < 0.05). Detected compounds are qualified JK. Non-detected compounds are qualified R.
1,4-Dioxane – All Samples
Continuing Calibration Qualification Summary
The following samples are associated with an opening or closing CCV with a percent difference outside criteria (i.e. Opening CCV: ≤ 25% Difference, Closing CCV: ≤ 50% Difference). Detected compounds are qualified JK. Non-detected compounds are qualified UJK.
2-Hexanone – J8L04, J8L08, J8L11, J8L15, J8L20, J8L24, J8L27, J8L30
Deuterated Monitoring Compound Qualification Summary
The following samples have DMC recoveries below the lower limit of the criteria window. Detected compounds are qualified JK. Non-detected compounds are qualified UJK.
Benzene-d_6 – J8L20, J8L30 1,2-Dichloropropane-d_6 – J8L20, J8L30
The following samples have DMC recoveries above the upper limit of the criteria window. Detected compounds are qualified JK. Non-detected compounds are not qualified.
2-Butanone-d5 – J8L19
Percent Moisture Qualification Summary
Percent moisture content of the following soil samples exceeds criteria (i.e. >70% moisture). Detected compounds are qualified JK. Non-detected compounds are qualified UJK.
J8L17

Manual/Electronic Data Review Results

SEMIVOLATILE ORGANIC ANALYSIS
Continuing Calibration Qualification Summary
The following samples are associated with an opening or closing CCV with a percent difference outside criteria (i.e. Opening CCV: ≤ 25% Difference, Closing CCV: ≤ 50% Difference). Detected compounds are qualified JK. Non-detected compounds are qualified UJK.
Pentachlorophenol – J8L04, J8L08, J8L11, J8L15, J8L20, J8L24, J8L27 Benzo(b)fluoranthene – J8L06, J8L10, J8L13, J8L17, J8L19, J8L22, J8L23, J8L26, J9L29
Deuterated Monitoring Compound Qualification Summary
The following samples have DMC recoveries below the lower limit of the criteria window. Detected compounds are qualified JK. Non-detected compounds are qualified UJK.
Pyrene-d_{10} – J8L06, J8L13, J8L17
Percent Moisture Qualification Summary
Percent moisture content of the following soil samples exceeds criteria (i.e. >70% moisture). Detected compounds are qualified JK. Non-detected compounds are qualified UJK.
J8L17
Detection Limit Qualification Summary
The following samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified JQ. Non-detected compounds are not qualified.
Diethylphthalate – J8L08

National Functional Guidelines Report #06

Lab KAP(KAP Technologies, Inc.) **SDG** J8L04 **Case** 41603 **Contract** EPW11031 **Region** 10 **DDTID** 131906 **SOW** SOM01.2

Analytical Sample Listing

VOA_Low_Med

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date/Time**	**Date/Time**	**GC Column**	**Instrument**
J8L04	Field_Sample	Water	LOW	08/26/2011 09:48:00	08/30/2011 09:55:00			09/07/2011 13:45:00	RTX-VMS	B-5973
J8L06	Field_Sample	Soil	LOW	08/26/2011 09:50:00	08/30/2011 09:55:00			09/05/2011 15:00:00	RTX-VMS	G-5973
J8L08	Field_Sample	Water	LOW	08/26/2011 10:32:00	08/30/2011 09:55:00			09/07/2011 17:10:00	RTX-VMS	B-5973
J8L10	Field_Sample	Soil	LOW	08/26/2011 10:34:00	08/30/2011 09:55:00			09/05/2011 15:42:00	RTX-VMS	G-5973
J8L11	Field_Sample	Water	LOW	08/26/2011 11:50:00	08/30/2011 09:55:00			09/07/2011 13:09:00	RTX-VMS	B-5973
J8L13	Field_Sample	Soil	LOW	08/26/2011 12:00:00	08/30/2011 09:55:00			09/05/2011 16:16:00	RTX-VMS	G-5973
J8L15	Field_Sample	Water	LOW	08/26/2011 12:29:00	08/30/2011 09:55:00			09/07/2011 14:19:00	RTX-VMS	B-5973
J8L17	Field_Sample	Soil	LOW	08/26/2011 12:35:00	08/30/2011 09:55:00			09/05/2011 16:50:00	RTX-VMS	G-5973
J8L19	Field_Sample	Soil	LOW	08/26/2011 14:00:00	08/30/2011 09:55:00			09/05/2011 17:24:00	RTX-VMS	G-5973
J8L20	Field_Sample	Water	LOW	08/26/2011 14:29:00	08/30/2011 09:55:00			09/07/2011 14:52:00	RTX-VMS	B-5973
J8L22	Field_Sample	Soil	LOW	08/26/2011 14:22:00	08/30/2011 09:55:00			09/05/2011 17:58:00	RTX-VMS	G-5973
J8L24	Field_Sample	Water	LOW	08/26/2011 15:40:00	08/30/2011 09:55:00			09/07/2011 15:26:00	RTX-VMS	B-5973
J8L24MS	Matrix_Spike	Water	LOW	08/26/2011 15:40:00	08/30/2011 09:55:00			09/07/2011 18:19:00	RTX-VMS	B-5973
J8L24MSD	Matrix_Spike_Duplicate	Water	LOW	08/26/2011 15:40:00	08/30/2011 09:55:00			09/07/2011 18:53:00	RTX-VMS	B-5973
J8L26	Field_Sample	Soil	LOW	08/26/2011 15:31:00	08/30/2011 09:55:00			09/05/2011 18:32:00	RTX-VMS	G-5973
J8L26MS	Matrix_Spike	Soil	LOW	08/26/2011 15:31:00	08/30/2011 09:55:00			09/05/2011 19:40:00	RTX-VMS	G-5973
J8L26MSD	Matrix_Spike_Duplicate	Soil	LOW	08/26/2011 15:31:00	08/30/2011 09:55:00			09/05/2011 20:15:00	RTX-VMS	G-5973
J8L27	Field_Sample	Water	LOW	08/26/2011 16:10:00	08/30/2011 09:55:00			09/07/2011 16:00:00	RTX-VMS	B-5973
J8L29	Field_Sample	Soil	LOW	08/26/2011 16:05:00	08/30/2011 09:55:00			09/05/2011 19:06:00	RTX-VMS	G-5973

National Functional Guidelines Report #06

Lab KAP(KAP Technologies, Inc.) **SDG** J8L04 **Case** 41603 **Contract** EPW11031 **Region** 10 **DDTID** 131906 **SOW** SOM01.2

Analytical Sample Listing

BNA

						Extraction		Analysis		
Sample Number	**Sample Type**	**Matrix**	**Level**	**Sampling Date**	**Date Received**	**Type**	**Date/Time**	**Date/Time**	**GC Column**	**Instrument**
J8L04	Field_Sample	Water	LOW	08/26/2011 09:48:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 14:53:00	RTX-5MS	F-5973
J8L06	Field_Sample	SOIL	LOW	08/26/2011 09:50:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 11:25:00	RTX-5MS	F-5973
J8L08	Field_Sample	Water	LOW	08/26/2011 10:32:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 15:25:00	RTX-5MS	F-5973
J8L10	Field_Sample	SOIL	LOW	08/26/2011 10:34:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 11:56:00	RTX-5MS	F-5973
J8L11	Field_Sample	Water	LOW	08/26/2011 11:50:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 15:56:00	RTX-5MS	F-5973
J8L13	Field_Sample	SOIL	LOW	08/26/2011 12:00:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 12:28:00	RTX-5MS	F-5973
J8L15	Field_Sample	Water	LOW	08/26/2011 12:29:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 16:27:00	RTX-5MS	F-5973
J8L17	Field_Sample	SOIL	LOW	08/26/2011 12:35:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 12:59:00	RTX-5MS	F-5973
J8L19	Field_Sample	SOIL	LOW	08/26/2011 14:00:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 13:30:00	RTX-5MS	F-5973
J8L20	Field_Sample	Water	LOW	08/26/2011 14:29:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 16:59:00	RTX-5MS	F-5973
J8L22	Field_Sample	SOIL	LOW	08/26/2011 14:22:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 14:02:00	RTX-5MS	F-5973
J8L23	Field_Sample	SOIL	LOW	08/26/2011 14:56:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 14:33:00	RTX-5MS	F-5973
J8L24	Field_Sample	Water	LOW	08/26/2011 15:40:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 17:30:00	RTX-5MS	F-5973
J8L24MS	Matrix_Spike	Water	LOW	08/26/2011 15:40:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 18:33:00	RTX-5MS	F-5973
J8L24MSD	Matrix_Spike_Duplicate	Water	LOW	08/26/2011 15:40:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 19:04:00	RTX-5MS	F-5973
J8L26	Field_Sample	SOIL	LOW	08/26/2011 15:31:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 15:05:00	RTX-5MS	F-5973
J8L26MS	Matrix_Spike	SOIL	LOW	08/26/2011 15:31:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 17:07:00	RTX-5MS	F-5973
J8L26MSD	Matrix_Spike_Duplicate	SOIL	LOW	08/26/2011 15:31:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 17:39:00	RTX-5MS	F-5973
J8L27	Field_Sample	Water	LOW	08/26/2011 16:10:00	08/30/2011 09:55:00	Liq_Liq	09/03/2011 13:45:00	09/12/2011 18:02:00	RTX-5MS	F-5973
J8L29	Field_Sample	SOIL	LOW	08/26/2011 16:05:00	08/30/2011 09:55:00	Sonication	08/31/2011 09:10:00	09/13/2011 15:36:00	RTX-5MS	F-5973

Edit History Report

Case No: 41603 Contract: EPW11031 SDG No: J8L04 Lab Code: KAP

Method: BNA

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L04	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L04	Water	1,2-Benzenedicarboxylic acid, butyl 2-methylpropyl ester	Validation Flag		JN	Donald Brown	9/27/11 6:05 PM	
J8L04	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:05 PM	
J8L06	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L06	SOIL	Benzo(a)anthracene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Benzo(a)pyrene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Benzo(g,h,i)perylene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Benzo(k)fluoranthene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Chrysene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Dibenzo(a,h)anthracene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Longipinane, (E)-	Validation Flag		JN	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Lup-20(29)-en-3-one	Validation Flag		JN	Donald Brown	9/27/11 6:07 PM	
J8L06	SOIL	Pyrene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:07 PM	
J8L08	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L08	Water	Diethylphthalate	Validation Flag	J	JQ	Donald Brown	9/27/11 6:09 PM	
J8L08	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:09 PM	
J8L10	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L10	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:11 PM	
J8L11	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L11	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:13 PM	
J8L13	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L13	SOIL	Benzo(a)anthracene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:14 PM	
J8L13	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:14 PM	
J8L13	SOIL	Chrysene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:14 PM	
J8L13	SOIL	D:C-Friedoolean-8-en-3-one	Validation Flag		JN	Donald Brown	9/27/11 6:14 PM	
J8L13	SOIL	Fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:14 PM	
J8L13	SOIL	Pyrene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:14 PM	
J8L15	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L15	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:16 PM	
J8L17	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L17	SOIL	1,1'-Biphenyl	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L17	SOIL	1,19-Eicosadiene	Validation Flag		JN	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	1,2,4,5-Tetrachlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,2'-Oxybis(1-chloropropane)	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,3,4,6-Tetrachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,4,5-Trichlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,4,6-Trichlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,4-Dichlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,4-Dimethylphenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,4-Dinitrophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,4-Dinitrotoluene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2,6-Dinitrotoluene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2-Chloronaphthalene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2-Chlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2-Methylnaphthalene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2-Methylphenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2-Nitroaniline	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	2-Nitrophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	3,3'-Dichlorobenzidine	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	3-Nitroaniline	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H	Validation Flag		JN	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4,6-Dinitro-2-methylphenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Bromophenyl-phenylether	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Chloro-3-methylphenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Chloroaniline	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Chlorophenyl-phenylether	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Methylphenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Nitroaniline	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	4-Nitrophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Acenaphthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Acenaphthylene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Acetophenone	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Anthracene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Atrazine	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Benzaldehyde	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Benzo(a)anthracene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L17	SOIL	Benzo(a)pyrene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Benzo(g,h,i)perylene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Benzo(k)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Bis(2-chloroethoxy)methane	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Bis(2-chloroethyl)ether	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Bis(2-ethylhexyl)phthal	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Butylbenzylphthalate	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Caprolactam	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Carbazole	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Chrysene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Di-n-butylphthalate	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Di-n-octylphthalate	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Dibenzo(a,h)anthracene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Dibenzofuran	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Diethylphthalate	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Dimethylphthalate	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Fluorene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Hexachlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Hexachlorobutadiene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Hexachlorocyclopentadiene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Hexachloroethane	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Indeno(1,2,3-cd)pyrene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Isophorone	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Lup-20(29)-en-3-one	Validation Flag		JN	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	N-Nitroso-di-n-propylamine	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	N-Nitrosodiphenylamine	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Naphthalene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Nitrobenzene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Oxirane, hexadecyl-	Validation Flag		JN	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Phenanthrene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Phenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Pyrene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:18 PM	
J8L17	SOIL	Total Alkanes	Validation Flag		JN	Donald Brown	9/27/11 6:18 PM	
J8L19	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L19	SOIL	Benzo(a)anthracene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:20 PM	
J8L19	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:20 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L19	SOIL	Chrysene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:20 PM	
J8L19	SOIL	Fluoranthene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:20 PM	
J8L19	SOIL	Pyrene	Validation Flag	UJ	U	Donald Brown	9/27/11 6:20 PM	
J8L20	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L20	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:21 PM	
J8L22	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L22	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:23 PM	
J8L22	SOIL	D:C-Friedoolean-8-en-3-one	Validation Flag		JN	Donald Brown	9/27/11 6:23 PM	
J8L23	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L23	SOIL	4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H	Validation Flag		JN	Donald Brown	9/27/11 6:24 PM	
J8L23	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:24 PM	
J8L23	SOIL	Lup-20(29)-en-3-one	Validation Flag		JN	Donald Brown	9/27/11 6:24 PM	
J8L24	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L24	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:26 PM	
J8L24MS	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L24MSD	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L26	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L26	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:28 PM	
J8L26	SOIL	Phenol, 4,4'-(1-methylethylidene)bis-	Validation Flag		JN	Donald Brown	9/27/11 6:28 PM	
J8L26MS	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L26MSD	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L27	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L27	Water	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)-	Validation Flag		JN	Donald Brown	9/27/11 6:29 PM	
J8L27	Water	Pentachlorophenol	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:29 PM	
J8L29	SOIL		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L29	SOIL	4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H	Validation Flag		JN	Donald Brown	9/27/11 6:31 PM	
J8L29	SOIL	Benzo(b)fluoranthene	Validation Flag	UJ	UJK	Donald Brown	9/27/11 6:31 PM	
J8L29	SOIL	Lup-20(29)-en-3-one	Validation Flag		JN	Donald Brown	9/27/11 6:31 PM	

Method: VOA_Low_Med

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L04	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L04	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 11:07 AM	
J8L04	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 11:07 AM	
J8L04	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 11:07 AM	
J8L04	Water	Cyclotetrasiloxane, octamethyl-	Reportable	Y	N	Donald Brown	9/26/11 11:07 AM	
J8L04	Water	Cyclotetrasiloxane, octamethyl-	Validation Flag		R	Donald Brown	9/26/11 11:07 AM	
J8L06	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L06	Soil	Cyclohexane, 1-methyl-4-(1-methylethylidene)-	Validation Flag		JN	Donald Brown	9/26/11 11:16 AM	
J8L08	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L08	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 11:18 AM	
J8L08	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 11:18 AM	
J8L08	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 11:18 AM	
J8L08	Water	Cyclotrisiloxane, hexamethyl-	Reportable	Y	N	Donald Brown	9/26/11 11:18 AM	
J8L08	Water	Cyclotrisiloxane, hexamethyl-	Validation Flag		R	Donald Brown	9/26/11 11:18 AM	
J8L10	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L10	Soil	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 11:20 AM	
J8L11	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L11	Water	1,4-Dioxane	Validation Flag	UJ	R	Donald Brown	9/26/11 11:22 AM	
J8L11	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 11:22 AM	
J8L11	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 11:22 AM	
J8L11	Water	Cyclotrisiloxane, hexamethyl-	Reportable	Y	N	Donald Brown	9/26/11 11:22 AM	
J8L11	Water	Cyclotrisiloxane, hexamethyl-	Validation Flag		R	Donald Brown	9/26/11 11:22 AM	
J8L13	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L13	Soil	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 11:25 AM	
J8L15	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L15	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 11:26 AM	
J8L15	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 11:26 AM	
J8L15	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 11:26 AM	
J8L15	Water	Cyclotetrasiloxane, octamethyl-	Reportable	Y	N	Donald Brown	9/26/11 11:26 AM	
J8L15	Water	Cyclotetrasiloxane, octamethyl-	Validation Flag		R	Donald Brown	9/26/11 11:26 AM	
J8L15	Water	Cyclotrisiloxane, hexamethyl-	Reportable	Y	N	Donald Brown	9/26/11 11:26 AM	
J8L15	Water	Cyclotrisiloxane, hexamethyl-	Validation Flag		R	Donald Brown	9/26/11 11:26 AM	
J8L17	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L17	Soil	1,1,1-Trichloroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,1,2,2-Tetrachloroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,1,2-Trichloro-1,2,2-trifluoroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,1,2-Trichloroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L17	Soil	1,1-Dichloroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,1-Dichloroethene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2,3-Trichlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2,4-Trichlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2-Dibromo-3-chloropropane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2-Dibromoethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2-Dichlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2-Dichloroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,2-Dichloropropane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,3-Dichlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,4-Dichlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	1,4-Dioxane	Validation Flag	UJ	R	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	2-Butanone	Validation Flag	J	JK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	2-Hexanone	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	4-Methyl-2-pentanone	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Acetone	Validation Flag	J	JK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Benzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Bromochloromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Bromodichloromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Bromoform	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Bromomethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Carbon disulfide	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Carbon tetrachloride	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Chlorobenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Chloroethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Chloroform	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Chloromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Cyclohexane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Dibromochloromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Dichlorodifluoromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Ethylbenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Isopropylbenzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Methyl acetate	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Methyl tert-butyl ether	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Methylcyclohexane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Methylene chloride	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Styrene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Tetrachloroethene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Toluene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Trichloroethene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	Trichlorofluorom	Validation	UJ	UJK	Donald	9/26/11 11:29 AM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L17	Soil	ethane	Flag	UJ	UJK	Brown	9/26/11 11:29 AM	
J8L17	Soil	Vinyl chloride	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	cis-1,2-Dichloroethene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	cis-1,3-Dichloropropene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	m,p-Xylene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	o-Xylene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	trans-1,2-Dichloroethene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L17	Soil	trans-1,3-Dichloropropene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 11:29 AM	
J8L19	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L19	Soil	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 11:47 AM	
J8L19	Soil	Acetone	Validation Flag	J	JK	Donald Brown	9/26/11 11:47 AM	
J8L20	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L20	Water	1,2-Dichloropropane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Benzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Bromodichloromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Cyclohexane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Cyclotetrasiloxane, octamethyl-	Reportable	Y	N	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Cyclotetrasiloxane, octamethyl-	Validation Flag		R	Donald Brown	9/26/11 12:00 PM	
J8L20	Water	Methylcyclohexane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:00 PM	
J8L22	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L22	Soil	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:02 PM	
J8L24	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L24	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:04 PM	
J8L24	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 12:04 PM	
J8L24	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 12:04 PM	
J8L24MS	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L24MSD	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L26	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L26	Soil	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:06 PM	
J8L26MS	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L26MSD	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:29 PM	Y
J8L27	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L27	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:07 PM	
J8L27	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 12:07 PM	
J8L27	Water	Bromomethane	Validation Flag	UJ	U	Donald Brown	9/26/11 12:07 PM	
J8L27	Water	Cyclotetrasiloxane, octamethyl-	Reportable	Y	N	Donald Brown	9/26/11 12:07 PM	
J8L27	Water	Cyclotetrasiloxane, octamethyl-	Validation Flag		R	Donald Brown	9/26/11 12:07 PM	
J8L27	Water	Cyclotrisiloxane,	Reportable	Y	N	Donald	9/26/11 12:07 PM	

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
J8L27	Water	hexamethyl-	Reportable	Y	N	Brown	9/26/11 12:07 PM	
J8L27	Water	Cyclotrisiloxane, hexamethyl-	Validation Flag		R	Donald Brown	9/26/11 12:07 PM	
J8L29	Soil		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L29	Soil	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:10 PM	
J8L29	Soil	1R-.alpha.-Pinene	Validation Flag		JN	Donald Brown	9/26/11 12:10 PM	
J8L29	Soil	Benzene, 1-methyl-4-(1-methylethyl)-	Validation Flag		JN	Donald Brown	9/26/11 12:10 PM	
J8L29	Soil	Camphene	Validation Flag		JN	Donald Brown	9/26/11 12:10 PM	
J8L29	Soil	Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)-	Validation Flag		JN	Donald Brown	9/26/11 12:10 PM	
J8L30	Water		Validation Level		S4VEM	Donald Brown	9/21/11 6:28 PM	Y
J8L30	Water	1,2-Dichloropropane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	1,4-Dioxane	Validation Flag	U	R	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	2-Hexanone	Validation Flag	U	UJK	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Benzene	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Bromodichloromethane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Bromomethane	Validated Result	3.9	5.0	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Bromomethane	Validation Flag	J	U	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Chloromethane	Validated Result	2.6	5.0	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Chloromethane	Validation Flag	J	U	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Cyclohexane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Cyclotetrasiloxane, octamethyl-	Reportable	Y	N	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Cyclotetrasiloxane, octamethyl-	Validation Flag		R	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Cyclotrisiloxane, hexamethyl-	Reportable	Y	N	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Cyclotrisiloxane, hexamethyl-	Validation Flag		R	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Methylcyclohexane	Validation Flag	UJ	UJK	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Methylene chloride	Validated Result	2.9	5.0	Donald Brown	9/26/11 12:12 PM	
J8L30	Water	Methylene chloride	Validation Flag	J	U	Donald Brown	9/26/11 12:12 PM	

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MEMORANDUM

DATE: October 5, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Total Organic Carbon Data Summary Check, Camp Bonneville Site, Vancouver, Washington**

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 36 soil samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Analysis for total organic carbon (EPA Method 9060A) was performed by the USEPA Manchester Environmental Laboratory, Port Orchard, Washington.

The samples were numbered:

11344569	11344574	11344591	11344592	11344595	11344596
11344597	11344598	11344599	11344600	11344601	11344602
11344603	11344604	11344607	11344608	11344611	11344614
11344615	11344616	11344617	11344618	11344619	11344620
11344621	11344624	11344625	11344628	11344631	11344635
11344636	11344637	11344640	11344641	11344644	11344647

No discrepancies were noted. The secondary reviewer added bias qualifiers based on the data memorandum.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganics Results from the USEPA Region 10 Laboratory

PROJECT NAME: Camp Bonneville: Phase II

PROJECT CODE: TEC-993B

FROM: Gerald Dodo, Chemistry Supervisor
Office of Environmental Assessment
USEPA Region 10 Laboratory

TO: Monica Tonel, RPM
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, USEPA Region 10

CC: Renee Nordeen, E & E

I have authorized release of this data package. Attached you will find the Total Organic Carbon results for the Camp Bonneville: Phase II project for the samples collected on 08/24/2011 to 08/26/2011. For further information regarding the attached data, contact Stephanie Le at (360) 871-8715.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR INORGANIC CHEMICAL ANALYSES

DATE: October 03, 2011

TO: Monica Tonel, Project Manager
Office of Environmental Cleanup, Assessment and Brownfield Unit 1, US EPA Region 10

FROM: Stephanie Le, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of Camp Bonneville: Phase II Results
For Total Organic Carbon

Project Code: TEC-993B
Account Code: 2012T10P303DD2101RLA00

CC: Renee Nordeen, E & E

The following is a quality assurance review of the results of the analysis of 36 soil samples for Total Organic Carbon (TOC). These samples were submitted for the Camp Bonneville: Phase II Project. The analyses were performed by ESAT chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

11344569	11344574	11344591	11344592	11344595	11344596	11344597
11344598	11344599	11344600	11344601	11344602	11344603	11344604
11344607	11344608	11344611	11344614	11344615	11344616	11344617
11344618	11344619	11344620	11344621	11344624	11344625	11344628
11344631	11344635	11344636	11344637	11344640	11344641	11344644
11344647						

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with **"Laboratory/QAPP Criteria Not Met."**

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has also been accredited to the standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt

Upon sample receipt, all conditions met Laboratory/QAPP requirements for the samples listed above.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples. The samples covered by this review met method holding time recommendations.

3. Sample Preparation

Samples were prepared according to the method outlined in the SOP for these analytes for this type of matrix. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification

The initial calibration met method criteria. All calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples

All laboratory control sample results met the recovery acceptance criteria for the method. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis

The method blanks did not contain detectable levels of analyte which would require data qualification.

7. Duplicate Analysis

Duplicate analysis was performed on samples 11344591, 1134608, 11344619, and 11344644. Sample results which were greater than five times the MRL level were within the ± 35% RPD QAPP requirement. No qualification was required based on duplicate analysis.

8. Matrix Spike/Matrix Spike Duplicate Analysis – Laboratory/QAPP Criteria Not Met

Matrix spike analyses were performed on samples 11344591, 11344608, 11344649, and 1134644. Sample results were within the ± 25% recovery and relative percent difference (RPD) requirements, with the exception of sample 11344608. The matrix spikes recoveries were high at 165% and 135%. TOC results for samples 11344574, 11344608, 11344608DU, 11344620, and 11344636 were qualified "J", estimated.

No other qualification was required based on matrix spike analyses.

9. Instrument Peak Integrations

No manual integrations were performed for this method.

10. Reporting Limits

All sample results that fall below the Minimum Reporting Limit (MRL) are assigned the value of the MRL and the 'U' qualifier is attached.

11. Data Qualifiers

The (U) qualifier was attached to the sample results that were below the MRL.

TOC results for samples 11344574, 11344608, 11344608DU, 11344620, and 11344636 were qualified "J", estimated due to high matrix spike recoveries.

No other qualification was required. The definition for the data qualifier is as follows:

U - The analyte was not detected at or above the reported value.

J - The identification of the analyte is acceptable; the reported value is an estimate.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Stephanie Le at the Region 10 Laboratory, phone number (360) 871- 8715.

12. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DS), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analyte(s) and the percent recovery of the analyte(s) is (are) determined.

Method Blank- An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) - the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Peak Integrations - The output of many analytical instruments is a peak which represents the quantity of analyte in the sample. The instrument automatically integrates the peak area to provide the concentration of the analyte; however, sometimes these peaks need to be manually integrated by the analyst.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

US EPA Region 10 Laboratory

Multi-Sample Final Report

Project Code : TEC-993B
Site : CAMP BONNEVILLE : PHASE II
Contact : Monica Tonel
Account : 2012T10P303DD2101RLA00*

Parameter(s): TOC
Analyte: *90064 - Total Organic Carbon
Weight Basis : Dry

Prep Method(s): 9060A - Total Organic Carbon (TOC)
Analytical Method: PSEP-TOC - TOC in sediments by Puget Sound Estuarine Protocols

Target Analyte Results:

Sample	COC Description	Lab Matrix	Result	Unit	Qual.	Analysis Date	Dilution
11344569 sam	EF01SD	Soil	7190	mg/Kg		9/9/11	1
11344574 sam	EF02SD	Soil	6270	mg/Kg	J H	9/9/11	1
11344591 sam	LC01SD	Soil	9370	mg/Kg		9/14/11	1
11344592 sam	LC02SD	Soil	16200	mg/Kg		9/9/11	1
11344595 sam	LC03SD	Soil	9230	mg/Kg		9/13/11	1
11344596 sam	LC04SD	Soil	8150	mg/Kg		9/14/11	1
11344597 sam	LC05SD	Soil	5590	mg/Kg		9/13/11	1
11344598 sam	LC06SD	Soil	6790	mg/Kg		9/14/11	1
11344599 sam	LC07SD	Soil	36200	mg/Kg		9/14/11	1
11344600 sam	LC08SD	Soil	6440	mg/Kg		9/13/11	1
11344601 sam	LC09SD	Soil	11700	mg/Kg		9/14/11	1
11344602 sam	LS10SD	Soil	12800	mg/Kg		9/14/11	1
11344603 sam	BC01SD	Soil	19800	mg/Kg		9/14/11	1
11344604 sam	LS12SD	Soil	17800	mg/Kg		9/14/11	1
11344607 sam	LS11SD	Soil	16400	mg/Kg		9/14/11	1
11344608 sam	LC13SD	Soil	5470	mg/Kg	J H	9/9/11	1
11344611 sam	LC14SD	Soil	11400	mg/Kg		9/13/11	1
11344614 sam	LC15SD	Soil	7050	mg/Kg		9/13/11	1
11344615 sam	DC01SD	Soil	15000	mg/Kg		9/15/11	1
11344616 sam	DC02SD	Soil	9190	mg/Kg		9/14/11	1
11344617 sam	EF03SD	Soil	6850	mg/Kg		9/14/11	1
11344618 sam	NF01SD	Soil	12100	mg/Kg		9/15/11	1
11344619 sam	DC03SD	Soil	5280	mg/Kg		9/14/11	1
11344620 sam	DC04SD	Soil	33000	mg/Kg	J H	9/14/11	1
11344621 sam	BG01SD	Soil	24200	mg/Kg		9/15/11	1
11344624 sam	NF02SD	Soil	68300	mg/Kg		9/15/11	1
11344625 sam	BG02SD	Soil	44500	mg/Kg		9/15/11	1
11344628 sam	NF03SD	Soil	8080	mg/Kg		9/15/11	1
11344631 sam	NF04SD	Soil	12700	mg/Kg		9/15/11	1
11344635 sam	NF05SD	Soil	43400	mg/Kg		9/15/11	1
11344636 sam	BG03SD	Soil	15400	mg/Kg	J H	9/14/11	1
11344637 sam	NF06SD	Soil	21300	mg/Kg		9/15/11	1

Target Analyte Results (cont.):

Sample	COC Description	Lab Matrix	Result	Unit	Qual.	Analysis Date	Dilution
11344640 sam	NF07SD	Soil	**24300**	**mg/Kg**		9/15/11	1
11344641 sam	NF08SD	Soil	**22900**	**mg/Kg**		9/15/11	1
11344644 sam	NF09SD	Soil	**16300**	**mg/Kg**		9/15/11	1
11344647 sam	BG04SD	Soil	**34500**	**mg/Kg**		9/15/11	1
11344591 du	LC01SD	Soil	**8630**	**mg/Kg**		9/14/11	1
11344608 du	LC13SD	Soil	**7330**	**mg/Kg**	J	9/9/11	1
11344619 du	DC03SD	Soil	**5340**	**mg/Kg**		9/14/11	1
11344644 du	NF09SD	Soil	**16600**	**mg/Kg**		9/15/11	1
11344591 ms	LC01SD	Soil	**103**	**%Rec**		9/14/11	1
11344608 ms	LC13SD	Soil	**165**	**%Rec**		9/9/11	1
11344619 ms	DC03SD	Soil	**98**	**%Rec**		9/14/11	1
11344644 ms	NF09SD	Soil	**99**	**%Rec**		9/15/11	1
11344591 msd	LC01SD	Soil	**99**	**%Rec**		9/14/11	1
11344608 msd	LC13SD	Soil	**135**	**%Rec**		9/9/11	1
11344619 msd	DC03SD	Soil	**98**	**%Rec**		9/14/11	1
11344644 msd	NF09SD	Soil	**120**	**%Rec**		9/15/11	1
IS090911ABL blk	Blank	Solid	500	mg/Kg	U	9/9/11	1
IS091311ABL blk	Blank	Solid	500	mg/Kg	U	9/13/11	1
IS091411ABL blk	Blank	Solid	500	mg/Kg	U	9/14/11	1
IS091511ABL blk	Blank	Solid	500	mg/Kg	U	9/15/11	1
IS090911ACO std	Control	Solid	**99**	**%Rec**		9/9/11	1
IS091311ACO std	Control	Solid	**93**	**%Rec**		9/13/11	1
IS091411ACO std	Control	Solid	**95**	**%Rec**		9/14/11	1
IS091511ACO std	Control	Solid	**103**	**%Rec**		9/15/11	1
IS090911AL1 lcs	Lab Control Standard	Solid	**102**	**%Rec**		9/9/11	1
IS091311AL1 lcs	Lab Control Standard	Solid	**102**	**%Rec**		9/13/11	1
IS091411AL1 lcs	Lab Control Standard	Solid	**106**	**%Rec**		9/14/11	1
IS091511AL1 lcs	Lab Control Standard	Solid	**103**	**%Rec**		9/15/11	1
IS090911AL2 lc2	Lab Control Standard Dup.	Solid	**102**	**%Rec**		9/9/11	1
IS091311AL2 lc2	Lab Control Standard Dup.	Solid	**102**	**%Rec**		9/13/11	1
IS091411AL2 lc2	Lab Control Standard Dup.	Solid	**103**	**%Rec**		9/14/11	1
IS091511AL2 lc2	Lab Control Standard Dup.	Solid	**103**	**%Rec**		9/15/11	1

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MEMORANDUM

DATE: December 31, 2011

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

TO: Renee Nordeen, START-3 Project Manager, Seattle, Washington

SUBJ: **Data Quality Assurance Review,**
Camp Bonneville Site, Vancouver, Washington

REF: TDD: 11-02-0010 PAN: 002233.0669.01SI

The data summary check of 5 sediment samples collected from the Camp Bonneville site located in Vancouver, Washington, has been completed. Grain size (ASTM method D-422) analyses were performed by Test America, Inc., Tacoma, Washington. All sample analyses were evaluated following EPA's Stage 2 Data Validation Manual Process (S2VM).

The samples were numbered:

EF01SD EF02SD LC01SD LC02SD LC05SD

Data Qualifications:

The samples were collected on August 24 and 25, 2011, and were analyzed by December 29, 2011. No discrepancies were noted in the laboratory case narrative.

The overall usefulness of the data is based on the criteria outlined in the Sampling and Quality Assurance Plan and the analytical method. Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

recycled paper

1B-IN
INORGANIC ANALYSIS DATA SHEET
GEOTECHNICAL

Client Sample ID: EF01SD
Lab Sample ID: 580-28371-14
Lab Name: TestAmerica Seattle
Job No.: 580-28371-2
SDG ID.:
Matrix: Solid
Date Sampled: 08/24/2011 15:59
Reporting Basis: WET
Date Received: 08/29/2011 14:40

CAS No.	Analyte	Result			Units	C	Q	DIL	Method
	Gravel	21.4			%			1	D422
	Coarse Sand	31.2			%			1	D422
	Medium Sand	37.2			%			1	D422
	Fine Sand	9.0			%			1	D422
	Very Fine Sand	0.2			%			1	D422
	Silt	0.1			%			1	D422
	Clay	1.0			%			1	D422

JMW 12/30/11

1B-IN
INORGANIC ANALYSIS DATA SHEET
GEOTECHNICAL

Client Sample ID: EF02SD
Lab Sample ID: 580-28371-15
Lab Name: TestAmerica Seattle
Job No.: 580-28371-2
SDG ID.:
Matrix: Solid
Date Sampled: 08/24/2011 16:40
Reporting Basis: WET
Date Received: 08/29/2011 14:40

CAS No.	Analyte	Result			Units	C	Q	DIL	Method
	Gravel	72.1			%			1	D422
	Coarse Sand	19.9			%			1	D422
	Medium Sand	6.9			%			1	D422
	Fine Sand	0.4			%			1	D422
	Very Fine Sand	0.0			%			1	D422
	Silt	0.1			%			1	D422
	Clay	0.6			%			1	D422

MW 12-3-11

1B-IN
INORGANIC ANALYSIS DATA SHEET
GEOTECHNICAL

Client Sample ID: LC01SD
Lab Sample ID: 580-28371-16
Lab Name: TestAmerica Seattle
Job No.: 580-28371-2
SDG ID.:
Matrix: Solid
Date Sampled: 08/25/2011 10:00
Reporting Basis: WET
Date Received: 08/29/2011 14:40

CAS No.	Analyte	Result			Units	C	Q	DIL	Method
	Gravel	0.9			%			1	D422
	Coarse Sand	1.2			%			1	D422
	Medium Sand	39.6			%			1	D422
	Fine Sand	53.2			%			1	D422
	Very Fine Sand	0.8			%			1	D422
	Silt	2.7			%			1	D422
	Clay	1.7			%			1	D422

JLW 12-30-11

1B-IN
INORGANIC ANALYSIS DATA SHEET
GEOTECHNICAL

Client Sample ID: LC02SD
Lab Sample ID: 580-28371-17
Lab Name: TestAmerica Seattle
Job No.: 580-28371-2
SDG ID.:
Matrix: Solid
Date Sampled: 08/25/2011 10:50
Reporting Basis: WET
Date Received: 08/29/2011 14:40

CAS No.	Analyte	Result			Units	C	Q	DIL	Method
	Gravel	2.6			%			1	D422
	Coarse Sand	3.4			%			1	D422
	Medium Sand	9.1			%			1	D422
	Fine Sand	73.5			%			1	D422
	Very Fine Sand	3.3			%			1	D422
	Silt	0.2			%			1	D422
	Clay	7.9			%			1	D422

12-31-11

1B-IN
INORGANIC ANALYSIS DATA SHEET
GEOTECHNICAL

Client Sample ID: LC05SD
Lab Sample ID: 580-28371-18
Lab Name: TestAmerica Seattle
Job No.: 580-28371-2
SDG ID.:
Matrix: Solid
Date Sampled: 08/25/2011 11:50
Reporting Basis: WET
Date Received: 08/29/2011 14:40

CAS No.	Analyte	Result			Units	C	Q	DIL	Method
	Gravel	60.2			%			1	D422
	Coarse Sand	14.9			%			1	D422
	Medium Sand	15.1			%			1	D422
	Fine Sand	8.9			%			1	D422
	Very Fine Sand	0.0			%			1	D422
	Silt	0.1			%			1	D422
	Clay	0.8			%			1	D422

JMW 12-3-11

TestAmerica Tacoma

Sediment Grain Size - D422

Client	Ecology and Environment, Inc.	Date Receved	8/24/2011
Client Sample ID	EF01SD	Start Date	12/21/2011
Lab Sample ID	580-28371-A-14	End Date	12/27/2011

Dry Weight Determination

Tin Weight	g
Wet Sample + Tin	g
Dry Sample + Tin	g
% Moisture	30 %

Maximum Particle Size:
Non-soil material:
Hardness (> #10):

Default Soil Gravity 2.65

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		145.7	145.7
Sample Weight (Oven Dried)			102

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			53.6
Sample <#10			48.4
% Passing #10			33.2

Hydrometer Data

Serial Number	8314288-10
Calib. Date (mm/dd/yyyy)	02/13/2009
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	25.0
Reading at High Temp	1.0025
Hydrometer Cal Slope	-0.0001875
Hydrometer Cal Intercept	1.0071875

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000	0	0	0 g	100.0	Cobbles	
2 inch	50000	0	0	0 g	100.0	Gravel	
1.5 inch	37500	0	0	0 g	100.0	Gravel	
1 inch	25000	0	0	0 g	100.0	Gravel	
3/4 inch	19000	0	0	0 g	100.0	Gravel	
3/8 inch	9500	0	10.581	10.581 g	89.6	Gravel	
#4	4750	0	11.2163	11.2163 g	78.6	Gravel	
#10	2000	0	31.8493	31.8493 g	47.4	Gravel	
#20	850	0	24.9113	24.9113 g	23.0	Sand	Coarse
#40	425	0	13.0318	13.0318 g	10.2	Sand	Medium
#60	250	0	5.5252	5.5252 g	4.8	Sand	Medium
#140	106	0	3.1282	3.1282 g	1.7	Sand	Fine
#200	75	0	0.4674	0.4674 g	1.3	Sand	Fine
#230	63	0	0.1868	0.1868 g	1.1	Sand	Very Fine
				0 g	1.1		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g) 102

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.005	15	39.81	0.984	Silt	
5	5	1.005	15	25.18	0.984	Silt	
15	15	1.005	15	14.54	0.984	Silt	
30	30	1.005	15	10.28	0.984	Silt	
60	60	1.005	15	7.268	0.984	Silt	
250	250	1.005	15	3.561	0.984	Clay	
1440	1440	1.005	15	1.484	0.984	Clay	

JMW 12-31-11

TestAmerica Tacoma

Sediment Grain Size - D422

Client	Ecology and Environment, Inc.	Date Receved	8/24/2011
Client Sample ID	EF02SD	Start Date	12/21/2011
Lab Sample ID	580-28371-A-15	End Date	12/29/2011

Dry Weight Determination

Tin Weight	g
Wet Sample + Tin	g
Dry Sample + Tin	g
% Moisture	16 %

Maximum Particle Size:
Non-soil material:
Hardness (> #10):

Default Soil Gravity 2.65

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		151.6	151.6
Sample Weight (Oven Dried)			127

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			117
Sample <#10			10
% Passing #10			6.6

Hydrometer Data

Serial Number	8294542-5
Calib. Date (mm/dd/yyyy)	12/30/2008
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	25.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.00025
Hydrometer Cal Intercept	1.00825

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000	0	0	0 g	100.0	Cobbles	
2 inch	50000	0	0	0 g	100.0	Gravel	
1.5 inch	37500	0	0	0 g	100.0	Gravel	
1 inch	25000	0	0	0 g	100.0	Gravel	
3/4 inch	19000	0	0	0 g	100.0	Gravel	
3/8 inch	9500	0	50.8541	50.8541 g	60.0	Gravel	
#4	4750	0	40.7093	40.7093 g	27.9	Gravel	
#10	2000	0	25.2929	25.2929 g	8.0	Gravel	
#20	850	0	7.0075	7.0075 g	2.5	Sand	Coarse
#40	425	0	1.7287	1.7287 g	1.1	Sand	Medium
#60	250	0	0.3275	0.3275 g	0.8	Sand	Medium
#140	106	0	0.1409	0.1409 g	0.7	Sand	Fine
#200	75	0	0.0291	0.0291 g	0.7	Sand	Fine
#230	63	0	0.0106	0.0106 g	0.7	Sand	Very Fine
				0 g	0.7		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g) 127

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.005	15	39.81	0.632	Silt	
5	5	1.005	15	25.18	0.632	Silt	
15	15	1.005	15	14.54	0.632	Silt	
30	30	1.005	15	10.28	0.632	Silt	
60	60	1.005	15	7.268	0.632	Silt	
250	250	1.005	15	3.561	0.632	Clay	
1440	1440	1.005	15	1.484	0.632	Clay	

JMW 12-30-11

TestAmerica Tacoma

Sediment Grain Size - D422

Client	Ecology and Environment, Inc.	Date Receved	8/25/2011
Client Sample ID	LC01SD	Start Date	12/21/2011
Lab Sample ID	580-28371-A-16	End Date	12/29/2011

Dry Weight Determination

Tin Weight	g
Wet Sample + Tin	g
Dry Sample + Tin	g
% Moisture	31 %

Maximum Particle Size:
Non-soil material:
Hardness (> #10):

Default Soil Gravity 2.65

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		105	105
Sample Weight (Oven Dried)			72.5

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			1.5
Sample <#10			71
% Passing #10			67.6

Hydrometer Data

Serial Number	08314248-21
Calib. Date (mm/dd/yyyy)	08/05/2009
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	25.0
Reading at High Temp	1.0030
Hydrometer Cal Slope	-0.000125
Hydrometer Cal Intercept	1.006125

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000	0	0	0 g	100.0	Cobbles	
2 inch	50000	0	0	0 g	100.0	Gravel	
1.5 inch	37500	0	0	0 g	100.0	Gravel	
1 inch	25000	0	0	0 g	100.0	Gravel	
3/4 inch	19000	0	0	0 g	100.0	Gravel	
3/8 inch	9500	0	0	0 g	100.0	Gravel	
#4	4750	0	0.6193	0.6193 g	99.1	Gravel	
#10	2000	0	0.8789	0.8789 g	97.9	Gravel	
#20	850	0	6.7237	6.7237 g	88.6	Sand	Coarse
#40	425	0	22.0035	22.0035 g	58.3	Sand	Medium
#60	250	0	23.6056	23.6056 g	25.7	Sand	Medium
#140	106	0	13.2287	13.2287 g	7.5	Sand	Fine
#200	75	0	1.6887	1.6887 g	5.1	Sand	Fine
#230	63	0	0.5619	0.5619 g	4.3	Sand	Very Fine
				0 g	4.3		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g) 72.5

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual		Spec. Gravity	Temp C	Particla Size (Micron)	% Finer	Classification	Sub Class
	2	2	1.006	15	39.45	3.88	Silt	
	5	5	1.006	15	24.95	3.88	Silt	
	15	15	1.005	15	14.54	1.66	Silt	
	30	30	1.005	15	10.28	1.66	Silt	
	60	60	1.005	15	7.268	1.66	Silt	
	250	250	1.005	15	3.561	1.66	Clay	
	1440	1440	1.005	15	1.484	1.66	Clay	

MW 12-31-11

TestAmerica Tacoma

Sediment Grain Size - D422

Client	Ecology and Environment, Inc.	Date Receved	8/25/2011
Client Sample ID	LC02SD	Start Date	12/21/2011
Lab Sample ID	580-28371-A-17	End Date	12/29/2011

Dry Weight Determination

Tin Weight	g
Wet Sample + Tin	g
Dry Sample + Tin	g
% Moisture	57 %

Maximum Particle Size:
Non-soil material:
Hardness (> #10):

Default Soil Gravity 2.65

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		118.4	118.4
Sample Weight (Oven Dried)			50.9

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			3.11
Sample <#10			47.8
% Passing #10			40.4

Hydrometer Data

Serial Number	08314257-17
Calib. Date (mm/dd/yyyy)	08/05/2009
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	25.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.00025
Hydrometer Cal Intercept	1.00825

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000	0	0	0 g	100.0	Cobbles	
2 inch	50000	0	0	0 g	100.0	Gravel	
1.5 inch	37500	0	0	0 g	100.0	Gravel	
1 inch	25000	0	0	0 g	100.0	Gravel	
3/4 inch	19000	0	0	0 g	100.0	Gravel	
3/8 inch	9500	0	0.3266	0.3266 g	99.4	Gravel	
#4	4750	0	1.0393	1.0393 g	97.4	Gravel	
#10	2000	0	1.7422	1.7422 g	94.0	Gravel	
#20	850	0	1.5732	1.5732 g	90.9	Sand	Coarse
#40	425	0	3.0783	3.0783 g	84.9	Sand	Medium
#60	250	0	9.2552	9.2552 g	66.7	Sand	Medium
#140	106	0	23.0097	23.0097 g	21.5	Sand	Fine
#200	75	0	5.1359	5.1359 g	11.4	Sand	Fine
#230	63	0	1.6836	1.6836 g	8.1	Sand	Very Fine
				0 g	8.1		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g) 50.9

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual		Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
	2	2	1.01	15	38.01	17.4	Silt	
	5	5	1.008	15	24.5	11	Silt	
	15	15	1.008	15	14.15	11	Silt	
	30	30	1.007	15	10.1	7.89	Silt	
	60	60	1.007	15	7.138	7.89	Silt	
	250	250	1.006	15	3.529	4.73	Clay	
	1440	1440	1.006	15	1.47	4.73	Clay	

MW 12/30/11

12/30/2011

TestAmerica Tacoma

Sediment Grain Size - D422

Client	Ecology and Environment, Inc.	Date Receved	8/25/2011
Client Sample ID	LC05SD	Start Date	12/21/2011
Lab Sample ID	580-28371-A-18	End Date	12/29/2011

Dry Weight Determination

Tin Weight	g
Wet Sample + Tin	g
Dry Sample + Tin	g
% Moisture	16 %

Maximum Particle Size:
Non-soil material:
Hardness (> #10):

Default Soil Gravity 2.65

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		188.5	188.5
Sample Weight (Oven Dried)			158

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			119
Sample <#10			39
% Passing #10			20.7

Hydrometer Data

Serial Number	8294532-2
Calib. Date (mm/dd/yyyy)	12/23/2008
Low Temp (C)	17.0
Reading at Low Temp	1.0040
High Temp (C)	25.0
Reading at High Temp	1.0030
Hydrometer Cal Slope	-0.000125
Hydrometer Cal Intercept	1.006125

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000	0	0	0 g	100.0	Cobbles	
2 inch	50000	0	0	0 g	100.0	Gravel	
1.5 inch	37500	0	0	0 g	100.0	Gravel	
1 inch	25000	0	0	0 g	100.0	Gravel	
3/4 inch	19000	0	0	0 g	100.0	Gravel	
3/8 inch	9500	0	56.3758	56.3758 g	64.3	Gravel	
#4	4750	0	38.7734	38.7734 g	39.8	Gravel	
#10	2000	0	23.4998	23.4998 g	24.9	Gravel	
#20	850	0	11.9851	11.9851 g	17.3	Sand	Coarse
#40	425	0	11.8743	11.8743 g	9.8	Sand	Medium
#60	250	0	8.0309	8.0309 g	4.7	Sand	Medium
#140	106	0	5.5068	5.5068 g	1.2	Sand	Fine
#200	75	0	0.5838	0.5838 g	0.8	Sand	Fine
#230	63	0	0.0394	0.0394 g	0.8	Sand	Very Fine
				0 g	0.8		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g) 158

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.005	15	39.81	0.762	Silt	
5	5	1.005	15	25.18	0.762	Silt	
15	15	1.005	15	14.54	0.762	Silt	
30	30	1.005	15	10.28	0.762	Silt	
60	60	1.005	15	7.268	0.762	Silt	
250	250	1.005	15	3.561	0.762	Clay	
1440	1440	1.005	15	1.484	0.762	Clay	

MW 12-30-11

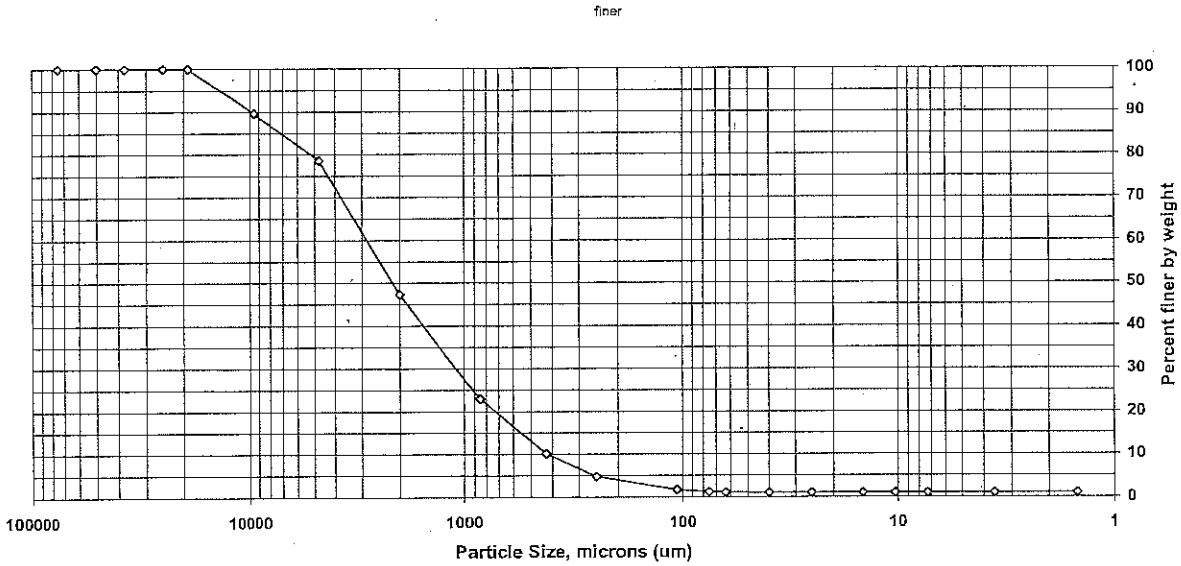
12/30/2011

Particle Size of Soils by ASTM D422

Client:	Ecology and Environment, Inc.			Date Received:	8/24/2011
Sample ID:	EF01SD	Percent Solids:	70%	Start Date:	12/21/2011
Lab ID:	580-28371-A-14	Specific Gravity:	2.650	End Date:	12/27/2011

Maximum Particle Size: 0.000
Non-soil material: 0

Shape (> #10):
Hardness (> #10): 0



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	89.6	10.4
#4	4750	78.6	11.0
#10	2000	47.4	31.2
#20	850	23.0	24.4
#40	425	10.2	12.8
#60	250	4.8	5.4
#140	106	1.7	3.1
#200	75	1.3	0.5
#230	63	1.1	0.2
Hyd	39.81	1.0	0.1
Hyd	25.18	1.0	0.0
Hyd	14.54	1.0	0.0
Hyd	10.28	1.0	0.0
Hyd	7.268	1.0	0.0
Hyd	3.561	1.0	0.0
Hyd	1.484	1.0	0.0

Soil Classification	Percent of Total Sample
Gravel	21.4
Sand	77.5
Coarse Sand	31.2
Medium Sand	37.2
Fine Sand	9.0
Very Fine Sand	0.2
Silt	0.1
Clay	1.0

Preparation Method: ASTM D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

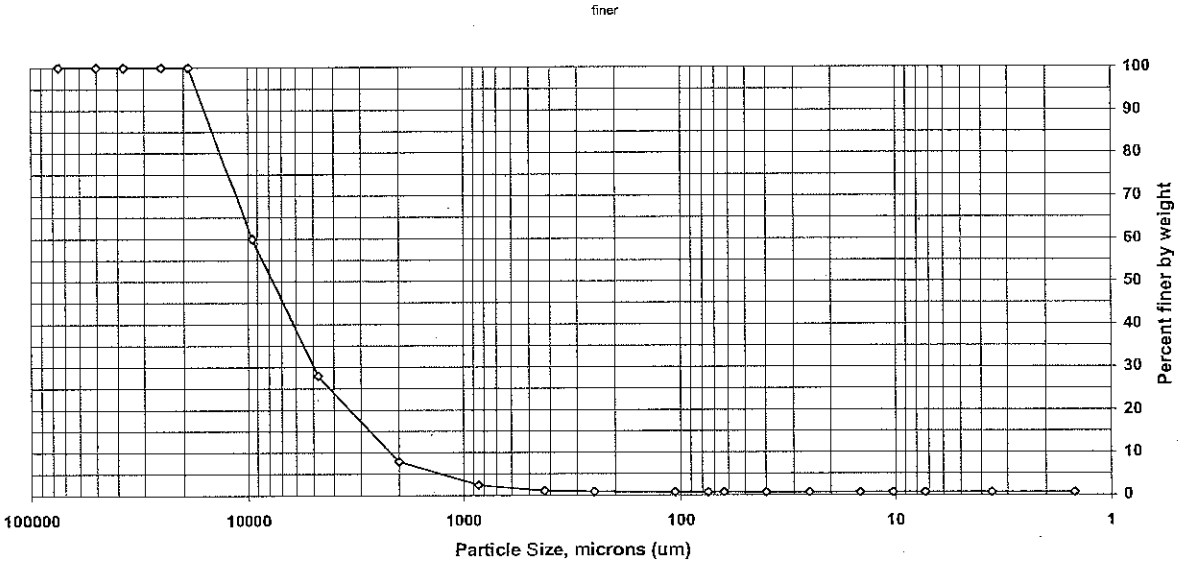
MW 12-31-11

Particle Size of Soils by ASTM D422

Client:	Ecology and Environment, Inc.			**Date Received:**	8/24/2011
Sample ID:	EF02SD	**Percent Solids:**	84%	**Start Date:**	12/21/2011
Lab ID:	580-28371-A-15	**Specific Gravity:**	2.650	**End Date:**	12/29/2011

Maximum Particle Size: 0.000
Non-soil material: 0

Shape (> #10):
Hardness (> #10): 0



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	60.0	40.0
#4	4750	27.9	32.1
#10	2000	8.0	19.9
#20	850	2.5	5.5
#40	425	1.1	1.4
#60	250	0.8	0.3
#140	106	0.7	0.1
#200	75	0.7	0.0
#230	63	0.7	0.0
Hyd	39.81	0.6	0.1
Hyd	25.18	0.6	0.0
Hyd	14.54	0.6	0.0
Hyd	10.28	0.6	0.0
Hyd	7.268	0.6	0.0
Hyd	3.561	0.6	0.0
Hyd	1.484	0.6	0.0

Soil Classification	Percent of Total Sample
Gravel	72.1
Sand	27.2
Coarse Sand	19.9
Medium Sand	6.9
Fine Sand	0.4
Very Fine Sand	0.0
Silt	0.1
Clay	0.6

Preparation Method: ASTM D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

JW 12-29-11

Particle Size of Soils by ASTM D422

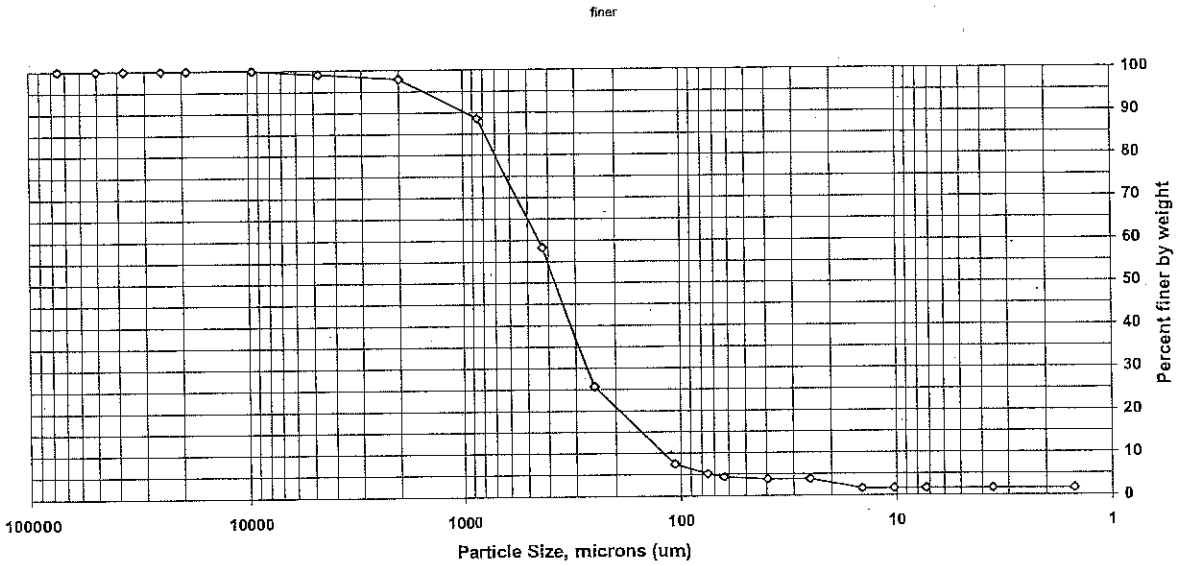
Client: Ecology and Environment, Inc.
Sample ID: LC01SD
Lab ID: 580-28371-A-16

Percent Solids: 69%
Specific Gravity: 2.650

Date Received: 8/25/2011
Start Date: 12/21/2011
End Date: 12/29/2011

Maximum Particle Size: 0.000
Non-soil material: 0

Shape (> #10):
Hardness (> #10): 0



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.1	0.9
#10	2000	97.9	1.2
#20	850	88.6	9.3
#40	425	58.3	30.3
#60	250	25.7	32.6
#140	106	7.5	18.3
#200	75	5.1	2.3
#230	63	4.3	0.8
Hyd	39.45	3.9	0.5
Hyd	24.95	3.9	0.0
Hyd	14.54	1.7	2.2
Hyd	10.28	1.7	0.0
Hyd	7.268	1.7	0.0
Hyd	3.561	1.7	0.0
Hyd	1.484	1.7	0.0

Soil Classification	Percent of Total Sample
Gravel	0.9
Sand	94.8
Coarse Sand	1.2
Medium Sand	39.6
Fine Sand	53.2
Very Fine Sand	0.8
Silt	2.7
Clay	1.7

Preparation Method: ASTM D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

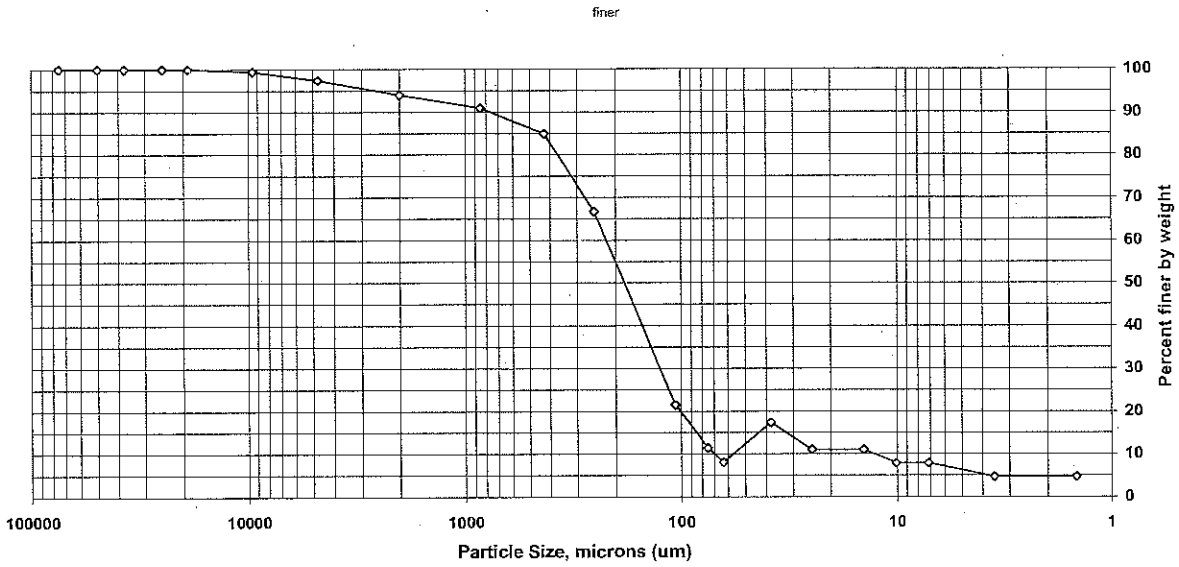
JMW 12-30-11

Particle Size of Soils by ASTM D422

Client:	Ecology and Environment, Inc.			**Date Received:**	8/25/2011
Sample ID:	LC02SD	**Percent Solids:**	43%	**Start Date:**	12/21/2011
Lab ID:	580-28371-A-17	**Specific Gravity:**	2.650	**End Date:**	12/29/2011

Maximum Particle Size: 0.000
Non-soil material: 0

Shape (> #10):
Hardness (> #10): 0



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.4	0.6
#4	4750	97.4	2.0
#10	2000	94.0	3.4
#20	850	90.9	3.1
#40	425	84.9	6.0
#60	250	66.7	18.2
#140	106	21.5	45.2
#200	75	11.4	10.1
#230	63	8.1	3.3
Hyd	38.01	17.4	-9.3
Hyd	24.5	11.0	6.4
Hyd	14.15	11.0	0.0
Hyd	10.1	7.9	3.1
Hyd	7.138	7.9	0.0
Hyd	3.529	4.7	3.2
Hyd	1.47	4.7	0.0

Soil Classification	Percent of Total Sample
Gravel	2.6
Sand	89.3
Coarse Sand	3.4
Medium Sand	9.1
Fine Sand	73.5
Very Fine Sand	3.3
Silt	0.2
Clay	7.9

Preparation Method: ASTM D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

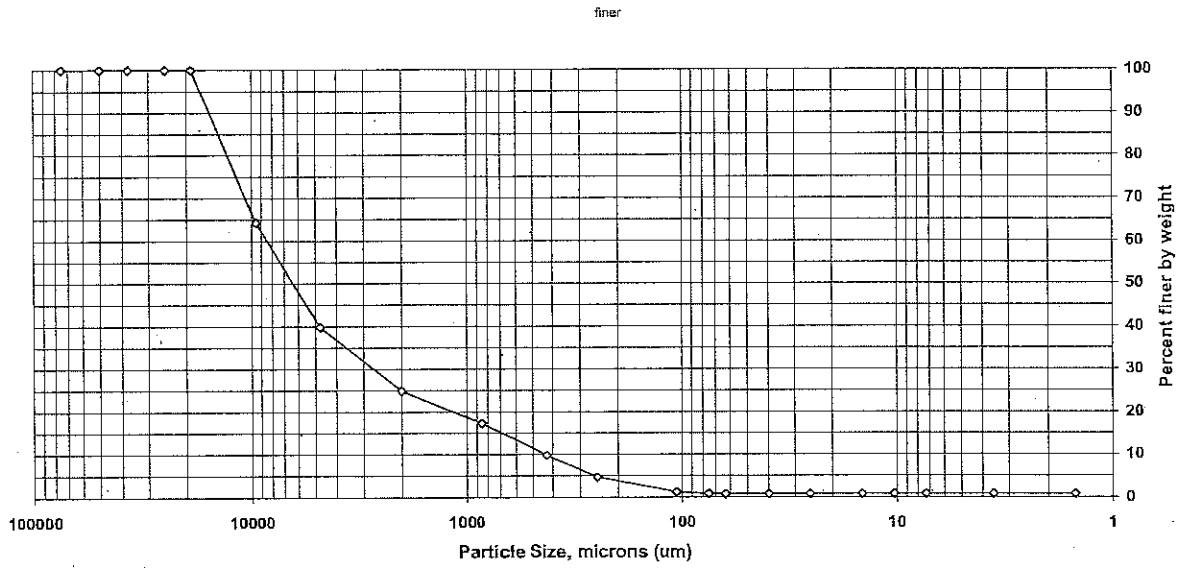
12-31-11

Particle Size of Soils by ASTM D422

Client:	Ecology and Environment, Inc.			Date Received:	8/25/2011
Sample ID:	LC05SD	Percent Solids:	84%	Start Date:	12/21/2011
Lab ID:	580-28371-A-18	Specific Gravity:	2.650	End Date:	12/29/2011

Maximum Particle Size: 0.000
Non-soil material: 0

Shape (> #10):
Hardness (> #10): 0



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	64.3	35.7
#4	4750	39.8	24.5
#10	2000	24.9	14.9
#20	850	17.3	7.6
#40	425	9.8	7.5
#60	250	4.7	5.1
#140	106	1.2	3.5
#200	75	0.8	0.4
#230	63	0.8	0.0
Hyd	39.81	0.8	0.1
Hyd	25.18	0.8	0.0
Hyd	14.54	0.8	0.0
Hyd	10.28	0.8	0.0
Hyd	7.268	0.8	0.0
Hyd	3.561	0.8	0.0
Hyd	1.484	0.8	0.0

Soil Classification	Percent of Total Sample
Gravel	60.2
Sand	39.0
Coarse Sand	14.9
Medium Sand	15.1
Fine Sand	8.9
Very Fine Sand	0.0
Silt	0.1
Clay	0.8

Preparation Method: ASTM D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

12-30-11