744 Horizon Ct., STE 140
Grand Junction, CO 81506
Phone: 970-243-3271
Fax: 970-243-3280

April 4, 2011

Mr. Chris Canfield, P.G.
Environmental Protection Specialist
State of Colorado Oil and Gas Conservation Commission
707 Wapiti Ct. Suite 204
Rile, Colorado 81605

RE: Williams Production Company RMT
Notice of Completion Report
Hoaglund PA 21-2 Pit Remediation #5063

Dear Mr. Canfield:

This Colorado Oil and Gas Conservation Commission (COGCC) Notice of Completion Report (NOC) is being submitted as a request for "No Further Action" determination related to the production pit closure of the Williams Production RMT Company (Williams) facility identified as the Hoaglund PA 21-2. This facility is located in the NENW, Sec 2, T7S, R95W, 6th PM, in Garfield County, CO. This NOC report is being submitted subsequent to the comprehensive and successful completion of tasks outlined in the approved Site Investigation and Remediation Plan (remediation #5063).

Should you have any questions or concerns in regards to the Form 27, please do not hesitate to contact me at your convenience.

Sincerely

Kris Rowe
Environmental Scientist

CC: Karolina Blaney
Herman Lucero
File

FORM
27
Rev 6/99

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

FOR OGCC USE ONLY

OGCC Employee:
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No:

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☑ Site/Facility Closure ☐ Other (describe):

OGCC Operator Number: 96850
Name of Operator: Williams Production RMT Company
Address: 1058 County Road 215
City: Parachute State: CO Zip: 81635

Contact Name and Telephone:
Karolina Blaney
No: 970 683 2295
Fax: 970 285 9573

API Number: 05-045-11452 County: Garfield
Facility Name: PA 21-2 Facility Number: PA 21-2
Well Name: PA 21-2 Well Number: PA 21-2
Location: (QtrQtr, Sec, Twp, Rng, Meridian): NE NW S2 T7S R95W 6th PM Latitude: 39.472308 Longitude: 107.966693

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced Water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☑ Y ☐ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.):

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Soli Series No. 55 - Potts Loam

Potential receptors (water wells within 1/4 mi, surface waters, etc.): surface water -311', water well-2078', ground water - 100' (see hydrology map for details)

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
☑ Soils	See attached for vertical and lateral extent	field screening, GIS mapping, analytical confirmation
☐ Vegetation		
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

See Attached Notice of Completion Report Remediation # 5063

Describe how source is to be removed:

See Attached Notice of Completion Report Remediation # 5063

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

See Attached Notice of Completion Report Remediation # 5063

Submit Page 2 with Page 1

FORM 27 Rev 6/99

Page 2

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax:(303)894-2109

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

See attached Noticed of Completion Report for Remediation # 5063

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

See attached Noticed of Completion Report for Remediation # 5063

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☑ Y ☐ N If yes, describe:

See attached Noticed of Completion Report for Remediation # 5063

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

See attached Noticed of Completion Report for Remediation # 5063

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: June 18, 2010	Date Site Investigation Completed: June 18, 2010	Date Remediation Plan Submitted: June 16, 2010
Remediation Start Date: November 30, 2010	Anticipated Completion Date: March, 2011	Actual Completion Date: March 1, 2011

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Karolina Blaney Signed: Karolina Blaney

Title: Environmental Specialist Date: 4/4/2011

OGCC Approved: _____ Title: _____ Date: _____

WILLIAMS PRODUCTION RMT COMPANY

SOUTH PARACHUTE FIELD

PA 21-2

NOTICE OF COMPLETION REPORT FOR REMEDIATION #5063

April 2011

Prepared For:

1058 County Road 215
P.O. Box 370
Parachute, Colorado 81635

Prepared By:

744 Horizon Court, Suite 140
Grand Junction, CO 81506
Phone: 970-243-3271
Fax: 970-243-3280

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Form 27 Attachment

Introduction

The purpose of this Notice of Completion report – for the closure of the Hoaglund PA 21-2 completion pit (COGCC API Number 05-045-11452; hereinafter also referred to as PA 21-2) – is to provide detailed information and findings analysis for the previously submitted and approved (remediation number 5063) Colorado Oil and Gas Conservation Commission (COGCC) Site Investigation and Remediation Workplan, Form 27. This report will provide the documentation necessary to demonstrate a comprehensive and diligent investigation of the pit and adjacent environment which was obtained as described and in accordance with all appropriate county, state and federal rules and regulations.

The subject Form 27 was delivered via electronic email on June 16, 2010. Preliminary approval to proceed with closure of the subject pit was issued by the COGCC and obtained by Williams Production RMT Company (Williams) on June 18, 2010; at which time the aforementioned remediation number was issued. Closure activities began in November 30, 2010 and were concluded on March 1, 2011. Information in this report includes, but is not limited to: field screening results; laboratory analytical; subliner soil remediation; liner recycling; pit sludge disposal; and complete backfilling of the completion pit.

Evacuation of Pit Contents

Remaining pit contents were removed from the pit using hydro-vac trucks and placed in a lined bermed containment to have free liquids removed via filter press.

The filter press sludge was palced into the aforementioned lined bermed containment cell, profiled for disposal/characterization purposes, and transported to ECDC Environmental for disposal on February 14, 2011.

Background Sampling

Three samples were collected from the up-gradient undisturbed hillsides surrounding the pad. All background samples were analyzed for arsenic as well as additional analysis at one location which included inorganic parameters of COGCC Table 910-1(i.e. SAR, EC, pH). Refer to Table 4 and Appendix 3 for background sampling results.

Pit Liner Investigation and Integrity Assessment

The pit liner system – containing two layers of poly synthetic material/liner and one layer of felt. Numerous rips and holes were discovered throughout the pit lining system and a liquid was

encountered under the primary liner provided evidence that the integrity of the pit lining system had been compromised at some point during operations.

It was discovered that small holes ranging from 2" to 6" were present on the north and northeast wall beginning at the crest of the pit and extending down to the center of the pit, approximately 10 ft. Similar holes were noticed in the southwest corner, extending from the crest of the pit to the bottom, and extending across the bottom for approximately five feet. Three patches were identified in the center/center of the north wall, at the crest of the pit in the northwest corner, and at the base of the pit in the northwest corner. The patch located center/center on the north wall had come unbound to the liner and allowed pit contents to impact the soil below the lining material.

The pit bottom contained minimal tearing and holes aside from: the patch located in the northwest corner, the 2"to 6" holes in the southwest corner, and two tears located near the center of the pit which were approximately 18" and 6" in length, and exposed the felt underlayment.

Pit Liner Removal

Removal of the pit liners consisted of a crew cutting the liner along the crest of the pit at an elevation adjacent to the surface of the well pad. A trackhoe bucket was utilized to grab sections of the liner for extraction and place them in a lined earthen bermed containment cell for subsequent management. Sections of liner that contained residual or trace amounts of sludge were pulled, placed into the containment cell, and allowed to dry. Liners were stored in a lined bermed containment until being banded to pallets to be recycled.

Subliner Soil Investigation and Activities

Subliner soils, examined below the pit lining, were inspected visually and through the use of specialized field screening equipment (identified below) to identify areas which may exceed standards set forth in Table 910-1 of the COGCC 900-Series Rule for hydrocarbons within the soil. Soils on the pit floor and walls were stained black and contained a moderate hydrocarbon odor, indicating that there may have been impacts to the subliner soils.

Field screening of the pit footprint and walls was performed along the entire pit in a grid pattern of sections. The pit bottom was separated into four sections and a five point composite sample was collected from each of the quarter sections, with a depth of 0-6 inches below the surface. A five point composite sample was collected from each of the pit walls and field screened for hydrocarbons. Grab samples were collected from each section as well at a later time to provide laboratory confirmation of field screen results.

Figure 1 outlines the pit sampling nomenclature and field screening results using a PetroFlag Hydrocarbon Unit (PetroFlag©) and Figure 2 is a GIS map of the pit outlining sample locations within the pit as well as background sample locations from the nearby uphill undisturbed soil.

Figure 1

PetroFlag Results and Pit Sampling ID Layout

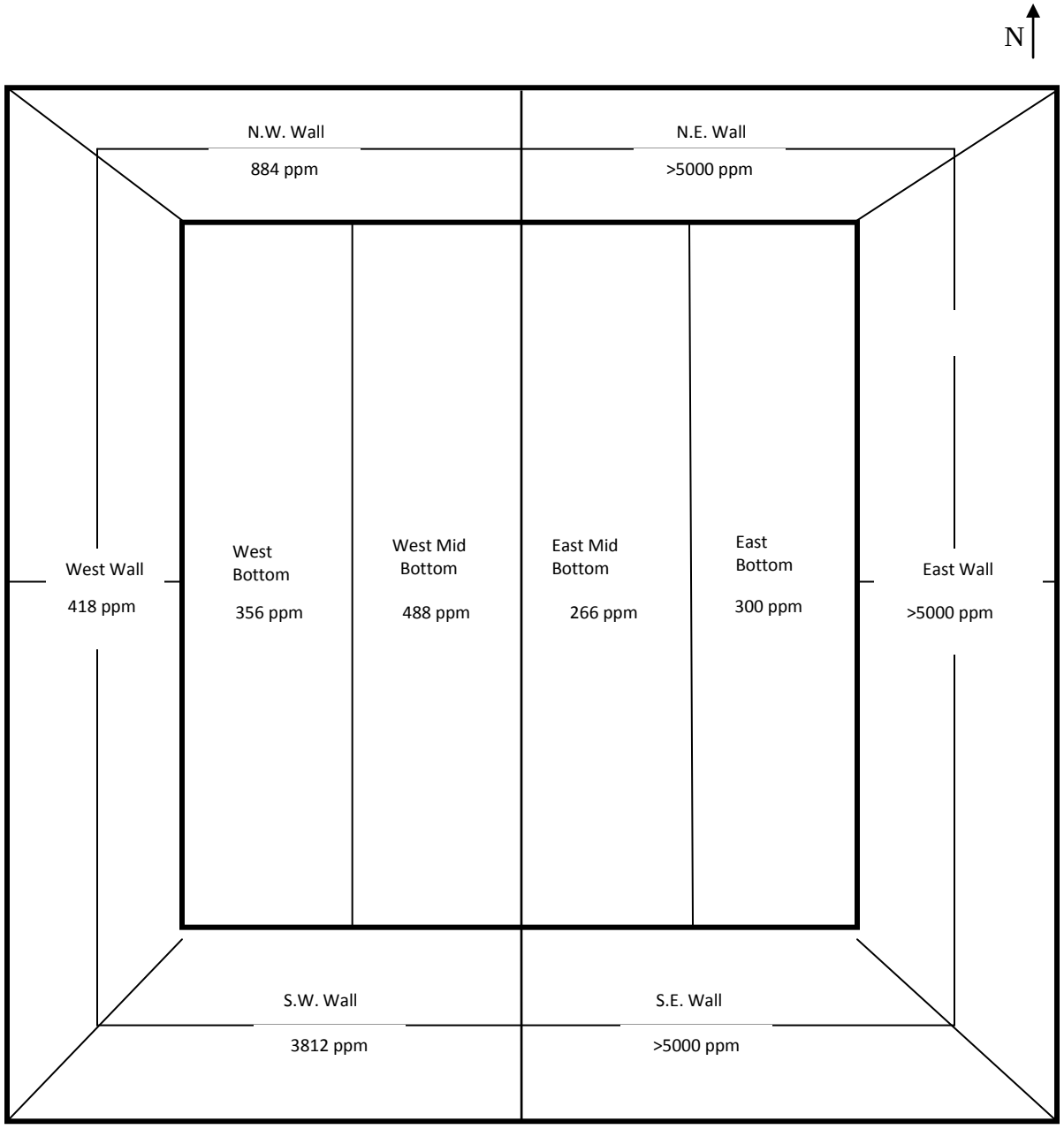


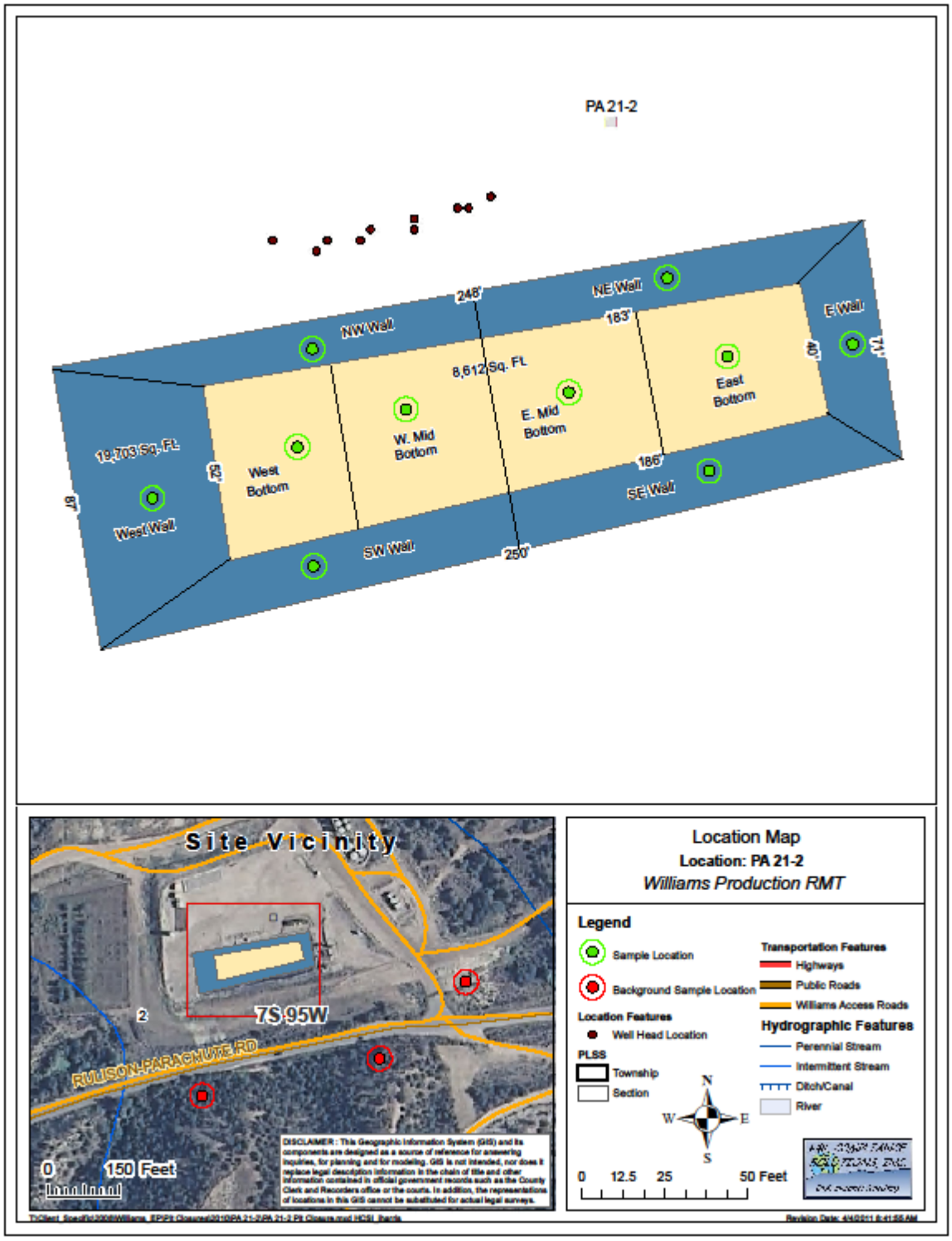
Table 1: PetroFlag Hydrocarbon Initial Field Screening Results

Sample ID	Results mg/kg
NE Wall	>5000
NW Wall	884
East Wall	>5000
SE Wall	>5000
SW Wall	3812
West Wall	418
West Bottom	356
West Mid. Bottom	488
East Mid. Bottom	266
East Bottom	300

Note: All results are in mg/kg
Highlighted numbers indicate areas that warranted additional inspection and analysis

Figure 2

GIS Map of Sampling Locations



Field screening results are provided in Table 1 and indicate that remediation is required due to TPH concentrations being above COGCC Table 910-1 standards.

Remediation Activities

Soil containing dark stains and a hydrocarbon odor located on the pit bottom and adjacent walls indicating the potential presence of hydrocarbon concentrations exceeding 500 ppm and thus required remediation. The pit footprint was excavated approximately 3 feet in areas containing a potential hydrocarbon concentration above 500 ppm. Discoloration within soil was no longer present at excavated depth and field screening results indicated that hydrocarbon concentrations were below 500 ppm. Confirmation samples were collected and analyzed for COGCC Table 910-1.

- Confirmation samples, in accordance with Rule 905.b.(4), were collected from the west and east side walls at a position that was centered vertically and horizontally. Confirmation samples were also collected from two points on the face of each north and south side walls of the pit at points centered vertically and which divided the walls into equal halves horizontally. These samples were collected for confirmation of compliance with COGCC Rule 910 and Table 910-1; as well as verification of field screening analysis. Four (4) additional grab samples were collected from the base of the pit, dividing the bottom of the pit into quarters, which included the low point of the base, to demonstrate compliance in accordance with Rule 905.b.(1).
- A Trimble Geo XT 2008 was used to collect GPS locations of each confirmation sample location from the pit walls and pit footprint.
- Visual inspection of the pit bottoms, field screening techniques, and sampling procedures were followed in accordance with Williams Highlands Pit Closure Plan (COGCC document #01175818).

Analytical data presented in Table 2 provides results for the confirmation sampling performed post excavation of the pit footprint (raw analytical results are available for review in Appendix 1 of this report).

Surface Water Sampling

Per the conditions specified by the COGCC on the approved Form 27 approved on June 18, 2010, a surface waster sample was collected from Cottonwood Creek due to the presence of flowing/live water during the time of pit closure activities. The sample collected was analyzed for constituents outlined in the 317B Battlement Mesa/Parachute Public Water Protection Plan (the list of analysis is also available upon review of, Table 3: Surface Water Sample – Cottonwood Creek of this NOC report). Analytical results are also provided in raw form in Table 3 (appendix 2)

Sample Analysis

See attached Table 2 (additional detail provided in Appendix 1) for summary of pit bottom and wall raw analytical results, and Table 3 (additional detail provided in Appendix 2) which provide raw analytical results for surface water sampling of Cottonwood Creek. Table 4 provides analytical data for background data collected from an uphill an undisturbed location (additional detail provided in Appendix 3), Table 5 provides analytical confirmation the backfilled material showing soil used meets COGCC Table 910-1 (additional detail provided in Appendix 4).

Management of Stockpiled Material

The pit liner was segregated according to material and placed in a bermed containment. Plastic lining material was placed in the south end of the containment and felt liners were placed on the north end. High Plains Services compressed and collected the liners and bound them to pallets for transportation to be recycled.

Pit sludge that was removed from the bottom of the pit, above the liner, and placed in a lined bermed containment cell was disposed of to ECDC Environmental on February 14, 2011.

Backfill Material

Additional backfill material, aside from soil present on the pad, was utilized during reclamation of the well pad by utilizing the soil and rock present on the Williams Well Pad RWF 23-30. Topsoil stockpiled on the pad during initial excavation of the pit was placed on the upper three feet and sampled to ensure material meets COGCC Table 910-1 (see Table 5 and Appendix 4 for additional detail).

- The soil was placed in lifts and was not compacted beyond the point of making an impenetrable layer but sufficient to suppose subsequent operations and prevent subsidence.
- The pit was reclaimed in accordance with the COGCC 1000 Series Rule in addition to all SUA/COA's per the land owner.

Exceptions to COGCC Table 910-1

The only exceedances with COGCC Table 910-1 are within the confines of constituents listed for inorganics and metals (i.e. arsenic). Refer to Appendix 5 for the Sundry Notice for consideration of background arsenic concentrations in the immediate area of the subject facility.

Analytical Data Management

See Appendix 1 for post excavated pit bottom and wall raw analytical data, Appendix 2 for surface water sampling raw analytical data, Appendix 3 background analytical data, and Appendix 4 backfill material confirmation raw analytical data.

Figures

Figure 3

Visual Representation of the Pit Facing East During Excavation

Summary Tables

Table 2: Post Excavation Pit Bottom Analytical Results

Post Excavation of Pit Walls and Bottom	West Bottom	West Mid. Bottom	East Mid. Bottom	East Bottom	East Wall	N.E. Wall	N.W. Wall	S.W. Wall	S.E. Wall	West Wall
TEPH (DRO)	15	9.7	13	14	9.8	12	11	14	ND	13
TVPH (GRO)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	53	ND	31	76	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENE TOTAL	65	ND	140	72	72	170	ND	ND	ND	85
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)ANTRHACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRANCENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	64	ND	97	ND	ND	ND	75	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ARSENIC	6.4	6.1	5.6	7.2	8.7	6.0	6.3	5.1	6.2	7.2
BARIUM	3400	2700	5100	4200	5100	4400	4100	4600	5000	490
CADMIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHROMIUM	16	13	13	13	14	12	15	14	16	17
CHROMIUM (III)	16	14	14	13	13	12	12	13	15	17
CHROMIUM (IV)	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND
COPPER	13	11	13	13	15	11	13	12	16	12
LEAD	13	12	14	17	21	10	14	14	18	12
NICKEL	18	16	17	15	17	22	18	16	17	17
SELENIUM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SILVER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZINC	170	130	270	180	210	190	180	190	210	62
Sodium Absorbtion Ratio (unitless)	160.2	103.5	88.8	100	72.5	182.2	71.1	80.4	81.1	208.2
Electric Conductivity (mmho/cm)	9.22	9.22	7.46	9.38	6.78	9.01	7.72	6.86	8.41	10.65
pH (unitless)	9	8.9	9.6	9.1	9.0	8.9	9.1	9.2	8.9	9.3

Note: all results are in, mg/kg = milligram per kilogram, unless noted
Exceedances are highlighted in yellow.

Table 3: Surface Water Sample - Cottonwood Creek

Cottonwood Creek	Cottonwood Creek
TEPH (DRO)	ND
TVPH (GRO)	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENE TOTAL	ND
ALL VOLATIL ORGANIC COMPOUNDS	ND
ARSENIC	0.0045
BARIUM	0.099
CADMIUM	ND
CHROMIUM	ND
CHROMIUM (III) (mg/kg)	0.00041
CHROMIUM (IV)	ND
COPPER	ND
IRON	0.22
LEAD	ND
MAGNESIUM	28
MERCURY	ND
NICKEL	ND
SELENIUM	ND
SILVER	ND
SODIUM	44
BROMIDE	0.1
CHLORIDE	6.6
FLUORIDE	0.35
NITRATE	0.47
NITRITE	ND
SULFATE	37
NITRATE-NITRITE	0.47
pH (unitless)	8.3
SPECIFIC CONDUCTANCE (µmhos/cm)	610
TOTAL DISSOLVED SOLIDS	370

Note: All results are in, mg/L = milligrams per liter, unless noted otherwise

Table 4: Background Analytical Data

	Arsenic	Sodium Absorption Ratio (unitless)	Electro Conductivity (mmhos/cm)	pH (unitless)
BKGD 1	6.0	0.50	0.39	8.26
BKGD 2	7.5			
BKGD 3	5.6			

All results are in, mg/kg = milligram per kilogram, unless noted otherwise

Table 5: Backfill Confirmation

Backfill Confirmation	Top 3 Ft
TEPH (DRO)	7.5
TVPH (GRO)	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENE TOTAL	ND
ACENAPHTHENE	ND
ACENAPHTHYLENE	ND
ANTHRACENE	ND
BENZO(A)ANTRHACENE	ND
BENZO(A)PYRENE	ND
BENZO(B)FLUORANTHENE	ND
BENZO(G,H,I)PERYLENE	ND
BENZO(K)FLUORANTHENE	ND
CHRYSENE	ND
DIBENZO(A,H)ANTHRANCENE	ND
FLUORANTHENE	ND
FLUORENE	ND
INDENO(1,2,3-CD)PYRENE	ND
NAPHTHALENE	ND
PYRENE	ND
ARSENIC	6.4
BARIUM	2000
CADMIUM	0.31
CHROMIUM	14
CHROMIUM (III)	14
CHROMIUM (IV)	ND
COPPER	12
LEAD	11
NICKEL	16
SELENIUM	1.0
SILVER	ND
ZINC	37
Sodium Absorbtion Ratio (unitless)	5.0
Electric Conductivity (mmho/cm)	0.57
pH	8.55

All results are in, mg/kg = milligram per kilogram, unless noted otherwise

Appendix 1: Pit Bottom and Walls Confirmation Raw Analytical Data

07-Feb-2011

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **PA 21-2 Pit Closure 1/30/11** Work Order: **1102072**

Dear Mark,

ALS Environmental received 10 samples on 03-Feb-2011 12:00 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 47.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 07-Feb-11

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11
Work Order: **1102072**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1102072-01	W Bottom	Soil		1/30/2011 10:00	2/3/2011 12:00	☐
1102072-02	W. Mid Bottom	Soil		1/30/2011 10:10	2/3/2011 12:00	☐
1102072-03	E. Mid Bottom	Soil		1/30/2011 10:20	2/3/2011 12:00	☐
1102072-04	E. Bottom	Soil		1/30/2011 10:30	2/3/2011 12:00	☐
1102072-05	E. Wall	Soil		1/30/2011 10:40	2/3/2011 12:00	☐
1102072-06	N.E. Wall	Soil		1/30/2011 10:50	2/3/2011 12:00	☐
1102072-07	N.W. Wall	Soil		1/30/2011 11:00	2/3/2011 12:00	☐
1102072-08	S.W. Wall	Soil		1/30/2011 11:10	2/3/2011 12:00	☐
1102072-09	S.E. Wall	Soil		1/30/2011 11:20	2/3/2011 12:00	☐
1102072-10	W. Wall	Soil		1/30/2011 11:30	2/3/2011 12:00	☐

ALS Group USA, Corp

Date: 07-Feb-11

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11
Work Order: 1102072

Case Narrative

The samples for pH were received after the hold time had expired.

Batch 31737 MS?MSD data for Metals is not related to this project's samples.

ALS Group USA, Corp

Date: 07-Feb-11

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11
WorkOrder: **1102072**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: W Bottom **Lab ID:** 1102072-01
Collection Date: 1/30/2011 10:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**15**		**4.8**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*41.4*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.8	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*108*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**6.4**		**0.95**	**mg/Kg-dry**	2	2/4/2011 05:19 PM
Barium	**3,400**		**95**	**mg/Kg-dry**	200	2/5/2011 03:33 PM
Cadmium	ND		0.38	mg/Kg-dry	2	2/4/2011 05:19 PM
Chromium	**16**		**0.95**	**mg/Kg-dry**	2	2/4/2011 05:19 PM
Copper	**13**		**0.95**	**mg/Kg-dry**	2	2/4/2011 05:19 PM
Lead	**13**		**0.95**	**mg/Kg-dry**	2	2/4/2011 05:19 PM
Nickel	**18**		**0.95**	**mg/Kg-dry**	2	2/4/2011 05:19 PM
Selenium	ND		0.95	mg/Kg-dry	2	2/4/2011 05:19 PM
Silver	ND		0.95	mg/Kg-dry	2	2/4/2011 05:19 PM
Zinc	**170**		**19**	**mg/Kg-dry**	20	2/5/2011 04:41 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Anthracene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Chrysene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Fluoranthene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Fluorene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Naphthalene	**64**		**35**	**µg/Kg-dry**	1	2/4/2011 08:22 PM
Pyrene	ND		35	µg/Kg-dry	1	2/4/2011 08:22 PM
Surr: 2,4,6-Tribromophenol	*71.3*		*38-104*	*%REC*	1	2/4/2011 08:22 PM
Surr: 2-Fluorobiphenyl	*43.7*		*12-85*	*%REC*	1	2/4/2011 08:22 PM
Surr: 2-Fluorophenol	*65.0*		*37-96*	*%REC*	1	2/4/2011 08:22 PM
Surr: 4-Terphenyl-d14	*61.1*		*32-101*	*%REC*	1	2/4/2011 08:22 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: W Bottom **Lab ID:** 1102072-01
Collection Date: 1/30/2011 10:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*61.1*		*32-98*	*%REC*	1	2/4/2011 08:22 PM
Surr: Phenol-d6	*66.6*		*42-98*	*%REC*	1	2/4/2011 08:22 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		20	µg/Kg-dry	100	2/3/2011 02:38 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 02:38 PM
m,p-Xylene	**65**		**18**	**µg/Kg-dry**	100	2/3/2011 02:38 PM
o-Xylene	ND		14	µg/Kg-dry	100	2/3/2011 02:38 PM
Toluene	ND		13	µg/Kg-dry	100	2/3/2011 02:38 PM
Xylenes, Total	**65**		**32**	**µg/Kg-dry**	100	2/3/2011 02:38 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**16**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**14**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.0**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: W. Mid Bottom **Lab ID:** 1102072-02
Collection Date: 1/30/2011 10:10 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**9.7**		**4.8**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*42.0*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**6.1**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:24 PM
Barium	**2,700**		**100**	**mg/Kg-dry**	200	2/5/2011 03:38 PM
Cadmium	ND		0.40	mg/Kg-dry	2	2/4/2011 05:24 PM
Chromium	**13**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:24 PM
Copper	**11**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:24 PM
Lead	**12**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:24 PM
Nickel	**16**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:24 PM
Selenium	ND		1.0	mg/Kg-dry	2	2/4/2011 05:24 PM
Silver	ND		1.0	mg/Kg-dry	2	2/4/2011 05:24 PM
Zinc	**130**		**20**	**mg/Kg-dry**	20	2/5/2011 04:46 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Anthracene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Chrysene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Fluoranthene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Fluorene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Naphthalene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Pyrene	ND		34	µg/Kg-dry	1	2/4/2011 11:56 PM
Surr: 2,4,6-Tribromophenol	*81.5*		*38-104*	*%REC*	1	2/4/2011 11:56 PM
Surr: 2-Fluorobiphenyl	*51.2*		*12-85*	*%REC*	1	2/4/2011 11:56 PM
Surr: 2-Fluorophenol	*69.6*		*37-96*	*%REC*	1	2/4/2011 11:56 PM
Surr: 4-Terphenyl-d14	*69.0*		*32-101*	*%REC*	1	2/4/2011 11:56 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: W. Mid Bottom **Lab ID:** 1102072-02
Collection Date: 1/30/2011 10:10 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*64.9*		*32-98*	*%REC*	1	2/4/2011 11:56 PM
Surr: Phenol-d6	*71.9*		*42-98*	*%REC*	1	2/4/2011 11:56 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		20	µg/Kg-dry	100	2/3/2011 03:04 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 03:04 PM
m,p-Xylene	ND		18	µg/Kg-dry	100	2/3/2011 03:04 PM
o-Xylene	ND		14	µg/Kg-dry	100	2/3/2011 03:04 PM
Toluene	ND		13	µg/Kg-dry	100	2/3/2011 03:04 PM
Xylenes, Total	ND		32	µg/Kg-dry	100	2/3/2011 03:04 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**14**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**13**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**8.9**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: E. Mid Bottom **Lab ID:** 1102072-03
Collection Date: 1/30/2011 10:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**13**		**4.7**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*42.4*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**5.6**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:29 PM
Barium	**5,100**		**100**	**mg/Kg-dry**	200	2/5/2011 03:43 PM
Cadmium	ND		0.40	mg/Kg-dry	2	2/4/2011 05:29 PM
Chromium	**13**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:29 PM
Copper	**13**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:29 PM
Lead	**14**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:29 PM
Nickel	**17**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:29 PM
Selenium	ND		1.0	mg/Kg-dry	2	2/4/2011 05:29 PM
Silver	ND		1.0	mg/Kg-dry	2	2/4/2011 05:29 PM
Zinc	**270**		**20**	**mg/Kg-dry**	20	2/5/2011 04:51 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Anthracene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Chrysene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Fluoranthene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Fluorene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Naphthalene	**97**		**34**	**µg/Kg-dry**	1	2/5/2011 12:22 PM
Pyrene	ND		34	µg/Kg-dry	1	2/5/2011 12:22 PM
Surr: 2,4,6-Tribromophenol	*62.8*		*38-104*	*%REC*	1	2/5/2011 12:22 PM
Surr: 2-Fluorobiphenyl	*33.9*		*12-85*	*%REC*	1	2/5/2011 12:22 PM
Surr: 2-Fluorophenol	*53.6*		*37-96*	*%REC*	1	2/5/2011 12:22 PM
Surr: 4-Terphenyl-d14	*55.0*		*32-101*	*%REC*	1	2/5/2011 12:22 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: E. Mid Bottom **Lab ID:** 1102072-03
Collection Date: 1/30/2011 10:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*50.7*		*32-98*	*%REC*	1	2/5/2011 12:22 PM
Surr: Phenol-d6	*55.9*		*42-98*	*%REC*	1	2/5/2011 12:22 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		19	µg/Kg-dry	100	2/3/2011 03:30 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 03:30 PM
m,p-Xylene	**140**		**18**	**µg/Kg-dry**	100	2/3/2011 03:30 PM
o-Xylene	ND		14	µg/Kg-dry	100	2/3/2011 03:30 PM
Toluene	**53**		**13**	**µg/Kg-dry**	100	2/3/2011 03:30 PM
Xylenes, Total	**140**		**32**	**µg/Kg-dry**	100	2/3/2011 03:30 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**14**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**12**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.6**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: E. Bottom **Lab ID:** 1102072-04
Collection Date: 1/30/2011 10:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**14**		**5.1**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*54.7*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.1	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**7.2**		**0.91**	**mg/Kg-dry**	2	2/4/2011 05:34 PM
Barium	**4,200**		**91**	**mg/Kg-dry**	200	2/5/2011 03:48 PM
Cadmium	ND		0.37	mg/Kg-dry	2	2/4/2011 05:34 PM
Chromium	**13**		**0.91**	**mg/Kg-dry**	2	2/4/2011 05:34 PM
Copper	**13**		**0.91**	**mg/Kg-dry**	2	2/4/2011 05:34 PM
Lead	**17**		**0.91**	**mg/Kg-dry**	2	2/4/2011 05:34 PM
Nickel	**15**		**0.91**	**mg/Kg-dry**	2	2/4/2011 05:34 PM
Selenium	ND		0.91	mg/Kg-dry	2	2/4/2011 05:34 PM
Silver	ND		0.91	mg/Kg-dry	2	2/4/2011 05:34 PM
Zinc	**180**		**18**	**mg/Kg-dry**	20	2/5/2011 04:56 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Anthracene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Chrysene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Fluoranthene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Fluorene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Naphthalene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Pyrene	ND		36	µg/Kg-dry	1	2/5/2011 12:49 PM
Surr: 2,4,6-Tribromophenol	*75.5*		*38-104*	*%REC*	1	2/5/2011 12:49 PM
Surr: 2-Fluorobiphenyl	*36.7*		*12-85*	*%REC*	1	2/5/2011 12:49 PM
Surr: 2-Fluorophenol	*64.1*		*37-96*	*%REC*	1	2/5/2011 12:49 PM
Surr: 4-Terphenyl-d14	*65.5*		*32-101*	*%REC*	1	2/5/2011 12:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: E. Bottom **Lab ID:** 1102072-04
Collection Date: 1/30/2011 10:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*55.7*		*32-98*	*%REC*	1	2/5/2011 12:49 PM
Surr: Phenol-d6	*68.4*		*42-98*	*%REC*	1	2/5/2011 12:49 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		21	µg/Kg-dry	100	2/3/2011 03:56 PM
Ethylbenzene	ND		15	µg/Kg-dry	100	2/3/2011 03:56 PM
m,p-Xylene	**72**		**19**	**µg/Kg-dry**	100	2/3/2011 03:56 PM
o-Xylene	ND		15	µg/Kg-dry	100	2/3/2011 03:56 PM
Toluene	ND		14	µg/Kg-dry	100	2/3/2011 03:56 PM
Xylenes, Total	**72**		**34**	**µg/Kg-dry**	100	2/3/2011 03:56 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**13**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**19**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.1**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: E. Wall **Lab ID:** 1102072-05
Collection Date: 1/30/2011 10:40 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**9.8**		**4.7**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*35.2*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**8.7**		**0.87**	**mg/Kg-dry**	2	2/4/2011 05:39 PM
Barium	**5,100**		**87**	**mg/Kg-dry**	200	2/5/2011 03:53 PM
Cadmium	ND		0.35	mg/Kg-dry	2	2/4/2011 05:39 PM
Chromium	**14**		**0.87**	**mg/Kg-dry**	2	2/4/2011 05:39 PM
Copper	**15**		**0.87**	**mg/Kg-dry**	2	2/4/2011 05:39 PM
Lead	**21**		**0.87**	**mg/Kg-dry**	2	2/4/2011 05:39 PM
Nickel	**17**		**0.87**	**mg/Kg-dry**	2	2/4/2011 05:39 PM
Selenium	ND		0.87	mg/Kg-dry	2	2/4/2011 05:39 PM
Silver	ND		0.87	mg/Kg-dry	2	2/4/2011 05:39 PM
Zinc	**210**		**17**	**mg/Kg-dry**	20	2/5/2011 05:01 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Anthracene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Chrysene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Fluoranthene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Fluorene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Naphthalene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Pyrene	ND		34	µg/Kg-dry	1	2/5/2011 01:16 AM
Surr: 2,4,6-Tribromophenol	*60.9*		*38-104*	*%REC*	1	2/5/2011 01:16 AM
Surr: 2-Fluorobiphenyl	*34.9*		*12-85*	*%REC*	1	2/5/2011 01:16 AM
Surr: 2-Fluorophenol	*54.7*		*37-96*	*%REC*	1	2/5/2011 01:16 AM
Surr: 4-Terphenyl-d14	*53.8*		*32-101*	*%REC*	1	2/5/2011 01:16 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: E. Wall **Lab ID:** 1102072-05
Collection Date: 1/30/2011 10:40 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*50.3*		*32-98*	*%REC*	1	2/5/2011 01:16 AM
Surr: Phenol-d6	*57.4*		*42-98*	*%REC*	1	2/5/2011 01:16 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		20	µg/Kg-dry	100	2/3/2011 04:22 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 04:22 PM
m,p-Xylene	**72**		**18**	**µg/Kg-dry**	100	2/3/2011 04:22 PM
o-Xylene	ND		14	µg/Kg-dry	100	2/3/2011 04:22 PM
Toluene	**31**		**13**	**µg/Kg-dry**	100	2/3/2011 04:22 PM
Xylenes, Total	**72**		**32**	**µg/Kg-dry**	100	2/3/2011 04:22 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**13**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**12**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.0**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: N.E. Wall **Lab ID:** 1102072-06
Collection Date: 1/30/2011 10:50 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**12**		**4.6**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*50.6*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.9	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**6.0**		**0.96**	**mg/Kg-dry**	2	2/4/2011 05:43 PM
Barium	**4,400**		**96**	**mg/Kg-dry**	200	2/5/2011 03:58 PM
Cadmium	ND		0.38	mg/Kg-dry	2	2/4/2011 05:43 PM
Chromium	**12**		**0.96**	**mg/Kg-dry**	2	2/4/2011 05:43 PM
Copper	**11**		**0.96**	**mg/Kg-dry**	2	2/4/2011 05:43 PM
Lead	**10**		**0.96**	**mg/Kg-dry**	2	2/4/2011 05:43 PM
Nickel	**22**		**0.96**	**mg/Kg-dry**	2	2/4/2011 05:43 PM
Selenium	ND		0.96	mg/Kg-dry	2	2/4/2011 05:43 PM
Silver	ND		0.96	mg/Kg-dry	2	2/4/2011 05:43 PM
Zinc	**190**		**19**	**mg/Kg-dry**	20	2/5/2011 05:06 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Anthracene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Chrysene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Fluorene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Naphthalene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Pyrene	ND		33	µg/Kg-dry	1	2/5/2011 01:43 AM
Surr: 2,4,6-Tribromophenol	*69.4*		*38-104*	*%REC*	1	2/5/2011 01:43 AM
Surr: 2-Fluorobiphenyl	*35.2*		*12-85*	*%REC*	1	2/5/2011 01:43 AM
Surr: 2-Fluorophenol	*61.0*		*37-96*	*%REC*	1	2/5/2011 01:43 AM
Surr: 4-Terphenyl-d14	*58.2*		*32-101*	*%REC*	1	2/5/2011 01:43 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: N.E. Wall **Lab ID:** 1102072-06
Collection Date: 1/30/2011 10:50 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*56.2*		*32-98*	*%REC*	1	2/5/2011 01:43 AM
Surr: Phenol-d6	*62.7*		*42-98*	*%REC*	1	2/5/2011 01:43 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		20	µg/Kg-dry	100	2/3/2011 04:48 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 04:48 PM
m,p-Xylene	**170**		**18**	**µg/Kg-dry**	100	2/3/2011 04:48 PM
o-Xylene	ND		14	µg/Kg-dry	100	2/3/2011 04:48 PM
Toluene	**76**		**14**	**µg/Kg-dry**	100	2/3/2011 04:48 PM
Xylenes, Total	**170**		**33**	**µg/Kg-dry**	100	2/3/2011 04:48 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**12**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**15**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**8.9**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: N.W. Wall **Lab ID:** 1102072-07
Collection Date: 1/30/2011 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**11**		**4.5**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*39.4*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.9	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*106*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**6.3**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:48 PM
Barium	**4,100**		**100**	**mg/Kg-dry**	200	2/5/2011 04:03 PM
Cadmium	ND		0.40	mg/Kg-dry	2	2/4/2011 05:48 PM
Chromium	**15**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:48 PM
Copper	**13**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:48 PM
Lead	**14**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:48 PM
Nickel	**18**		**1.0**	**mg/Kg-dry**	2	2/4/2011 05:48 PM
Selenium	ND		1.0	mg/Kg-dry	2	2/4/2011 05:48 PM
Silver	ND		1.0	mg/Kg-dry	2	2/4/2011 05:48 PM
Zinc	**180**		**20**	**mg/Kg-dry**	20	2/5/2011 05:11 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Anthracene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Chrysene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Fluorene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Naphthalene	**75**		**33**	**µg/Kg-dry**	1	2/5/2011 02:09 AM
Pyrene	ND		33	µg/Kg-dry	1	2/5/2011 02:09 AM
Surr: 2,4,6-Tribromophenol	*66.8*		*38-104*	*%REC*	1	2/5/2011 02:09 AM
Surr: 2-Fluorobiphenyl	*39.2*		*12-85*	*%REC*	1	2/5/2011 02:09 AM
Surr: 2-Fluorophenol	*58.4*		*37-96*	*%REC*	1	2/5/2011 02:09 AM
Surr: 4-Terphenyl-d14	*57.6*		*32-101*	*%REC*	1	2/5/2011 02:09 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: N.W. Wall **Lab ID:** 1102072-07
Collection Date: 1/30/2011 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*54.6*		*32-98*	*%REC*	1	2/5/2011 02:09 AM
Surr: Phenol-d6	*60.0*		*42-98*	*%REC*	1	2/5/2011 02:09 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		20	µg/Kg-dry	100	2/3/2011 05:15 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 05:15 PM
m,p-Xylene	ND		18	µg/Kg-dry	100	2/3/2011 05:15 PM
o-Xylene	ND		15	µg/Kg-dry	100	2/3/2011 05:15 PM
Toluene	ND		14	µg/Kg-dry	100	2/3/2011 05:15 PM
Xylenes, Total	ND		33	µg/Kg-dry	100	2/3/2011 05:15 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**12**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	**2.3**		**0.58**	**mg/Kg-dry**	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**16**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.1**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: S.W. Wall **Lab ID:** 1102072-08
Collection Date: 1/30/2011 11:10 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**14**		**4.6**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*50.4*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**5.1**		**0.91**	**mg/Kg-dry**	2	2/4/2011 07:24 PM
Barium	**4,600**		**91**	**mg/Kg-dry**	200	2/5/2011 04:27 PM
Cadmium	ND		0.36	mg/Kg-dry	2	2/4/2011 07:24 PM
Chromium	**14**		**0.91**	**mg/Kg-dry**	2	2/4/2011 07:24 PM
Copper	**12**		**0.91**	**mg/Kg-dry**	2	2/4/2011 07:24 PM
Lead	**14**		**0.91**	**mg/Kg-dry**	2	2/4/2011 07:24 PM
Nickel	**16**		**0.91**	**mg/Kg-dry**	2	2/4/2011 07:24 PM
Selenium	ND		0.91	mg/Kg-dry	2	2/4/2011 07:24 PM
Silver	ND		0.91	mg/Kg-dry	2	2/4/2011 07:24 PM
Zinc	**190**		**18**	**mg/Kg-dry**	20	2/5/2011 05:35 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Anthracene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Chrysene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Fluoranthene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Fluorene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Naphthalene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Pyrene	ND		33	µg/Kg-dry	1	2/5/2011 02:36 AM
Surr: 2,4,6-Tribromophenol	*80.0*		*38-104*	*%REC*	1	2/5/2011 02:36 AM
Surr: 2-Fluorobiphenyl	*47.8*		*12-85*	*%REC*	1	2/5/2011 02:36 AM
Surr: 2-Fluorophenol	*67.1*		*37-96*	*%REC*	1	2/5/2011 02:36 AM
Surr: 4-Terphenyl-d14	*65.3*		*32-101*	*%REC*	1	2/5/2011 02:36 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: S.W. Wall **Lab ID:** 1102072-08
Collection Date: 1/30/2011 11:10 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*64.9*		*32-98*	*%REC*	1	2/5/2011 02:36 AM
Surr: Phenol-d6	*69.5*		*42-98*	*%REC*	1	2/5/2011 02:36 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		19	µg/Kg-dry	100	2/3/2011 05:41 PM
Ethylbenzene	ND		14	µg/Kg-dry	100	2/3/2011 05:41 PM
m,p-Xylene	ND		18	µg/Kg-dry	100	2/3/2011 05:41 PM
o-Xylene	ND		14	µg/Kg-dry	100	2/3/2011 05:41 PM
Toluene	ND		13	µg/Kg-dry	100	2/3/2011 05:41 PM
Xylenes, Total	ND		32	µg/Kg-dry	100	2/3/2011 05:41 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**13**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**12**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.2**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: S.E. Wall **Lab ID:** 1102072-09
Collection Date: 1/30/2011 11:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	ND		5.3	mg/Kg-dry	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*46.1*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.5	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*105*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**6.2**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:29 PM
Barium	**5,000**		**100**	**mg/Kg-dry**	200	2/5/2011 04:32 PM
Cadmium	ND		0.41	mg/Kg-dry	2	2/4/2011 07:29 PM
Chromium	**16**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:29 PM
Copper	**16**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:29 PM
Lead	**18**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:29 PM
Nickel	**17**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:29 PM
Selenium	ND		1.0	mg/Kg-dry	2	2/4/2011 07:29 PM
Silver	ND		1.0	mg/Kg-dry	2	2/4/2011 07:29 PM
Zinc	**210**		**21**	**mg/Kg-dry**	20	2/5/2011 05:40 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Anthracene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Benzo(a)anthracene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Benzo(a)pyrene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Benzo(b)fluoranthene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Benzo(g,h,i)perylene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Benzo(k)fluoranthene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Chrysene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Dibenzo(a,h)anthracene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Fluoranthene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Fluorene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Indeno(1,2,3-cd)pyrene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Naphthalene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Pyrene	ND		38	µg/Kg-dry	1	2/5/2011 03:03 AM
Surr: 2,4,6-Tribromophenol	*74.2*		*38-104*	*%REC*	1	2/5/2011 03:03 AM
Surr: 2-Fluorobiphenyl	*46.1*		*12-85*	*%REC*	1	2/5/2011 03:03 AM
Surr: 2-Fluorophenol	*68.4*		*37-96*	*%REC*	1	2/5/2011 03:03 AM
Surr: 4-Terphenyl-d14	*63.1*		*32-101*	*%REC*	1	2/5/2011 03:03 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: S.E. Wall **Lab ID:** 1102072-09
Collection Date: 1/30/2011 11:20 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*63.2*		*32-98*	*%REC*	1	2/5/2011 03:03 AM
Surr: Phenol-d6	*71.3*		*42-98*	*%REC*	1	2/5/2011 03:03 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		22	µg/Kg-dry	100	2/3/2011 06:07 PM
Ethylbenzene	ND		15	µg/Kg-dry	100	2/3/2011 06:07 PM
m,p-Xylene	ND		20	µg/Kg-dry	100	2/3/2011 06:07 PM
o-Xylene	ND		16	µg/Kg-dry	100	2/3/2011 06:07 PM
Toluene	ND		15	µg/Kg-dry	100	2/3/2011 06:07 PM
Xylenes, Total	ND		36	µg/Kg-dry	100	2/3/2011 06:07 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**15**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.64	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**23**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**8.9**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: W. Wall **Lab ID:** 1102072-10
Collection Date: 1/30/2011 11:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	**13**		**5.0**	**mg/Kg-dry**	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*67.6*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.1	mg/Kg-dry	100	2/3/2011 03:35 PM
Surr: Toluene-d8	*107*		*50-150*	*%REC*	100	2/3/2011 03:35 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/3/2011**	Analyst: **CES**
Arsenic	**7.2**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:33 PM
Barium	**490**		**100**	**mg/Kg-dry**	200	2/5/2011 04:37 PM
Cadmium	ND		0.40	mg/Kg-dry	2	2/4/2011 07:33 PM
Chromium	**17**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:33 PM
Copper	**12**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:33 PM
Lead	**12**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:33 PM
Nickel	**17**		**1.0**	**mg/Kg-dry**	2	2/4/2011 07:33 PM
Selenium	ND		1.0	mg/Kg-dry	2	2/4/2011 07:33 PM
Silver	ND		1.0	mg/Kg-dry	2	2/4/2011 07:33 PM
Zinc	**62**		**20**	**mg/Kg-dry**	20	2/5/2011 05:44 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 2/7/11**			**attached**	1	2/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
Acenaphthene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Anthracene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Chrysene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Fluoranthene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Fluorene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Naphthalene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Pyrene	ND		36	µg/Kg-dry	1	2/5/2011 03:29 AM
Surr: 2,4,6-Tribromophenol	*85.9*		*38-104*	*%REC*	1	2/5/2011 03:29 AM
Surr: 2-Fluorobiphenyl	*53.2*		*12-85*	*%REC*	1	2/5/2011 03:29 AM
Surr: 2-Fluorophenol	*77.2*		*37-96*	*%REC*	1	2/5/2011 03:29 AM
Surr: 4-Terphenyl-d14	*71.2*		*32-101*	*%REC*	1	2/5/2011 03:29 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/30/11 **Work Order:** 1102072
Sample ID: W. Wall **Lab ID:** 1102072-10
Collection Date: 1/30/2011 11:30 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	*71.2*		*32-98*	*%REC*	1	2/5/2011 03:29 AM
Surr: Phenol-d6	*80.1*		*42-98*	*%REC*	1	2/5/2011 03:29 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		21	µg/Kg-dry	100	2/3/2011 06:34 PM
Ethylbenzene	ND		15	µg/Kg-dry	100	2/3/2011 06:34 PM
m,p-Xylene	**85**		**19**	**µg/Kg-dry**	100	2/3/2011 06:34 PM
o-Xylene	ND		15	µg/Kg-dry	100	2/3/2011 06:34 PM
Toluene	ND		14	µg/Kg-dry	100	2/3/2011 06:34 PM
Xylenes, Total	**85**		**34**	**µg/Kg-dry**	100	2/3/2011 06:34 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**17**			**mg/Kg-dry**	1	2/7/2011 08:12 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **2/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	2/4/2011 01:30 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**18**		**0.010**	**% of sample**	1	2/3/2011 01:12 PM
PH			**SW9045D**			Analyst: **NZ**
pH	**9.3**	H		**s.u.**	1	2/3/2011 01:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Report Number: F11035-0033
Acount Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

3505 Conestoga Drive • Fort Wayne, Indiana 46808-4413 • Phone 260-483-4759 • Fax 260-483-5274
www.algreatlakes.com • lab@algreatlakes.com

QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1102072

DATE RECEIVED: 02/04/2011
DATE REPORTED: 02/07/2011
PAGE: 1
P.O. NUMBER: 20-122009696

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
35634	01C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	9.22	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	149	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	39	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	8522	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	160.2	-	USDA Handbook 60
35635	02C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	9.22	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	182	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	67	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	6447	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	103.5	-	USDA Handbook 60
35636	03C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	7.46	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	197	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	57	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	5515	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	88.8	-	USDA Handbook 60
35637	04C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	9.38	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	275	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	66	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	7134	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	100.0	-	USDA Handbook 60

Report Number: F11035-0033
Acount Number: 91000

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QUALITY ANALYSES FOR INFORMED DECISIONS

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3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1102072

DATE RECEIVED: 02/04/2011
DATE REPORTED: 02/07/2011
PAGE: 2
P.O. NUMBER: 20-122009696

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
35638	05C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	6.78	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	200	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	73	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	4729	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	72.5	-	USDA Handbook 60
35639	06C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	9.01	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	85	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	21	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	7257	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	182.2	-	USDA Handbook 60
35640	07C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	7.72	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	181	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	92	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	4726	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	71.1	-	USDA Handbook 60
35641	08C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	6.86	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	198	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	65	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	5118	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	80.4	-	USDA Handbook 60

Report Number: F11035-0033
Acount Number: 91000

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QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1102072

DATE RECEIVED: 02/04/2011
DATE REPORTED: 02/07/2011
PAGE: 3
P.O. NUMBER: 20-122009696

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
35642	09C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	8.41	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	257	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	110	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	6187	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	81.1	-	USDA Handbook 60
35643	10C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	10.65	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	109	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	26	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	9344	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	208.2	-	USDA Handbook 60

ALS Group USA, Corp

Date: 07-Feb-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1102072

Project: PA 21-2 Pit Closure 1/30/11

Batch ID: **31731** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-31731-31731** Units: **mg/Kg** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552204** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	*0.5098*	0	*1.667*	0	*30.6*	*30-125*	0			

LCS Sample ID: **DLCSS1-31731-31731** Units: **mg/Kg** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552206** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	130	4.2	166.7	0	78	60-130	0			
Surr: 4-Terphenyl-d14	*0.7698*	0	*1.667*	0	*46.2*	*30-125*	0			

LCSD Sample ID: **DLCSDS1-31731-31731** Units: **mg/Kg** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552205** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	149	4.2	166.7	0	89.4	60-130	130	13.7	30	
Surr: 4-Terphenyl-d14	*0.8503*	0	*1.667*	0	*51*	*30-125*	0.7698	*9.93*	*30*	

MS Sample ID: **1102039-03C MS** Units: **mg/Kg** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552192** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	267	7.8	312.8	0	85.4	60-130	0			
Surr: 4-Terphenyl-d14	*1.527*	0	*3.128*	0	*48.8*	*30-125*	0			

MSD Sample ID: **1102039-03C MSD** Units: **mg/Kg** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552193** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	317.2	8.0	321.4	0	98.7	60-130	267	17.2	30	
Surr: 4-Terphenyl-d14	*1.88*	0	*3.214*	0	*58.5*	*30-125*	1.527	*20.8*	*30*	

The following samples were analyzed in this batch:

1102072-01B	1102072-02B	1102072-03B
1102072-04B	1102072-05B	1102072-06B
1102072-07B	1102072-08B	1102072-09B
1102072-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **R86727** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MB-R86727-R86727** Units: **µg/L** Analysis Date: **2/3/2011 03:35 PM**
Client ID: Run ID: **GC9_110203A** SeqNo: **1550903** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*106.7*	0	*100*	0	*107*	*70-130*	0			

LCS Sample ID: **LCS-R86727-R86727** Units: **µg/L** Analysis Date: **2/3/2011 03:35 PM**
Client ID: Run ID: **GC9_110203A** SeqNo: **1550904** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	26600	200	25000	0	106	70-130	0			
Surr: Toluene-d8	*109.2*	0	*100*	0	*109*	*70-130*	0			

LCSD Sample ID: **LCSD-R86727-R86727** Units: **µg/L** Analysis Date: **2/3/2011 03:35 PM**
Client ID: Run ID: **GC9_110203A** SeqNo: **1550915** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	26250	200	25000	0	105	70-130	26600	1.33	30	
Surr: Toluene-d8	*108.9*	0	*100*	0	*109*	*70-130*	109.2	*0.282*	*30*	

MS Sample ID: **1102002-04AMS** Units: **µg/L** Analysis Date: **2/3/2011 03:35 PM**
Client ID: Run ID: **GC9_110203A** SeqNo: **1550908** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	27370	200	25000	0	109	70-130	0			
Surr: Toluene-d8	*108.3*	0	*100*	0	*108*	*70-130*	0			

MSD Sample ID: **1102002-04AMSD** Units: **µg/L** Analysis Date: **2/3/2011 03:35 PM**
Client ID: Run ID: **GC9_110203A** SeqNo: **1550909** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	26990	200	25000	0	108	70-130	27370	1.41	30	
Surr: Toluene-d8	*107.8*	0	*100*	0	*108*	*70-130*	108.3	*0.469*	*30*	

The following samples were analyzed in this batch:

1102072-01A	1102072-02A	1102072-03A
1102072-04A	1102072-05A	1102072-06A
1102072-07A	1102072-08A	1102072-09A
1102072-10A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31737** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK Sample ID: **MBLK-31737-31737** Units: **mg/Kg** Analysis Date: **2/4/2011 04:01 PM**
Client ID: Run ID: **ICPMS2_110204A** SeqNo: **1551283** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	0.0375	0.25								J
Cadmium	0.01085	0.10								J
Chromium	0.004148	0.25								J
Copper	0.01741	0.25								J
Lead	0.002038	0.25								J
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								

MBLK Sample ID: **MBLK-31737-31737** Units: **mg/Kg** Analysis Date: **2/5/2011 03:18 PM**
Client ID: Run ID: **ICPMS2_110205A** SeqNo: **1551677** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	ND	0.50								

LCS Sample ID: **LCS-31737-31737** Units: **mg/Kg** Analysis Date: **2/4/2011 04:06 PM**
Client ID: Run ID: **ICPMS2_110204A** SeqNo: **1551284** Prep Date: **2/3/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.736	0.50	5	0	94.7	80-120	0			
Barium	5.064	0.50	5	0	101	80-120	0			
Cadmium	4.936	0.20	5	0	98.7	80-120	0			
Chromium	4.824	0.50	5	0	96.5	80-120	0			
Copper	4.972	0.50	5	0	99.4	80-120	0			
Lead	4.961	0.50	5	0	99.2	80-120	0			
Nickel	4.943	0.50	5	0	98.9	80-120	0			
Selenium	4.904	0.50	5	0	98.1	80-120	0			
Silver	4.929	0.50	5	0	98.6	80-120	0			

LCS Sample ID: **LCS-31737-31737** Units: **mg/Kg** Analysis Date: **2/5/2011 03:23 PM**
Client ID: Run ID: **ICPMS2_110205A** SeqNo: **1551678** Prep Date: **2/3/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	4.678	1.0	5	0	93.6	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31737** Instrument ID **ICPMS2** Method: **SW6020A**

LCSD Sample ID: **LCSD-31737-31737** Units: **mg/Kg** Analysis Date: **2/4/2011 04:11 PM**
Client ID: Run ID: **ICPMS2_110204A** SeqNo: **1551285** Prep Date: **2/3/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.835	0.50	5	0	96.7	80-120	4.736	2.07	20	
Barium	5.053	0.50	5	0	101	80-120	5.064	0.217	20	
Cadmium	4.939	0.20	5	0	98.8	80-120	4.936	0.0608	20	
Chromium	4.885	0.50	5	0	97.7	80-120	4.824	1.26	20	
Copper	4.861	0.50	5	0	97.2	80-120	4.972	2.26	20	
Lead	5.054	0.50	5	0	101	80-120	4.961	1.86	20	
Nickel	5.036	0.50	5	0	101	80-120	4.943	1.86	20	
Selenium	4.983	0.50	5	0	99.7	80-120	4.904	1.6	20	
Silver	5.021	0.50	5	0	100	80-120	4.929	1.85	20	

LCSD Sample ID: **LCSD-31737-31737** Units: **mg/Kg** Analysis Date: **2/5/2011 03:28 PM**
Client ID: Run ID: **ICPMS2_110205A** SeqNo: **1551679** Prep Date: **2/3/2011** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	4.936	1.0	5	0	98.7	80-120	4.678	5.37	20	

MS Sample ID: **1101689-29AMS** Units: **mg/Kg** Analysis Date: **2/4/2011 04:35 PM**
Client ID: Run ID: **ICPMS2_110204A** SeqNo: **1551290** Prep Date: **2/3/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.03	1.7	8.696	3.679	108	80-120	0			
Barium	90.82	1.7	8.696	79.32	132	80-120	0			SO
Cadmium	8.477	0.70	8.696	0.1261	96	80-120	0			
Chromium	11.14	1.7	8.696	2.964	94	80-120	0			
Copper	8.984	1.7	8.696	0.8598	93.4	80-120	0			
Lead	12.01	1.7	8.696	2.199	113	80-120	0			
Nickel	11.2	1.7	8.696	2.87	95.8	80-120	0			
Selenium	8.96	1.7	8.696	0.2988	99.6	80-120	0			
Silver	8.087	1.7	8.696	0.01271	92.9	80-120	0			

MS Sample ID: **1101689-29AMS** Units: **mg/Kg** Analysis Date: **2/5/2011 02:09 PM**
Client ID: Run ID: **ICPMS2_110205A** SeqNo: **1551667** Prep Date: **2/3/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	21.42	3.5	8.696	11.94	109	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31737** Instrument ID **ICPMS2** Method: **SW6020A**

MSD Sample ID: **1101689-29AMSD** Units: **mg/Kg** Analysis Date: **2/4/2011 04:40 PM**
Client ID: Run ID: **ICPMS2_110204A** SeqNo: **1551291** Prep Date: **2/3/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.61	1.7	8.696	3.679	114	80-120	13.03	4.33	25	
Barium	92.24	1.7	8.696	79.32	149	80-120	90.82	1.56	25	SO
Cadmium	8.132	0.70	8.696	0.1261	92.1	80-120	8.477	4.15	25	
Chromium	10.9	1.7	8.696	2.964	91.3	80-120	11.14	2.15	25	
Copper	8.605	1.7	8.696	0.8598	89.1	80-120	8.984	4.31	25	
Lead	11.7	1.7	8.696	2.199	109	80-120	12.01	2.58	25	
Nickel	11.03	1.7	8.696	2.87	93.8	80-120	11.2	1.6	25	
Selenium	8.643	1.7	8.696	0.2988	96	80-120	8.96	3.6	25	
Silver	7.659	1.7	8.696	0.01271	87.9	80-120	8.087	5.43	25	

MSD Sample ID: **1101689-29AMSD** Units: **mg/Kg** Analysis Date: **2/5/2011 02:15 PM**
Client ID: Run ID: **ICPMS2_110205A** SeqNo: **1551668** Prep Date: **2/3/2011** DF: **4**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Zinc	21.69	3.5	8.696	11.94	112	80-120	21.42	1.29	25	

The following samples were analyzed in this batch:

1102072-01B	1102072-02B	1102072-03B
1102072-04B	1102072-05B	1102072-06B
1102072-07B	1102072-08B	1102072-09B
1102072-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31754** Instrument ID **SVMS6** Method: **SW8270**

MBLK Sample ID: **SBLKS1-31754-31754** Units: **µg/Kg** Analysis Date: **2/4/2011 06:09 PM**

Client ID: Run ID: **SVMS6_110204A** SeqNo: **1551910** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
Surr: 2,4,6-Tribromophenol	*781.7*	0	*1667*	0	*46.9*	*38-104*	0			
Surr: 2-Fluorobiphenyl	*746*	0	*1667*	0	*44.8*	*12-85*	0			
Surr: 2-Fluorophenol	*783.7*	0	*1667*	0	*47*	*37-96*	0			
Surr: 4-Terphenyl-d14	*949*	0	*1667*	0	*56.9*	*32-101*	0			
Surr: Nitrobenzene-d5	*782.3*	0	*1667*	0	*46.9*	*32-98*	0			
Surr: Phenol-d6	*821*	0	*1667*	0	*49.3*	*42-98*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31754** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: **SLCSS1-31754-31754** Units: **µg/Kg** Analysis Date: **2/4/2011 06:35 PM**

Client ID: Run ID: **SVMS6_110204A** SeqNo: **1551911** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	982.3	30	1333	0	73.7	45-110	0			
Anthracene	1007	30	1333	0	75.5	55-105	0			
Benzo(a)anthracene	1051	30	1333	0	78.9	50-110	0			
Benzo(a)pyrene	1058	30	1333	0	79.4	50-110	0			
Benzo(b)fluoranthene	1054	30	1333	0	79	45-115	0			
Benzo(g,h,i)perylene	1133	30	1333	0	85	40-125	0			
Benzo(k)fluoranthene	1204	30	1333	0	90.3	45-115	0			
Chrysene	1057	30	1333	0	79.3	55-110	0			
Dibenzo(a,h)anthracene	1077	30	1333	0	80.8	40-125	0			
Fluoranthene	1030	30	1333	0	77.2	55-115	0			
Fluorene	1126	30	1333	0	84.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1090	30	1333	0	81.7	40-120	0			
Naphthalene	954.3	30	1333	0	71.6	40-105	0			
Pyrene	1092	30	1333	0	81.9	45-125	0			
Surr: 2,4,6-Tribromophenol	*1371*	0	*1667*	0	*82.2*	*38-104*	0			
Surr: 2-Fluorobiphenyl	*1048*	0	*1667*	0	*62.9*	*12-85*	0			
Surr: 2-Fluorophenol	*1158*	0	*1667*	0	*69.5*	*37-96*	0			
Surr: 4-Terphenyl-d14	*1291*	0	*1667*	0	*77.4*	*32-101*	0			
Surr: Nitrobenzene-d5	*1139*	0	*1667*	0	*68.3*	*32-98*	0			
Surr: Phenol-d6	*1102*	0	*1667*	0	*66.1*	*42-98*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31754** Instrument ID **SVMS6** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-31754-31754** Units: **µg/Kg** Analysis Date: **2/4/2011 07:02 PM**

Client ID: Run ID: **SVMS6_110204A** SeqNo: **1551912** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1061	30	1333	0	79.6	45-110	982.3	7.67	25	
Anthracene	1076	30	1333	0	80.7	55-105	1007	6.63	25	
Benzo(a)anthracene	1107	30	1333	0	83	50-110	1051	5.13	25	
Benzo(a)pyrene	1120	30	1333	0	84	50-110	1058	5.69	25	
Benzo(b)fluoranthene	1065	30	1333	0	79.9	45-115	1054	1.07	25	
Benzo(g,h,i)perylene	1185	30	1333	0	88.9	40-125	1133	4.54	25	
Benzo(k)fluoranthene	1409	30	1333	0	106	45-115	1204	15.7	25	
Chrysene	1116	30	1333	0	83.7	55-110	1057	5.43	25	
Dibenzo(a,h)anthracene	1146	30	1333	0	85.9	40-125	1077	6.21	25	
Fluoranthene	1080	30	1333	0	81	55-115	1030	4.77	25	
Fluorene	1203	30	1333	0	90.2	50-110	1126	6.58	25	
Indeno(1,2,3-cd)pyrene	1155	30	1333	0	86.6	40-120	1090	5.82	25	
Naphthalene	1032	30	1333	0	77.4	40-105	954.3	7.85	25	
Pyrene	1157	30	1333	0	86.8	45-125	1092	5.78	25	
Surr: 2,4,6-Tribromophenol	*1461*	0	*1667*	0	*87.6*	*38-104*	1371	*6.36*	*40*	
Surr: 2-Fluorobiphenyl	*1138*	0	*1667*	0	*68.3*	*12-85*	1048	*8.3*	*40*	
Surr: 2-Fluorophenol	*1253*	0	*1667*	0	*75.2*	*37-96*	1158	*7.94*	*40*	
Surr: 4-Terphenyl-d14	*1388*	0	*1667*	0	*83.3*	*32-101*	1291	*7.29*	*40*	
Surr: Nitrobenzene-d5	*1250*	0	*1667*	0	*75*	*32-98*	1139	*9.3*	*40*	
Surr: Phenol-d6	*1201*	0	*1667*	0	*72.1*	*42-98*	1102	*8.57*	*40*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31754** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1102072-01B MS** Units: **µg/Kg** Analysis Date: **2/4/2011 07:29 PM**

Client ID: **W Bottom** Run ID: **SVMS6_110204A** SeqNo: **1551913** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1620	48	2123	0	76.3	45-110	0			
Anthracene	1625	48	2123	0	76.6	55-105	0			
Benzo(a)anthracene	1668	48	2123	0	78.6	50-110	0			
Benzo(a)pyrene	1700	48	2123	0	80.1	50-110	0			
Benzo(b)fluoranthene	1629	48	2123	0	76.7	45-115	0			
Benzo(g,h,i)perylene	1813	48	2123	0	85.4	40-125	0			
Benzo(k)fluoranthene	2052	48	2123	0	96.6	45-115	0			
Chrysene	1671	48	2123	0	78.7	55-110	0			
Dibenzo(a,h)anthracene	1747	48	2123	0	82.3	40-125	0			
Fluoranthene	1643	48	2123	0	77.4	55-115	0			
Fluorene	1840	48	2123	0	86.7	50-110	0			
Indeno(1,2,3-cd)pyrene	1762	48	2123	0	83	40-120	0			
Naphthalene	1674	48	2123	54.76	76.3	40-105	0			
Pyrene	1735	48	2123	0	81.7	45-125	0			
Surr: 2,4,6-Tribromophenol	*2322*	0	*2654*	0	*87.5*	*38-104*	0			
Surr: 2-Fluorobiphenyl	*1615*	0	*2654*	0	*60.9*	*12-85*	0			
Surr: 2-Fluorophenol	*2020*	0	*2654*	0	*76.1*	*37-96*	0			
Surr: 4-Terphenyl-d14	*2038*	0	*2654*	0	*76.8*	*32-101*	0			
Surr: Nitrobenzene-d5	*1990*	0	*2654*	0	*75*	*32-98*	0			
Surr: Phenol-d6	*1910*	0	*2654*	0	*72*	*42-98*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31754** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: **1102072-01B MSD** Units: **µg/Kg** Analysis Date: **2/4/2011 07:55 PM**

Client ID: **W Bottom** Run ID: **SVMS6_110204A** SeqNo: **1551914** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1918	59	2614	0	73.4	45-110	1620	16.9	30	
Anthracene	1969	59	2614	0	75.3	55-105	1625	19.1	30	
Benzo(a)anthracene	2027	59	2614	0	77.5	50-110	1668	19.4	30	
Benzo(a)pyrene	2039	59	2614	0	78	50-110	1700	18.2	30	
Benzo(b)fluoranthene	1909	59	2614	0	73	45-115	1629	15.8	30	
Benzo(g,h,i)perylene	2220	59	2614	0	84.9	40-125	1813	20.2	30	
Benzo(k)fluoranthene	2513	59	2614	0	96.1	45-115	2052	20.2	30	
Chrysene	2056	59	2614	0	78.6	55-110	1671	20.6	30	
Dibenzo(a,h)anthracene	2109	59	2614	0	80.7	40-125	1747	18.8	30	
Fluoranthene	1982	59	2614	0	75.8	55-115	1643	18.7	30	
Fluorene	2167	59	2614	0	82.9	50-110	1840	16.4	30	
Indeno(1,2,3-cd)pyrene	2133	59	2614	0	81.6	40-120	1762	19.1	30	
Naphthalene	1943	59	2614	54.76	72.2	40-105	1674	14.9	30	
Pyrene	2123	59	2614	0	81.2	45-125	1735	20.1	30	
Surr: 2,4,6-Tribromophenol	*2777*	0	*3268*	0	*85*	*38-104*	2322	*17.8*	*40*	
Surr: 2-Fluorobiphenyl	*1924*	0	*3268*	0	*58.9*	*12-85*	1615	*17.4*	*40*	
Surr: 2-Fluorophenol	*2321*	0	*3268*	0	*71*	*37-96*	2020	*13.9*	*40*	
Surr: 4-Terphenyl-d14	*2480*	0	*3268*	0	*75.9*	*32-101*	2038	*19.6*	*40*	
Surr: Nitrobenzene-d5	*2311*	0	*3268*	0	*70.7*	*32-98*	1990	*14.9*	*40*	
Surr: Phenol-d6	*2228*	0	*3268*	0	*68.2*	*42-98*	1910	*15.3*	*40*	

The following samples were analyzed in this batch:

1102072-01B	1102072-02B	1102072-03B
1102072-04B	1102072-05B	1102072-06B
1102072-07B	1102072-08B	1102072-09B
1102072-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **R86642** Instrument ID **VMS5** Method: **SW8260**

MBLK Sample ID: **VBLKW1-110203-R86642** Units: **µg/L** Analysis Date: **2/3/2011 02:12 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549877** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	2.0								

LCS Sample ID: **VLCSW1-110203-R86642** Units: **µg/L** Analysis Date: **2/3/2011 12:53 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549351** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.44	1.0	20	0	102	80-120	0			
Ethylbenzene	20.74	1.0	20	0	104	75-125	0			
m,p-Xylene	42.8	2.0	40	0	107	75-130	0			
o-Xylene	21.65	1.0	20	0	108	80-120	0			
Toluene	20.36	1.0	20	0	102	75-120	0			
Xylenes, Total	64.45	2.0	60	0	107	75-130	0			

LCSD Sample ID: **VLCSDW1-110203-R86642** Units: **µg/L** Analysis Date: **2/3/2011 01:20 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549391** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.68	1.0	20	0	103	80-120	20.44	1.17	30	
Ethylbenzene	21.2	1.0	20	0	106	75-125	20.74	2.19	30	
m,p-Xylene	42.91	2.0	40	0	107	75-130	42.8	0.257	30	
o-Xylene	21.62	1.0	20	0	108	80-120	21.65	0.139	30	
Toluene	21	1.0	20	0	105	75-120	20.36	3.09	30	
Xylenes, Total	64.53	2.0	60	0	108	75-130	64.45	0.124	30	

MS Sample ID: **1102082-04A MS** Units: **µg/L** Analysis Date: **2/3/2011 10:35 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549884** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.27	1.0	20	0	101	80-120	0			
Ethylbenzene	20.91	1.0	20	0	105	75-125	0			
m,p-Xylene	42.53	2.0	40	0	106	75-130	0			
o-Xylene	21.45	1.0	20	0	107	80-120	0			
Toluene	20.35	1.0	20	0	102	75-120	0			
Xylenes, Total	63.98	2.0	60	0	107	75-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **R86642** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: **1102082-04A MSD** Units: **µg/L** Analysis Date: **2/3/2011 11:02 PM**

Client ID: Run ID: **VMS5_110203A** SeqNo: **1549885** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.86	1.0	20	0	99.3	80-120	20.27	2.04	30	
Ethylbenzene	20.37	1.0	20	0	102	75-125	20.91	2.62	30	
m,p-Xylene	41.9	2.0	40	0	105	75-130	42.53	1.49	30	
o-Xylene	20.86	1.0	20	0	104	80-120	21.45	2.79	30	
Toluene	20.02	1.0	20	0	100	75-120	20.35	1.63	30	
Xylenes, Total	62.76	2.0	60	0	105	75-130	63.98	1.93	30	

The following samples were analyzed in this batch:

1102072-01A	1102072-02A	1102072-03A
1102072-04A	1102072-05A	1102072-06A
1102072-07A	1102072-08A	1102072-09A
1102072-10A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **31762** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-31762-31762** Units: **mg/Kg** Analysis Date: **2/4/2011 01:30 PM**
Client ID: Run ID: **WETCHEM_110204B** SeqNo: **1550574** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.49								

LCS Sample ID: **LCS-31762-31762** Units: **mg/Kg** Analysis Date: **2/4/2011 01:30 PM**
Client ID: Run ID: **WETCHEM_110204B** SeqNo: **1550575** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.733	0.48	1.938	0	89.4	75-110	0			

LCSD Sample ID: **LCSD-31762-31762** Units: **mg/Kg** Analysis Date: **2/4/2011 01:30 PM**
Client ID: Run ID: **WETCHEM_110204B** SeqNo: **1550590** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.826	0.48	1.938	0	94.2	75-110	1.733	5.23	20	

MS Sample ID: **1102072-01B MS** Units: **mg/Kg** Analysis Date: **2/4/2011 01:30 PM**
Client ID: **W Bottom** Run ID: **WETCHEM_110204B** SeqNo: **1550579** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.585	0.48	1.938	0	81.8	60-130	0			

MSD Sample ID: **1102072-01B MSD** Units: **mg/Kg** Analysis Date: **2/4/2011 01:30 PM**
Client ID: **W Bottom** Run ID: **WETCHEM_110204B** SeqNo: **1550580** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2.115	0.50	1.984	0	107	60-130	1.585	28.6	30	

The following samples were analyzed in this batch:

1102072-01B	1102072-02B	1102072-03B
1102072-04B	1102072-05B	1102072-06B
1102072-07B	1102072-08B	1102072-09B
1102072-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **R86645** Instrument ID **WETCHEM** Method: **SW9045D**

DUP Sample ID: **1102072-10B DUP** Units: **s.u.** Analysis Date: **2/3/2011 01:00 PM**

Client ID: **W. Wall** Run ID: **WETCHEM_110203D** SeqNo: **1549375** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	9.33	0	0	0	0	0-0	9.33	0	20	H

The following samples were analyzed in this batch:

1102072-01B	1102072-02B	1102072-03B
1102072-04B	1102072-05B	1102072-06B
1102072-07B	1102072-08B	1102072-09B
1102072-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102072
Project: PA 21-2 Pit Closure 1/30/11

QC BATCH REPORT

Batch ID: **R86705** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-110203-R86705** Units: **% of sample** Analysis Date: **2/3/2011 01:12 PM**
Client ID: Run ID: **MOIST_110203C** SeqNo: **1550162** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.010								

DUP Sample ID: **1102072-01B DUP** Units: **% of sample** Analysis Date: **2/3/2011 01:12 PM**
Client ID: **W Bottom** Run ID: **MOIST_110203C** SeqNo: **1550164** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15	0.010	0	0	0	0-0	14	6.9	20	

DUP Sample ID: **1102080-07B DUP** Units: **% of sample** Analysis Date: **2/3/2011 01:12 PM**
Client ID: Run ID: **MOIST_110203C** SeqNo: **1550175** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.8	0.010	0	0	0	0-0	14.9	5.86	20	

The following samples were analyzed in this batch:

1102072-01B	1102072-02B	1102072-03B
1102072-04B	1102072-05B	1102072-06B
1102072-07B	1102072-08B	1102072-09B
1102072-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r6

WORKORDER # 1102072

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME	PA 21-2 Pit closure	SAMPLER	Reed Wold	DATE	1/30/2011
PROJECT No.		SITE ID	PA 21-2 Pit closure	TURNAROUND	24 hr Rush
		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams		
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolia Blaney		
ADDRESS	744 HORIZON CT SUITE 140	ADDRESS	1058 co rd 215		
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	CITY / STATE / ZIP	Parachute CO 81635		
PHONE	970-243-3271	PHONE	970-683-2295		
FAX	970-243-3280	FAX	970-285-9573		
E-MAIL	Mmumby@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com		

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO	SAR/ EC/ PH	PAH/ Metals (table 910-1)
01	W Bottom	So	1/30/2011	10:00	4	8		X	X	X	X
02	W. Mid Bottom	So	1/30/2011	10:10	4	8		X	X	X	X
03	E. Mid Bottom	So	1/30/2011	10:20	4	8		X	X	X	X
04	E. Bottom	So	1/30/2011	10:30	4	8		X	X	X	X
05	E. Wall	So	1/30/2011	10:40	4	8		X	X	X	X
06	N.E. Wall	So	1/30/2011	10:50	4	8		X	X	X	X
07	N.W. Wall	So	1/30/2011	11:00	4	8		X	X	X	X
08	S.W. Wall	So	1/30/2011	11:10	4	8		X	X	X	X
09	S.E. Wall	So	1/30/2011	11:20	4	8		X	X	X	X
10	W. Wall	So	1/30/2011	11:30	4	8		X	X	X	X

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	
	5.6 c

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Reed Wold	Reed Wold	1/30/11	4:30
RECEIVED BY		Diane Shaw	2/3/11	1200
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental

Subcontractor:
A & L Great Lakes Agricultural La
3505 Conestoga Dr
Ft. Wayne, IN 46808
TEL: (260) 483-4759
FAX:
Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Date: 03-Feb-11
COC ID: 2805
Due Date 04-Feb-11

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	1102072	A	Subcontracted Analyses (SUBCONTRACT)
Work Order		Project Number		B	
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C	
Send Report To	Ann Preston	Inv Attn	Accounts Payable	D	
Address	3352 128th Avenue	Address	3352 128th Avenue	E	
				F	
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	G	
Phone	(616) 399-6070	Phone	(616) 399-6070	H	
Fax	(616) 399-6185	Fax	(616) 399-6185	I	
eMail Address	ann.preston@alsglobal.com	eMail CC		J	

Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J
1102072-01C (W Bottom)	Soil	30/Jan/2011 10:00	(1) 8OZGNEAT	X									
1102072-02C (W. Mid Bottom)	Soil	30/Jan/2011 10:10	(1) 8OZGNEAT	X									
1102072-03C (E. Mid Bottom)	Soil	30/Jan/2011 10:20	(1) 8OZGNEAT	X									
1102072-04C (E. Bottom)	Soil	30/Jan/2011 10:30	(1) 8OZGNEAT	X									
1102072-05C (E. Wall)	Soil	30/Jan/2011 10:40	(1) 8OZGNEAT	X									
1102072-06C (N.E. Wall)	Soil	30/Jan/2011 10:50	(1) 8OZGNEAT	X									
1102072-07C (N.W. Wall)	Soil	30/Jan/2011 11:00	(1) 8OZGNEAT	X									
1102072-08C (S.W. Wall)	Soil	30/Jan/2011 11:10	(1) 8OZGNEAT	X									
1102072-09C (S.E. Wall)	Soil	30/Jan/2011 11:20	(1) 8OZGNEAT	X									
1102072-10C (W. Wall)	Soil	30/Jan/2011 11:30	(1) 8OZGNEAT	X									

Comments:
SAR-EC Analyses

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
					Std
Relinquished by:	Date/Time	Received by:	Date/Time		

Table 2. Surface Water Sample Locations, Collections, Handling and Analysis Summary

Sample Location	Analyte Class	Analysis	EPA Approved Analytical Methods	EPA's Max Contaminant Levels (MCLs)* (µg/L)	COGCC Table 910-1 Concentration Levels	Holding Time	Container
Battlement Mesa/Parachute Surface Water Supply Area		TVPH (GRO)	SW8015 mod			14 days	2-40 ml vials
		TEPH (DRO)				7 days	1-1 L amber/1-125 ml
		Benzene	SW8021		5 µg/L	14 days	2-40 ml vials
		Toluene			1,000 µg/L		
		Ethylbenzene			700 µg/L		
		Xylenes (total)			10,000 µg/L		
	Organics	Acenaphthene	SW8270	***Please note:*** all boxes left blank in this column have not yet been designated a MCL by the EPA. COGCC has been contacted; awaiting further guidance.		14 days	2-1 L amber
		Anthracene					
		Benzo (A) anthracene					
		Benzo (B) flouranthene					
		Benzo (K) fluoranthene					
		Benzo (A) pyrene					
		Chrysene					
		Dibenzo (A,H) anthracene					
		Fluoranthene					
		Fluorene					
		Indeno (1,2,3-C,D) pyrene					
		Naphthalene					
		Pyrene					

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **03-Feb-11 12:00**

Work Order: **1102072** Received by: **DS**

Checklist completed by Ann Preston (eSignature) 04-Feb-11 (Date) Reviewed by: Ann Preston (eSignature) 04-Feb-11 (Date)

Matrices: soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.6°C on ice		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

FedEx Express **US Airbill**

FedEx Tracking Number 8746 3271 8198

Form ID No. 0200 **Recipient's Copy**

1 From [redacted]

Date 1/30/11

Sender's Name Reid Wold

Phone 970 243 3271

Company WRL compliance

Address 744 Horizon Ct. Suite 140 Dept/Floor/Suite/Room

City Grand Junction State Co ZIP 81506

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Receiving Phone 616 399-6070

Company ALS Group

Address 3352 128th Ave

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight. ☐

Address

Use this line for the HOLD location address or for continuation of your shipping address.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations. ☐

City Holland State MI ZIP 49424

8746 3271 8198

4a Express Package Service *To most locations. *Packages up to 150 lbs.*

- ☑ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.*
- ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service **To most locations. *Packages over 150 lbs.*

- ☐ FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 1Day Freight Booking No.
- ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☑ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak and FedEx Large Pak. ☐ FedEx Box ☐ FedEx Tube ☑ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☑ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☑ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☑ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check ☐ Obtain recip. Acct. No.

[redacted]

Total Packages	Total Weight	Total Declared Value†	Credit Card Auth.
1	52 lbs.	$ .00	

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

606

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Appendix 2: Cottonwood Creek Raw Analytical Data

09-Feb-2011

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **PA 21-2 Pit Closure 1/28/11** Work Order: **1102081**

Dear Mark,

ALS Environmental received 1 sample on 03-Feb-2011 12:00 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 43.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 09-Feb-11

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11
Work Order: **1102081**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1102081-01	Cottonwood Creek	Water		1/28/2011 12:00	2/3/2011 12:00	☐

ALS Group USA, Corp

Date: 09-Feb-11

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11
Work Order: 1102081

Case Narrative

Batch 31752 RPD between the LCS and LCSD recoveries for DRO (C10-C28) was above control limits, but the individual recoveries met quality control criteria.

Batch 31764 MS/MSD data for Metals is not related to this project's samples.

Batch 31751 MS/MSD data for Semi-Volatiles is not related to this project's samples. Sample 1102081-01B had one or more surrogate recoveries that were above the upper control limit, but all compounds were ND.

The samples for Hexavalent Chromium, Nitrate, Nitrite and pH were received after the hold time had expired.

ALS Group USA, Corp

Date: 09-Feb-11

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11
WorkOrder: **1102081**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
µg/L	Micrograms per Liter
µmhos/cm	Micromhos per Centimeter
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
s.u.	Standard Units

ALS Group USA, Corp

Date: *09-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11 **Work Order:** 1102081
Sample ID: Cottonwood Creek **Lab ID:** 1102081-01
Collection Date: 1/28/2011 12:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **2/4/2011**	Analyst: **RM**
DRO (C10-C28)	ND		0.10	mg/L	1	2/7/2011 09:26 AM
Surr: 4-Terphenyl-d14	*90.2*		*30-125*	*%REC*	1	2/7/2011 09:26 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		0.20	mg/L	1	2/4/2011 03:17 AM
Surr: Toluene-d8	*105*		*70-130*	*%REC*	1	2/4/2011 03:17 AM
MERCURY BY CVAA			**SW7470**		Prep Date: **2/4/2011**	Analyst: **LR**
Mercury	ND		0.00020	mg/L	1	2/7/2011 09:58 AM
METALS BY ICP-MS			**SW6020A**		Prep Date: **2/4/2011**	Analyst: **CES**
Arsenic	**0.0045**		**0.0010**	**mg/L**	1	2/7/2011 01:25 PM
Barium	**0.099**		**0.0050**	**mg/L**	1	2/7/2011 01:25 PM
Cadmium	ND		0.0020	mg/L	1	2/7/2011 01:25 PM
Chromium	ND		0.0050	mg/L	1	2/7/2011 01:25 PM
Copper	ND		0.0050	mg/L	1	2/7/2011 01:25 PM
Iron	**0.22**		**0.080**	**mg/L**	1	2/7/2011 01:25 PM
Lead	ND		0.0050	mg/L	1	2/7/2011 01:25 PM
Magnesium	**28**		**0.20**	**mg/L**	1	2/7/2011 01:25 PM
Nickel	ND		0.0050	mg/L	1	2/7/2011 01:25 PM
Selenium	ND		0.0050	mg/L	1	2/7/2011 01:25 PM
Silver	ND		0.0050	mg/L	1	2/7/2011 01:25 PM
Sodium	**44**		**0.20**	**mg/L**	1	2/7/2011 01:25 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **2/4/2011**	Analyst: **JG**
1,2,4-Trichlorobenzene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
1,2-Dichlorobenzene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
1,3-Dichlorobenzene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
1,4-Dichlorobenzene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2,4,5-Trichlorophenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2,4,6-Trichlorophenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2,4-Dichlorophenol	ND		10	µg/L	1	2/7/2011 10:54 AM
2,4-Dimethylphenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2,4-Dinitrophenol	ND		20	µg/L	1	2/7/2011 10:54 AM
2,4-Dinitrotoluene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2,6-Dinitrotoluene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2-Chloronaphthalene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2-Chlorophenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2-Methylnaphthalene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2-Methylphenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
2-Nitroaniline	ND		20	µg/L	1	2/7/2011 10:54 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *09-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11 **Work Order:** 1102081
Sample ID: Cottonwood Creek **Lab ID:** 1102081-01
Collection Date: 1/28/2011 12:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
2-Nitrophenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
3,3´-Dichlorobenzidine	ND		20	µg/L	1	2/7/2011 10:54 AM
3-Nitroaniline	ND		20	µg/L	1	2/7/2011 10:54 AM
4,6-Dinitro-2-methylphenol	ND		20	µg/L	1	2/7/2011 10:54 AM
4-Bromophenyl phenyl ether	ND		5.0	µg/L	1	2/7/2011 10:54 AM
4-Chloro-3-methylphenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
4-Chloroaniline	ND		20	µg/L	1	2/7/2011 10:54 AM
4-Chlorophenyl phenyl ether	ND		5.0	µg/L	1	2/7/2011 10:54 AM
4-Methylphenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
4-Nitroaniline	ND		20	µg/L	1	2/7/2011 10:54 AM
4-Nitrophenol	ND		20	µg/L	1	2/7/2011 10:54 AM
Acenaphthene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Acenaphthylene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Anthracene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Benzo(a)anthracene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Benzo(a)pyrene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Benzo(b)fluoranthene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Benzo(g,h,i)perylene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Benzo(k)fluoranthene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Benzoic acid	ND		50	µg/L	1	2/7/2011 10:54 AM
Benzyl alcohol	ND		20	µg/L	1	2/7/2011 10:54 AM
Bis(2-chloroethoxy)methane	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Bis(2-chloroethyl)ether	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Bis(2-chloroisopropyl)ether	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Bis(2-ethylhexyl)phthalate	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Butyl benzyl phthalate	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Carbazole	ND		10	µg/L	1	2/7/2011 10:54 AM
Chrysene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Di-n-butyl phthalate	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Di-n-octyl phthalate	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Dibenzo(a,h)anthracene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Dibenzofuran	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Diethyl phthalate	ND		20	µg/L	1	2/7/2011 10:54 AM
Dimethyl phthalate	ND		20	µg/L	1	2/7/2011 10:54 AM
Fluoranthene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Fluorene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Hexachlorobenzene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Hexachlorobutadiene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Hexachlorocyclopentadiene	ND		20	µg/L	1	2/7/2011 10:54 AM
Hexachloroethane	ND		5.0	µg/L	1	2/7/2011 10:54 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *09-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11 **Work Order:** 1102081
Sample ID: Cottonwood Creek **Lab ID:** 1102081-01
Collection Date: 1/28/2011 12:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Isophorone	ND		5.0	µg/L	1	2/7/2011 10:54 AM
N-Nitrosodi-n-propylamine	ND		5.0	µg/L	1	2/7/2011 10:54 AM
N-Nitrosodiphenylamine	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Naphthalene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Nitrobenzene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Pentachlorophenol	ND		20	µg/L	1	2/7/2011 10:54 AM
Phenanthrene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Phenol	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Pyrene	ND		5.0	µg/L	1	2/7/2011 10:54 AM
Surr: 2,4,6-Tribromophenol	*77.7*		*41-99*	*%REC*	1	2/7/2011 10:54 AM
Surr: 2-Fluorobiphenyl	*58.9*		*44-85*	*%REC*	1	2/7/2011 10:54 AM
Surr: 2-Fluorophenol	*41.8*		*22-56*	*%REC*	1	2/7/2011 10:54 AM
Surr: 4-Terphenyl-d14	*65.3*		*36-91*	*%REC*	1	2/7/2011 10:54 AM
Surr: Nitrobenzene-d5	*65.9*		*45-88*	*%REC*	1	2/7/2011 10:54 AM
Surr: Phenol-d6	*27.7*		*18-39*	*%REC*	1	2/7/2011 10:54 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **MK**
Benzene	ND		1.0	µg/L	1	2/3/2011 08:20 PM
Ethylbenzene	ND		1.0	µg/L	1	2/3/2011 08:20 PM
m,p-Xylene	ND		2.0	µg/L	1	2/3/2011 08:20 PM
o-Xylene	ND		1.0	µg/L	1	2/3/2011 08:20 PM
Toluene	ND		1.0	µg/L	1	2/3/2011 08:20 PM
Xylenes, Total	ND		2.0	µg/L	1	2/3/2011 08:20 PM
Surr: 1,2-Dichloroethane-d4	*99.9*		*70-120*	*%REC*	1	2/3/2011 08:20 PM
Surr: 4-Bromofluorobenzene	*95.3*		*75-120*	*%REC*	1	2/3/2011 08:20 PM
Surr: Dibromofluoromethane	*99.6*		*85-115*	*%REC*	1	2/3/2011 08:20 PM
Surr: Toluene-d8	*102*		*85-120*	*%REC*	1	2/3/2011 08:20 PM
ALKALINITY (AS CACO3)			**A2320 B**			Analyst: **NZ**
Alkalinity, Bicarbonate (as CaCO3)	**310**		**10**	**mg/L**	1	2/7/2011 02:55 PM
Alkalinity, Carbonate (as CaCO3)	ND		10	mg/L	1	2/7/2011 02:55 PM
Alkalinity, Total (as CaCO3)	**320**		**12**	**mg/L**	1	2/7/2011 02:55 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JJG**
Chromium, Trivalent	**0.00041**			**mg/Kg**	1	2/8/2011 07:54 AM
CHROMIUM, HEXAVALENT			**SW7196A**			Analyst: **MB**
Chromium, Hexavalent	ND	H	0.0050	mg/L	1	2/4/2011 03:00 PM
ANIONS BY ION CHROMATOGRAPHY			**SW9056**			Analyst: **ED**
Bromide	**0.10**		**0.10**	**mg/L**	1	2/3/2011 04:27 PM
Chloride	**6.6**		**1.0**	**mg/L**	1	2/3/2011 04:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *09-Feb-11*

Client: HRL Compliance Solutions
Project: PA 21-2 Pit Closure 1/28/11 **Work Order:** 1102081
Sample ID: Cottonwood Creek **Lab ID:** 1102081-01
Collection Date: 1/28/2011 12:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoride	**0.35**		**0.10**	**mg/L**	1	2/3/2011 04:27 PM
Nitrogen, Nitrate	**0.47**	H	**0.020**	**mg/L**	1	2/3/2011 04:27 PM
Nitrogen, Nitrite	ND	H	0.020	mg/L	1	2/3/2011 04:27 PM
Sulfate	**37**		**3.0**	**mg/L**	3	2/3/2011 05:26 PM
Nitrogen, Nitrate-Nitrite	**0.47**		**0.020**	**mg/L**	1	2/3/2011 04:27 PM
PH			**SW9040**			Analyst: **JJG**
pH	**8.3**	H		**s.u.**	1	2/3/2011 08:50 AM
SPECIFIC CONDUCTANCE			**A2510**			Analyst: **KV**
Specific Conductance	**610**		**5.0**	**µmhos/cm**	1	2/3/2011 01:23 PM
TOTAL DISSOLVED SOLIDS			**A2540 C**			Analyst: **JJG**
Total Dissolved Solids	**370**		**10**	**mg/L**	1	2/3/2011 03:19 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-Feb-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1102081

Project: PA 21-2 Pit Closure 1/28/11

Batch ID: **31752** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKW1-31752-31752** Units: **mg/L** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552989** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	0.10								
Surr: 4-Terphenyl-d14	*0.03073*	0	*0.05*	0	*61.5*	*30-125*	0			

LCS Sample ID: **DLCSW1-31752-31752** Units: **mg/L** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552991** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	4.592	0.10	5	0	91.8	60-130	0			
Surr: 4-Terphenyl-d14	*0.03039*	0	*0.05*	0	*60.8*	*30-125*	0			

LCSD Sample ID: **DLCSDW1-31752-31752** Units: **mg/L** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552990** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	3.357	0.10	5	0	67.1	60-130	4.592	31.1	30	R
Surr: 4-Terphenyl-d14	*0.0411*	0	*0.05*	0	*82.2*	*30-125*	0.03039	*30*	*30*	

MS Sample ID: **1102039-06B MS** Units: **mg/L** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552973** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	42.77	1.0	50	0	85.5	60-130	0			
Surr: 4-Terphenyl-d14	*0.2892*	0	*0.5*	0	*57.8*	*30-125*	0			

MSD Sample ID: **1102039-06B MSD** Units: **mg/L** Analysis Date: **2/7/2011 09:26 AM**

Client ID: Run ID: **GC8_110207A** SeqNo: **1552974** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	37.39	1.0	50	0	74.8	60-130	42.77	13.4	30	
Surr: 4-Terphenyl-d14	*0.3326*	0	*0.5*	0	*66.5*	*30-125*	0.2892	*14*	*30*	

The following samples were analyzed in this batch: 1102081-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86729** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MB-R86729-R86729** Units: **µg/L** Analysis Date: **2/4/2011 03:17 AM**
Client ID: Run ID: **GC9_110204A** SeqNo: **1550955** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*107.4*	0	*100*	0	*107*	*70-130*	0			

LCS Sample ID: **LCS-R86729-R86729** Units: **µg/L** Analysis Date: **2/4/2011 03:17 AM**
Client ID: Run ID: **GC9_110204A** SeqNo: **1550956** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	24490	200	25000	0	97.9	70-130	0			
Surr: Toluene-d8	*103.9*	0	*100*	0	*104*	*70-130*	0			

LCSD Sample ID: **LCSD-R86729-R86729** Units: **µg/L** Analysis Date: **2/4/2011 03:17 AM**
Client ID: Run ID: **GC9_110204A** SeqNo: **1550969** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	25070	200	25000	0	100	70-130	24490	2.35	30	
Surr: Toluene-d8	*102.6*	0	*100*	0	*103*	*70-130*	103.9	*1.27*	*30*	

MS Sample ID: **1102039-03AMS** Units: **µg/Kg** Analysis Date: **2/4/2011 03:17 AM**
Client ID: Run ID: **GC9_110204A** SeqNo: **1550972** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	2399000	5,000	2500000	0	96	70-130	0			
Surr: Toluene-d8	*10110*	0	*10000*	0	*101*	*50-150*	0			

MS Sample ID: **1102099-01A MS** Units: **µg/Kg** Analysis Date: **2/4/2011 03:17 AM**
Client ID: Run ID: **GC9_110204A** SeqNo: **1550977** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	2328000	5,000	2500000	0	93.1	70-130	0			
Surr: Toluene-d8	*11410*	0	*10000*	0	*114*	*50-150*	0			

MSD Sample ID: **1102039-03AMSD** Units: **µg/Kg** Analysis Date: **2/4/2011 03:17 AM**
Client ID: Run ID: **GC9_110204A** SeqNo: **1550973** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	2201000	5,000	2500000	0	88.1	70-130	2399000	8.6	30	
Surr: Toluene-d8	*9484*	0	*10000*	0	*94.8*	*50-150*	10110	*6.37*	*30*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86729** Instrument ID **GC9** Method: **SW8015**

MSD Sample ID: **1102099-01A MSD** Units: **µg/Kg** Analysis Date: **2/4/2011 03:17 AM**

Client ID: Run ID: **GC9_110204A** SeqNo: **1550978** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	2340000	5,000	2500000	0	93.6	70-130	2328000	0.492	30	
Surr: Toluene-d8	*11080*	0	*10000*	0	*111*	*50-150*	11410	*2.88*	*30*	

The following samples were analyzed in this batch: 1102081-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31765** Instrument ID **HG1** Method: **SW7470**

MBLK Sample ID: **MBLK-31765-31765** Units: **mg/L** Analysis Date: **2/7/2011 09:18 AM**
Client ID: Run ID: **HG1_110207A** SeqNo: **1551991** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **LCS-31765-31765** Units: **mg/L** Analysis Date: **2/7/2011 09:20 AM**
Client ID: Run ID: **HG1_110207A** SeqNo: **1551992** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.002026	0.00020	0.002	0	101	80-120	0			

LCSD Sample ID: **LCSD-31765-31765** Units: **mg/L** Analysis Date: **2/7/2011 09:22 AM**
Client ID: Run ID: **HG1_110207A** SeqNo: **1551993** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001827	0.00020	0.002	0	91.4	80-120	0.002026	10.3	20	

MS Sample ID: **1102100-04CMS** Units: **mg/L** Analysis Date: **2/7/2011 10:17 AM**
Client ID: Run ID: **HG1_110207A** SeqNo: **1552017** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.002012	0.00020	0.002	0.000017	99.8	75-125	0			

MSD Sample ID: **1102100-04CMSD** Units: **mg/L** Analysis Date: **2/7/2011 10:19 AM**
Client ID: Run ID: **HG1_110207A** SeqNo: **1552018** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001951	0.00020	0.002	0.000017	96.7	75-125	0.002012	3.08	20	

The following samples were analyzed in this batch: 1102081-01C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31764** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK Sample ID: **MBLK-31764-31764** Units: **mg/L** Analysis Date: **2/7/2011 11:43 AM**

Client ID: Run ID: **ICPMS2_110207A** SeqNo: **1552081** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0003122	0.0050								J
Barium	ND	0.0050								
Cadmium	ND	0.0020								
Chromium	ND	0.0050								
Copper	ND	0.0050								
Iron	ND	0.080								
Lead	ND	0.0050								
Magnesium	ND	0.20								
Nickel	ND	0.0050								
Selenium	ND	0.0050								
Silver	ND	0.0050								
Sodium	ND	0.20								

LCS Sample ID: **LCS-31764-31764** Units: **mg/L** Analysis Date: **2/7/2011 11:48 AM**

Client ID: Run ID: **ICPMS2_110207A** SeqNo: **1552082** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.08963	0.0050	0.1	0	89.6	80-120	0			
Barium	0.08797	0.0050	0.1	0	88	80-120	0			
Cadmium	0.0894	0.0020	0.1	0	89.4	80-120	0			
Chromium	0.08956	0.0050	0.1	0	89.6	80-120	0			
Copper	0.08771	0.0050	0.1	0	87.7	80-120	0			
Iron	8.805	0.080	10	0	88	80-120	0			
Lead	0.08957	0.0050	0.1	0	89.6	80-120	0			
Magnesium	8.679	0.20	10	0	86.8	80-120	0			
Nickel	0.0874	0.0050	0.1	0	87.4	80-120	0			
Selenium	0.08856	0.0050	0.1	0	88.6	80-120	0			
Silver	0.08782	0.0050	0.1	0	87.8	80-120	0			
Sodium	8.576	0.20	10	0	85.8	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31764** Instrument ID **ICPMS2** Method: **SW6020A**

LCSD Sample ID: **LCSD-31764-31764** Units: **mg/L** Analysis Date: **2/7/2011 11:54 AM**

Client ID: Run ID: **ICPMS2_110207A** SeqNo: **1552083** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.09031	0.0050	0.1	0	90.3	80-120	0.08963	0.756	20	
Barium	0.08787	0.0050	0.1	0	87.9	80-120	0.08797	0.114	20	
Cadmium	0.08995	0.0020	0.1	0	90	80-120	0.0894	0.613	20	
Chromium	0.08975	0.0050	0.1	0	89.8	80-120	0.08956	0.212	20	
Copper	0.08914	0.0050	0.1	0	89.1	80-120	0.08771	1.62	20	
Iron	8.945	0.080	10	0	89.4	80-120	8.805	1.58	20	
Lead	0.09049	0.0050	0.1	0	90.5	80-120	0.08957	1.02	20	
Magnesium	8.771	0.20	10	0	87.7	80-120	8.679	1.05	20	
Nickel	0.08894	0.0050	0.1	0	88.9	80-120	0.0874	1.75	20	
Selenium	0.09033	0.0050	0.1	0	90.3	80-120	0.08856	1.98	20	
Silver	0.08765	0.0050	0.1	0	87.6	80-120	0.08782	0.194	20	
Sodium	8.605	0.20	10	0	86	80-120	8.576	0.338	20	

MS Sample ID: **1102100-03CMS** Units: **mg/L** Analysis Date: **2/7/2011 12:13 PM**

Client ID: Run ID: **ICPMS2_110207A** SeqNo: **1552087** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.08923	0.0050	0.1	0.004395	84.8	80-120	0			
Barium	0.1583	0.0050	0.1	0.07104	87.3	80-120	0			
Cadmium	0.08515	0.0020	0.1	0.00007433	85.1	80-120	0			
Chromium	0.08518	0.0050	0.1	0.00349	81.7	80-120	0			
Copper	0.08215	0.0050	0.1	0.006774	75.4	80-120	0			S
Iron	10.47	0.080	10	2.945	75.2	80-120	0			S
Lead	0.08878	0.0050	0.1	0.002696	86.1	80-120	0			
Magnesium	41.99	0.20	10	68.13	-261	80-120	0			SO
Nickel	0.08259	0.0050	0.1	0.1639	-81.3	80-120	0			S
Selenium	0.08663	0.0050	0.1	0.001589	85	80-120	0			
Silver	0.08111	0.0050	0.1	0.00004983	81.1	80-120	0			
Sodium	45.36	0.20	10	0	454	80-120	0			S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31764** Instrument ID **ICPMS2** Method: **SW6020A**

MSD Sample ID: **1102100-03CMSD** Units: **mg/L** Analysis Date: **2/7/2011 12:18 PM**

Client ID: Run ID: **ICPMS2_110207A** SeqNo: **1552088** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0942	0.0050	0.1	0.004395	89.8	80-120	0.08923	5.42	20	
Barium	0.1657	0.0050	0.1	0.07104	94.7	80-120	0.1583	4.57	20	
Cadmium	0.0904	0.0020	0.1	0.00007433	90.3	80-120	0.08515	5.98	20	
Chromium	0.09225	0.0050	0.1	0.00349	88.8	80-120	0.08518	7.97	20	
Copper	0.08848	0.0050	0.1	0.006774	81.7	80-120	0.08215	7.42	20	
Iron	11.14	0.080	10	2.945	82	80-120	10.47	6.2	20	
Lead	0.09526	0.0050	0.1	0.002696	92.6	80-120	0.08878	7.04	20	
Magnesium	43.12	0.20	10	68.13	-250	80-120	41.99	2.66	20	SO
Nickel	0.08864	0.0050	0.1	0.1639	-75.3	80-120	0.08259	7.07	20	S
Selenium	0.09288	0.0050	0.1	0.001589	91.3	80-120	0.08663	6.96	20	
Silver	0.08506	0.0050	0.1	0.00004983	85	80-120	0.08111	4.75	20	
Sodium	46.48	0.20	10	0	465	80-120	45.36	2.44	20	S

The following samples were analyzed in this batch: 1102081-01C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31751** Instrument ID **SVMS4** Method: **SW8270**

MBLK Sample ID: **SBLKW1-31751-31751** Units: **µg/L** Analysis Date: **2/4/2011 05:18 PM**

Client ID: Run ID: **SVMS4_110204A** SeqNo: **1551879** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	ND	5.0								
2-Methylnaphthalene	ND	5.0								
Acenaphthene	ND	5.0								
Acenaphthylene	ND	5.0								
Anthracene	ND	5.0								
Benzo(a)anthracene	ND	5.0								
Benzo(a)pyrene	ND	5.0								
Benzo(b)fluoranthene	ND	5.0								
Benzo(g,h,i)perylene	ND	5.0								
Benzo(k)fluoranthene	ND	5.0								
Chrysene	ND	5.0								
Dibenzo(a,h)anthracene	ND	5.0								
Fluoranthene	ND	5.0								
Fluorene	ND	5.0								
Indeno(1,2,3-cd)pyrene	ND	5.0								
Naphthalene	ND	5.0								
Phenanthrene	ND	5.0								
Pyrene	ND	5.0								
Surr: 2-Fluorobiphenyl	*34.84*	0	*50*	0	*69.7*	*44-85*	0			
Surr: 4-Terphenyl-d14	*44.72*	0	*50*	0	*89.4*	*36-91*	0			
Surr: Nitrobenzene-d5	*43.6*	0	*50*	0	*87.2*	*45-88*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31751** Instrument ID **SVMS4** Method: **SW8270**

LCS Sample ID: **SLCSW1-31751-31751** Units: **µg/L** Analysis Date: **2/4/2011 05:49 PM**

Client ID: Run ID: **SVMS4_110204A** SeqNo: **1551880** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	29.45	5.0	40	0	73.6	50-105	0			
2-Methylnaphthalene	30	5.0	40	0	75	45-105	0			
Acenaphthene	32.62	5.0	40	0	81.6	45-110	0			
Acenaphthylene	33.08	5.0	40	0	82.7	50-105	0			
Anthracene	38.49	5.0	40	0	96.2	55-110	0			
Benzo(a)anthracene	39.69	5.0	40	0	99.2	55-110	0			
Benzo(a)pyrene	36.61	5.0	40	0	91.5	55-110	0			
Benzo(b)fluoranthene	34.11	5.0	40	0	85.3	45-120	0			
Benzo(g,h,i)perylene	42.35	5.0	40	0	106	40-125	0			
Benzo(k)fluoranthene	36.99	5.0	40	0	92.5	45-125	0			
Chrysene	38.41	5.0	40	0	96	55-110	0			
Dibenzo(a,h)anthracene	39.07	5.0	40	0	97.7	40-125	0			
Fluoranthene	38.75	5.0	40	0	96.9	55-115	0			
Fluorene	33.67	5.0	40	0	84.2	50-110	0			
Indeno(1,2,3-cd)pyrene	39.57	5.0	40	0	98.9	45-125	0			
Naphthalene	29.58	5.0	40	0	74	40-100	0			
Phenanthrene	38.06	5.0	40	0	95.2	50-115	0			
Pyrene	40.07	5.0	40	0	100	50-130	0			
Surr: 2-Fluorobiphenyl	*34.04*	0	*50*	0	*68.1*	*44-85*	0			
Surr: 4-Terphenyl-d14	*38.21*	0	*50*	0	*76.4*	*36-91*	0			
Surr: Nitrobenzene-d5	*43.7*	0	*50*	0	*87.4*	*45-88*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31751** Instrument ID **SVMS4** Method: **SW8270**

LCSD Sample ID: **SLCSDW1-31751-31751** Units: **µg/L** Analysis Date: **2/4/2011 06:20 PM**

Client ID: Run ID: **SVMS4_110204A** SeqNo: **1551881** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	28.47	5.0	40	0	71.2	50-105	29.45	3.38	30	
2-Methylnaphthalene	28.86	5.0	40	0	72.2	45-105	30	3.87	30	
Acenaphthene	31.23	5.0	40	0	78.1	45-110	32.62	4.35	30	
Acenaphthylene	31.71	5.0	40	0	79.3	50-105	33.08	4.23	30	
Anthracene	37.78	5.0	40	0	94.4	55-110	38.49	1.86	30	
Benzo(a)anthracene	38.88	5.0	40	0	97.2	55-110	39.69	2.06	30	
Benzo(a)pyrene	35.92	5.0	40	0	89.8	55-110	36.61	1.9	30	
Benzo(b)fluoranthene	33.29	5.0	40	0	83.2	45-120	34.11	2.43	30	
Benzo(g,h,i)perylene	41.83	5.0	40	0	105	40-125	42.35	1.24	30	
Benzo(k)fluoranthene	37.27	5.0	40	0	93.2	45-125	36.99	0.754	30	
Chrysene	37.43	5.0	40	0	93.6	55-110	38.41	2.58	30	
Dibenzo(a,h)anthracene	37.77	5.0	40	0	94.4	40-125	39.07	3.38	30	
Fluoranthene	37.43	5.0	40	0	93.6	55-115	38.75	3.47	30	
Fluorene	32.65	5.0	40	0	81.6	50-110	33.67	3.08	30	
Indeno(1,2,3-cd)pyrene	38.52	5.0	40	0	96.3	45-125	39.57	2.69	30	
Naphthalene	28.38	5.0	40	0	71	40-100	29.58	4.14	30	
Phenanthrene	37.25	5.0	40	0	93.1	50-115	38.06	2.15	30	
Pyrene	39.18	5.0	40	0	98	50-130	40.07	2.25	30	
Surr: 2-Fluorobiphenyl	*32.93*	0	*50*	0	*65.9*	*44-85*	34.04	*3.31*	*40*	
Surr: 4-Terphenyl-d14	*42.71*	0	*50*	0	*85.4*	*36-91*	38.21	*11.1*	*40*	
Surr: Nitrobenzene-d5	*42.42*	0	*50*	0	*84.8*	*45-88*	43.7	*2.97*	*40*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31751** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: **1102039-06B MS** Units: **µg/L** Analysis Date: **2/4/2011 06:51 PM**

Client ID: Run ID: **SVMS4_110204A** SeqNo: **1551882** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	305.1	50	400	0	76.3	50-105	0			
2-Methylnaphthalene	312.3	50	400	0	78.1	45-105	0			
Acenaphthene	331.3	50	400	0	82.8	45-110	0			
Acenaphthylene	332.7	50	400	0	83.2	50-105	0			
Anthracene	391.5	50	400	0	97.9	55-110	0			
Benzo(a)anthracene	407.6	50	400	0	102	55-110	0			
Benzo(a)pyrene	372.7	50	400	0	93.2	55-110	0			
Benzo(b)fluoranthene	341.8	50	400	0	85.4	45-120	0			
Benzo(g,h,i)perylene	429.4	50	400	0	107	40-125	0			
Benzo(k)fluoranthene	395.8	50	400	0	99	45-125	0			
Chrysene	391.1	50	400	0	97.8	55-110	0			
Dibenzo(a,h)anthracene	392.6	50	400	0	98.2	40-125	0			
Fluoranthene	387.5	50	400	0	96.9	55-115	0			
Fluorene	340.9	50	400	0	85.2	50-110	0			
Indeno(1,2,3-cd)pyrene	397.5	50	400	0	99.4	45-125	0			
Naphthalene	309.5	50	400	0	77.4	40-100	0			
Phenanthrene	388.3	50	400	0	97.1	50-115	0			
Pyrene	408.6	50	400	0	102	50-130	0			
Surr: 2-Fluorobiphenyl	*347.9*	0	*500*	0	*69.6*	*44-85*	0			
Surr: 4-Terphenyl-d14	*317.9*	0	*500*	0	*63.6*	*36-91*	0			
Surr: Nitrobenzene-d5	*460.3*	0	*500*	0	*92.1*	*45-88*	0			*S*

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31751** Instrument ID **SVMS4** Method: **SW8270**

MSD Sample ID: **1102039-06B MSD** Units: **µg/L** Analysis Date: **2/4/2011 07:21 PM**

Client ID: Run ID: **SVMS4_110204A** SeqNo: **1551883** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	272.8	50	400	0	68.2	50-105	305.1	11.2	30	
2-Methylnaphthalene	274.1	50	400	0	68.5	45-105	312.3	13	30	
Acenaphthene	303.4	50	400	0	75.8	45-110	331.3	8.79	30	
Acenaphthylene	309	50	400	0	77.2	50-105	332.7	7.39	30	
Anthracene	374.6	50	400	0	93.6	55-110	391.5	4.41	30	
Benzo(a)anthracene	386.9	50	400	0	96.7	55-110	407.6	5.21	30	
Benzo(a)pyrene	356.6	50	400	0	89.2	55-110	372.7	4.42	30	
Benzo(b)fluoranthene	334.6	50	400	0	83.6	45-120	341.8	2.13	30	
Benzo(g,h,i)perylene	424.8	50	400	0	106	40-125	429.4	1.08	30	
Benzo(k)fluoranthene	406.4	50	400	0	102	45-125	395.8	2.64	30	
Chrysene	370.5	50	400	0	92.6	55-110	391.1	5.41	30	
Dibenzo(a,h)anthracene	373.7	50	400	0	93.4	40-125	392.6	4.93	30	
Fluoranthene	368	50	400	0	92	55-115	387.5	5.16	30	
Fluorene	325.7	50	400	0	81.4	50-110	340.9	4.56	30	
Indeno(1,2,3-cd)pyrene	382.1	50	400	0	95.5	45-125	397.5	3.95	30	
Naphthalene	279.6	50	400	0	69.9	40-100	309.5	10.2	30	
Phenanthrene	367.9	50	400	0	92	50-115	388.3	5.4	30	
Pyrene	388.6	50	400	0	97.2	50-130	408.6	5.02	30	
Surr: 2-Fluorobiphenyl	*316.3*	0	*500*	0	*63.3*	*44-85*	347.9	*9.52*	*40*	
Surr: 4-Terphenyl-d14	*293.8*	0	*500*	0	*58.8*	*36-91*	317.9	*7.88*	*40*	
Surr: Nitrobenzene-d5	*412.8*	0	*500*	0	*82.6*	*45-88*	460.3	*10.9*	*40*	

The following samples were analyzed in this batch: 1102081-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

MBLK Sample ID: **SBLKW1-31759-31759** Units: **µg/L** Analysis Date: **2/7/2011 08:44 AM**

Client ID: Run ID: **SVMS6_110207A** SeqNo: **1552029** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	ND	5.0								
1,2-Dichlorobenzene	ND	5.0								
1,3-Dichlorobenzene	ND	5.0								
1,4-Dichlorobenzene	ND	5.0								
2,4,5-Trichlorophenol	ND	5.0								
2,4,6-Trichlorophenol	ND	5.0								
2,4-Dichlorophenol	ND	10								
2,4-Dimethylphenol	ND	5.0								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	5.0								
2,6-Dinitrotoluene	ND	5.0								
2-Chloronaphthalene	ND	5.0								
2-Chlorophenol	ND	5.0								
2-Methylnaphthalene	ND	5.0								
2-Methylphenol	ND	5.0								
2-Nitroaniline	ND	20								
2-Nitrophenol	ND	5.0								
3,3´-Dichlorobenzidine	ND	20								
3-Nitroaniline	ND	20								
4,6-Dinitro-2-methylphenol	ND	20								
4-Bromophenyl phenyl ether	ND	5.0								
4-Chloro-3-methylphenol	ND	5.0								
4-Chloroaniline	ND	20								
4-Chlorophenyl phenyl ether	ND	5.0								
4-Methylphenol	ND	5.0								
4-Nitroaniline	ND	20								
4-Nitrophenol	ND	20								
Acenaphthene	ND	5.0								
Acenaphthylene	ND	5.0								
Anthracene	ND	5.0								
Benzo(a)anthracene	ND	5.0								
Benzo(a)pyrene	ND	5.0								
Benzo(b)fluoranthene	ND	5.0								
Benzo(g,h,i)perylene	ND	5.0								
Benzo(k)fluoranthene	ND	5.0								
Benzoic acid	ND	50								
Benzyl alcohol	ND	20								
Bis(2-chloroethoxy)methane	ND	5.0								
Bis(2-chloroethyl)ether	ND	5.0								
Bis(2-chloroisopropyl)ether	ND	5.0								
Bis(2-ethylhexyl)phthalate	ND	5.0								
Butyl benzyl phthalate	ND	5.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

Carbazole	ND	10					
Chrysene	ND	5.0					
Di-n-butyl phthalate	ND	5.0					
Di-n-octyl phthalate	ND	5.0					
Dibenzo(a,h)anthracene	ND	5.0					
Dibenzofuran	ND	5.0					
Diethyl phthalate	ND	20					
Dimethyl phthalate	ND	20					
Fluoranthene	ND	5.0					
Fluorene	ND	5.0					
Hexachlorobenzene	ND	5.0					
Hexachlorobutadiene	ND	5.0					
Hexachlorocyclopentadiene	ND	20					
Hexachloroethane	ND	5.0					
Indeno(1,2,3-cd)pyrene	ND	5.0					
Isophorone	ND	5.0					
N-Nitrosodi-n-propylamine	ND	5.0					
N-Nitrosodiphenylamine	ND	5.0					
Naphthalene	ND	5.0					
Nitrobenzene	ND	5.0					
Pentachlorophenol	ND	20					
Phenanthrene	ND	5.0					
Phenol	ND	5.0					
Pyrene	ND	5.0					
Surr: 2,4,6-Tribromophenol	*36.33*	0	*50*	0	*72.7*	*41-99*	0
Surr: 2-Fluorobiphenyl	*28.36*	0	*50*	0	*56.7*	*44-85*	0
Surr: 2-Fluorophenol	*21.54*	0	*50*	0	*43.1*	*22-56*	0
Surr: 4-Terphenyl-d14	*33.45*	0	*50*	0	*66.9*	*36-91*	0
Surr: Nitrobenzene-d5	*31.78*	0	*50*	0	*63.6*	*45-88*	0
Surr: Phenol-d6	*14.75*	0	*50*	0	*29.5*	*18-39*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: **SLCSW1-31759-31759** Units: **µg/L** Analysis Date: **2/7/2011 09:10 AM**

Client ID: Run ID: **SVMS6_110207A** SeqNo: **1552030** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	26.34	5.0	40	0	65.8	35-105	0			
1,2-Dichlorobenzene	26.05	5.0	40	0	65.1	35-100	0			
1,3-Dichlorobenzene	25.8	5.0	40	0	64.5	30-100	0			
1,4-Dichlorobenzene	26.38	5.0	40	0	66	30-100	0			
2,4,5-Trichlorophenol	30.43	5.0	40	0	76.1	50-110	0			
2,4,6-Trichlorophenol	30.54	5.0	40	0	76.4	50-115	0			
2,4-Dichlorophenol	29.21	10	40	0	73	50-105	0			
2,4-Dimethylphenol	25.26	5.0	40	0	63.2	30-110	0			
2,4-Dinitrophenol	32.19	20	40	0	80.5	15-140	0			
2,4-Dinitrotoluene	31.57	5.0	40	0	78.9	50-120	0			
2,6-Dinitrotoluene	30.69	5.0	40	0	76.7	50-115	0			
2-Chloronaphthalene	30.31	5.0	40	0	75.8	50-105	0			
2-Chlorophenol	27.53	5.0	40	0	68.8	35-105	0			
2-Methylnaphthalene	26.94	5.0	40	0	67.4	45-105	0			
2-Methylphenol	25.56	5.0	40	0	63.9	40-110	0			
2-Nitroaniline	30.14	20	40	0	75.4	50-115	0			
2-Nitrophenol	29.21	5.0	40	0	73	40-115	0			
3-Nitroaniline	29.66	20	40	0	74.2	20-125	0			
4,6-Dinitro-2-methylphenol	32.64	20	40	0	81.6	40-130	0			
4-Bromophenyl phenyl ether	28.14	5.0	40	0	70.4	50-115	0			
4-Chloro-3-methylphenol	30.4	5.0	40	0	76	45-110	0			
4-Chloroaniline	36.13	20	40	0	90.3	15-110	0			
4-Chlorophenyl phenyl ether	30.26	5.0	40	0	75.6	50-110	0			
4-Methylphenol	24.42	5.0	40	0	61	30-110	0			
4-Nitroaniline	24.98	20	40	0	62.4	35-150	0			
4-Nitrophenol	10.59	20	40	0	26.5	1-58	0			J
Acenaphthene	27.49	5.0	40	0	68.7	45-110	0			
Acenaphthylene	28.41	5.0	40	0	71	50-105	0			
Anthracene	27.76	5.0	40	0	69.4	55-110	0			
Benzo(a)anthracene	28.68	5.0	40	0	71.7	55-110	0			
Benzo(a)pyrene	28.87	5.0	40	0	72.2	55-110	0			
Benzo(b)fluoranthene	28.86	5.0	40	0	72.2	45-120	0			
Benzo(g,h,i)perylene	30.81	5.0	40	0	77	40-125	0			
Benzo(k)fluoranthene	31.21	5.0	40	0	78	45-125	0			
Bis(2-chloroethoxy)methane	28.8	5.0	40	0	72	45-105	0			
Bis(2-chloroethyl)ether	31.25	5.0	40	0	78.1	35-110	0			
Bis(2-chloroisopropyl)ether	34.54	5.0	40	0	86.4	25-130	0			
Bis(2-ethylhexyl)phthalate	34.63	5.0	40	0	86.6	40-125	0			
Butyl benzyl phthalate	33.85	5.0	40	0	84.6	45-115	0			
Carbazole	36.55	10	40	0	91.4	50-150	0			
Chrysene	28.5	5.0	40	0	71.2	55-110	0			
Di-n-butyl phthalate	29.38	5.0	40	0	73.4	55-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

Di-n-octyl phthalate	30.58	5.0	40	0	76.4	35-135	0	
Dibenzo(a,h)anthracene	29.29	5.0	40	0	73.2	40-125	0	
Dibenzofuran	29.02	5.0	40	0	72.6	55-105	0	
Diethyl phthalate	29.36	20	40	0	73.4	40-120	0	
Dimethyl phthalate	29.32	20	40	0	73.3	25-125	0	
Fluoranthene	28.46	5.0	40	0	71.2	55-115	0	
Fluorene	30.83	5.0	40	0	77.1	50-110	0	
Hexachlorobenzene	28.02	5.0	40	0	70	50-110	0	
Hexachlorobutadiene	25.21	5.0	40	0	63	25-105	0	
Hexachlorocyclopentadiene	19.23	20	40	0	48.1	25-105	0	J
Hexachloroethane	27.13	5.0	40	0	67.8	30-95	0	
Indeno(1,2,3-cd)pyrene	29.61	5.0	40	0	74	45-125	0	
Isophorone	29.11	5.0	40	0	72.8	50-110	0	
N-Nitrosodi-n-propylamine	29.91	5.0	40	0	74.8	35-130	0	
N-Nitrosodiphenylamine	32.84	5.0	40	0	82.1	50-110	0	
Naphthalene	26.37	5.0	40	0	65.9	40-100	0	
Nitrobenzene	28.68	5.0	40	0	71.7	45-110	0	
Pentachlorophenol	23.8	20	40	0	59.5	40-115	0	
Phenanthrene	27.23	5.0	40	0	68.1	50-115	0	
Phenol	14.72	5.0	40	0	36.8	12-43	0	
Pyrene	30.21	5.0	40	0	75.5	50-130	0	
Surr: 2,4,6-Tribromophenol	*37.42*	0	*50*	0	*74.8*	*41-99*	0	
Surr: 2-Fluorobiphenyl	*28.96*	0	*50*	0	*57.9*	*44-85*	0	
Surr: 2-Fluorophenol	*22.53*	0	*50*	0	*45.1*	*22-56*	0	
Surr: 4-Terphenyl-d14	*36.34*	0	*50*	0	*72.7*	*36-91*	0	
Surr: Nitrobenzene-d5	*31.89*	0	*50*	0	*63.8*	*45-88*	0	
Surr: Phenol-d6	*14.15*	0	*50*	0	*28.3*	*18-39*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

LCSD Sample ID: **SLCSDW1-31759-31759** Units: **µg/L** Analysis Date: **2/7/2011 09:36 AM**

Client ID: Run ID: **SVMS6_110207A** SeqNo: **1552031** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	26.68	5.0	40	0	66.7	35-105	26.34	1.28	30	
1,2-Dichlorobenzene	26.33	5.0	40	0	65.8	35-100	26.05	1.07	30	
1,3-Dichlorobenzene	26.27	5.0	40	0	65.7	30-100	25.8	1.81	30	
1,4-Dichlorobenzene	26.79	5.0	40	0	67	30-100	26.38	1.54	30	
2,4,5-Trichlorophenol	30.76	5.0	40	0	76.9	50-110	30.43	1.08	30	
2,4,6-Trichlorophenol	30.73	5.0	40	0	76.8	50-115	30.54	0.62	30	
2,4-Dichlorophenol	29.12	10	40	0	72.8	50-105	29.21	0.309	30	
2,4-Dimethylphenol	23.63	5.0	40	0	59.1	30-110	25.26	6.67	30	
2,4-Dinitrophenol	34.99	20	40	0	87.5	15-140	32.19	8.34	30	
2,4-Dinitrotoluene	33.13	5.0	40	0	82.8	50-120	31.57	4.82	30	
2,6-Dinitrotoluene	31.93	5.0	40	0	79.8	50-115	30.69	3.96	30	
2-Chloronaphthalene	30.9	5.0	40	0	77.2	50-105	30.31	1.93	30	
2-Chlorophenol	27.13	5.0	40	0	67.8	35-105	27.53	1.46	30	
2-Methylnaphthalene	27.16	5.0	40	0	67.9	45-105	26.94	0.813	30	
2-Methylphenol	24.59	5.0	40	0	61.5	40-110	25.56	3.87	30	
2-Nitroaniline	30.59	20	40	0	76.5	50-115	30.14	1.48	30	
2-Nitrophenol	29.58	5.0	40	0	74	40-115	29.21	1.26	30	
3-Nitroaniline	29.89	20	40	0	74.7	20-125	29.66	0.772	30	
4,6-Dinitro-2-methylphenol	36.12	20	40	0	90.3	40-130	32.64	10.1	30	
4-Bromophenyl phenyl ether	29.18	5.0	40	0	73	50-115	28.14	3.63	30	
4-Chloro-3-methylphenol	30.06	5.0	40	0	75.2	45-110	30.4	1.12	30	
4-Chloroaniline	33.72	20	40	0	84.3	15-110	36.13	6.9	30	
4-Chlorophenyl phenyl ether	31.16	5.0	40	0	77.9	50-110	30.26	2.93	30	
4-Methylphenol	23.15	5.0	40	0	57.9	30-110	24.42	5.34	30	
4-Nitroaniline	25.57	20	40	0	63.9	35-150	24.98	2.33	30	
4-Nitrophenol	10.4	20	40	0	26	1-58	10.59	0	30	J
Acenaphthene	28.11	5.0	40	0	70.3	45-110	27.49	2.23	30	
Acenaphthylene	28.81	5.0	40	0	72	50-105	28.41	1.4	30	
Anthracene	29.11	5.0	40	0	72.8	55-110	27.76	4.75	30	
Benzo(a)anthracene	30.38	5.0	40	0	76	55-110	28.68	5.76	30	
Benzo(a)pyrene	30.78	5.0	40	0	77	55-110	28.87	6.4	30	
Benzo(b)fluoranthene	29.1	5.0	40	0	72.8	45-120	28.86	0.828	30	
Benzo(g,h,i)perylene	33.33	5.0	40	0	83.3	40-125	30.81	7.86	30	
Benzo(k)fluoranthene	37.97	5.0	40	0	94.9	45-125	31.21	19.5	30	
Bis(2-chloroethoxy)methane	28.71	5.0	40	0	71.8	45-105	28.8	0.313	30	
Bis(2-chloroethyl)ether	31.03	5.0	40	0	77.6	35-110	31.25	0.706	30	
Bis(2-chloroisopropyl)ether	34.45	5.0	40	0	86.1	25-130	34.54	0.261	30	
Bis(2-ethylhexyl)phthalate	36.86	5.0	40	0	92.2	40-125	34.63	6.24	30	
Butyl benzyl phthalate	35.81	5.0	40	0	89.5	45-115	33.85	5.63	30	
Carbazole	38.71	10	40	0	96.8	50-150	36.55	5.74	30	
Chrysene	30.42	5.0	40	0	76	55-110	28.5	6.52	30	
Di-n-butyl phthalate	31.05	5.0	40	0	77.6	55-115	29.38	5.53	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

Di-n-octyl phthalate	32.84	5.0	40	0	82.1	35-135	30.58	7.13	30	
Dibenzo(a,h)anthracene	31.81	5.0	40	0	79.5	40-125	29.29	8.25	30	
Dibenzofuran	29.59	5.0	40	0	74	55-105	29.02	1.95	30	
Diethyl phthalate	30.66	20	40	0	76.6	40-120	29.36	4.33	30	
Dimethyl phthalate	30.39	20	40	0	76	25-125	29.32	3.58	30	
Fluoranthene	30.15	5.0	40	0	75.4	55-115	28.46	5.77	30	
Fluorene	31.53	5.0	40	0	78.8	50-110	30.83	2.25	30	
Hexachlorobenzene	29.72	5.0	40	0	74.3	50-110	28.02	5.89	30	
Hexachlorobutadiene	25.34	5.0	40	0	63.4	25-105	25.21	0.514	30	
Hexachlorocyclopentadiene	19.09	20	40	0	47.7	25-105	19.23	0	30	J
Hexachloroethane	27.49	5.0	40	0	68.7	30-95	27.13	1.32	30	
Indeno(1,2,3-cd)pyrene	32.03	5.0	40	0	80.1	45-125	29.61	7.85	30	
Isophorone	29.04	5.0	40	0	72.6	50-110	29.11	0.241	30	
N-Nitrosodi-n-propylamine	29.9	5.0	40	0	74.8	35-130	29.91	0.0334	30	
N-Nitrosodiphenylamine	34.38	5.0	40	0	86	50-110	32.84	4.58	30	
Naphthalene	26.67	5.0	40	0	66.7	40-100	26.37	1.13	30	
Nitrobenzene	28.89	5.0	40	0	72.2	45-110	28.68	0.73	30	
Pentachlorophenol	25.77	20	40	0	64.4	40-115	23.8	7.95	30	
Phenanthrene	28.85	5.0	40	0	72.1	50-115	27.23	5.78	30	
Phenol	13.62	5.0	40	0	34	12-43	14.72	7.76	30	
Pyrene	31.95	5.0	40	0	79.9	50-130	30.21	5.6	30	
Surr: 2,4,6-Tribromophenol	*39.21*	0	*50*	0	*78.4*	*41-99*	37.42	*4.67*	*40*	
Surr: 2-Fluorobiphenyl	*29.42*	0	*50*	0	*58.8*	*44-85*	28.96	*1.58*	*40*	
Surr: 2-Fluorophenol	*21.14*	0	*50*	0	*42.3*	*22-56*	22.53	*6.37*	*40*	
Surr: 4-Terphenyl-d14	*37.98*	0	*50*	0	*76*	*36-91*	36.34	*4.41*	*40*	
Surr: Nitrobenzene-d5	*32.47*	0	*50*	0	*64.9*	*45-88*	31.89	*1.8*	*40*	
Surr: Phenol-d6	*13.22*	0	*50*	0	*26.4*	*18-39*	14.15	*6.8*	*40*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1102081-01B MS** Units: **µg/L** Analysis Date: **2/7/2011 10:02 AM**

Client ID: **Cottonwood Creek** Run ID: **SVMS6_110207A** SeqNo: **1552032** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	271.8	50	400	0	68	35-105	0			
1,2-Dichlorobenzene	271.4	50	400	0	67.8	35-100	0			
1,3-Dichlorobenzene	268.7	50	400	0	67.2	30-100	0			
1,4-Dichlorobenzene	276.2	50	400	0	69	30-100	0			
2,4,5-Trichlorophenol	307.5	50	400	0	76.9	50-110	0			
2,4,6-Trichlorophenol	310.7	50	400	0	77.7	50-115	0			
2,4-Dichlorophenol	300.7	100	400	0	75.2	50-105	0			
2,4-Dimethylphenol	235.7	50	400	0	58.9	30-110	0			
2,4-Dinitrophenol	355.4	200	400	0	88.8	15-140	0			
2,4-Dinitrotoluene	325.7	50	400	0	81.4	50-120	0			
2,6-Dinitrotoluene	315.2	50	400	0	78.8	50-115	0			
2-Chloronaphthalene	310.6	50	400	0	77.6	50-105	0			
2-Chlorophenol	280.3	50	400	0	70.1	35-105	0			
2-Methylnaphthalene	274.8	50	400	0	68.7	45-105	0			
2-Methylphenol	251.2	50	400	0	62.8	40-110	0			
2-Nitroaniline	305.3	200	400	0	76.3	50-115	0			
2-Nitrophenol	304.1	50	400	0	76	40-115	0			
3-Nitroaniline	302	200	400	0	75.5	20-125	0			
4,6-Dinitro-2-methylphenol	354.9	200	400	0	88.7	40-130	0			
4-Bromophenyl phenyl ether	291.3	50	400	0	72.8	50-115	0			
4-Chloro-3-methylphenol	307.5	50	400	0	76.9	45-110	0			
4-Chloroaniline	334.8	200	400	0	83.7	15-110	0			
4-Chlorophenyl phenyl ether	311	50	400	0	77.8	50-110	0			
4-Methylphenol	238.6	50	400	0	59.6	30-110	0			
4-Nitroaniline	259.3	200	400	0	64.8	35-150	0			
4-Nitrophenol	107.3	200	400	0	26.8	1-58	0			J
Acenaphthene	281.1	50	400	0	70.3	45-110	0			
Acenaphthylene	287.3	50	400	0	71.8	50-105	0			
Anthracene	283.5	50	400	0	70.9	55-110	0			
Benzo(a)anthracene	302.3	50	400	0	75.6	55-110	0			
Benzo(a)pyrene	304.1	50	400	0	76	55-110	0			
Benzo(b)fluoranthene	289	50	400	0	72.2	45-120	0			
Benzo(g,h,i)perylene	329.4	50	400	0	82.4	40-125	0			
Benzo(k)fluoranthene	370.8	50	400	0	92.7	45-125	0			
Bis(2-chloroethoxy)methane	294.2	50	400	0	73.6	45-105	0			
Bis(2-chloroethyl)ether	319.3	50	400	0	79.8	35-110	0			
Bis(2-chloroisopropyl)ether	359.4	50	400	0	89.8	25-130	0			
Bis(2-ethylhexyl)phthalate	368.8	50	400	0	92.2	40-125	0			
Butyl benzyl phthalate	355.9	50	400	0	89	45-115	0			
Carbazole	379.4	100	400	0	94.8	50-150	0			
Chrysene	307.2	50	400	0	76.8	55-110	0			
Di-n-butyl phthalate	304.9	50	400	0	76.2	55-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

Di-n-octyl phthalate	327.8	50	400	0	82	35-135	0	
Dibenzo(a,h)anthracene	315.1	50	400	0	78.8	40-125	0	
Dibenzofuran	296.6	50	400	0	74.2	55-105	0	
Diethyl phthalate	304.1	200	400	0	76	40-120	0	
Dimethyl phthalate	301.2	200	400	0	75.3	25-125	0	
Fluoranthene	291.9	50	400	0	73	55-115	0	
Fluorene	317.3	50	400	0	79.3	50-110	0	
Hexachlorobenzene	290	50	400	0	72.5	50-110	0	
Hexachlorobutadiene	260.9	50	400	0	65.2	25-105	0	
Hexachlorocyclopentadiene	176.1	200	400	0	44	25-105	0	J
Hexachloroethane	281.6	50	400	0	70.4	30-95	0	
Indeno(1,2,3-cd)pyrene	316.6	50	400	0	79.2	45-125	0	
Isophorone	296.8	50	400	0	74.2	50-110	0	
N-Nitrosodi-n-propylamine	308.4	50	400	0	77.1	35-130	0	
N-Nitrosodiphenylamine	339.3	50	400	0	84.8	50-110	0	
Naphthalene	274.7	50	400	0	68.7	40-100	0	
Nitrobenzene	298.7	50	400	0	74.7	45-110	0	
Pentachlorophenol	245.9	200	400	0	61.5	40-115	0	
Phenanthrene	282.1	50	400	0	70.5	50-115	0	
Phenol	143.9	50	400	0	36	12-43	0	
Pyrene	316.2	50	400	0	79	50-130	0	
Surr: 2,4,6-Tribromophenol	*386*	0	*500*	0	*77.2*	*41-99*	0	
Surr: 2-Fluorobiphenyl	*295.9*	0	*500*	0	*59.2*	*44-85*	0	
Surr: 2-Fluorophenol	*220.5*	0	*500*	0	*44.1*	*22-56*	0	
Surr: 4-Terphenyl-d14	*373.6*	0	*500*	0	*74.7*	*36-91*	0	
Surr: Nitrobenzene-d5	*330.4*	0	*500*	0	*66.1*	*45-88*	0	
Surr: Phenol-d6	*140*	0	*500*	0	*28*	*18-39*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: **1102081-01B MSD** Units: **µg/L** Analysis Date: **2/7/2011 10:28 AM**

Client ID: **Cottonwood Creek** Run ID: **SVMS6_110207A** SeqNo: **1552033** Prep Date: **2/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	261.8	50	400	0	65.4	35-105	271.8	3.75	30	
1,2-Dichlorobenzene	260.9	50	400	0	65.2	35-100	271.4	3.95	30	
1,3-Dichlorobenzene	255.4	50	400	0	63.8	30-100	268.7	5.08	30	
1,4-Dichlorobenzene	263.8	50	400	0	66	30-100	276.2	4.59	30	
2,4,5-Trichlorophenol	312.3	50	400	0	78.1	50-110	307.5	1.55	30	
2,4,6-Trichlorophenol	315	50	400	0	78.8	50-115	310.7	1.37	30	
2,4-Dichlorophenol	295.3	100	400	0	73.8	50-105	300.7	1.81	30	
2,4-Dimethylphenol	239.4	50	400	0	59.8	30-110	235.7	1.56	30	
2,4-Dinitrophenol	343	200	400	0	85.8	15-140	355.4	3.55	30	
2,4-Dinitrotoluene	334.3	50	400	0	83.6	50-120	325.7	2.61	30	
2,6-Dinitrotoluene	322.2	50	400	0	80.6	50-115	315.2	2.2	30	
2-Chloronaphthalene	310.7	50	400	0	77.7	50-105	310.6	0.0322	30	
2-Chlorophenol	269.4	50	400	0	67.4	35-105	280.3	3.97	30	
2-Methylnaphthalene	273.8	50	400	0	68.4	45-105	274.8	0.365	30	
2-Methylphenol	243.8	50	400	0	61	40-110	251.2	2.99	30	
2-Nitroaniline	311.9	200	400	0	78	50-115	305.3	2.14	30	
2-Nitrophenol	300.7	50	400	0	75.2	40-115	304.1	1.12	30	
3-Nitroaniline	307.3	200	400	0	76.8	20-125	302	1.74	30	
4,6-Dinitro-2-methylphenol	360.4	200	400	0	90.1	40-130	354.9	1.54	30	
4-Bromophenyl phenyl ether	297.2	50	400	0	74.3	50-115	291.3	2.01	30	
4-Chloro-3-methylphenol	300.6	50	400	0	75.2	45-110	307.5	2.27	30	
4-Chloroaniline	333.6	200	400	0	83.4	15-110	334.8	0.359	30	
4-Chlorophenyl phenyl ether	318	50	400	0	79.5	50-110	311	2.23	30	
4-Methylphenol	231.3	50	400	0	57.8	30-110	238.6	3.11	30	
4-Nitroaniline	270.9	200	400	0	67.7	35-150	259.3	4.38	30	
4-Nitrophenol	105.6	200	400	0	26.4	1-58	107.3	0	0	J
Acenaphthene	287.3	50	400	0	71.8	45-110	281.1	2.18	30	
Acenaphthylene	292.8	50	400	0	73.2	50-105	287.3	1.9	30	
Anthracene	294.1	50	400	0	73.5	55-110	283.5	3.67	30	
Benzo(a)anthracene	307.8	50	400	0	77	55-110	302.3	1.8	30	
Benzo(a)pyrene	311.5	50	400	0	77.9	55-110	304.1	2.4	30	
Benzo(b)fluoranthene	292.1	50	400	0	73	45-120	289	1.07	30	
Benzo(g,h,i)perylene	335.9	50	400	0	84	40-125	329.4	1.95	30	
Benzo(k)fluoranthene	391.6	50	400	0	97.9	45-125	370.8	5.46	30	
Bis(2-chloroethoxy)methane	295.6	50	400	0	73.9	45-105	294.2	0.475	30	
Bis(2-chloroethyl)ether	318	50	400	0	79.5	35-110	319.3	0.408	30	
Bis(2-chloroisopropyl)ether	358.5	50	400	0	89.6	25-130	359.4	0.251	30	
Bis(2-ethylhexyl)phthalate	377.6	50	400	0	94.4	40-125	368.8	2.36	30	
Butyl benzyl phthalate	364.4	50	400	0	91.1	45-115	355.9	2.36	30	
Carbazole	403.3	100	400	0	101	50-150	379.4	6.11	30	
Chrysene	311.5	50	400	0	77.9	55-110	307.2	1.39	30	
Di-n-butyl phthalate	312.7	50	400	0	78.2	55-115	304.9	2.53	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **31759** Instrument ID **SVMS6** Method: **SW8270**

Di-n-octyl phthalate	332	50	400	0	83	35-135	327.8	1.27	30	
Dibenzo(a,h)anthracene	321.5	50	400	0	80.4	40-125	315.1	2.01	30	
Dibenzofuran	301.6	50	400	0	75.4	55-105	296.6	1.67	30	
Diethyl phthalate	309.9	200	400	0	77.5	40-120	304.1	1.89	30	
Dimethyl phthalate	308.9	200	400	0	77.2	25-125	301.2	2.52	30	
Fluoranthene	302.5	50	400	0	75.6	55-115	291.9	3.57	30	
Fluorene	323.2	50	400	0	80.8	50-110	317.3	1.84	30	
Hexachlorobenzene	296.1	50	400	0	74	50-110	290	2.08	30	
Hexachlorobutadiene	246.7	50	400	0	61.7	25-105	260.9	5.59	30	
Hexachlorocyclopentadiene	187	200	400	0	46.8	25-105	176.1	0	30	J
Hexachloroethane	263.5	50	400	0	65.9	30-95	281.6	6.64	30	
Indeno(1,2,3-cd)pyrene	324.4	50	400	0	81.1	45-125	316.6	2.43	30	
Isophorone	298.2	50	400	0	74.6	50-110	296.8	0.471	30	
N-Nitrosodi-n-propylamine	310.5	50	400	0	77.6	35-130	308.4	0.679	30	
N-Nitrosodiphenylamine	349.6	50	400	0	87.4	50-110	339.3	2.99	30	
Naphthalene	266.6	50	400	0	66.6	40-100	274.7	2.99	30	
Nitrobenzene	292.7	50	400	0	73.2	45-110	298.7	2.03	30	
Pentachlorophenol	236.2	200	400	0	59	40-115	245.9	4.02	30	
Phenanthrene	288.3	50	400	0	72.1	50-115	282.1	2.17	30	
Phenol	140.7	50	400	0	35.2	12-43	143.9	2.25	30	
Pyrene	321.9	50	400	0	80.5	50-130	316.2	1.79	30	
Surr: 2,4,6-Tribromophenol	*391.6*	0	*500*	0	*78.3*	*41-99*	386	*1.44*	*40*	
Surr: 2-Fluorobiphenyl	*298*	0	*500*	0	*59.6*	*44-85*	295.9	*0.707*	*40*	
Surr: 2-Fluorophenol	*206.7*	0	*500*	0	*41.3*	*22-56*	220.5	*6.46*	*40*	
Surr: 4-Terphenyl-d14	*378.3*	0	*500*	0	*75.7*	*36-91*	373.6	*1.25*	*40*	
Surr: Nitrobenzene-d5	*325.9*	0	*500*	0	*65.2*	*45-88*	330.4	*1.37*	*40*	
Surr: Phenol-d6	*135.2*	0	*500*	0	*27*	*18-39*	140	*3.49*	*40*	

The following samples were analyzed in this batch: 1102081-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86642** Instrument ID **VMS5** Method: **SW8260**

MBLK Sample ID: **VBLKW1-110203-R86642** Units: **µg/L** Analysis Date: **2/3/2011 02:12 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549877** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 1,2-Dichloroethane-d4	*101.5*	0	*100*	0	*101*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*92.59*	0	*100*	0	*92.6*	*75-120*	0			
Surr: Dibromofluoromethane	*99.06*	0	*100*	0	*99.1*	*85-115*	0			
Surr: Toluene-d8	*100.9*	0	*100*	0	*101*	*85-120*	0			

LCS Sample ID: **VLCSW1-110203-R86642** Units: **µg/L** Analysis Date: **2/3/2011 12:53 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549351** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.44	1.0	20	0	102	80-120	0			
Ethylbenzene	20.74	1.0	20	0	104	75-125	0			
m,p-Xylene	42.8	2.0	40	0	107	75-130	0			
o-Xylene	21.65	1.0	20	0	108	80-120	0			
Toluene	20.36	1.0	20	0	102	75-120	0			
Xylenes, Total	64.45	2.0	60	0	107	75-130	0			
Surr: 1,2-Dichloroethane-d4	*96.81*	0	*100*	0	*96.8*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*101*	0	*100*	0	*101*	*75-120*	0			
Surr: Dibromofluoromethane	*100.1*	0	*100*	0	*100*	*85-115*	0			
Surr: Toluene-d8	*101.4*	0	*100*	0	*101*	*85-120*	0			

LCSD Sample ID: **VLCSDW1-110203-R86642** Units: **µg/L** Analysis Date: **2/3/2011 01:20 PM**
Client ID: Run ID: **VMS5_110203A** SeqNo: **1549391** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.68	1.0	20	0	103	80-120	20.44	1.17	30	
Ethylbenzene	21.2	1.0	20	0	106	75-125	20.74	2.19	30	
m,p-Xylene	42.91	2.0	40	0	107	75-130	42.8	0.257	30	
o-Xylene	21.62	1.0	20	0	108	80-120	21.65	0.139	30	
Toluene	21	1.0	20	0	105	75-120	20.36	3.09	30	
Xylenes, Total	64.53	2.0	60	0	108	75-130	64.45	0.124	30	
Surr: 1,2-Dichloroethane-d4	*98.41*	0	*100*	0	*98.4*	*70-120*	96.81	*1.64*	*30*	
Surr: 4-Bromofluorobenzene	*100.8*	0	*100*	0	*101*	*75-120*	101	*0.178*	*30*	
Surr: Dibromofluoromethane	*100.6*	0	*100*	0	*101*	*85-115*	100.1	*0.498*	*30*	
Surr: Toluene-d8	*102.5*	0	*100*	0	*102*	*85-120*	101.4	*1.04*	*30*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86642** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: **1102082-04A MS** Units: **µg/L** Analysis Date: **2/3/2011 10:35 PM**

Client ID: Run ID: **VMS5_110203A** SeqNo: **1549884** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.27	1.0	20	0	101	80-120	0			
Ethylbenzene	20.91	1.0	20	0	105	75-125	0			
m,p-Xylene	42.53	2.0	40	0	106	75-130	0			
o-Xylene	21.45	1.0	20	0	107	80-120	0			
Toluene	20.35	1.0	20	0	102	75-120	0			
Xylenes, Total	63.98	2.0	60	0	107	75-130	0			
Surr: 1,2-Dichloroethane-d4	*97.72*	0	*100*	0	*97.7*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*104.2*	0	*100*	0	*104*	*75-120*	0			
Surr: Dibromofluoromethane	*98.87*	0	*100*	0	*98.9*	*85-115*	0			
Surr: Toluene-d8	*100.5*	0	*100*	0	*100*	*85-120*	0			

MSD Sample ID: **1102082-04A MSD** Units: **µg/L** Analysis Date: **2/3/2011 11:02 PM**

Client ID: Run ID: **VMS5_110203A** SeqNo: **1549885** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.86	1.0	20	0	99.3	80-120	20.27	2.04	30	
Ethylbenzene	20.37	1.0	20	0	102	75-125	20.91	2.62	30	
m,p-Xylene	41.9	2.0	40	0	105	75-130	42.53	1.49	30	
o-Xylene	20.86	1.0	20	0	104	80-120	21.45	2.79	30	
Toluene	20.02	1.0	20	0	100	75-120	20.35	1.63	30	
Xylenes, Total	62.76	2.0	60	0	105	75-130	63.98	1.93	30	
Surr: 1,2-Dichloroethane-d4	*96.5*	0	*100*	0	*96.5*	*70-120*	97.72	*1.26*	*30*	
Surr: 4-Bromofluorobenzene	*103*	0	*100*	0	*103*	*75-120*	104.2	*1.23*	*30*	
Surr: Dibromofluoromethane	*96.51*	0	*100*	0	*96.5*	*85-115*	98.87	*2.42*	*30*	
Surr: Toluene-d8	*98.9*	0	*100*	0	*98.9*	*85-120*	100.5	*1.57*	*30*	

The following samples were analyzed in this batch: 1102081-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86653a** Instrument ID **WETCHEM** Method: **A2510**

MBLK Sample ID: **WBLKW1-110203-R86653a** Units: **µmhos/cm** Analysis Date: **2/3/2011 01:23 PM**
Client ID: Run ID: **WETCHEM_110203G** SeqNo: **1549492** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	ND	5.0								

DUP Sample ID: **1102024-01A DUP** Units: **µmhos/cm** Analysis Date: **2/3/2011 01:23 PM**
Client ID: Run ID: **WETCHEM_110203G** SeqNo: **1549495** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	383	5.0	0	0	0	0-0	375	2.11	20	

LCS1 Sample ID: **WLCSW1-110203-R86653a** Units: **µmhos/cm** Analysis Date: **2/3/2011 01:23 PM**
Client ID: Run ID: **WETCHEM_110203G** SeqNo: **1549493** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	9.88	5.0	10.3	0	95.9	80-120	0			

LCS2 Sample ID: **WLCSW2-110203-R86653a** Units: **µmhos/cm** Analysis Date: **2/3/2011 01:23 PM**
Client ID: Run ID: **WETCHEM_110203G** SeqNo: **1549496** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	938	5.0	1000	0	93.8	80-120	0			

The following samples were analyzed in this batch: 1102081-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86675** Instrument ID **WETCHEM** Method: **A4500-H B**

DUP Sample ID: **1102068-01B DUP** Units: **s.u.** Analysis Date: **2/3/2011 08:50 AM**

Client ID: Run ID: **WETCHEM_110203L** SeqNo: **1549784** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.83	0	0	0	0	0-0	7.83	0	20	H

DUP Sample ID: **1102081-01D DUP** Units: **s.u.** Analysis Date: **2/3/2011 08:50 AM**

Client ID: **Cottonwood Creek** Run ID: **WETCHEM_110203L** SeqNo: **1549786** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.27	0	0	0	0	0-0	8.27	0	20	H

The following samples were analyzed in this batch: 1102081-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86682** Instrument ID **IC3** Method: **SW9056**

MBLK Sample ID: **CCB/MBLK-R86682** Units: **mg/L** Analysis Date: **2/3/2011 11:21 AM**
Client ID: Run ID: **IC3_110203A** SeqNo: **1549923** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	ND	0.10								
Chloride	ND	1.0								
Fluoride	ND	0.10								
Nitrogen, Nitrate	ND	0.020								
Nitrogen, Nitrite	ND	0.020								
Sulfate	0.1039	1.0								J
Nitrogen, Nitrate-Nitrite	ND	0.020								

LCS Sample ID: **CCV/LCS-R86682** Units: **mg/L** Analysis Date: **2/3/2011 11:41 AM**
Client ID: Run ID: **IC3_110203A** SeqNo: **1549924** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	2.025	0.10	2	0	101	80-120	0			
Chloride	9.747	1.0	10	0	97.5	80-120	0			
Fluoride	2.095	0.10	2	0	105	80-120	0			
Nitrogen, Nitrate	0.2644	0.020	0.25	0	106	80-120	0			
Nitrogen, Nitrite	0.2634	0.020	0.25	0	105	80-120	0			
Sulfate	9.919	1.0	10	0	99.2	80-120	0			

LCSD Sample ID: **CCV/LCSD-R86682** Units: **mg/L** Analysis Date: **2/3/2011 12:00 PM**
Client ID: Run ID: **IC3_110203A** SeqNo: **1549925** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	2.052	0.10	2	0	103	80-120	2.025	1.35	20	
Chloride	9.707	1.0	10	0	97.1	80-120	9.747	0.412	20	
Fluoride	2.035	0.10	2	0	102	80-120	2.095	2.91	20	
Nitrogen, Nitrate	0.2538	0.020	0.25	0	102	80-120	0.2644	4.09	20	
Nitrogen, Nitrite	0.2458	0.020	0.25	0	98.3	80-120	0.2634	6.91	20	
Sulfate	9.95	1.0	10	0	99.5	80-120	9.919	0.311	20	

MS Sample ID: **1102037-01A MS** Units: **mg/L** Analysis Date: **2/3/2011 12:51 PM**
Client ID: Run ID: **IC3_110203A** SeqNo: **1549927** Prep Date: DF: **30**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	411.1	30	100	327.9	83.2	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86682** Instrument ID **IC3** Method: **SW9056**

MS Sample ID: **1102081-01D MS** Units: **mg/L** Analysis Date: **2/3/2011 04:46 PM**

Client ID: **Cottonwood Creek** Run ID: **IC3_110203A** SeqNo: **1549937** Prep Date: DF: **3**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	2.008	0.30	2	0.1149	94.7	75-125	0			
Chloride	16.4	3.0	10	6.723	96.8	75-125	0			
Fluoride	2.474	0.30	2	0.4653	100	75-125	0			
Nitrogen, Nitrate	0.9591	0.060	0.5	0.4998	91.9	75-125	0			H
Nitrogen, Nitrite	0.5145	0.060	0.5	0.0033	102	75-125	0			H
Sulfate	46.55	3.0	10	36.99	95.6	75-125	0			

MSD Sample ID: **1102037-01A MSD** Units: **mg/L** Analysis Date: **2/3/2011 01:11 PM**

Client ID: Run ID: **IC3_110203A** SeqNo: **1549928** Prep Date: DF: **30**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	419.5	30	100	327.9	91.6	75-125	411.1	2.03	20	

MSD Sample ID: **1102081-01D MSD** Units: **mg/L** Analysis Date: **2/3/2011 05:06 PM**

Client ID: **Cottonwood Creek** Run ID: **IC3_110203A** SeqNo: **1549938** Prep Date: DF: **3**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	2.19	0.30	2	0.1149	104	75-125	2.008	8.67	20	
Chloride	16.67	3.0	10	6.723	99.5	75-125	16.4	1.65	20	
Fluoride	2.308	0.30	2	0.4653	92.1	75-125	2.474	6.94	20	
Nitrogen, Nitrate	0.9738	0.060	0.5	0.4998	94.8	75-125	0.9591	1.52	20	H
Nitrogen, Nitrite	0.5328	0.060	0.5	0.0033	106	75-125	0.5145	3.49	20	H
Sulfate	46.52	3.0	10	36.99	95.3	75-125	46.55	0.0664	20	

The following samples were analyzed in this batch: 1102081-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86702** Instrument ID **TDS** Method: **A2540 C**

MBLK Sample ID: **WBLKW1-110203-R86702** Units: **mg/L** Analysis Date: **2/3/2011 03:19 PM**
Client ID: Run ID: **TDS_110203A** SeqNo: **1550103** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	ND	10								

LCS Sample ID: **WLCSW1-110203-R86702** Units: **mg/L** Analysis Date: **2/3/2011 03:19 PM**
Client ID: Run ID: **TDS_110203A** SeqNo: **1550104** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	483	10	495	0	97.6	80-120	0			

LCSD Sample ID: **WLCSDW1-110203-R86702** Units: **mg/L** Analysis Date: **2/3/2011 03:19 PM**
Client ID: Run ID: **TDS_110203A** SeqNo: **1550117** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	471	10	495	0	95.2	80-120	483	2.52	20	

DUP Sample ID: **1102068-01B DUP** Units: **mg/L** Analysis Date: **2/3/2011 03:19 PM**
Client ID: Run ID: **TDS_110203A** SeqNo: **1550109** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	29030	10	0	0	0	0-0	29360	1.15	20	

DUP Sample ID: **1102081-01D DUP** Units: **mg/L** Analysis Date: **2/3/2011 03:19 PM**
Client ID: **Cottonwood Creek** Run ID: **TDS_110203A** SeqNo: **1550111** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	376	10	0	0	0	0-0	368	2.15	20	

The following samples were analyzed in this batch: 1102081-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86732** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MB-R86732-R86732** Units: **mg/L** Analysis Date: **2/4/2011 03:00 PM**
Client ID: Run ID: **WETCHEM_110204E** SeqNo: **1551022** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.0050								

LCS Sample ID: **LCS-R86732-R86732** Units: **mg/L** Analysis Date: **2/4/2011 03:00 PM**
Client ID: Run ID: **WETCHEM_110204E** SeqNo: **1551023** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.2009	0.0050	0.2	0	100	80-120	0			

LCSD Sample ID: **LCSD-R86732-R86732** Units: **mg/L** Analysis Date: **2/4/2011 03:00 PM**
Client ID: Run ID: **WETCHEM_110204E** SeqNo: **1551027** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.2095	0.0050	0.2	0	105	80-120	0.2009	4.19	20	

MS Sample ID: **1102081-01D MS** Units: **mg/L** Analysis Date: **2/4/2011 03:00 PM**
Client ID: **Cottonwood Creek** Run ID: **WETCHEM_110204E** SeqNo: **1551025** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.1984	0.0050	0.2	0	99.2	75-125	0			H

MSD Sample ID: **1102081-01D MSD** Units: **mg/L** Analysis Date: **2/4/2011 03:00 PM**
Client ID: **Cottonwood Creek** Run ID: **WETCHEM_110204E** SeqNo: **1551026** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.2021	0.0050	0.2	0	101	75-125	0.1984	1.85	30	H

The following samples were analyzed in this batch: 1102081-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1102081
Project: PA 21-2 Pit Closure 1/28/11

QC BATCH REPORT

Batch ID: **R86780** Instrument ID **WETCHEM** Method: **A2320 B**

MBLK Sample ID: **WBLKW1-110207-R86780** Units: **mg/L** Analysis Date: **2/7/2011 02:55 PM**
Client ID: Run ID: **WETCHEM_110207J** SeqNo: **1552286** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	2	10								J
Alkalinity, Carbonate (as CaCO3)	ND	10								
Alkalinity, Total (as CaCO3)	2	12								J

LCS Sample ID: **WLCSW1-110207-R86780** Units: **mg/L** Analysis Date: **2/7/2011 02:55 PM**
Client ID: Run ID: **WETCHEM_110207J** SeqNo: **1552287** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	492.3	10	513	0	96	40-160	0			
Alkalinity, Carbonate (as CaCO3)	462.7	10	482	0	96	40-160	0			
Alkalinity, Total (as CaCO3)	960	12	1000	0	96	80-120	0			

LCSD Sample ID: **WLCSDW1-110207-R86780** Units: **mg/L** Analysis Date: **2/7/2011 02:55 PM**
Client ID: Run ID: **WETCHEM_110207J** SeqNo: **1552295** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	502.6	10	513	0	98	40-160	492.3	2.07	30	
Alkalinity, Carbonate (as CaCO3)	472.4	10	482	0	98	40-160	462.7	2.07	30	
Alkalinity, Total (as CaCO3)	980	12	1000	0	98	80-120	960	2.06	20	

DUP Sample ID: **1102081-01D DUP** Units: **mg/L** Analysis Date: **2/7/2011 02:55 PM**
Client ID: **Cottonwood Creek** Run ID: **WETCHEM_110207J** SeqNo: **1552294** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	310.8	10	0	0	0		310.6	0.0644	20	
Alkalinity, Carbonate (as CaCO3)	5.1	10	0	0	0		5.3	0	20	J
Alkalinity, Total (as CaCO3)	316	12	0	0	0		316	0	20	

The following samples were analyzed in this batch: 1102081-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #	1102081

		SAMPLER	Reed Wold	DATE	1/30/2011
PROJECT NAME	PA 21-2 Pit closure	SITE ID	PA 21-2 Pit closure	TURNAROUND	3-5 day
PROJECT No.		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams		
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolia Blaney		
ADDRESS	744 HORIZON CT SUITE 140	ADDRESS	1058 co rd 215		
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	CITY / STATE / ZIP	Parachute CO 81635		
PHONE	970-243-3271	PHONE	970-683-2295		
FAX	970-243-3280	FAX	970-285-9573		
E-MAIL	Mmumby@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com		

PAGE	1 of 1
DISPOSAL	By Lab or Return to Client

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO/ PAH	Metals (Priority Pollutant List)	Semi-Vols-see attached sheet	Specific Conductivity	Alkalinity	Anions-See attached sheet	pH	TDS
01	Cottonwood Creek	W	1/28/2011	12:00	10	2,8		X	X	X	X	X	X	X	X	X

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:

3.2°c

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	[signature]	Reed Wold	1/30/11	4:30
RECEIVED BY	[signature]	Diane Shaw	2/3/11	1200
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

Table 2 cont'd. Surface Water Sample Locations, Collections, Handling and Analysis Summary

Sample Location	Analyte Class	Analysis	EPA Approved Analytical Methods	EPA's Max Contaminant Levels (MCLs)* (µg/L)	COGCC Table 910-1 Concentration Levels	Holding Time	Container
Battlement Mesa/Parachute Surface Water Supply Area	Inorganics	Specific Conductivity	SM2510 B			28 days	1-125 ml poly
		Alkalinity	SM2320 B, 2310 B			14 days	1-250 ml poly
		pH	SM4500-H^+ B, SW9040	6.5-8.5		<15 min discharge/< 24 hrs.	1-125 ml poly
		TDS	SM2540 B/C/D	500 mg/L	<1.25 x background	7 days	1-500 ml poly
	Total Metals	Arsenic	SW846/40CFR	10		28 days for Hg & 180 days for remaining	1-250 ml poly
		Barium		2,000			
		Cadmium		5			
		Chromium (III)					
		Chromium (IV)		100			
		Iron		300			
		Lead (inorganic)					
		Magnesium					
		Mercury					
		Selenium		50			
		Silver		100			
		Sodium					
	Anions	Chloride	E300.0	50-200	<1.25 x background	28 days	1-125 ml poly
		Fluoride		2,000			
		Sulfate		250 mg/L	<1.25 x background		

*MCL – The highest level of contaminant that is allowed in drinking water. MCLs are set as close to Maximum Contaminant Level Goals (MCLGs) as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **03-Feb-11 12:00**

Work Order: **1102081** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 03-Feb-11 (Date) Reviewed by: Ann Preston (eSignature) 04-Feb-11 (Date)

Matrices: Water
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.2 c		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:	_		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

FedEx® US Airbill Express

FedEx Tracking Number 8746 3271 8213

Form ID No. 0200

Recipient's Copy

1 From

Date

Sender's Name

Phone

Company

Address

Dept./Floor/Suite/Room

City

State ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name

Phone

Company

Address

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City

State ZIP

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8746 3271 8213

Packages up to 150 lbs.

4a Express Package Service * To most locations.

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

Packages over 150 lbs.

4b Express Freight Service ** To most locations.

- [ ] FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 1Day Freight Booking No.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope
- [ ] FedEx Pak* — Includes FedEx Small Pak and FedEx Large Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.

Signature Options

- [x] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No: [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages	Total Weight	Total Declared Value†	Credit Card Auth.
1	56 lbs.	$ .00	

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

606

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Appendix 3: Background Raw Analytical Data

Report of Analysis

Client Sample ID:	BACKGROUND 3		
Lab Sample ID:	D13598-5	**Date Sampled:**	05/21/10
Matrix:	SO - Soil	**Date Received:**	05/25/10
		Percent Solids:	95.2
Project:	Williams PA 21-2		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.6	0.32	mg/kg	5	06/04/10	06/09/10	JM	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA730
(2) Prep QC Batch: MP2009

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BACKGROUND 2		
Lab Sample ID:	D13598-4	**Date Sampled:**	05/21/10
Matrix:	SO - Soil	**Date Received:**	05/25/10
		Percent Solids:	95.2
Project:	Williams PA 21-2		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	7.5	0.33	mg/kg	5	06/04/10	06/09/10	JM	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA730
(2) Prep QC Batch: MP2009

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BACKGROUND 1		
Lab Sample ID:	D13598-3	**Date Sampled:**	05/21/10
Matrix:	SO - Soil	**Date Received:**	05/25/10
		Percent Solids:	95.2
Project:	Williams PA 21-2		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6.0	0.33	mg/kg	5	06/04/10	06/09/10	JM	SW846 6020 [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA730
(2) Prep QC Batch: MP2009

RL = Reporting Limit

30-Mar-2011

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **PA 21-2 SAR Background 3/22/11** Work Order: **1103560**

Dear Mark,

ALS Environmental received 1 sample on 23-Mar-2011 10:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 30-Mar-11

Client: HRL Compliance Solutions
Project: PA 21-2 SAR Background 3/22/11
Work Order: **1103560**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1103560-01	PA 21-2 SAR Background	Soil		3/22/2011 14:00	3/23/2011 10:30	☐
1103560-01	PA 21-2 SAR Background	Soil		3/22/2011 14:00	3/23/2011 10:30	☐

ALS Group USA, Corp

Date: 30-Mar-11

Client: HRL Compliance Solutions
Project: PA 21-2 SAR Background 3/22/11
WorkOrder: **1103560**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
s.u.	Standard Units

ALS Group USA, Corp

Date: *30-Mar-11*

Client: HRL Compliance Solutions
Project: PA 21-2 SAR Background 3/22/11 **Work Order:** 1103560
Sample ID: PA 21-2 SAR Background **Lab ID:** 1103560-01
Collection Date: 3/22/2011 02:00 PM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 3/29/11**			**attached**	1	3/24/2011
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**17**		**0.010**	**% of sample**	1	3/23/2011 11:56 AM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.26**			**s.u.**	1	3/23/2011 07:55 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Report Number: F11084-0285
Acount Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

3505 Conestoga Drive • Fort Wayne, Indiana 46808-4413 • Phone 260-483-4759 • Fax 260-483-5274
www.algreatlakes.com • lab@algreatlakes.com

QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1103560-01A

DATE RECEIVED: 03/25/2011
DATE REPORTED: 03/29/2011
PAGE: 1
P.O. NUMBER: 20-122009882

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
55204	01A	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.39	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	50	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	12	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	14	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	0.5	-	USDA Handbook 60

ALS Group USA, Corp

Date: 30-Mar-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1103560

Project: PA 21-2 SAR Background 3/22/11

Batch ID: **R88251** Instrument ID **WETCHEM** Method: **A4500-H B**

DUP Sample ID: **1103548-04A DUP** Units: **s.u.** Analysis Date: **3/23/2011 07:55 AM**

Client ID: Run ID: **WETCHEM_110323K** SeqNo: **1581736** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	9.56	0	0	0	0	0-0	9.56	0	20	

DUP Sample ID: **1103560-01B DUP** Units: **s.u.** Analysis Date: **3/23/2011 07:55 AM**

Client ID: **PA 21-2 SAR Background** Run ID: **WETCHEM_110323K** SeqNo: **1581738** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.26	0	0	0	0	0-0	8.26	0	20	

The following samples were analyzed in this batch: 1103560-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103560
Project: PA 21-2 SAR Background 3/22/11

QC BATCH REPORT

Batch ID: **R88255** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-110323-R88255** Units: **% of sample** Analysis Date: **3/23/2011 11:56 AM**

Client ID: Run ID: **MOIST_110323A** SeqNo: **1581924** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.010								

DUP Sample ID: **1103560-01B DUP** Units: **% of sample** Analysis Date: **3/23/2011 11:56 AM**

Client ID: **PA 21-2 SAR Background** Run ID: **MOIST_110323A** SeqNo: **1581927** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.8	0.010	0	0	0	0-0	16.8	0	20	

The following samples were analyzed in this batch: 1103560-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER # 1103560

		SAMPLER	Reed Wold	DATE	3/23/2011	PAGE	1 of 1
PROJECT NAME	PA 21-2 SAR Background	SITE ID	PA 21-2	TURNAROUND	Standard	DISPOSAL	By Lab or Return to Client
PROJECT No.		EDD FORMAT					
		PURCHASE ORDER					
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams				
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolia Blaney				
ADDRESS	744 HORIZON CT SUITE 140	ADDRESS	1058 co rd 215				
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	CITY / STATE / ZIP	Parachute CO 81635				
PHONE	970-243-3271	PHONE	970-683-2295				
FAX	970-243-3280	FAX	970-285-9573				
E-MAIL	Mmumby@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	SAR/ EC/ PH
1	PA 21-2 SAR Background	SO	3/22/2011	2:00	1	8		X

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY			3/22/11	4:45
RECEIVED BY		KEITH WIERENGA	3/23/11	1030
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental

Subcontractor:
A & L Great Lakes Agricultural La
3505 Conestoga Dr
Ft. Wayne, IN 46808
TEL: (260) 483-4759
FAX:
Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Date: 24-Mar-11
COC ID: 2874
Due Date 29-Mar-11

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	1103560	A	Subcontracted Analyses (SUBCONTRACT)
Work Order		Project Number		B	
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C	
Send Report To	Ann Preston	Inv Attn	Accounts Payable	D	
Address	3352 128th Avenue	Address	3352 128th Avenue	E	
				F	
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	G	
Phone	(616) 399-6070	Phone	(616) 399-6070	H	
Fax	(616) 399-6185	Fax	(616) 399-6185	I	
eMail Address	ann.preston@alsglobal.com	eMail CC		J	

Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J
1103560-01A (PA 21-2 SAR Background)	Soil	22/Mar/2011 14:00	(1) MISC	X									

Comments:

Please run for SAR-EC

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
					Std
Relinquished by:	Date/Time	Received by:	Date/Time		

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **23-Mar-11 10:30**

Work Order: **1103560** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 23-Mar-11 (Date) Reviewed by: Ann Preston (eSignature) 24-Mar-11 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.4 C		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Appendix 4: Backfill Confirmation Raw Analytical Data

10-Mar-2011

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **PA 21-2 3/1/11** Work Order: **1103117**

Dear Mark,

ALS Environmental received 1 sample on 03-Mar-2011 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 28.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: IL100452

ALS Group USA, Corp

Date: 10-Mar-11

Client: HRL Compliance Solutions
Project: PA 21-2 3/1/11
Work Order: **1103117**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1103117-01	PA 21-2 top soil	Soil		3/1/2011 11:00	3/3/2011 09:30	☐

Client: HRL Compliance Solutions
Project: PA 21-2 3/1/11
Work Order: 1103117

Case Narrative

Batch 32230 MS/MSD data for Metals is not related to this project's samples.

Batch 32169 MS/MSD data for PAHs is not related to this project's samples.

Batch 32233 sample PA 21-2 Top Soil MS/MSD recoveries for Hexavalent Chromium were below control limits due to matrix interference. The reporting limit in the parent sample may be biased low.

ALS Group USA, Corp

Date: 10-Mar-11

Client: HRL Compliance Solutions
Project: PA 21-2 3/1/11
WorkOrder: **1103117**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
TDL	Target Detection Limit

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group USA, Corp

Date: *10-Mar-11*

Client: HRL Compliance Solutions
Project: PA 21-2 3/1/11 **Work Order:** 1103117
Sample ID: PA 21-2 top soil **Lab ID:** 1103117-01
Collection Date: 3/1/2011 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep Date: **3/4/2011**	Analyst: **RM**
DRO (C10-C28)	**7.5**		**4.9**	**mg/Kg-dry**	1	3/5/2011 01:57 AM
Surr: 4-Terphenyl-d14	*101*		*30-125*	*%REC*	1	3/5/2011 01:57 AM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015**			Analyst: **RM**
GRO (C6-C10)	ND		6.0	mg/Kg-dry	100	3/8/2011 01:26 AM
Surr: Toluene-d8	*93.1*		*50-150*	*%REC*	100	3/8/2011 01:26 AM
MERCURY BY CVAA			**SW7471**		Prep Date: **3/7/2011**	Analyst: **LR**
Mercury	ND		0.022	mg/Kg-dry	1	3/8/2011 02:55 PM
METALS BY ICP-MS			**SW6020A**		Prep Date: **3/7/2011**	Analyst: **CES**
Arsenic	**6.4**		**0.48**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Barium	**2,000**		**48**	**mg/Kg-dry**	100	3/9/2011 09:50 PM
Cadmium	**0.31**		**0.19**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Chromium	**14**		**0.48**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Copper	**12**		**0.48**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Lead	**11**		**0.48**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Nickel	**16**		**0.48**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Selenium	**1.0**		**0.48**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
Silver	ND		0.48	mg/Kg-dry	1	3/8/2011 08:38 PM
Zinc	**37**		**0.96**	**mg/Kg-dry**	1	3/8/2011 08:38 PM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **A&LGL**
Subcontracted Analyses	**Rcvd 3/8/11**			**attached**	1	3/8/2011
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date: **3/4/2011**	Analyst: **CW**
Acenaphthene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Anthracene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Chrysene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Fluoranthene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Fluorene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Naphthalene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Pyrene	ND		35	µg/Kg-dry	1	3/4/2011 10:47 PM
Surr: 2,4,6-Tribromophenol	*87.4*		*34-140*	*%REC*	1	3/4/2011 10:47 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *10-Mar-11*

Client: HRL Compliance Solutions
Project: PA 21-2 3/1/11 **Work Order:** 1103117
Sample ID: PA 21-2 top soil **Lab ID:** 1103117-01
Collection Date: 3/1/2011 11:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	*66.5*		*12-100*	*%REC*	1	3/4/2011 10:47 PM
Surr: 2-Fluorophenol	*83.1*		*33-117*	*%REC*	1	3/4/2011 10:47 PM
Surr: 4-Terphenyl-d14	*86.0*		*25-137*	*%REC*	1	3/4/2011 10:47 PM
Surr: Nitrobenzene-d5	*77.9*		*37-107*	*%REC*	1	3/4/2011 10:47 PM
Surr: Phenol-d6	*82.3*		*40-106*	*%REC*	1	3/4/2011 10:47 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260**			Analyst: **BG**
Benzene	ND		21	µg/Kg-dry	100	3/5/2011 01:56 AM
Ethylbenzene	ND		14	µg/Kg-dry	100	3/5/2011 01:56 AM
m,p-Xylene	ND		19	µg/Kg-dry	100	3/5/2011 01:56 AM
o-Xylene	ND		15	µg/Kg-dry	100	3/5/2011 01:56 AM
Toluene	ND		14	µg/Kg-dry	100	3/5/2011 01:56 AM
Xylenes, Total	ND		33	µg/Kg-dry	100	3/5/2011 01:56 AM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **MB**
Chromium, Trivalent	**14**			**mg/L-dry**	1	3/10/2011 10:20 AM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep Date: **3/3/2011**	Analyst: **MB**
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	3/7/2011 03:00 PM
MOISTURE			**A2540 G**			Analyst: **JJG**
Moisture	**17**		**0.010**	**% of sample**	1	3/3/2011 02:09 PM
PH			**SW9045D**			Analyst: **JJG**
pH	**8.55**			**s.u.**	1	3/3/2011 09:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Report Number: F11063-0043
Acount Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

3505 Conestoga Drive • Fort Wayne, Indiana 46808-4413 • Phone 260-483-4759 • Fax 260-483-5274
www.algreatlakes.com • lab@algreatlakes.com

QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1103117

DATE RECEIVED: 03/04/2011
DATE REPORTED: 03/08/2011
PAGE: 1
P.O. NUMBER: 20-122009823

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
40773	01C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.57	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	46	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	15	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	154	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	5.0	-	USDA Handbook 60

ALS Group USA, Corp

Date: 10-Mar-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1103117

Project: PA 21-2 3/1/11

Batch ID: **32170** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-32170-32170** Units: **mg/Kg** Analysis Date: **3/4/2011 09:31 PM**

Client ID: Run ID: **GC8_110304A** SeqNo: **1570887** Prep Date: **3/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	*1.595*	0	*1.667*	0	*95.7*	*30-125*	0			

LCS Sample ID: **DLCSS1-32170-32170** Units: **mg/Kg** Analysis Date: **3/4/2011 10:59 AM**

Client ID: Run ID: **GC8_110304A** SeqNo: **1570870** Prep Date: **3/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	144.4	4.2	166.7	0	86.6	60-130	0			
Surr: 4-Terphenyl-d14	*1.255*	0	*1.667*	0	*75.3*	*30-125*	0			

LCSD Sample ID: **DLCSDS1-32170-32170** Units: **mg/Kg** Analysis Date: **3/4/2011 11:23 AM**

Client ID: Run ID: **GC8_110304A** SeqNo: **1570871** Prep Date: **3/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	152.5	4.2	166.7	0	91.5	60-130	144.4	5.51	30	
Surr: 4-Terphenyl-d14	*1.214*	0	*1.667*	0	*72.9*	*30-125*	1.255	*3.32*	*30*	

MS Sample ID: **1103091-03B MS** Units: **mg/Kg** Analysis Date: **3/4/2011 01:25 PM**

Client ID: Run ID: **GC8_110304A** SeqNo: **1570876** Prep Date: **3/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	304.7	8.4	335.1	0	90.9	60-130	0			
Surr: 4-Terphenyl-d14	*2.395*	0	*3.351*	0	*71.5*	*30-125*	0			

MSD Sample ID: **1103091-03B MSD** Units: **mg/Kg** Analysis Date: **3/4/2011 01:49 PM**

Client ID: Run ID: **GC8_110304A** SeqNo: **1570877** Prep Date: **3/4/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	244.1	8.2	329.4	0	74.1	60-130	304.7	22.1	30	
Surr: 4-Terphenyl-d14	*2.093*	0	*3.294*	0	*63.5*	*30-125*	2.395	*13.4*	*30*	

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **R87728** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **MBLK-R87728-R87728** Units: **µg/L** Analysis Date: **3/7/2011 07:38 PM**
Client ID: Run ID: **GC9_110307A** SeqNo: **1571555** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	*93.64*	0	*100*	0	*93.6*	*70-130*	0			

LCS Sample ID: **LCS-R87728-R87728** Units: **µg/L** Analysis Date: **3/7/2011 06:18 PM**
Client ID: Run ID: **GC9_110307A** SeqNo: **1571553** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	25640	200	25000	0	103	70-130	0			
Surr: Toluene-d8	*100.1*	0	*100*	0	*100*	*70-130*	0			

LCSD Sample ID: **LCSD-R87728-R87728** Units: **µg/L** Analysis Date: **3/7/2011 06:43 PM**
Client ID: Run ID: **GC9_110307A** SeqNo: **1571554** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	26620	200	25000	0	106	70-130	25640	3.74	30	
Surr: Toluene-d8	*96.16*	0	*100*	0	*96.2*	*70-130*	100.1	*4.04*	*30*	

MS Sample ID: **1103126-06A MS** Units: **µg/L** Analysis Date: **3/8/2011 03:30 AM**
Client ID: Run ID: **GC9_110307A** SeqNo: **1571568** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	23430	200	25000	0	93.7	70-130	0			
Surr: Toluene-d8	*83.83*	0	*100*	0	*83.8*	*70-130*	0			

MS Sample ID: **1103125-04A MS** Units: **µg/Kg** Analysis Date: **3/8/2011 03:05 AM**
Client ID: Run ID: **GC9_110307A** SeqNo: **1571576** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	2580000	5,000	2500000	0	103	70-130	0			
Surr: Toluene-d8	*9018*	0	*10000*	0	*90.2*	*50-150*	0			

MSD Sample ID: **1103126-06A MSD** Units: **µg/L** Analysis Date: **3/8/2011 04:19 AM**
Client ID: Run ID: **GC9_110307A** SeqNo: **1571569** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	22060	200	25000	0	88.2	70-130	23430	6.02	30	
Surr: Toluene-d8	*80.68*	0	*100*	0	*80.7*	*70-130*	83.83	*3.83*	*30*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **R87728** Instrument ID **GC9** Method: **SW8015**

MSD Sample ID: **1103125-04A MSD** Units: **µg/Kg** Analysis Date: **3/8/2011 03:55 AM**

Client ID: Run ID: **GC9_110307A** SeqNo: **1571577** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	2478000	5,000	2500000	0	99.1	70-130	2580000	4.05	30	
Surr: Toluene-d8	*9660*	0	*10000*	0	*96.6*	*50-150*	9018	*6.87*	*30*	

The following samples were analyzed in this batch: 1103117-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32229** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-32229-32229** Units: **mg/Kg** Analysis Date: **3/8/2011 02:27 PM**
Client ID: Run ID: **HG1_110308A** SeqNo: **1571770** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS Sample ID: **LCS-32229-32229** Units: **mg/Kg** Analysis Date: **3/8/2011 02:29 PM**
Client ID: Run ID: **HG1_110308A** SeqNo: **1571771** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1783	0.020	0.1665	0	107	80-120	0			

LCSD Sample ID: **LCSD-32229-32229** Units: **mg/Kg** Analysis Date: **3/8/2011 02:31 PM**
Client ID: Run ID: **HG1_110308A** SeqNo: **1571772** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.184	0.020	0.1665	0	111	80-120	0.1783	3.13	20	

MS Sample ID: **1103125-04CMS** Units: **mg/Kg** Analysis Date: **3/8/2011 03:08 PM**
Client ID: Run ID: **HG1_110308A** SeqNo: **1571797** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.176	0.020	0.1627	0.001019	108	75-125	0			

MSD Sample ID: **1103125-04CMSD** Units: **mg/Kg** Analysis Date: **3/8/2011 03:11 PM**
Client ID: Run ID: **HG1_110308A** SeqNo: **1571798** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1741	0.019	0.1583	0.001019	109	75-125	0.176	1.08	35	

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32230** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-32230-32230** Units: **mg/Kg** Analysis Date: **3/8/2011 04:37 PM**
Client ID: Run ID: **ICPMS1_110308A** SeqNo: **1572236** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	0.05295	0.25								J
Cadmium	0.01234	0.10								J
Chromium	0.006565	0.25								J
Copper	0.05975	0.25								J
Lead	0.006815	0.25								J
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-32230-32230** Units: **mg/Kg** Analysis Date: **3/8/2011 04:43 PM**
Client ID: Run ID: **ICPMS1_110308A** SeqNo: **1572237** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.696	0.25	5	0	93.9	80-120	0			
Barium	4.796	0.25	5	0	95.9	80-120	0			
Cadmium	4.724	0.10	5	0	94.5	80-120	0			
Chromium	4.799	0.25	5	0	96	80-120	0			
Copper	4.84	0.25	5	0	96.8	80-120	0			
Lead	4.816	0.25	5	0	96.3	80-120	0			
Nickel	4.732	0.25	5	0	94.6	80-120	0			
Selenium	4.48	0.25	5	0	89.6	80-120	0			
Silver	4.76	0.25	5	0	95.2	80-120	0			
Zinc	4.514	0.50	5	0	90.3	80-120	0			

LCSD Sample ID: **LCSD-32230-32230** Units: **mg/Kg** Analysis Date: **3/8/2011 04:48 PM**
Client ID: Run ID: **ICPMS1_110308A** SeqNo: **1572238** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.471	0.25	5	0	89.4	80-120	4.696	4.9	20	
Barium	4.564	0.25	5	0	91.3	80-120	4.796	4.95	20	
Cadmium	4.486	0.10	5	0	89.7	80-120	4.724	5.18	20	
Chromium	4.905	0.25	5	0	98.1	80-120	4.799	2.18	20	
Copper	4.87	0.25	5	0	97.4	80-120	4.84	0.628	20	
Lead	4.618	0.25	5	0	92.4	80-120	4.816	4.2	20	
Nickel	4.796	0.25	5	0	95.9	80-120	4.732	1.35	20	
Selenium	4.52	0.25	5	0	90.4	80-120	4.48	0.9	20	
Silver	4.864	0.25	5	0	97.3	80-120	4.76	2.16	20	
Zinc	4.607	0.50	5	0	92.1	80-120	4.514	2.03	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32230** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: **1103111-25AMS** Units: **mg/Kg** Analysis Date: **3/8/2011 05:59 PM**

Client ID: Run ID: **ICPMS1_110308A** SeqNo: **1572248** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.43	0.45	8.921	5.964	83.7	80-120	0			
Barium	38.24	0.45	8.921	30.42	87.7	80-120	0			
Cadmium	7.973	0.18	8.921	0.1195	88	80-120	0			
Chromium	14.32	0.45	8.921	6.797	84.3	80-120	0			
Copper	18.32	0.45	8.921	11.59	75.5	80-120	0			S
Lead	19.87	0.45	8.921	8.608	126	80-120	0			S
Nickel	14.99	0.45	8.921	8.892	68.3	80-120	0			S
Selenium	7.721	0.45	8.921	0.4305	81.7	80-120	0			
Silver	7.187	0.45	8.921	0.01119	80.4	80-120	0			
Zinc	37.98	0.89	8.921	28.87	102	80-120	0			

MSD Sample ID: **1103111-25AMSD** Units: **mg/Kg** Analysis Date: **3/8/2011 06:05 PM**

Client ID: Run ID: **ICPMS1_110308A** SeqNo: **1572249** Prep Date: **3/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.06	0.45	8.953	5.964	79.3	80-120	13.43	2.81	25	S
Barium	38.13	0.45	8.953	30.42	86.2	80-120	38.24	0.298	25	
Cadmium	7.809	0.18	8.953	0.1195	85.9	80-120	7.973	2.08	25	
Chromium	13.44	0.45	8.953	6.797	74.2	80-120	14.32	6.34	25	S
Copper	18.76	0.45	8.953	11.59	80.2	80-120	18.32	2.38	25	
Lead	18.93	0.45	8.953	8.608	115	80-120	19.87	4.85	25	
Nickel	14.8	0.45	8.953	8.892	66	80-120	14.99	1.26	25	S
Selenium	7.699	0.45	8.953	0.4305	81.2	80-120	7.721	0.28	25	
Silver	7.065	0.45	8.953	0.01119	78.8	80-120	7.187	1.71	25	S
Zinc	33.03	0.90	8.953	28.87	46.4	80-120	37.98	13.9	25	S

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32169** Instrument ID **SVMS4** Method: **SW8270**

MBLK Sample ID: **SBLKS1-32169-32169** Units: **µg/Kg** Analysis Date: **3/3/2011 07:16 PM**

Client ID: Run ID: **SVMS4_110303A** SeqNo: **1569562** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
Surr: 2,4,6-Tribromophenol	*1629*	0	*1667*	0	*97.7*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1139*	0	*1667*	0	*68.3*	*12-100*	0			
Surr: 2-Fluorophenol	*1278*	0	*1667*	0	*76.7*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1672*	0	*1667*	0	*100*	*25-137*	0			
Surr: Nitrobenzene-d5	*1143*	0	*1667*	0	*68.6*	*37-107*	0			
Surr: Phenol-d6	*1251*	0	*1667*	0	*75*	*40-106*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32169** Instrument ID **SVMS4** Method: **SW8270**

LCS Sample ID: **SLCSS1-32169-32169** Units: **µg/Kg** Analysis Date: **3/3/2011 07:47 PM**

Client ID: Run ID: **SVMS4_110303A** SeqNo: **1569563** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1129	30	1333	0	84.7	45-110	0			
Anthracene	1274	30	1333	0	95.6	55-105	0			
Benzo(a)anthracene	1309	30	1333	0	98.2	50-110	0			
Benzo(a)pyrene	1209	30	1333	0	90.7	50-110	0			
Benzo(b)fluoranthene	1270	30	1333	0	95.3	45-115	0			
Benzo(g,h,i)perylene	1481	30	1333	0	111	40-125	0			
Benzo(k)fluoranthene	1209	30	1333	0	90.7	45-115	0			
Chrysene	1397	30	1333	0	105	55-110	0			
Dibenzo(a,h)anthracene	1244	30	1333	0	93.3	40-125	0			
Fluoranthene	1256	30	1333	0	94.2	55-115	0			
Fluorene	1247	30	1333	0	93.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1295	30	1333	0	97.1	40-120	0			
Naphthalene	963.7	30	1333	0	72.3	40-105	0			
Pyrene	1348	30	1333	0	101	45-125	0			
Surr: 2,4,6-Tribromophenol	*1560*	0	*1667*	0	*93.6*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*1267*	0	*1667*	0	*76*	*12-100*	0			
Surr: 2-Fluorophenol	*1399*	0	*1667*	0	*83.9*	*33-117*	0			
Surr: 4-Terphenyl-d14	*1746*	0	*1667*	0	*105*	*25-137*	0			
Surr: Nitrobenzene-d5	*1305*	0	*1667*	0	*78.3*	*37-107*	0			
Surr: Phenol-d6	*1335*	0	*1667*	0	*80.1*	*40-106*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32169** Instrument ID **SVMS4** Method: **SW8270**

LCSD Sample ID: **SLCSDS1-32169-32169** Units: **µg/Kg** Analysis Date: **3/4/2011 10:33 AM**

Client ID: Run ID: **SVMS4_110304A** SeqNo: **1569668** Prep Date: **3/4/2011** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1123	300	1333	0	84.3	45-110	1129	0.533	25	
Anthracene	1253	300	1333	0	94	55-105	1274	1.66	25	
Benzo(a)anthracene	730	300	1333	0	54.8	50-110	1309	56.8	25	R
Benzo(a)pyrene	1327	300	1333	0	99.5	50-110	1209	9.25	25	
Benzo(b)fluoranthene	1313	300	1333	0	98.5	45-115	1270	3.35	25	
Benzo(g,h,i)perylene	1280	300	1333	0	96	40-125	1481	14.6	25	
Benzo(k)fluoranthene	1070	300	1333	0	80.3	45-115	1209	12.2	25	
Chrysene	1093	300	1333	0	82	55-110	1397	24.4	25	
Dibenzo(a,h)anthracene	1317	300	1333	0	98.8	40-125	1244	5.65	25	
Fluoranthene	1180	300	1333	0	88.5	55-115	1256	6.21	25	
Fluorene	1097	300	1333	0	82.3	50-110	1247	12.8	25	
Indeno(1,2,3-cd)pyrene	1227	300	1333	0	92	40-120	1295	5.42	25	
Naphthalene	910	300	1333	0	68.3	40-105	963.7	5.73	25	
Pyrene	1257	300	1333	0	94.3	45-125	1348	6.99	25	
Surr: 2,4,6-Tribromophenol	*1637*	0	*1667*	0	*98.2*	*38-104*	1560	*4.78*	*40*	
Surr: 2-Fluorobiphenyl	*1237*	0	*1667*	0	*74.2*	*12-85*	1267	*2.4*	*40*	
Surr: 2-Fluorophenol	*1120*	0	*1667*	0	*67.2*	*37-96*	1399	*22.2*	*40*	
Surr: 4-Terphenyl-d14	*1580*	0	*1667*	0	*94.8*	*32-101*	1746	*9.96*	*40*	
Surr: Nitrobenzene-d5	*1127*	0	*1667*	0	*67.6*	*32-98*	1305	*14.6*	*40*	
Surr: Phenol-d6	*1157*	0	*1667*	0	*69.4*	*42-98*	1335	*14.3*	*40*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32169** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: **1103056-23B MS** Units: **µg/Kg** Analysis Date: **3/3/2011 10:18 PM**

Client ID: Run ID: **SVMS4_110303A** SeqNo: **1569568** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2150	60	2666	0	80.7	45-110	0			
Anthracene	2570	60	2666	0	96.4	55-105	0			
Benzo(a)anthracene	2549	60	2666	0	95.6	50-110	0			
Benzo(a)pyrene	2359	60	2666	0	88.5	50-110	0			
Benzo(b)fluoranthene	2428	60	2666	0	91.1	45-115	0			
Benzo(g,h,i)perylene	2749	60	2666	0	103	40-125	0			
Benzo(k)fluoranthene	2480	60	2666	0	93	45-115	0			
Chrysene	2767	60	2666	0	104	55-110	0			
Dibenzo(a,h)anthracene	2306	60	2666	0	86.5	40-125	0			
Fluoranthene	2496	60	2666	0	93.6	55-115	0			
Fluorene	2506	60	2666	0	94	50-110	0			
Indeno(1,2,3-cd)pyrene	2414	60	2666	0	90.5	40-120	0			
Naphthalene	1524	60	2666	0	57.2	40-105	0			
Pyrene	2695	60	2666	0	101	45-125	0			
Surr: 2,4,6-Tribromophenol	*3143*	0	*3333*	0	*94.3*	*34-140*	0			
Surr: 2-Fluorobiphenyl	*2265*	0	*3333*	0	*68*	*12-100*	0			
Surr: 2-Fluorophenol	*2097*	0	*3333*	0	*62.9*	*33-117*	0			
Surr: 4-Terphenyl-d14	*3709*	0	*3333*	0	*111*	*25-137*	0			
Surr: Nitrobenzene-d5	*2072*	0	*3333*	0	*62.2*	*37-107*	0			
Surr: Phenol-d6	*2135*	0	*3333*	0	*64.1*	*40-106*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32169** Instrument ID **SVMS4** Method: **SW8270**

MSD Sample ID: **1103056-23B MSD** Units: **µg/Kg** Analysis Date: **3/3/2011 10:48 PM**

Client ID: Run ID: **SVMS4_110303A** SeqNo: **1569569** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2295	59	2644	0	86.8	45-110	2150	6.51	30	
Anthracene	2474	59	2644	0	93.6	55-105	2570	3.78	30	
Benzo(a)anthracene	2532	59	2644	0	95.8	50-110	2549	0.653	30	
Benzo(a)pyrene	2325	59	2644	0	88	50-110	2359	1.43	30	
Benzo(b)fluoranthene	2279	59	2644	0	86.2	45-115	2428	6.34	30	
Benzo(g,h,i)perylene	2561	59	2644	0	96.9	40-125	2749	7.09	30	
Benzo(k)fluoranthene	2635	59	2644	0	99.7	45-115	2480	6.04	30	
Chrysene	2702	59	2644	0	102	55-110	2767	2.37	30	
Dibenzo(a,h)anthracene	2280	59	2644	0	86.2	40-125	2306	1.13	30	
Fluoranthene	2489	59	2644	0	94.1	55-115	2496	0.304	30	
Fluorene	2500	59	2644	0	94.6	50-110	2506	0.226	30	
Indeno(1,2,3-cd)pyrene	2363	59	2644	0	89.4	40-120	2414	2.11	30	
Naphthalene	2125	59	2644	0	80.4	40-105	1524	32.9	30	R
Pyrene	2647	59	2644	0	100	45-125	2695	1.81	30	
Surr: 2,4,6-Tribromophenol	*2967*	0	*3305*	0	*89.8*	*34-140*	3143	*5.77*	*40*	
Surr: 2-Fluorobiphenyl	*2628*	0	*3305*	0	*79.5*	*12-100*	2265	*14.8*	*40*	
Surr: 2-Fluorophenol	*2856*	0	*3305*	0	*86.4*	*33-117*	2097	*30.6*	*40*	
Surr: 4-Terphenyl-d14	*3579*	0	*3305*	0	*108*	*25-137*	3709	*3.57*	*40*	
Surr: Nitrobenzene-d5	*2881*	0	*3305*	0	*87.2*	*37-107*	2072	*32.7*	*40*	
Surr: Phenol-d6	*2659*	0	*3305*	0	*80.5*	*40-106*	2135	*21.9*	*40*	

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **R87673A** Instrument ID **VMS5** Method: **SW8260**

MBLK Sample ID: **VBLKW2-110304-R87673A** Units: **µg/L** Analysis Date: **3/4/2011 07:06 PM**
Client ID: Run ID: **VMS5_110304A** SeqNo: **1570255** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0	0	0	0	0-0	0			
Ethylbenzene	ND	1.0	0	0	0	0-0	0			
m,p-Xylene	ND	2.0	0	0	0	0-0	0			
o-Xylene	ND	1.0	0	0	0	0-0	0			
Toluene	ND	1.0	0	0	0	0-0	0			
Xylenes, Total	ND	2.0	0	0	0	0-0	0			

LCS Sample ID: **VLCSW1-110304-R87673A** Units: **µg/L** Analysis Date: **3/4/2011 05:48 PM**
Client ID: Run ID: **VMS5_110304A** SeqNo: **1570236** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.11	1.0	20	0	106	80-120	0			
Ethylbenzene	22.61	1.0	20	0	113	75-125	0			
m,p-Xylene	41.67	2.0	40	0	104	75-130	0			
o-Xylene	20.26	1.0	20	0	101	80-120	0			
Toluene	21.22	1.0	20	0	106	75-120	0			
Xylenes, Total	61.93	2.0	60	0	103	75-130	0			

LCSD Sample ID: **VLCSDW1-110304-R87673A** Units: **µg/L** Analysis Date: **3/4/2011 06:14 PM**
Client ID: Run ID: **VMS5_110304A** SeqNo: **1570254** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.52	1.0	20	0	108	80-120	21.11	1.92	30	
Ethylbenzene	22.86	1.0	20	0	114	75-125	22.61	1.1	30	
m,p-Xylene	41.89	2.0	40	0	105	75-130	41.67	0.527	30	
o-Xylene	20.53	1.0	20	0	103	80-120	20.26	1.32	30	
Toluene	21.38	1.0	20	0	107	75-120	21.22	0.751	30	
Xylenes, Total	62.42	2.0	60	0	104	75-130	61.93	0.788	30	

MS Sample ID: **1103125-04A MS** Units: **µg/Kg** Analysis Date: **3/5/2011 03:40 AM**
Client ID: Run ID: **VMS5_110304A** SeqNo: **1570652** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2055	100	2000	0	103	75-125	0			
Ethylbenzene	2130	200	2000	0	106	75-125	0			
m,p-Xylene	3966	200	4000	0	99.2	80-125	0			
o-Xylene	1955	100	2000	0	97.8	75-125	0			
Toluene	2022	150	2000	0	101	70-125	0			
Xylenes, Total	5921	300	6000	0	98.7	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **R87673A** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: **1103125-04A MSD** Units: **µg/Kg** Analysis Date: **3/5/2011 04:05 AM**

Client ID: Run ID: **VMS5_110304A** SeqNo: **1570653** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2005	100	2000	0	100	75-125	2055	2.46	30	
Ethylbenzene	2105	200	2000	0	105	75-125	2130	1.18	30	
m,p-Xylene	3891	200	4000	0	97.3	80-125	3966	1.91	30	
o-Xylene	1907	100	2000	0	95.4	75-125	1955	2.49	30	
Toluene	1971	150	2000	0	98.6	70-125	2022	2.55	30	
Xylenes, Total	5798	300	6000	0	96.6	75-125	5921	2.1	30	

The following samples were analyzed in this batch: 1103117-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **32233** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-32233-32233** Units: **mg/Kg** Analysis Date: **3/7/2011 03:00 PM**
Client ID: Run ID: **WETCHEM_110307G** SeqNo: **1571088** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.48								

LCS Sample ID: **LCS-32233-32233** Units: **mg/Kg** Analysis Date: **3/7/2011 03:00 PM**
Client ID: Run ID: **WETCHEM_110307G** SeqNo: **1571086** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.949	0.49	1.961	0	99.4	75-110	0			

LCSD Sample ID: **LCSD-32233-32233** Units: **mg/Kg** Analysis Date: **3/7/2011 03:00 PM**
Client ID: Run ID: **WETCHEM_110307G** SeqNo: **1571087** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.837	0.49	1.946	0	94.4	75-110	1.949	5.94	20	

MS Sample ID: **1103117-01B MS** Units: **mg/Kg** Analysis Date: **3/7/2011 03:00 PM**
Client ID: **PA 21-2 top soil** Run ID: **WETCHEM_110307G** SeqNo: **1571084** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.9325	0.50	1.984	0	47	60-130	0			S

MSD Sample ID: **1103117-01B MSD** Units: **mg/Kg** Analysis Date: **3/7/2011 03:00 PM**
Client ID: **PA 21-2 top soil** Run ID: **WETCHEM_110307G** SeqNo: **1571085** Prep Date: **3/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.6349	0.50	1.984	0	32	60-130	0.9325	38	30	SR

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **R87613** Instrument ID **WETCHEM** Method: **E150.1**

DUP Sample ID: **1103112-01D DUP** Units: **s.u.** Analysis Date: **3/3/2011 09:50 AM**
Client ID: Run ID: **WETCHEM_110303G** SeqNo: **1569086** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.86	0	0	0	0	0-0	7.86	0	20	H

DUP Sample ID: **1103111-03A DUP** Units: **s.u.** Analysis Date: **3/3/2011 09:50 AM**
Client ID: Run ID: **WETCHEM_110303G** SeqNo: **1569088** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.49	0	0	0	0	0-0	7.49	0	20	

DUP Sample ID: **1103117-01B DUP** Units: **s.u.** Analysis Date: **3/3/2011 09:50 AM**
Client ID: **PA 21-2 top soil** Run ID: **WETCHEM_110303G** SeqNo: **1569096** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.55	0	0	0	0	0-0	8.55	0	20	

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1103117
Project: PA 21-2 3/1/11

QC BATCH REPORT

Batch ID: **R87638** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS1-110303-R87638** Units: **% of sample** Analysis Date: **3/3/2011 02:09 PM**

Client ID: Run ID: **MOIST_110303C** SeqNo: **1569719** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.010								

DUP Sample ID: **1103111-25A DUP** Units: **% of sample** Analysis Date: **3/3/2011 02:09 PM**

Client ID: Run ID: **MOIST_110303C** SeqNo: **1569725** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	6.3	0.010	0	0	0	0-0	6.1	3.23	20	

The following samples were analyzed in this batch: 1103117-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **03-Mar-11 09:30**

Work Order: **1103117** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 03-Mar-11 (Date) Reviewed by: Ann Preston (eSignature) 03-Mar-11 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	5.0 c		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER # 1103117

PAGE 1 of 1

DISPOSAL (By Lab) or Return to Client

PROJECT NAME	PA 21-2	SAMPLER	Reed Wold
PROJECT No.		SITE ID	PA 21-2 Top Soil
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	HRL COMPLIANCE SOLUTIONS Inc.	BILL TO COMPANY	Williams
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolia Blaney
ADDRESS	744 HORIZON CT SUITE 140	ADDRESS	1058 co rd 215
CITY / STATE / ZIP	GRAND JUNCTION CO 81506	CITY / STATE / ZIP	Parachute CO 81635
PHONE	970-243-3271	PHONE	970-683-2295
FAX	970-243-3280	FAX	970-285-9573
E-MAIL	Mmumby@hrlcomp.com	E-MAIL	Karolia.blaney@williams.com

DATE 3/1/2011

TURNAROUND Standard

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX/ GRO	DRO/ PAH/ Metals (table 910-1)	SAR/ EC/ PH
01	PA 21-2 top soil	SO	3/1/2011	11:00	3	8		X	X	X

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:		QC PACKAGE (check below)
	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)

5.00

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Reed Wold	Reed Wold	3/1/11	3:30
RECEIVED BY		Diane F. Shaw	3/3/11	0930
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental

Subcontractor:
A & L Great Lakes Agricultural La
3505 Conestoga Dr
Ft. Wayne, IN 46808
TEL: (260) 483-4759
FAX:
Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Date: 03-Mar-11
COC ID: 2865
Due Date 09-Mar-11

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	1103117	A	Subcontracted Analyses (SUBCONTRACT)
Work Order		Project Number		B	
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C	
Send Report To	Ann Preston	Inv Attn	Accounts Payable	D	
Address	3352 128th Avenue	Address	3352 128th Avenue	E	
				F	
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	G	
Phone	(616) 399-6070	Phone	(616) 399-6070	H	
Fax	(616) 399-6185	Fax	(616) 399-6185	I	
eMail Address	ann.preston@alsglobal.com	eMail CC		J	

Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J
1103117-01C (PA 21-2 top soil)	Soil	1/Mar/2011 11:00	(1) MISC	X									

Comments:
Please run for SAR-EC

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
					Std
Relinquished by:	Date/Time	Received by:	Date/Time		

PURCHASE ORDER

The following number must appear on all related correspondence, shipping papers, and invoices:

P.O. NUMBER: 20-122009823

To: A & L Great Lakes Agricultural Laboratori
3505 Conestoga Dr
Ft. Wayne, IN 468084413
Ph: (260) 483-4759 Fax:

Bill To: **ALS Group USA, Corp**
10450 Stancliff Rd, Suite 210
Houston, TX 77099
TEL 281-530-5656 FAX 281-530-5887

Ship To: ALS Group USA, Corp
3352 128th Avenue

Holland, Michigan 49424-9263
TEL (616) 399-6070 FAX (616) 399-6185

Acct #: 91000

P.O. DATE	REQUISITIONER	Ship VIA	Department	TERMS
3/3/2011	apreston	FedEx	SUB	NET 30

Item	Catalog No.	QTY	Unit Price	Total Price
SAR-PKG		1	$40.00	$40.00

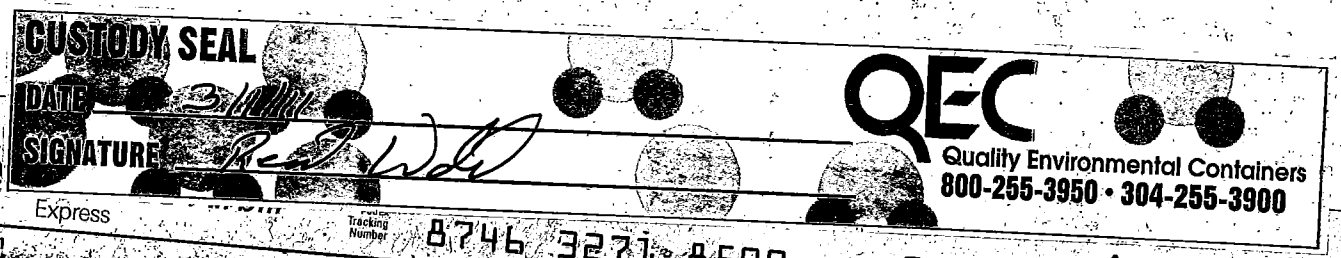
Comments: WO# 1103117

Sales Tax:	$0.00
Shipping/Handling:	$0.00
Other:	$0.00
OrderAmount:	**$40.00**

COPY

3/31/11

Authorized by Date



Fe Express

Tracking Number 8746 3271 8500 0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 3/11/11 Sender's FedEx Account Number

Sender's Name Reed Wold Phone 720 243-3271

Company HRL Compliance

Address 744 Horizon Ct Suite 140

City Grand Junction State CO ZIP 81506 Dept./Floor/Suite/Room

2 Your Internal Billing Reference

3 To

Recipient's Name Sample Recieving Phone 611 299 6670

Company ALS Group

Address 3352 128th Ave We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address Use this line for the HOLD location address or for continuation of your shipping address.

City Holland State MI ZIP 49424

8746 3271 8500

4a Express Package Service * To most locations. *Packages up to 150 lbs.*

01 ☑ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

06 ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.*

03 ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. *Packages over 150 lbs.*

70 ☐ FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 1Day Freight Booking No.

80 ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* Includes FedEx Small Pak and FedEx Large Pak. 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☑ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

No Signature Required — Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight. 01 ☐

HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations. 31 ☐

Does this shipment contain dangerous goods? One box must be checked.

☑ No 04 ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. 06 ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

1 ☐ Sender Acct. No. in Section 1 will be billed. 2 ☑ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

[redacted]

Total Packages ____ Total Weight ____ lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

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606

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Appendix 5: Pit Liner Recycling Manifest

Williams Production RMT Company
Pit liner and Related Materials Recovery and Recycling Program
Recycle Material Manifest

1.0 Generator Information:

1.1	Generator's Name and Mailing Address: Williams Production Company RMT Piceance Highlands and Valley Asset Teams 1058 County Road 215 Parachute, CO 81635 Generator's Phone: 970-285-9377	1.2 Manifest Tracking Number: **WPC PA 21-2**	
		1.3 Generator's Site or Facility Name: PA 21-2	
1.4	Recovery Company Name and Mailing Address: HIGH PLAINS SERVICES, INC. 2966 D ROAD GRAND JUNCTION, CO. 81504	1.5 Date of Material Recovery: 12/13/2010	
		1.6 Pit ID Number:	

2.0 Pit Liner Recovery and Material Acceptance Criteria:

2.1	Has all excess dirt been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.2	Has all rock been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.3	Has all, if any, oil and condensate been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.4	Has the pit liner been segregated from the nonwoven materials?	☑ Yes	☐ No	☐ NA
2.5	Has the pit liner been cut into manageable strips?	☑ Yes	☐ No	☐ NA
2.6	Has the pit liner material been strapped to pallet for transport?	☑ Yes	☐ No	☐ NA
2.7	Will the pit liners require additional cleaning to meet recycling criteria?	☐ Yes	☑ No	☐ NA
2.8	Were photographs taken during the pit liner recovery process?	☐ Yes	☑ No	☐ NA
2.9	Are MSDS attached for recovered pit liner materials?	☐ Yes	☑ No	☐ NA

Additional Comments/Discrepancies:

Inspector's Signature: _____ Date: 12/13/2010

3.0 Materials Inventory for Transport to Recycle and Reuse Repository:

	3.1 Inventory Description (includes Client Code, Pallet or Bale ID Code, Bale Date, Pit ID #, and Bale #)	3.2 Material Weight or Volume	3.3 Containers Type	3.4 REC Codes		
1.	WPC PA 21-2, 12/10/10, BALE #413	800 LBS.	C02	P05	R07	GEO
2.	WPC PA 21-2, 12/10/10, BALE #414	800 LBS.	C02	P05	R07	GEO
3.	WPC PA 21-2, 12/10/10, BALE #415	800 LBS.	C02	P05	R07	GEO
4.	WPC PA 21-2, 12/10/10, BALE #416	800 LBS.	C02	P05	R07	GEO
5.	WPC PA 21-2, 12/10/10, BALE #417	800 LBS.	C02	P05	R07	GEO
6.						

Additional Comments/Discrepancies:

Transporter's Signature: _____ Date: 12/13/2010

Williams Production RMT Company
Pit liner and Related Materials Recovery and Recycling Program
Recycle Material Manifest

1.0 Generator Information:

1.1	Generator's Name and Mailing Address: Williams Production Company RMT Piceance Highlands and Valley Asset Teams 1058 County Road 215 Parachute, CO 81635 Generator's Phone: 970-285-9377	1.2 Manifest Tracking Number: **WPC PA 21-2** 1.3 Generator's Site or Facility Name: PA 21-2
1.4	Recovery Company Name and Mailing Address: High Plains Services, Inc. 2966 D Road Grand Junction, CO. 81504	1.5 Date of Material Recovery: 1/3/2011 1.6 Pit ID Number:

2.0 Pit Liner Recovery and Material Acceptance Criteria:

2.1	Has all excess dirt been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.2	Has all rock been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.3	Has all, if any, oil and condensate been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.4	Has the pit liner been segregated from the nonwoven materials?	☑ Yes	☐ No	☐ NA
2.5	Has the pit liner been cut into manageable strips?	☑ Yes	☐ No	☐ NA
2.6	Has the pit liner material been strapped to pallet for transport?	☑ Yes	☐ No	☐ NA
2.7	Will the pit liners require additional cleaning to meet recycling criteria?	☐ Yes	☑ No	☐ NA
2.8	Were photographs taken during the pit liner recovery process?	☐ Yes	☑ No	☐ NA
2.9	Are MSDS attached for recovered pit liner materials?	☐ Yes	☑ No	☐ NA

Additional Comments/Discrepancies:

Inspector's Signature: _____ Date: 1/3/2011

3.0 Materials Inventory for Transport to Recycle and Reuse Repository:

	3.1 Inventory Description (includes Client Code, Pallet or Bale ID Code, Bale Date, Pit ID #, and Bale #)	3.2 Material Weight or Volume	3.3 Containers Type	3.4 REC Codes		
1.	WPC PA 21-2, BALED 12/13/10, BALE #418	800 LBS.	C02	P02	R006	GEO
2.						
3.						
4.						
5.						
6.						

Additional Comments/Discrepancies:

Transporter's Signature: _____ Date: 1/3/2011

Williams Production RMT Company
Pit liner and Related Materials Recovery and Recycling Program
Recycle Material Manifest

1.0 Generator Information:

1.1	Generator's Name and Mailing Address: Williams Production Company RMT Piceance Highlands and Valley Asset Teams 1058 County Road 215 Parachute, CO 81635 Generator's Phone: 970-285-9377	1.2 Manifest Tracking Number: **WPC PA 21-2**	
		1.3 Generator's Site or Facility Name: PA 21-2	
1.4	Recovery Company Name and Mailing Address: HIGH PLAINS SERVICES, INC. 2966 D ROAD GRAND JUNCTION, CO. 81504	1.5 Date of Material Recovery: 12/13/2010	
		1.6 Pit ID Number:	

2.0 Pit Liner Recovery and Material Acceptance Criteria:

2.1	Has all excess dirt been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.2	Has all rock been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.3	Has all, if any, oil and condensate been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.4	Has the pit liner been segregated from the nonwoven materials?	☑ Yes	☐ No	☐ NA
2.5	Has the pit liner been cut into manageable strips?	☑ Yes	☐ No	☐ NA
2.6	Has the pit liner material been strapped to pallet for transport?	☑ Yes	☐ No	☐ NA
2.7	Will the pit liners require additional cleaning to meet recycling criteria?	☐ Yes	☑ No	☐ NA
2.8	Were photographs taken during the pit liner recovery process?	☐ Yes	☑ No	☐ NA
2.9	Are MSDS attached for recovered pit liner materials?	☐ Yes	☑ No	☐ NA

Additional Comments/Discrepancies:

Inspector's Signature: _____ Date: 12/13/2010

3.0 Materials Inventory for Transport to Recycle and Reuse Repository:

	3.1 Inventory Description (includes Client Code, Pallet or Bale ID Code, Bale Date, Pit ID #, and Bale #)	3.2 Material Weight or Volume	3.3 Containers Type	3.4 REC Codes		
1.	WPC PA 21-2, 12/10/10, BALE #413	800 LBS.	C02	P05	R07	GEO
2.	WPC PA 21-2, 12/10/10, BALE #414	800 LBS.	C02	P05	R07	GEO
3.	WPC PA 21-2, 12/10/10, BALE #415	800 LBS.	C02	P05	R07	GEO
4.	WPC PA 21-2, 12/10/10, BALE #416	800 LBS.	C02	P05	R07	GEO
5.	WPC PA 21-2, 12/10/10, BALE #417	800 LBS.	C02	P05	R07	GEO
6.						

Additional Comments/Discrepancies:

Transporter's Signature: _____ Date: 12/13/2010

Williams Production RMT Company
Pit liner and Related Materials Recovery and Recycling Program
Recycle Material Manifest

1.0 Generator Information:

1.1	Generator's Name and Mailing Address: Williams Production Company RMT Piceance Highlands and Valley Asset Teams 1058 County Road 215 Parachute, CO 81635 Generator's Phone: 970-285-9377	1.2 Manifest Tracking Number: **WPC PA 21-2** 1.3 Generator's Site or Facility Name: PA 21-2
1.4	Recovery Company Name and Mailing Address: HIGH PLAINS SERVICES, INC. 2966 D ROAD GRAND JUNCTION, CO. 81504	1.5 Date of Material Recovery: 12/13/2010 1.6 Pit ID Number:

2.0 Pit Liner Recovery and Material Acceptance Criteria:

2.1	Has all excess dirt been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.2	Has all rock been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.3	Has all, if any, oil and condensate been removed from pit liner?	☑ Yes	☐ No	☐ NA
2.4	Has the pit liner been segregated from the nonwoven materials?	☑ Yes	☐ No	☐ NA
2.5	Has the pit liner been cut into manageable strips?	☑ Yes	☐ No	☐ NA
2.6	Has the pit liner material been strapped to pallet for transport?	☑ Yes	☐ No	☐ NA
2.7	Will the pit liners require additional cleaning to meet recycling criteria?	☐ Yes	☑ No	☐ NA
2.8	Were photographs taken during the pit liner recovery process?	☐ Yes	☑ No	☐ NA
2.9	Are MSDS attached for recovered pit liner materials?	☐ Yes	☑ No	☐ NA

Additional Comments/Discrepancies:

Inspector's Signature: _____ Date: 12/13/2010

3.0 Materials Inventory for Transport to Recycle and Reuse Repository:

	3.1 Inventory Description (includes Client Code, Pallet or Bale ID Code, Bale Date, Pit ID #, and Bale #)	3.2 Material Weight or Volume	3.3 Containers Type	3.4 REC Codes		
1.	WPC PA 21-2, 12/9/10, BALE #407	800 LBS.	C02	P05	R07	GEO
2.	WPC PA 21-2, 12/9/10, BALE #408	800 LBS.	C02	P05	R07	GEO
3.	WPC PA 21-2, 12/10/10, BALE #409	800 LBS.	C02	P05	R07	GEO
4.	WPC PA 21-2, 12/10/10, BALE #410	800 LBS.	C02	P05	R07	GEO
5.	WPC PA 21-2, 12/10/10, BALE #411	800 LBS.	C02	P05	R07	GEO
6.	WPC PA 21-2, 12/10/10, BALE #412	800 LBS.	C02	P05	R07	GEO

Additional Comments/Discrepancies:

Transporter's Signature: _____ Date: 12/13/2010

Williams Production RMT Company
Pit liner and Related Materials Recovery and Recycling Program
Processing Center Manifest

1.0 Generator Information:

1.1	Generator's Name and Mailing Address: Williams Production Company RMT Piceance Highlands Asst Team 1058 County Road 215 Parachute, CO 81504 Generator's Phone: 970-683-2295	1.2 Manifest Tracking Number: **WPC00014** 1.3 Generator's Site or Facility Name: **RRR**
1.4	Transport Company Name and Mailing Address: High Plains Services 2966 D Road Grand Junction, CO 81504	1.5 Transport Date to Recycling Center: **1/27/2011**

2.0 Materials Inventory for Transport Recycling Center:

	2.1 Inventory Description (includes Client Code, Pallet or Bale ID Code, Date Transported to RC, Pit ID#, and Bale #)	2.2 Material Weight or Volume	2.3 Containers Type	2.4 REC Codes		
1.	WPC-RGU 24-14-298 01/27/2011 PT3032 Bale # 322	800 lbs.	C02	P16	R006	GEO
2.	WPC-NLW 8-21D-797 01/27/2011 Bale # 327	800 lbs.	C02	P18	R006	GEO
3.	WPC-NLW 8-21D-797 01/27/2011 Bale # 328	800 lbs.	C02	P18	R006	GEO
4.	WPC-NLW 8-21D-797 01/27/2011 Bale # 329	800 lbs.	C02	P18	R006	GEO
5.	WPC-RGU 11-7-397 01/27/2011 PT3038 Bale # 344	800 lbs.	C02	P07	R006	GEO
6.	WPC-RGU 11-7-397 01/27/2011 PT3038 Bale # 345	800 lbs.	C02	P07	R006	GEO
7.	WPC-RGU 11-7-397 01/27/2011 PT3038 Bale # 346	800 lbs.	C02	P07	R006	GEO
8.	WPC-RMV 8-16 01/27/2011 Bale # 348	800 lbs.	C02	P07	R006	GEO
9.	WPC-RMV 8-16 01/27/2011 Bale # 351	800 lbs.	C02	P07	R007	GEO
10.	WPC-RMV 8-16 01/27/2011 Bale # 352	800 lbs.	C02	P07	R007	GEO
11.	WPC-RGU 12-1-298 01/27/2011 PT3019 Bale # 364	800 lbs.	C02	P02	R006	GEO
12.	WPC-RGU 12-1-298 01/27/2011 PT3019 Bale # 366	800 lbs.	C02	P02	R006	GEO
13.	WPC-RGU 12-1-298 01/27/2011 PT3019 Bale # 367	800 lbs.	C02	P02	R006	GEO
14.	WPC-RGU 12-1-298 01/27/2011 PT3019 Bale # 368	800 lbs.	C02	P02	R006	GEO
15.	WPC-RGU 23-14-298 01/27/2011 Bale # 370	800 lbs.	C02	P02	R006	GEO
16.	WPC-TR 42-36-597 01/27/2011 Bale # 397	800 lbs.	C02	P03	R002	GEO
17.	WPC-TR 42-36-597 01/27/2011 Bale # 399	800 lbs.	C02	P03	R001	GEO
18.	WPC-TR 42-36-597 01/27/2011 Bale # 402	800 lbs.	C02	P03	R001	GEO
19.	WPC-PA 21-2 01/27/2011 Bale # 407	800 lbs.	C02	P05	R007	GEO
20.	WPC-PA 21-2 01/27/2011 Bale # 408	800 lbs.	C02	P05	R007	GEO
21.	WPC-PA 21-2 01/27/2011 Bale # 409	800 lbs.	C02	P05	R007	GEO
22.	WPC-PA 21-2 01/27/2011 Bale # 415	800 lbs.	C02	P05	R007	GEO
23.	WPC-PA 21-2 01/27/2011 Bale # 416	800 lbs.	C02	P05	R007	GEO
24.	WPC-PA 21-2 01/27/2011 Bale # 418	800 lbs.	C02	P05	R007	GEO

Appendix 6: Sundry Form 4

FORM 4
Rev 12/05

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax:(303)894-2109

DE | ET | DE | ES

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 96850
2. Name of Operator: Williams Production RMT Company
3. Address: 1058 County Road 215
City: Parachute State: CO Zip: 81635
4. Contact Name: Karolina Blaney
Phone: 970-683-2295
Fax: 970-285-9573

Complete the Attachment Checklist — OP OGCC

5. API Number 05- 045-11452 OGCC Facility ID Number N/A
6. Well/Facility Name: Hoaglung PA 21-2 7. Well/Facility Number N/A
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW, Sec 2, T7S, R95W, 6 PM
9. County: Garfield 10. Field Name: Rulison
11. Federal, Indian or State Lease Number:

Attachment Checklist	OP	OGCC
Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page	X	
Other		

General Notice

☐ CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL		FEL/FWL	
Change of **Surface** Footage from Exterior Section Lines:				
Change of **Surface** Footage to Exterior Section Lines:				
Change of **Bottomhole** Footage from Exterior Section Lines:				
Change of **Bottomhole** Footage to Exterior Section Lines:				attach directional survey

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer

Latitude | Distance to nearest property line | Distance to nearest bldg, public rd, utility or RR
Longitude | Distance to nearest lease line | Is location in a High Density Area (rule 603b)? Yes/No
Ground Elevation | Distance to nearest well same formation | Surface owner consultation date:

GPS DATA:
Date of Measurement PDOP Reading Instrument Operator's Name

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond
Signed surface use agreement attached

☐ CHANGE OF OPERATOR (prior to drilling):
Effective Date:
Plugging Bond: ☐ Blanket ☐ Individual

☐ CHANGE WELL NAME NUMBER
From:
To:
Effective Date:

☐ ABANDONED LOCATION:
Was location ever built? ☐ Yes ☐ No
Is site ready for Inspection? ☐ Yes ☐ No
Date Ready for Inspection:

☐ NOTICE OF CONTINUED SHUT IN STATUS
Date well shut in or temporarily abandoned:
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years. Date of last MIT

☐ SPUD DATE:

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

☐ SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

☐ RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
Final reclamation will commence on approximately ☐ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

☐ Notice of Intent
Approximate Start Date:

☐ Report of Work Done
Date Work Completed:

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

☐ Intent to Recomplete (submit form 2)
☐ Change Drilling Plans
☐ Gross Interval Changed?
☐ Casing/Cementing Program Change
☐ Request to Vent or Flare
☐ Repair Well
☐ Rule 502 variance requested
☒ Other: Background
☐ E&P Waste Disposal
☐ Beneficial Reuse of E&P Waste
☐ Status Update/Change of Remediation Plans for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Karolina Blaney Date: 4/4/2011 Email: Karolina.Blaney@williams.com
Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved: Title: Date:
CONDITIONS OF APPROVAL, IF ANY:

FORM 4 Rev 12/05

TECHNICAL INFORMATION PAGE

FOR OGCC USE ONLY

1. OGCC Operator Number: 96850 API Number: 05-045-11452
2. Name of Operator: Williams Production RMT OGCC Facility ID # N/A
3. Well/Facility Name: Hoaglund PA 21-2 Well/Facility Number: N/A
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW, Sec 2, T7S, R95W, 6PM

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS**

This COGCC Form 4 is being submitted as a request to consider the background concentration levels for arsenic at the Hoaglund PA 21-2 well pad relative to production pit closure at the subject facillity in accordance with footnote 1 to the COGCC Table 9101-1.

The request is based on the analytical results below (see attached analytical)

Ten (10) grab samples were collected from locations within the pit footprint at depths of approximately 20' to 20.6' below pad grade to ascertain the arsenic concentrations of the facility.

PA 21-2 West Bottom - 6.4 mg/kg
PA 21-2 West Mid Bottom - 6.1 mg/kg
PA 21-2 East Mid Bottom - 5.6 mg/kg
PA 21-2 East Bottom - 7.2 mg/kg
PA 21-2 East Wall - 8.7 mg/kg
PA 21-2 NE Wall - 6.0 mg/kg
PA 21-2 NW Wall - 6.3 mg/kg
PA 21-2 SW Wal - 5.1 mg/kg
PA 21-2 SE Wall - 6.2 mg/kg
PA 21-2 West Wall - 7.2 mg/kg

Average concentration - 6.48 mg/kg

Three (3) grab samples were collected from nearby non-impacted, native soil from surface to 6" below to establish the background arsenic concentrations.

PA 21-2 BKGD 1 - 6.0 mg/kg
PA 21-2 BKGD 2 - 7.5 mg/kg
PA 21-2 BKGD 3 - 5.6 mg/kg

Average concentration - 6.36 mg/kg

Williams is requesting this approval in order to proceed with closure and reclamation of the produced water pit on the Hoaglund PA 21-2 well pad.