

**State of Colorado
Oil and Gas Conservation Commission**

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



#5984

FOR OGCC USE ONLY

RECEIVED
7/27/2011

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 Employee:

☒ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: **2214894**

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: N/A

County: Garfield

Facility Name: BERNKLAU RWF 24-4

Facility Number: 414573 (RT ID) / Location ID # 334777

Well Name: BERNKLAU RWF 24-4

Well Number: N/A

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SESW, SEC 4, T7S, R94W, 6 PM ✓ Latitude: 39.463434 Longitude: -107.895619

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.): Rangeland, Non Crop Land

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Villa Grove-Zoltay loams, 15-30 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Spruce Creek lies approximately 421 feet to the east. Ground water well (permit # 36594) lies downgradient approximately 521 feet to the north.

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

Impacted Media (check):

- ☒ Soils
☐ Vegetation
☐ Groundwater
☐ Surface Water

Extent of Impact:

Impacted soils extended vertically 3 feet and horizontally 2 feet

How Determined:

Excavation, field screening and analytical sampling

REMEDIALATION WORKPLAN

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

Please see and refer to Attachment A.

Describe how source is to be removed:

Please see and refer to Attachment A.

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.:

Please see and refer to Attachment A.



REMEDIAL WORKPLAN (Cont.)

Tracking Number: # 221 4894 (Spill Report)
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: PIT NAME: RWF 24-4
Facility Name & No: Pit # 414573

OGCC Employee: _____

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

Please see and refer to Attachment A.

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.

Please see and refer to Attachment A.

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:

Please see and refer to Attachment A.

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

Please see and refer to Attachment A.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>6/29/2011</u>	Date Site Investigation Completed: <u>6/29/2011</u>	Date Remediation Plan Submitted: <u>7/26/2011</u>
Remediation Start Date: <u>6/30/2011</u>	Anticipated Completion Date: <u>7/1/2011</u>	Actual Completion Date: <u>7/1/2011</u>

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: 7/26/2011

OGCC Approved: [Signature]

Title: FOR Chris Camfield
EPS NW Region

Date: 08/04/2011

Williams Production RMT
Sensitive Area Determination*
RWF 24-4 Completion Fluids Facility



<u>Sensitive Area Factors</u>	<u>Comments</u>	<u>Sensitive Area Determination</u>
Quality of Produced or Stored Water	Exceeds Total Dissolved Solids of 1.25 x Background	Yes
Presence of unconfined aquifers or recharge areas	Unconfined Aquifer Present	Yes
Hydraulic conductivity of soils or geologic material under pit	Permeability = $1.4(10^{-4})$ to $4.2(10^{-4})$ cm/sec $> 10^{-6}$ cm/sec (NRCS)	No
Presence of WQCC classified area or wellhead protection area	Area not designated in WQCC Regulation 42 as of 6-3-08.	No
Proximity to public or domestic water supply wells	Domestic wells in vicinity	no
Depth and quality of ground water	Excellent water quality. Depth to Water Estimate = 80 ft.	Yes
		Inside Sensitive Area

* Per Colorado Oil and Gas Conservation Commission Rule 901.f. - Sensitive Area Operations and Figure 901-1 Sensitive Area Determination Decision Tree.

Prepared by: Fox Engineering Solutions LLC
Date: 06-03-08

WILLIAMS PRODUCTION RMT COMPANY
SOUTH RULISON FIELD
RWF 24-4
SPILL TRACKING # 2214894
NOTICE OF COMPLETION REPORT

July 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

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Form 27 Attachment

Introduction

The purpose of this Notice of Completion report is to provide detailed information about the investigation and remediation activities completed for the release verbally reported on 6/21/2011 at RWF 24-4 special purpose pit (COGCC Facility ID 414573). This report will provide the documentation necessary to demonstrate that a comprehensive and diligent investigation and remediation of the pit and adjacent environment was conducted as described herein and was completed in accordance with all appropriate county, state and federal rules and regulations.

Discovery of Release

During frac operations, water levels in the pit dropped approximately 2-3 feet below typical water levels, allowing two approximately 4 foot vertical tears on the east pit wall to be observed for the first time. During the investigation, it was discovered that during placement and retrieval of suction hoses by a contractor who was removing water from the pit, sharp bolts and edges on their equipment slid along the side of the liner, resulting in tearing.

Pit Liner Removal

After discovery of the release, all fluids in the pit were removed. Removal of the pit liner then occurred and consisted of a crew cutting the liner along the crest of the pit at the elevation of 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 a filter press, and allowed to dry for disposal. 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 determine whether or not stained areas met standards set forth in Table 910-1 of the COGCC 900-Series Rule for hydrocarbons in soil. Soils on the pit floor and walls where tearing occurred 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 eastern wall and bottom of the pit in a grid pattern of sections. The pit bottom was separated into three sections and a five point composite sample was collected from each of the 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. A trackhoe was utilized to excavate the impacted area to 3 feet where native soil was encountered and field screening of the soil indicated that hydrocarbon

concentrations were well below COGCC Table 910-1 standards. Grab samples were then collected from each of the grid sections and analyzed for constituents outlined in COGCC Table 910-1.

Figure 1 illustrates the pit grid sampling nomenclature and Table 1 outlines field screening results using a PetroFlag Hydrocarbon Unit (PetroFlag[®]) and Figure 2 is a GIS map of the pit depicting sample locations within the pit as well as background sample locations and water samples collected from Spruce Creek up-gradient and down gradient of the pit.

Figure 1

Pit Sampling ID Layout

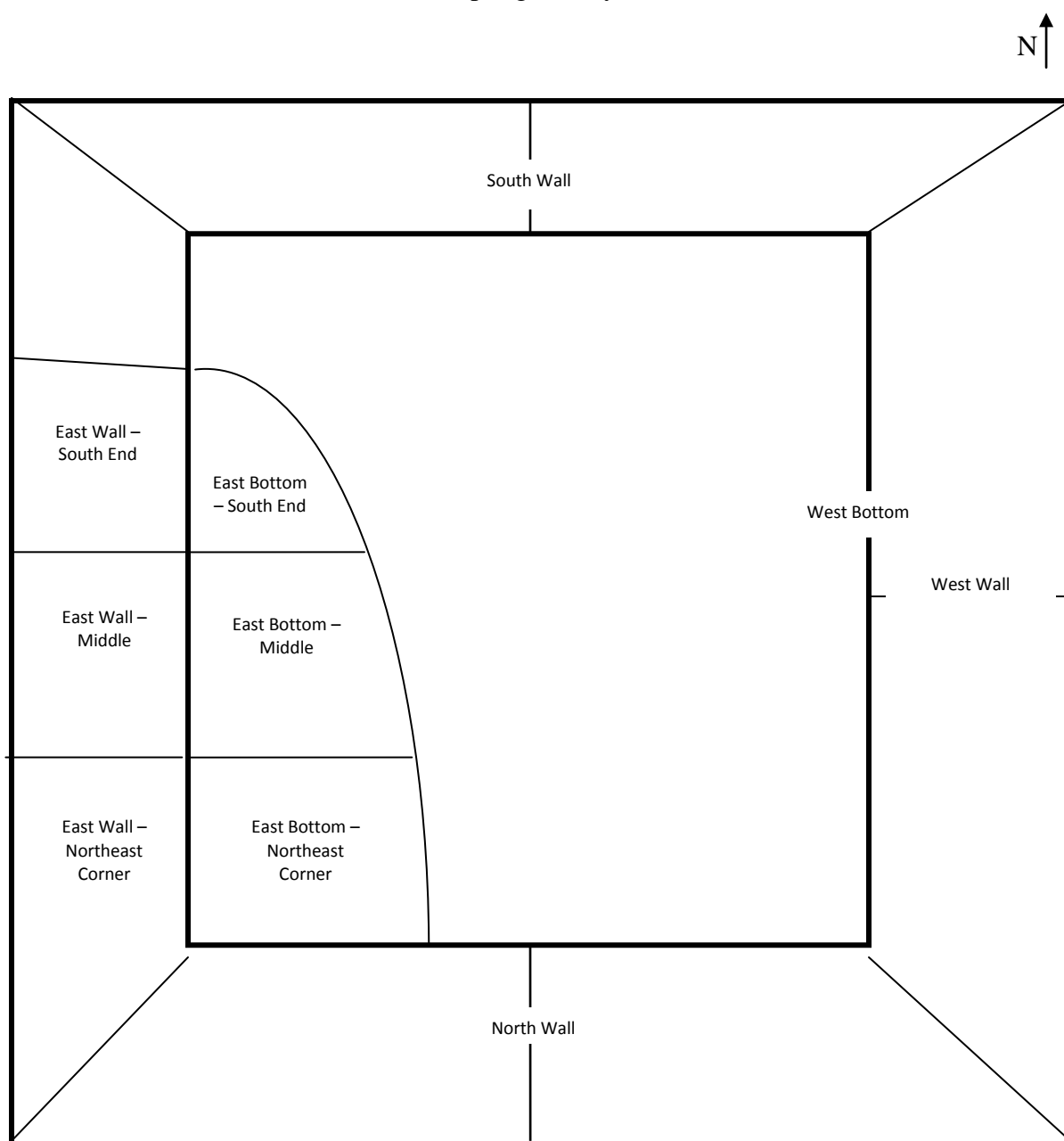


Table 1: PetroFlag Hydrocarbon Initial Field Screening Results

Sample ID	Results mg/kg
East Bottom - NE Corner @ 0-6"	672
East Bottom - Middle @ 0-6"	362
East Bottom - South End @ 0-6"	722
East Wall - NE Corner @ 0-6"	550
East Wall - Middle @ 0-6"	1127
East Wall - South End @ 0-6"	987
East Bottom - NE Corner @ 3'	56
East Bottom - Middle @ 3'	42
East Bottom - South End @ 3'	22
East Wall - NE Corner @ 3'	68
East Wall - Middle @ 3'	90
East Wall - South End @ 3'	62
East Bottom - South End @ 7'	96
East Bottom - Middle @ 7'	56
East Bottom - North End @ 7'	62
East Bottom - South End 13'	89
East Bottom - Middle @ 13'	56
East Bottom - NE Corner @ 11'	192
BKGD 1	278
BKGD 2	447
BKGD 3	576
West Wall	108

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

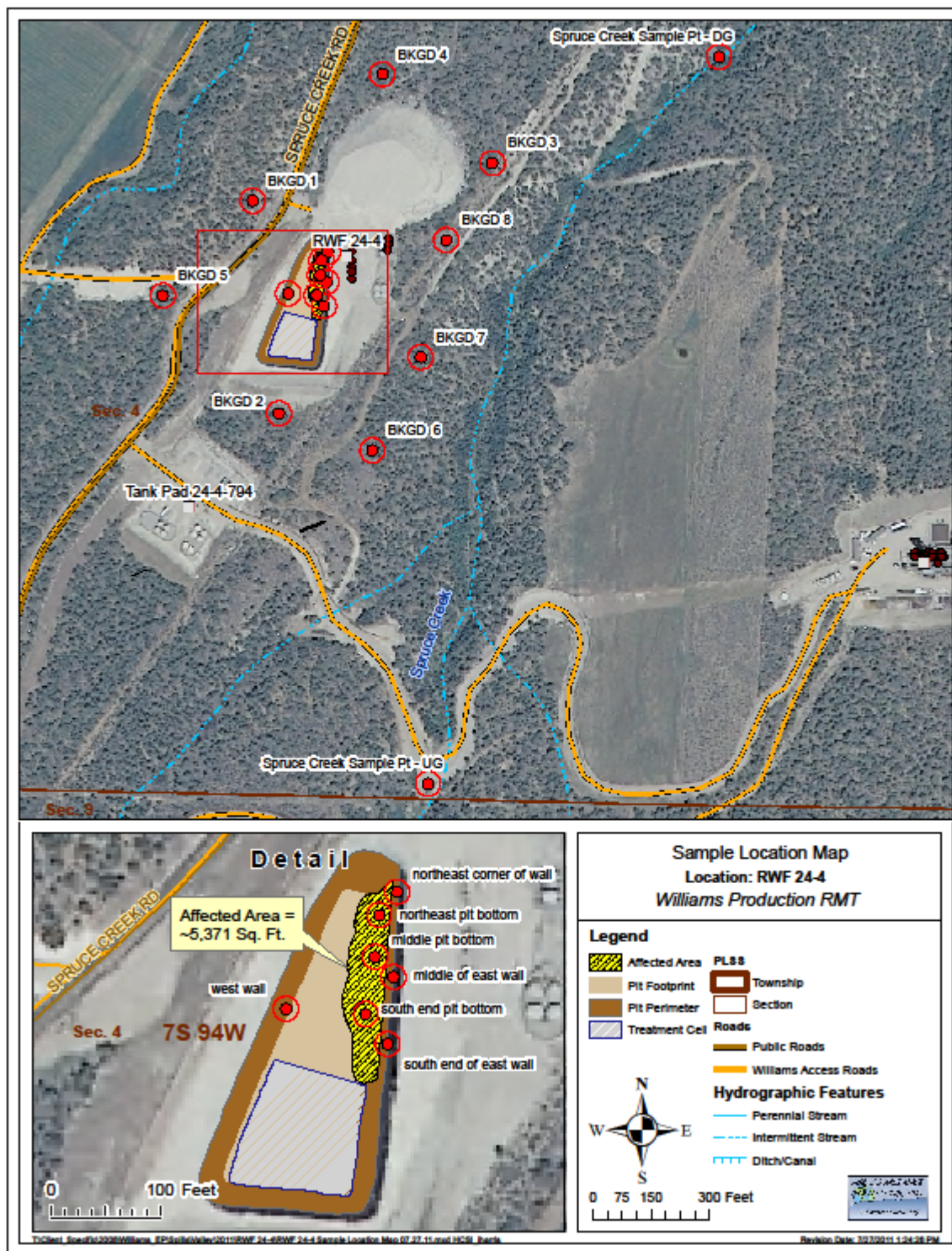
Field screening results are provided in Table 1 and indicate that remediation is required due to TPH concentrations above COGCC Table 910-1 standards.

Facility Name: Williams RWF 24-4
 Facility ID: 414573
 Spill Tracking #: 2214894

Name of Operator: Williams Production RMT Company
 Latitude: 39.46343 Longitude -107.8956
 Location (QtrQty, Sec, Twp, Rng, Meridian): SESW, Sec 4, T7S, R94W, 6th PM

COGCC Operator # 96850
 County: Garfield

Figure 2
 GIS Map of Sampling Locations



Remediation Activities

Soil containing dark stains and hydrocarbon odor located on the eastern pit bottom and walls, indicating the potential presence of hydrocarbon concentrations exceeding 500 ppm were remediated. The impacted areas on the pit bottom and eastern wall were excavated approximately 3 feet in areas containing a potential hydrocarbon concentration above 500 ppm based on field screening analysis. Discoloration within soil was no longer present at the 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 east side walls at a position that was centered vertically and 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. Three (3) additional grab samples were collected from the bottom of the pit, along the eastern side of the pit, to demonstrate compliance in accordance with Rule 905.b.(1).
- Additional due diligence was conducted by collecting samples at depths of 11ft in the northeast corner and 13ft in the middle and southern end of the pit bottom. An additional sample was collected on the west side of the pit, where the wall crests into the bottom to demonstrate compliance of the adjacent side of the pit. Refer to table 3 and Appendix 1 for additional due diligence sampling results.
- A Trimble Geo XT 2008 was used to collect GPS locations of each confirmation sample location from the pit walls and pit footprint.

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

Background Sampling

Eight samples were collected from the undisturbed hillsides surrounding the pad. All background samples were analyzed for arsenic, three samples were analyzed for TEPH (DRO), TVPH (GRO), and BTEX, to determine background TPH concentrations within the soil. Additional analysis at one location included inorganic parameters of COGCC Table 910-1(i.e. SAR, EC, pH). Refer to Table 3 and Appendix 2 for background sampling results.

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 background samples collected from nearby undisturbed locations. Table 4 provides analytical data for surface water samples collected from Spruce Creek (additional detail provided in Appendix 3).

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 filter press was disposed of to ECDC Environmental on July 5, 2011.

Excavated soils from the pit wall and bottom were placed within an earth bermed containment cell within the pit boundary on the southern end of the pit and will be treated via bioremediation. Confirmation samples will be collected from the treatment cell to ensure soils meet COGCC Table 910-1 criteria prior to any re-use.

Exceptions to COGCC Table 910-1

The only constituents that exceed COGCC Table 910-1 standards are within the confines of constituents listed for inorganics and arsenic. Refer to Appendix 4 for the Sundry Notice for consideration of background arsenic concentrations in the immediate area of the subject facility.

Surface Water Sampling

In addition to the background soil samples, water samples were collected upgradient and downgradient of the pit from the nearest surface water feature, Spruce Creek, which lies approximately 450 feet east of the pit. Table 5 provides analytical results for samples collected on Spruce Creek (additional detail provided in Appendix 3). The samples tested non-detect for hydrocarbons.

Conclusions

Based on the remediation activities at the site, including removal of impacted soil, post excavation sampling in the pit, and the non-detect results of the surface water samples, Williams believes that no further action is required.

Figures

Figure 3



Visual Representation of the Pit Facing South During Excavation

Summary Tables

Table 2: Post Excavation of Eastern Pit Bottom & Bottom Analytical Results

Post Excavation of Pit Walls and Bottom	East Wall – Middle @ 3'	East Wall – South End @ 3'	East Wall – NE Corner @ 3'	Pit Bottom – South End @ 3'	Pit Bottom – NE Corner @ 3'	Pit Bottom – Middle @ 3'
TEPH (DRO)	46	11	97	41	NE	ND
TVPH (GRO)	0.040	0.030	0.026	ND	140	ND
BENZENE	0.00098	ND	0.0015	ND	ND	ND
TOLUENE	ND	0.0018	53	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	140	ND	ND	ND
ACENAPHTHENE	0.0056			ND		
ACENAPHTHYLENE	ND			ND		
ANTHRACENE	0.0036			ND		
BENZO(A)ANTHRACENE	ND			ND		
BENZO(A)PYRENE	ND			ND		
BENZO(B)FLUORANTHENE	ND			ND		
BENZO(G,H,I)PERYLENE	ND			ND		
BENZO(K)FLUORANTHENE	0.0018			ND		
CHRYSENE	0.0054			ND		
DIBENZO(A,H)ANTHRACENE	ND			ND		
FLUORANTHENE	ND			ND		
FLUORENE	0.029			ND		
INDENO(1,2,3-CD)PYRENE	ND			ND		
NAPHTHALENE	0.033			59		
PYRENE	0.014			ND		
ARSENIC	4.52			7.4		
BARIUM	12,600			5,000		
CADMIUM	0.226			ND		
CHROMIUM	8.06			16		
CHROMIUM (III)	8.06			16		
CHROMIUM (IV)	ND			ND		
COPPER	13.7			14		
LEAD	29.8			13		
NICKEL	12.9			24		
SELENIUM	0.451			0.98		
SILVER	ND			ND		
ZINC	32.3			42		
Sodium Absorbion Ratio (unitless)				135.2		
Electric Conductivity (mmho/cm)				8.14		
pH (unitless)				8.44		

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

Table 3: Additional Due Diligence Excavation Analytical Results

Pit Bottom – NE Corner @ 11'	Pit Bottom – South End @ 13'	Pit Bottom – Middle @ 13'	West Pit Wall @ 2'
19	ND	ND	9.4
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
8.2	7.5	37	6.1
1,200	160	410	290
ND	ND	0.82	ND
17	17	16	16
16	16	16	16
ND	ND	ND	ND
19	15	31	18
12	11	36	11
31	26	24	29
0.93	1.0	0.94	1.3
ND	ND	ND	ND
78	44	71	47
29.9	84.3	56.2	6.1
4.35	3.64	3.91	0.39
8.3	9.29	8.1	9.4

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

Table 4: Background Analytical Data

	Arsenic	Sodium Absorption Ratio (unitless)	Electro Conductivity (mmhos/cm)	pH (unitless)	TEPH	TVPH	BTEX
BKGD 1	3.5	29.9	4.35	8.70	130	ND	ND
BKGD 2	4.5				28	ND	ND
BKGD 3	3.2				65	ND	ND
BKGD 4	4.4						
BKGD 5	4.9						
BKGD 6	3.7						
BKGD 7	5.1						
BKGD 8	7.3						

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

Table 5: Surface Water Sample - Spruce Creek

Spruce Creek	Spruce Creek- Upgradient	Spruce Creek- Downgradient
TEPH (DRO)	ND	ND
TVPH (GRO)	ND	ND
BENZENE	ND	ND
TOLUENE	ND	ND
ETHYLBENZENE	ND	ND
XYLENE TOTAL	ND	ND
CHLORIDE	2.8	2.6
SULFATE	34	33
TOTAL DISSOLVED SOLIDS	290	270

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

Appendix 1: Eastern Pit Bottom and Wall Confirmation Raw Analytical Data



13-Jul-2011

Kris Rowe
HRL Compliance Solutions Inc.
744 Horizon Ct Suite 140
Grand Junction, CO 81506

Tel: (970) 243-3271
Fax: (970) 243-3230

Re: Grey Hawk RWF 24-4 Pit Remediation

Work Order: **1107006**

Dear Kris,

ALS Environmental received 3 samples on 01-Jul-2011 08:45 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. Results are expressed as "as received" unless otherwise noted.

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

The total number of pages in this report is 24.

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

Sincerely,

A handwritten signature in cursive script that reads "Bethany Agarwal".

Electronically approved by: Makenzie L. Henderson

Bethany Agarwal
Project Manager



Certificate No: T104704231-09A-TX

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

BMT HSP VQ/VTB -DP SQ!!Qbsutpgtut f BMT Mbcpsbupsz IHspvq!B IDbn qc fmmCspui fst Mjn jife IDpn qboz

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
Work Order: 1107006

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1107006-01	East Wall-Middle	Soil		6/29/2011 12:00	7/1/2011 08:45	<input type="checkbox"/>
1107006-02	East Wall-South End	Soil		6/29/2011 12:30	7/1/2011 08:45	<input type="checkbox"/>
1107006-03	East Wall-Northeast Corner	Soil		6/29/2011 13:00	7/1/2011 08:45	<input type="checkbox"/>

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
Work Order: 1107006

Case Narrative

Batch R112311, Volatile Organics, Sample 1106938-04: MS/MSD performed on an unrelated sample

Batch R112344, Gasoline Range Organics, Sample East Wall-Northeast Corner : MS recoveries were outside of control limits due to matrix interference.

Batch 53630, Metals, Sample 1106938-20: MS/MSD performed on an unrelated sample.

The analyses for SAR/EC/pH were performed at Olsen's Agricultural Laboratory.

ALS Environmental

Date: 13-Jul-11

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
Sample ID: East Wall-Middle
Collection Date: 6/29/2011 12:00 PM

Work Order: 1107006
Lab ID: 1107006-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID Method: SW8015M Prep: SW3541 / 7/1/11 Analyst: KMB							
DRO (>C10 - C28)	46		0.50	1.7	mg/Kg	1	7/5/2011 12:39
Surr: 2-Fluorobiphenyl	104			70-130	%REC	1	7/5/2011 12:39
GASOLINE RANGE ORGANICS - SW8015C Method: SW8015 Analyst: JFT							
Gasoline Range Organics	0.040	J	0.020	0.050	mg/Kg	1	7/1/2011 13:42
Surr: 4-Bromofluorobenzene	109			70-130	%REC	1	7/1/2011 13:42
TRIVALENT CHROMIUM Method: CALCULATION Analyst: SKS							
Chromium, Trivalent	8.06		0.70	5.00	mg/Kg	1	7/5/2011
MERCURY - SW7471B Method: SW7471A Prep: SW7471A / 7/5/11 Analyst: JCJ							
Mercury	0.0221		0.00028	0.00342	mg/Kg	1	7/5/2011 14:23
METALS Method: SW6020 Prep: SW3050A / 7/1/11 Analyst: IGF							
Arsenic	4.52		0.090	0.452	mg/Kg	1	7/1/2011 20:37
Barium	12,600		72	452	mg/Kg	1000	7/5/2011 13:52
Cadmium	0.226	J	0.045	0.452	mg/Kg	1	7/1/2011 20:37
Chromium	8.06		0.081	0.452	mg/Kg	1	7/1/2011 20:37
Copper	13.7		0.090	0.452	mg/Kg	1	7/1/2011 20:37
Lead	29.8		0.045	0.452	mg/Kg	1	7/1/2011 20:37
Nickel	12.9		0.081	0.452	mg/Kg	1	7/1/2011 20:37
Selenium	0.451	J	0.16	0.452	mg/Kg	1	7/1/2011 20:37
Silver	U		0.072	0.452	mg/Kg	1	7/1/2011 20:37
Zinc	32.3		0.23	0.452	mg/Kg	1	7/1/2011 20:37
LOW-LEVEL PAHS Method: SW8270 Prep: SW3541 / 7/1/11 Analyst: LG							
Acenaphthene	0.0056	J	0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Acenaphthylene	U		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Anthracene	0.0036	J	0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Benz(a)anthracene	U		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Benzo(a)pyrene	U		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Benzo(b)fluoranthene	U		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Benzo(g,h,i)perylene	U		0.0017	0.0066	mg/Kg	1	7/2/2011 16:11
Benzo(k)fluoranthene	0.0018	J	0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Chrysene	0.0054	J	0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Dibenz(a,h)anthracene	U		0.0020	0.0066	mg/Kg	1	7/2/2011 16:11
Fluoranthene	U		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Fluorene	0.029		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Indeno(1,2,3-cd)pyrene	U		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Naphthalene	0.033		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Phenanthrene	0.053		0.0025	0.0066	mg/Kg	1	7/2/2011 16:11

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

ALS Environmental

Date: 13-Jul-11

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
Sample ID: East Wall-Middle
Collection Date: 6/29/2011 12:00 PM

Work Order: 1107006
Lab ID: 1107006-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Pyrene	0.014		0.0016	0.0066	mg/Kg	1	7/2/2011 16:11
Surr: 2-Fluorobiphenyl	67.0			43-125	%REC	1	7/2/2011 16:11
Surr: 4-Terphenyl-d14	90.8			32-125	%REC	1	7/2/2011 16:11
Surr: Nitrobenzene-d5	57.9			37-125	%REC	1	7/2/2011 16:11
VOLATILES			Method: SW8260				Analyst: WLR
Benzene	0.00098	J	0.00060	0.0050	mg/Kg	1	7/1/2011 12:47
Ethylbenzene	U		0.00090	0.0050	mg/Kg	1	7/1/2011 12:47
m,p-Xylene	U		0.0017	0.010	mg/Kg	1	7/1/2011 12:47
o-Xylene	U		0.0010	0.0050	mg/Kg	1	7/1/2011 12:47
Toluene	U		0.00070	0.0050	mg/Kg	1	7/1/2011 12:47
Xylenes, Total	U		0.0026	0.015	mg/Kg	1	7/1/2011 12:47
Surr: 1,2-Dichloroethane-d4	96.8			70-128	%REC	1	7/1/2011 12:47
Surr: 4-Bromofluorobenzene	101			73-126	%REC	1	7/1/2011 12:47
Surr: Dibromofluoromethane	100			71-128	%REC	1	7/1/2011 12:47
Surr: Toluene-d8	98.7			73-127	%REC	1	7/1/2011 12:47
MISCELLANEOUS ANALYSIS			Method: NA				Analyst: SUB
Miscellaneous Analysis	U		0			1	7/13/2011
HEXAVALENT CHROMIUM			Method: SW7196		Prep: SW3060A / 7/5/11		Analyst: IAB
Chromium, Hexavalent	U		0.68	1.93	mg/Kg	1	7/5/2011 11:00

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

ALS Environmental

Date: 13-Jul-11

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
Sample ID: East Wall-South End
Collection Date: 6/29/2011 12:30 PM

Work Order: 1107006
Lab ID: 1107006-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID		Method: SW8015M		Prep: SW3541 / 7/1/11		Analyst: KMB	
DRO (>C10 - C28)	11		0.50	1.7	mg/Kg	1	7/5/2011 11:41
Surr: 2-Fluorobiphenyl	90.4			70-130	%REC	1	7/5/2011 11:41
GASOLINE RANGE ORGANICS - SW8015C		Method: SW8015				Analyst: JFT	
Gasoline Range Organics	0.030	J	0.020	0.050	mg/Kg	1	7/1/2011 14:00
Surr: 4-Bromofluorobenzene	111			70-130	%REC	1	7/1/2011 14:00
VOLATILES		Method: SW8260				Analyst: WLR	
Benzene	U		0.00060	0.0050	mg/Kg	1	7/1/2011 13:12
Ethylbenzene	U		0.00090	0.0050	mg/Kg	1	7/1/2011 13:12
m,p-Xylene	0.0019	J	0.0017	0.010	mg/Kg	1	7/1/2011 13:12
o-Xylene	U		0.0010	0.0050	mg/Kg	1	7/1/2011 13:12
Toluene	0.0018	J	0.00070	0.0050	mg/Kg	1	7/1/2011 13:12
Xylenes, Total	U		0.0026	0.015	mg/Kg	1	7/1/2011 13:12
Surr: 1,2-Dichloroethane-d4	93.7			70-128	%REC	1	7/1/2011 13:12
Surr: 4-Bromofluorobenzene	99.7			73-126	%REC	1	7/1/2011 13:12
Surr: Dibromofluoromethane	96.7			71-128	%REC	1	7/1/2011 13:12
Surr: Toluene-d8	99.0			73-127	%REC	1	7/1/2011 13:12

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

ALS Environmental

Date: 13-Jul-11

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
Sample ID: East Wall-Northeast Corner
Collection Date: 6/29/2011 01:00 PM

Work Order: 1107006
Lab ID: 1107006-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID		Method: SW8015M		Prep: SW3541 / 7/1/11		Analyst: KMB	
DRO (>C10 - C28)	97		2.5	8.5	mg/Kg	5	7/5/2011 13:22
Surr: 2-Fluorobiphenyl	105			70-130	%REC	5	7/5/2011 13:22
GASOLINE RANGE ORGANICS - SW8015C		Method: SW8015				Analyst: JFT	
Gasoline Range Organics	0.026	J	0.020	0.050	mg/Kg	1	7/1/2011 14:17
Surr: 4-Bromofluorobenzene	111			70-130	%REC	1	7/1/2011 14:17
VOLATILES		Method: SW8260				Analyst: WLR	
Benzene	0.0015	J	0.00060	0.0050	mg/Kg	1	7/1/2011 11:33
Ethylbenzene	U		0.00090	0.0050	mg/Kg	1	7/1/2011 11:33
m,p-Xylene	U		0.0017	0.010	mg/Kg	1	7/1/2011 11:33
o-Xylene	U		0.0010	0.0050	mg/Kg	1	7/1/2011 11:33
Toluene	U		0.00070	0.0050	mg/Kg	1	7/1/2011 11:33
Xylenes, Total	U		0.0026	0.015	mg/Kg	1	7/1/2011 11:33
Surr: 1,2-Dichloroethane-d4	99.8			70-128	%REC	1	7/1/2011 11:33
Surr: 4-Bromofluorobenzene	101			73-126	%REC	1	7/1/2011 11:33
Surr: Dibromofluoromethane	95.5			71-128	%REC	1	7/1/2011 11:33
Surr: Toluene-d8	97.4			73-127	%REC	1	7/1/2011 11:33

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

ALS Environmental

Date: 13-Jul-11

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53632** Instrument ID **FID-7** Method: **SW8015M**

MBLK	Sample ID: FBLKS1-110701-53632				Units: mg/Kg		Analysis Date: 7/5/2011 11:02 AM			
Client ID:	Run ID: FID-7_110705A				SeqNo: 2445618		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	U	1.7								
<i>Surr: 2-Fluorobiphenyl</i>	3.741	0	3.3	0	113	70-130	0			

LCS	Sample ID: FLCSS1-110701-53632				Units: mg/Kg		Analysis Date: 7/5/2011 11:22 AM			
Client ID:	Run ID: FID-7_110705A				SeqNo: 2445619		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	39.96	1.7	33.3	0	120	70-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.298	0	3.3	0	99.9	70-130	0			

MS	Sample ID: 1107006-02BMS				Units: mg/Kg		Analysis Date: 7/5/2011 12:00 PM			
Client ID: East Wall-South End	Run ID: FID-7_110705A				SeqNo: 2445621		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	48.57	1.7	33.28	11.35	112	70-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.036	0	3.298	0	92.1	70-130	0			

MSD	Sample ID: 1107006-02BMSD				Units: mg/Kg		Analysis Date: 7/5/2011 12:20 PM			
Client ID: East Wall-South End	Run ID: FID-7_110705A				SeqNo: 2445622		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (>C10 - C28)	54.43	1.7	33.24	11.35	130	70-130	48.57	11.4	30	
<i>Surr: 2-Fluorobiphenyl</i>	3.483	0	3.295	0	106	70-130	3.036	13.7	30	

The following samples were analyzed in this batch:

1107006-01B	1107006-02B	1107006-03B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R112344** Instrument ID **FID-9** Method: **SW8015**

MBLK	Sample ID: GBLKW1-070111-R112344				Units: mg/Kg		Analysis Date: 7/1/2011 01:25 PM			
Client ID:	Run ID: FID-9_110701A				SeqNo: 2444606		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	U	0.050								
<i>Surr: 4-Bromofluorobenzene</i>	0.1086	0.0050	0.1	0	109	70-130	0			

LCS	Sample ID: GLCSW1-070111-R112344				Units: mg/Kg		Analysis Date: 7/1/2011 12:33 PM			
Client ID:	Run ID: FID-9_110701A				SeqNo: 2444604		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9467	0.050	1	0	94.7	70-130	0			
<i>Surr: 4-Bromofluorobenzene</i>	0.1086	0.0050	0.1	0	109	70-130	0			

LCSD	Sample ID: GLCSDW1-070111-R112344				Units: mg/Kg		Analysis Date: 7/1/2011 12:50 PM			
Client ID:	Run ID: FID-9_110701A				SeqNo: 2444605		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.9553	0.050	1	0	95.5	70-130	0.9467	0.905	30	
<i>Surr: 4-Bromofluorobenzene</i>	0.1122	0.0050	0.1	0	112	70-130	0.1086	3.27	30	

MS	Sample ID: 1107006-03AMS				Units: mg/Kg		Analysis Date: 7/1/2011 02:35 PM			
Client ID: East Wall-Northeast Corner	Run ID: FID-9_110701A				SeqNo: 2444610		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.7056	0.050	1	0.02649	67.9	70-130	0			S
<i>Surr: 4-Bromofluorobenzene</i>	0.1139	0.0050	0.1	0	114	70-130	0			

MSD	Sample ID: 1107006-03AMSD				Units: mg/Kg		Analysis Date: 7/1/2011 02:52 PM			
Client ID: East Wall-Northeast Corner	Run ID: FID-9_110701A				SeqNo: 2444611		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.7547	0.050	1	0.02649	72.8	70-130	0.7056	6.73	30	
<i>Surr: 4-Bromofluorobenzene</i>	0.1177	0.0050	0.1	0	118	70-130	0.1139	3.22	30	

The following samples were analyzed in this batch:

1107006-01A	1107006-02A	1107006-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53630** Instrument ID **ICPMS04** Method: **SW6020**

MBLK	Sample ID: MBLKS1-070111-53630				Units: mg/Kg		Analysis Date: 7/1/2011 08:25 PM			
Client ID:	Run ID: ICPMS04_110701A				SeqNo: 2444942		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.50								
Barium	U	0.50								
Cadmium	U	0.50								
Chromium	U	0.50								
Copper	U	0.50								
Lead	U	0.50								
Nickel	U	0.50								
Selenium	U	0.50								
Silver	U	0.50								
Zinc	U	0.50								

LCS	Sample ID: MLCSS1-070111-53630				Units: mg/Kg		Analysis Date: 7/5/2011 01:47 PM			
Client ID:	Run ID: ICPMS04_110705A				SeqNo: 2445653		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.556	0.50	10	0	95.6	80-120	0			
Barium	9.828	0.50	10	0	98.3	80-120	0			
Cadmium	9.912	0.50	10	0	99.1	80-120	0			
Chromium	9.68	0.50	10	0	96.8	80-120	0			
Copper	9.768	0.50	10	0	97.7	80-120	0			
Lead	9.836	0.50	10	0	98.4	80-120	0			
Nickel	9.952	0.50	10	0	99.5	80-120	0			
Selenium	9.582	0.50	10	0	95.8	80-120	0			
Silver	9.264	0.50	10	0	92.6	80-120	0			
Zinc	10.26	0.50	10	0	103	80-120	0			

MS	Sample ID: 1106938-20AMS				Units: mg/Kg		Analysis Date: 7/1/2011 09:08 PM			
Client ID:	Run ID: ICPMS04_110701A				SeqNo: 2444949		Prep Date: 7/1/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	8.994	0.46	9.244	1.623	79.7	75-125	0			
Barium	18.89	0.46	9.244	11.75	77.2	75-125	0			
Cadmium	8.442	0.46	9.244	0.01078	91.2	75-125	0			
Chromium	10.76	0.46	9.244	3.152	82.2	75-125	0			
Copper	8.302	0.46	9.244	0.6603	82.7	75-125	0			
Lead	10.67	0.46	9.244	2.78	85.4	75-125	0			
Nickel	8.205	0.46	9.244	0.56	82.7	75-125	0			
Selenium	7.652	0.46	9.244	0.1244	81.4	75-125	0			
Silver	7.38	0.46	9.244	0.006377	79.8	75-125	0			
Zinc	36.44	0.46	9.244	29.87	71.1	75-125	0			S

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53630** Instrument ID **ICPMS04** Method: **SW6020**

MSD		Sample ID: 1106938-20AMSD				Units: mg/Kg		Analysis Date: 7/1/2011 09:14 PM		
Client ID:		Run ID: ICPMS04_110701A				SeqNo: 2444950		Prep Date: 7/1/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	8.838	0.46	9.163	1.623	78.7	75-125	8.994	1.76	25	
Barium	17.79	0.46	9.163	11.75	65.8	75-125	18.89	6.02	25	S
Cadmium	8.012	0.46	9.163	0.01078	87.3	75-125	8.442	5.23	25	
Chromium	10.49	0.46	9.163	3.152	80	75-125	10.76	2.54	25	
Copper	8.116	0.46	9.163	0.6603	81.4	75-125	8.302	2.26	25	
Lead	10.27	0.46	9.163	2.78	81.7	75-125	10.67	3.83	25	
Nickel	8.067	0.46	9.163	0.56	81.9	75-125	8.205	1.69	25	
Selenium	7.405	0.46	9.163	0.1244	79.5	75-125	7.652	3.29	25	
Silver	7.221	0.46	9.163	0.006377	78.7	75-125	7.38	2.18	25	
Zinc	35.67	0.46	9.163	29.87	63.2	75-125	36.44	2.15	25	S

DUP		Sample ID: 1106938-20ADUP				Units: mg/Kg		Analysis Date: 7/1/2011 08:50 PM		
Client ID:		Run ID: ICPMS04_110701A				SeqNo: 2444946		Prep Date: 7/1/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.969	0.46	0	0	0	0-0	1.623	19.3	25	
Barium	12.37	0.46	0	0	0	0-0	11.75	5.12	25	
Cadmium	U	0.46	0	0	0	0-0	0.01078	0	25	
Chromium	3.413	0.46	0	0	0	0-0	3.152	7.95	25	
Copper	0.7607	0.46	0	0	0	0-0	0.6603	14.1	25	
Lead	3.255	0.46	0	0	0	0-0	2.78	15.7	25	
Nickel	0.5246	0.46	0	0	0	0-0	0.56	6.51	25	
Selenium	U	0.46	0	0	0	0-0	0.1244	0	25	
Silver	U	0.46	0	0	0	0-0	0.006377	0	25	
Zinc	35.33	0.46	0	0	0	0-0	29.87	16.7	25	

The following samples were analyzed in this batch:

1107006-01B

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53664** Instrument ID **HG02** Method: **SW7471A**

MBLK	Sample ID: GBLKS1-070511-53664				Units: µg/Kg		Analysis Date: 7/5/2011 01:53 PM			
Client ID:	Run ID: HG02_110705A				SeqNo: 2445796		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	3.3								

LCS	Sample ID: GLCSS1-070511-53664				Units: µg/Kg		Analysis Date: 7/5/2011 01:55 PM			
Client ID:	Run ID: HG02_110705A				SeqNo: 2445797		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	333.3	3.3	333.3	0	100	85-115	0			

MS	Sample ID: 1106970-07BMS				Units: µg/Kg		Analysis Date: 7/5/2011 02:05 PM			
Client ID:	Run ID: HG02_110705A				SeqNo: 2445800		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	340.9	3.6	360.4	9.483	92	85-115	0			

MSD	Sample ID: 1106970-07BMSD				Units: µg/Kg		Analysis Date: 7/5/2011 02:07 PM			
Client ID:	Run ID: HG02_110705A				SeqNo: 2445801		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	322.2	3.4	341.3	9.483	91.6	85-115	340.9	5.65	20	

DUP	Sample ID: 1106970-07BDUP				Units: µg/Kg		Analysis Date: 7/5/2011 02:02 PM			
Client ID:	Run ID: HG02_110705A				SeqNo: 2445799		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	10.14	3.6	0	0	0		9.483	6.73	20	

The following samples were analyzed in this batch:

1107006-01B

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53631** Instrument ID **SV-4** Method: **SW8270**

MBLK Sample ID: **SBLKS1-110701-53631** Units: **µg/Kg** Analysis Date: **7/2/2011 03:31 PM**

Client ID: Run ID: **SV-4_110702A** SeqNo: **2444635** Prep Date: **7/1/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	U	6.6								
Acenaphthylene	U	6.6								
Anthracene	U	6.6								
Benz(a)anthracene	U	6.6								
Benzo(a)pyrene	U	6.6								
Benzo(b)fluoranthene	U	6.6								
Benzo(g,h,i)perylene	U	6.6								
Benzo(k)fluoranthene	U	6.6								
Chrysene	U	6.6								
Dibenz(a,h)anthracene	U	6.6								
Fluoranthene	U	6.6								
Fluorene	U	6.6								
Indeno(1,2,3-cd)pyrene	U	6.6								
Naphthalene	U	6.6								
Phenanthrene	U	6.6								
Pyrene	U	6.6								
<i>Surr: 2-Fluorobiphenyl</i>	<i>144</i>	<i>6.6</i>	<i>166.7</i>	<i>0</i>	<i>86.4</i>	<i>43-125</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>149.9</i>	<i>6.6</i>	<i>166.7</i>	<i>0</i>	<i>90</i>	<i>32-125</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>137.5</i>	<i>6.6</i>	<i>166.7</i>	<i>0</i>	<i>82.5</i>	<i>37-125</i>	<i>0</i>			

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53631** Instrument ID **SV-4** Method: **SW8270**

LCS		Sample ID: SLCSS1-110701-53631				Units: µg/Kg		Analysis Date: 7/2/2011 03:51 PM		
Client ID:		Run ID: SV-4_110702A				SeqNo: 2444636		Prep Date: 7/1/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	169.2	6.6	166.7	0	101	50-120	0			
Acenaphthylene	141.3	6.6	166.7	0	84.8	50-120	0			
Anthracene	146.7	6.6	166.7	0	88	50-123	0			
Benz(a)anthracene	156	6.6	166.7	0	93.6	50-131	0			
Benzo(a)pyrene	146.8	6.6	166.7	0	88.1	50-130	0			
Benzo(b)fluoranthene	156	6.6	166.7	0	93.6	50-137	0			
Benzo(g,h,i)perylene	156.8	6.6	166.7	0	94.1	50-130	0			
Benzo(k)fluoranthene	154.8	6.6	166.7	0	92.9	50-143	0			
Chrysene	144.8	6.6	166.7	0	86.9	50-130	0			
Dibenz(a,h)anthracene	165.1	6.6	166.7	0	99.1	50-130	0			
Fluoranthene	136.8	6.6	166.7	0	82.1	50-131	0			
Fluorene	152.8	6.6	166.7	0	91.7	50-125	0			
Indeno(1,2,3-cd)pyrene	159.9	6.6	166.7	0	95.9	45-139	0			
Naphthalene	151	6.6	166.7	0	90.6	50-125	0			
Phenanthrene	140.7	6.6	166.7	0	84.4	50-125	0			
Pyrene	137.1	6.6	166.7	0	82.2	45-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	<i>138.3</i>	<i>6.6</i>	<i>166.7</i>	<i>0</i>	<i>83</i>	<i>43-125</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>139.1</i>	<i>6.6</i>	<i>166.7</i>	<i>0</i>	<i>83.4</i>	<i>32-125</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>138.3</i>	<i>6.6</i>	<i>166.7</i>	<i>0</i>	<i>83</i>	<i>37-125</i>	<i>0</i>			

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53631** Instrument ID **SV-4** Method: **SW8270**

MS Sample ID: 1107006-01BMS				Units: µg/Kg			Analysis Date: 7/2/2011 04:31 PM			
Client ID: East Wall-Middle		Run ID: SV-4_110702A		SeqNo: 2444637		Prep Date: 7/1/2011		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	129.4	6.6	166.2	5.614	74.5	50-120	0			
Acenaphthylene	114.4	6.6	166.2	0	68.8	50-120	0			
Anthracene	155.5	6.6	166.2	3.571	91.4	50-123	0			
Benz(a)anthracene	159.3	6.6	166.2	0	95.9	50-131	0			
Benzo(a)pyrene	167.6	6.6	166.2	0	101	50-130	0			
Benzo(b)fluoranthene	197.1	6.6	166.2	0	119	50-137	0			
Benzo(g,h,i)perylene	157.7	6.6	166.2	0	94.9	50-130	0			
Benzo(k)fluoranthene	145.8	6.6	166.2	1.842	86.6	50-143	0			
Chrysene	145.9	6.6	166.2	5.356	84.6	50-130	0			
Dibenz(a,h)anthracene	166.7	6.6	166.2	0	100	50-130	0			
Fluoranthene	143	6.6	166.2	0	86	50-131	0			
Fluorene	178.8	6.6	166.2	28.61	90.3	50-125	0			
Indeno(1,2,3-cd)pyrene	173	6.6	166.2	0	104	45-139	0			
Naphthalene	143.1	6.6	166.2	33.16	66.1	50-125	0			
Phenanthrene	186.1	6.6	166.2	52.58	80.4	50-125	0			
Pyrene	172.2	6.6	166.2	14.29	95	45-130	0			
<i>Surr: 2-Fluorobiphenyl</i>	<i>105.9</i>	6.6	166.2	0	63.7	43-125	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>149.1</i>	6.6	166.2	0	89.7	32-125	0			
<i>Surr: Nitrobenzene-d5</i>	<i>111</i>	6.6	166.2	0	66.8	37-125	0			

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53631** Instrument ID **SV-4** Method: **SW8270**

MSD		Sample ID: 1107006-01BMSD				Units: µg/Kg		Analysis Date: 7/2/2011 04:51 PM		
Client ID: East Wall-Middle		Run ID: SV-4_110702A				SeqNo: 2444638		Prep Date: 7/1/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	128.4	6.6	166.4	5.614	73.8	50-120	129.4	0.8	30	
Acenaphthylene	102.6	6.6	166.4	0	61.7	50-120	114.4	10.9	30	
Anthracene	144.7	6.6	166.4	3.571	84.8	50-123	155.5	7.2	30	
Benz(a)anthracene	164.1	6.6	166.4	0	98.6	50-131	159.3	2.93	30	
Benzo(a)pyrene	169.1	6.6	166.4	0	102	50-130	167.6	0.863	30	
Benzo(b)fluoranthene	182.9	6.6	166.4	0	110	50-137	197.1	7.48	30	
Benzo(g,h,i)perylene	153.7	6.6	166.4	0	92.3	50-130	157.7	2.6	30	
Benzo(k)fluoranthene	142.4	6.6	166.4	1.842	84.5	50-143	145.8	2.37	30	
Chrysene	154.4	6.6	166.4	5.356	89.6	50-130	145.9	5.64	30	
Dibenz(a,h)anthracene	167	6.6	166.4	0	100	50-130	166.7	0.18	30	
Fluoranthene	138.7	6.6	166.4	0	83.4	50-131	143	3.05	30	
Fluorene	173.4	6.6	166.4	28.61	87	50-125	178.8	3.06	30	
Indeno(1,2,3-cd)pyrene	175.1	6.6	166.4	0	105	45-139	173	1.2	30	
Naphthalene	147.3	6.6	166.4	33.16	68.6	50-125	143.1	2.91	30	
Phenanthrene	185.7	6.6	166.4	52.58	80	50-125	186.1	0.233	30	
Pyrene	166.4	6.6	166.4	14.29	91.4	45-130	172.2	3.45	30	
<i>Surr: 2-Fluorobiphenyl</i>	96.8	6.6	166.4	0	58.2	43-125	105.9	9	30	
<i>Surr: 4-Terphenyl-d14</i>	153.6	6.6	166.4	0	92.3	32-125	149.1	3	30	
<i>Surr: Nitrobenzene-d5</i>	117.8	6.6	166.4	0	70.8	37-125	111	5.92	30	

The following samples were analyzed in this batch:

1107006-01B

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

Client: HRL Compliance Solutions Inc.
 Work Order: 1107006
 Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R112311** Instrument ID **VOA5** Method: **SW8260**

MBLK		Sample ID: VBLKS1-070111-R112311				Units: µg/Kg		Analysis Date: 7/1/2011 09:56 AM		
Client ID:		Run ID: VOA5_110701A				SeqNo: 2444100		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	5.0								
Ethylbenzene	U	5.0								
m,p-Xylene	U	10								
o-Xylene	U	5.0								
Toluene	U	5.0								
Xylenes, Total	U	15								
Surr: 1,2-Dichloroethane-d4	47.92	0	50	0	95.8	70-128	0			
Surr: 4-Bromofluorobenzene	49.81	0	50	0	99.6	73-126	0			
Surr: Dibromofluoromethane	49.14	0	50	0	98.3	71-128	0			
Surr: Toluene-d8	47.57	0	50	0	95.1	73-127	0			

LCS		Sample ID: VLCSS1-070111-R112311				Units: µg/Kg		Analysis Date: 7/1/2011 08:45 AM		
Client ID:		Run ID: VOA5_110701A				SeqNo: 2444098		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	53.59	5.0	50	0	107	79-120	0			
Ethylbenzene	50.29	5.0	50	0	101	80-122	0			
m,p-Xylene	98.98	10	100	0	99	79-122	0			
o-Xylene	49.7	5.0	50	0	99.4	80-123	0			
Toluene	49.47	5.0	50	0	98.9	79-120	0			
Xylenes, Total	148.7	15	150	0	99.1	80-120	0			
Surr: 1,2-Dichloroethane-d4	50.26	0	50	0	101	70-128	0			
Surr: 4-Bromofluorobenzene	50.95	0	50	0	102	73-126	0			
Surr: Dibromofluoromethane	52.41	0	50	0	105	71-128	0			
Surr: Toluene-d8	46.19	0	50	0	92.4	73-127	0			

LCSD		Sample ID: VLCSDS1-070111-R112311				Units: µg/Kg		Analysis Date: 7/1/2011 09:09 AM		
Client ID:		Run ID: VOA5_110701A				SeqNo: 2444099		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	57.55	5.0	50	0	115	79-120	53.59	7.13	30	
Ethylbenzene	53.26	5.0	50	0	107	80-122	50.29	5.74	30	
m,p-Xylene	106.6	10	100	0	107	79-122	98.98	7.41	30	
o-Xylene	53.18	5.0	50	0	106	80-123	49.7	6.77	30	
Toluene	52.32	5.0	50	0	105	79-120	49.47	5.59	30	
Xylenes, Total	159.8	15	150	0	107	80-120	148.7	7.19	30	
Surr: 1,2-Dichloroethane-d4	51.25	0	50	0	103	70-128	50.26	1.95	30	
Surr: 4-Bromofluorobenzene	50.16	0	50	0	100	73-126	50.95	1.56	30	
Surr: Dibromofluoromethane	52.78	0	50	0	106	71-128	52.41	0.709	30	
Surr: Toluene-d8	46.37	0	50	0	92.7	73-127	46.19	0.397	30	

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

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R112311** Instrument ID **VOA5** Method: **SW8260**

MS				Sample ID: 1106938-04AMS			Units: µg/Kg		Analysis Date: 7/1/2011 11:57 AM		
Client ID:		Run ID: VOA5_110701A			SeqNo:2444225		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	44.93	5.0	50	1.193	87.5	79-120	0				
Ethylbenzene	39.11	5.0	50	0	78.2	80-122	0			S	
m,p-Xylene	75.8	10	100	0	75.8	79-122	0			S	
o-Xylene	38.91	5.0	50	0	77.8	80-123	0			S	
Toluene	40.73	5.0	50	0	81.5	79-120	0				
Xylenes, Total	114.7	15	150	0	76.5	80-120	0			S	
Surr: 1,2-Dichloroethane-d4	47.44	0	50	0	94.9	70-128	0				
Surr: 4-Bromofluorobenzene	50.04	0	50	0	100	73-126	0				
Surr: Dibromofluoromethane	51.35	0	50	0	103	71-128	0				
Surr: Toluene-d8	48.73	0	50	0	97.5	73-127	0				

MSD				Sample ID: 1106938-04AMSD			Units: µg/Kg		Analysis Date: 7/1/2011 12:22 PM		
Client ID:		Run ID: VOA5_110701A			SeqNo:2444226		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	48.92	5.0	50	1.193	95.5	79-120	44.93	8.51	30		
Ethylbenzene	39	5.0	50	0	78	80-122	39.11	0.281	30	S	
m,p-Xylene	76.45	10	100	0	76.4	79-122	75.8	0.846	30	S	
o-Xylene	38.47	5.0	50	0	76.9	80-123	38.91	1.13	30	S	
Toluene	42.21	5.0	50	0	84.4	79-120	40.73	3.55	30		
Xylenes, Total	114.9	15	150	0	76.6	80-120	114.7	0.181	30	S	
Surr: 1,2-Dichloroethane-d4	50.16	0	50	0	100	70-128	47.44	5.58	30		
Surr: 4-Bromofluorobenzene	50.81	0	50	0	102	73-126	50.04	1.54	30		
Surr: Dibromofluoromethane	50.09	0	50	0	100	71-128	51.35	2.48	30		
Surr: Toluene-d8	49.01	0	50	0	98	73-127	48.73	0.581	30		

The following samples were analyzed in this batch:

1107006-01A	1107006-02A	1107006-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions Inc.
Work Order: 1107006
Project: Grey Hawk RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **53677** Instrument ID **UV-2450** Method: **SW7196**

MBLK		Sample ID: WBLKS-070511-53677				Units: mg/kg		Analysis Date: 7/5/2011 11:00 AM		
Client ID:		Run ID: UV-2450_110705D				SeqNo: 2445764		Prep Date: 7/5/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	U	2.0								

LCS		Sample ID: WLCSS-070511-53677				Units: mg/kg		Analysis Date: 7/5/2011 11:00 AM		
Client ID:		Run ID: UV-2450_110705D				SeqNo: 2445765		Prep Date: 7/5/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	9.68	2.0	10	0	96.8	80-120	0			

LCSD		Sample ID: WLCSDS-075011-53677				Units: mg/kg		Analysis Date: 7/5/2011 11:00 AM		
Client ID:		Run ID: UV-2450_110705D				SeqNo: 2445769		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	10.2	2.0	10	0	102	80-120	9.68	5.23	20	

MS		Sample ID: 1107022-01AMS				Units: mg/kg		Analysis Date: 7/5/2011 11:00 AM		
Client ID:		Run ID: UV-2450_110705D				SeqNo: 2445770		Prep Date: 7/5/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	10.98	2.0	9.978	0	110	75-125	0			

The following samples were analyzed in this batch:

1107006-01B

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

Client: HRL Compliance Solutions Inc.
Project: Grey Hawk RWF 24-4 Pit Remediation
WorkOrder: 1107006

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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
M	Manually integrated, see raw data for justification
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

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
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
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram

HRL COMPLIANCE: HRL Compliance Solutions Inc.


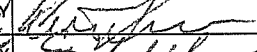
Project: Grey Hawk RWF 24-4 Pit Remediation

[illegible]

*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: BTEX / DRO / GRO = 24 Rush PAH / Metals / SAR / EC / pH = Standard Turnaround Time	QC PACKAGE (check below)	
		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		Kris Rowe	3/5/2011 6/29/11	17:00
RECEIVED BY		Sal Yanez	7/1/11	08:45
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL COMPLIANCE**

Date/Time Received: **01-Jul-11 08:45**

Work Order: **1107006**

Received by: **SAY**

Checklist completed by Robert D. Harris
eSignature

01-Jul-11
Date

Reviewed by: Hector Coronado
eSignature

01-Jul-11
Date

Matrices: soils

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.0c</u> <u>002</u>		
Cooler(s)/Kit(s):	<u></u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:



Contacted By:

Regarding:

Comments:

CorrectiveAction:

110708-2

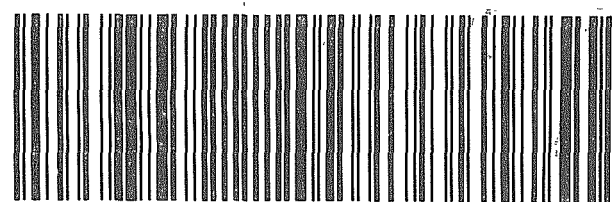
CUSTODY SEAL	QEC
DATE <u>6/29/94</u>	
SIGNATURE 	Quality Environmental Containers 800-255-3950 • 304-255-3900

FedEx
TRK# 8758 3475 6171
0200

THU - 30 JUN A2
PRIORITY OVERNIGHT

XH SGRA

77099
TX-US IAH

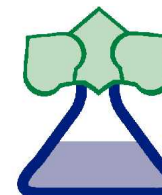


Olsen's Agricultural Laboratory, Inc.

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www.olsenlab.com



40365

ALS LABORATORY GROUP

10450 STANCLIFF RD STE 210

HOUSTON TX 77099

NAME : 1107006

DATE RECEIVED: 07/06/2011

DATE REPORTED: 07/11/2011

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	Depth Inches	pH		LIME REC T/A 60% ECCE		EL	SOLUBLE SALTS mod. SP mmhos/cm	OM LOI %	NITRATE-N (FIA)		PHOSPHORUS				
				1 : 1 Soil	Buffer Woodruff	Legume	Non Legume				ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm
963445	01C	E WALL MIDDLE	0-8	8.4				H	3.44								

LAB NUMBER	SULFATE-S Ca-P ppm	NH4OAc (Exchangeable)				DTPA				BORON Sorbitol ppm	EST. CATION EXCHANGE CAPACITY (CEC) me/100g	% SATURATION					
		K ppm	Ca ppm	Mg ppm	Na ppm	Zn ppm	Fe ppm	Mn ppm	Cu ppm			BASE	H	Ca	Mg	K	Na
963445										0.4							

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE		EXCH. NH4-N		ALUMINUM ppm	TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE	ppm	lbs/A	ppm	lbs/A		
963445	16.87	25.70	44.90	9.73	13	0.2										

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROP TO BE GROWN	YIELD GOAL	N lbs/A	P2O5 lbs/A	K2O lbs/A	S lbs/A	Zn lbs/A	MgO lbs/A	Fe lbs/A	Mn lbs/A	Cu lbs/A	B lbs/A	Cl lbs/A
963445	01C	E WALL MIDDLE													

Analysis By: Olsen's Ag. Lab

Recommendations By: Olsen's Ag. Lab



11-Jul-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Williams RWF 24-4 Pit Remediation**

Work Order: **1107050**

Dear Kris,

ALS Environmental received 7 samples on 02-Jul-2011 10:15 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 38.

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

Sincerely,

A handwritten signature in black ink that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: IL100452

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental The ALS logo, a stylized blue triangle with a yellow flame-like shape inside.

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RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Work Order: 1107050

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1107050-01	North Pit Bottom at 11 ft	Soil		7/1/2011 11:00	7/2/2011 10:15	<input type="checkbox"/>
1107050-02	South Pit Bottom at 13 ft	Soil		7/1/2011 11:45	7/2/2011 10:15	<input type="checkbox"/>
1107050-03	Middle of Pit Bottom at 13 ft	Soil		7/1/2011 11:30	7/2/2011 10:15	<input type="checkbox"/>
1107050-04	West Pit Wall at 2 ft	Soil		7/1/2011 12:00	7/2/2011 10:15	<input type="checkbox"/>
1107050-05	BKGD 1	Soil		7/1/2011 12:15	7/2/2011 10:15	<input type="checkbox"/>
1107050-06	BKGD 2	Soil		7/1/2011 12:30	7/2/2011 10:15	<input type="checkbox"/>
1107050-07	BKGD 3	Soil		7/1/2011 12:45	7/2/2011 10:15	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Work Order: 1107050

Case Narrative

Batch 34171 MS/MSD data for PAHs is not related to this project's samples.

Batch 34172 MS/MSD data for PAHs is not related to this project's samples.

Batch 34177 MS/MSD data for Metals is not related to this project's samples.

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
WorkOrder: 1107050

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
SQL	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

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: North Pit Bottom at 11 ft
Collection Date: 7/1/2011 11:00 AM

Work Order: 1107050
Lab ID: 1107050-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	19		SW8015M		Prep Date: 7/5/2011	Analyst: RM
			4.9	mg/Kg-dry	1	7/6/2011 02:07 PM
Surr: 4-Terphenyl-d14	57.8		39-115	%REC	1	7/6/2011 02:07 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			5.9	mg/Kg-dry	100	7/5/2011 08:17 PM
Surr: Toluene-d8	104		50-150	%REC	100	7/5/2011 08:17 PM
MERCURY BY CVAA						
Mercury	0.028		SW7471		Prep Date: 7/6/2011	Analyst: LR
			0.022	mg/Kg-dry	1	7/6/2011 04:41 PM
METALS BY ICP-MS						
Arsenic	8.2		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Barium	1,200		8.4	mg/Kg-dry	20	7/6/2011 02:07 PM
Cadmium	ND		0.34	mg/Kg-dry	2	7/6/2011 12:49 PM
Chromium	17		0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Copper	19		0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Lead	12		0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Nickel	31		0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Selenium	0.93		0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Silver	ND		0.84	mg/Kg-dry	2	7/6/2011 12:49 PM
Zinc	78		1.7	mg/Kg-dry	2	7/6/2011 12:49 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT			Analyst: A&LGL
			as noted		1	7/8/2011
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270		Prep Date: 7/5/2011	Analyst: HL
			35	µg/Kg-dry	1	7/6/2011 12:46 PM
Anthracene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Benzo(a)anthracene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Benzo(a)pyrene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Benzo(b)fluoranthene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Benzo(g,h,i)perylene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Benzo(k)fluoranthene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Chrysene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Dibenzo(a,h)anthracene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Fluoranthene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Fluorene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Indeno(1,2,3-cd)pyrene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Naphthalene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Pyrene	ND		35	µg/Kg-dry	1	7/6/2011 12:46 PM
Surr: 2,4,6-Tribromophenol	65.3		34-140	%REC	1	7/6/2011 12:46 PM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: North Pit Bottom at 11 ft
Collection Date: 7/1/2011 11:00 AM

Work Order: 1107050
Lab ID: 1107050-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	43.9		12-100	%REC	1	7/6/2011 12:46 PM
<i>Surr: 2-Fluorophenol</i>	64.7		33-117	%REC	1	7/6/2011 12:46 PM
<i>Surr: 4-Terphenyl-d14</i>	97.3		25-137	%REC	1	7/6/2011 12:46 PM
<i>Surr: Nitrobenzene-d5</i>	56.7		37-107	%REC	1	7/6/2011 12:46 PM
<i>Surr: Phenol-d6</i>	63.4		40-106	%REC	1	7/6/2011 12:46 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG
Benzene	ND		120	µg/Kg-dry	100	7/5/2011 08:44 PM
Ethylbenzene	ND		120	µg/Kg-dry	100	7/5/2011 08:44 PM
m,p-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 08:44 PM
o-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 08:44 PM
Toluene	ND		120	µg/Kg-dry	100	7/5/2011 08:44 PM
Xylenes, Total	ND		350	µg/Kg-dry	100	7/5/2011 08:44 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	103		70-120	%REC	100	7/5/2011 08:44 PM
<i>Surr: 4-Bromofluorobenzene</i>	98.6		75-120	%REC	100	7/5/2011 08:44 PM
<i>Surr: Dibromofluoromethane</i>	97.2		85-115	%REC	100	7/5/2011 08:44 PM
<i>Surr: Toluene-d8</i>	99.7		85-115	%REC	100	7/5/2011 08:44 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: ED
Chromium, Trivalent	16			mg/L-dry	1	7/6/2011 05:50 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 7/6/2011	Analyst: MB
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	7/6/2011 02:45 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	15		0.050	% of sample	1	7/5/2011 11:55 AM
PH			SW9045D			Analyst: JS
pH	8.83			s.u.	1	7/5/2011 10:20 AM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: South Pit Bottom at 13 ft
Collection Date: 7/1/2011 11:45 AM

Work Order: 1107050
Lab ID: 1107050-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	ND		SW8015M	5.0 mg/Kg-dry	1	Prep Date: 7/5/2011 Analyst: RM 7/6/2011 02:07 PM
Surr: 4-Terphenyl-d14	67.7		39-115	%REC	1	7/6/2011 02:07 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015	6.1 mg/Kg-dry	100	Analyst: RM 7/5/2011 08:44 PM
Surr: Toluene-d8	103		50-150	%REC	100	7/5/2011 08:44 PM
MERCURY BY CVAA						
Mercury	0.043		SW7471	0.020 mg/Kg-dry	1	Prep Date: 7/6/2011 Analyst: LR 7/6/2011 04:43 PM
METALS BY ICP-MS						
Arsenic	7.5		SW6020A	0.82 mg/Kg-dry	2	Prep Date: 7/5/2011 Analyst: CES 7/6/2011 12:55 PM
Barium	160			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Cadmium	ND			0.33 mg/Kg-dry	2	7/6/2011 12:55 PM
Chromium	17			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Copper	15			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Lead	11			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Nickel	26			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Selenium	1.0			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Silver	ND			0.82 mg/Kg-dry	2	7/6/2011 12:55 PM
Zinc	44			1.6 mg/Kg-dry	2	7/6/2011 12:55 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT	as noted	1	Analyst: A&LGL 7/8/2011
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270	36 µg/Kg-dry	1	Prep Date: 7/5/2011 Analyst: HL 7/6/2011 01:13 PM
Anthracene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Benzo(a)anthracene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Benzo(a)pyrene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Benzo(b)fluoranthene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Benzo(g,h,i)perylene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Benzo(k)fluoranthene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Chrysene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Dibenzo(a,h)anthracene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Fluoranthene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Fluorene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Indeno(1,2,3-cd)pyrene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Naphthalene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Pyrene	ND			36 µg/Kg-dry	1	7/6/2011 01:13 PM
Surr: 2,4,6-Tribromophenol	53.6		34-140	%REC	1	7/6/2011 01:13 PM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: South Pit Bottom at 13 ft
Collection Date: 7/1/2011 11:45 AM

Work Order: 1107050
Lab ID: 1107050-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	24.9		12-100	%REC	1	7/6/2011 01:13 PM
<i>Surr: 2-Fluorophenol</i>	47.4		33-117	%REC	1	7/6/2011 01:13 PM
<i>Surr: 4-Terphenyl-d14</i>	87.9		25-137	%REC	1	7/6/2011 01:13 PM
<i>Surr: Nitrobenzene-d5</i>	41.4		37-107	%REC	1	7/6/2011 01:13 PM
<i>Surr: Phenol-d6</i>	45.2		40-106	%REC	1	7/6/2011 01:13 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG
Benzene	ND		120	µg/Kg-dry	100	7/5/2011 09:10 PM
Ethylbenzene	ND		120	µg/Kg-dry	100	7/5/2011 09:10 PM
m,p-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 09:10 PM
o-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 09:10 PM
Toluene	ND		120	µg/Kg-dry	100	7/5/2011 09:10 PM
Xylenes, Total	ND		370	µg/Kg-dry	100	7/5/2011 09:10 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	104		70-120	%REC	100	7/5/2011 09:10 PM
<i>Surr: 4-Bromofluorobenzene</i>	98.1		75-120	%REC	100	7/5/2011 09:10 PM
<i>Surr: Dibromofluoromethane</i>	97.5		85-115	%REC	100	7/5/2011 09:10 PM
<i>Surr: Toluene-d8</i>	101		85-115	%REC	100	7/5/2011 09:10 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: ED
Chromium, Trivalent	16			mg/L-dry	1	7/6/2011 05:50 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 7/6/2011	Analyst: MB
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	7/6/2011 02:45 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	18		0.050	% of sample	1	7/5/2011 11:55 AM
PH			SW9045D			Analyst: JS
pH	9.29			s.u.	1	7/5/2011 10:20 AM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: Middle of Pit Bottom at 13 ft
Collection Date: 7/1/2011 11:30 AM

Work Order: 1107050
Lab ID: 1107050-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 7/5/2011	Analyst: RM
DRO (C10-C28)	ND		5.0	mg/Kg-dry	1	7/6/2011 02:31 PM
Surr: 4-Terphenyl-d14	63.3		39-115	%REC	1	7/6/2011 02:31 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: RM
GRO (C6-C10)	ND		6.2	mg/Kg-dry	100	7/5/2011 09:10 PM
Surr: Toluene-d8	103		50-150	%REC	100	7/5/2011 09:10 PM
MERCURY BY CVAA						
			SW7471		Prep Date: 7/6/2011	Analyst: LR
Mercury	0.044		0.023	mg/Kg-dry	1	7/6/2011 04:45 PM
METALS BY ICP-MS						
			SW6020A		Prep Date: 7/5/2011	Analyst: CES
Arsenic	37		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Barium	410		9.3	mg/Kg-dry	20	7/6/2011 02:13 PM
Cadmium	0.82		0.37	mg/Kg-dry	2	7/6/2011 01:01 PM
Chromium	16		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Copper	31		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Lead	36		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Nickel	24		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Selenium	0.94		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Silver	ND		0.93	mg/Kg-dry	2	7/6/2011 01:01 PM
Zinc	71		1.9	mg/Kg-dry	2	7/6/2011 01:01 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT			Analyst: A&LGL
			as noted		1	7/8/2011
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep Date: 7/5/2011	Analyst: HL
Acenaphthene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Anthracene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Benzo(a)anthracene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Benzo(a)pyrene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Benzo(b)fluoranthene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Benzo(k)fluoranthene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Chrysene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Dibenzo(a,h)anthracene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Fluoranthene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Fluorene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Indeno(1,2,3-cd)pyrene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Naphthalene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Pyrene	ND		36	µg/Kg-dry	1	7/6/2011 01:39 PM
Surr: 2,4,6-Tribromophenol	61.7		34-140	%REC	1	7/6/2011 01:39 PM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: Middle of Pit Bottom at 13 ft
Collection Date: 7/1/2011 11:30 AM

Work Order: 1107050
Lab ID: 1107050-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	28.6		12-100	%REC	1	7/6/2011 01:39 PM
<i>Surr: 2-Fluorophenol</i>	51.2		33-117	%REC	1	7/6/2011 01:39 PM
<i>Surr: 4-Terphenyl-d14</i>	92.1		25-137	%REC	1	7/6/2011 01:39 PM
<i>Surr: Nitrobenzene-d5</i>	41.5		37-107	%REC	1	7/6/2011 01:39 PM
<i>Surr: Phenol-d6</i>	49.5		40-106	%REC	1	7/6/2011 01:39 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: MK
Benzene	ND		120	µg/Kg-dry	100	7/5/2011 07:00 PM
Ethylbenzene	ND		120	µg/Kg-dry	100	7/5/2011 07:00 PM
m,p-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 07:00 PM
o-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 07:00 PM
Toluene	ND		120	µg/Kg-dry	100	7/5/2011 07:00 PM
Xylenes, Total	ND		370	µg/Kg-dry	100	7/5/2011 07:00 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	103		70-120	%REC	100	7/5/2011 07:00 PM
<i>Surr: 4-Bromofluorobenzene</i>	100		75-120	%REC	100	7/5/2011 07:00 PM
<i>Surr: Dibromofluoromethane</i>	96.0		85-115	%REC	100	7/5/2011 07:00 PM
<i>Surr: Toluene-d8</i>	100		85-115	%REC	100	7/5/2011 07:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: ED
Chromium, Trivalent	16			mg/L-dry	1	7/6/2011 05:50 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 7/6/2011	Analyst: MB
Chromium, Hexavalent	ND		0.62	mg/Kg-dry	1	7/6/2011 02:45 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	19		0.050	% of sample	1	7/5/2011 11:55 AM
PH			SW9045D			Analyst: JS
pH	8.81			s.u.	1	7/5/2011 10:20 AM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: West Pit Wall at 2 ft
Collection Date: 7/1/2011 12:00 PM

Work Order: 1107050
Lab ID: 1107050-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	9.4		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>72.2</i>		<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 02:31 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>101</i>		<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 09:37 PM</i>
MERCURY BY CVAA						
Mercury	0.023		SW7471		Prep Date: 7/6/2011	Analyst: LR
			0.021	mg/Kg-dry	1	7/6/2011 04:48 PM
METALS BY ICP-MS						
Arsenic	6.1		SW6020A		Prep Date: 7/5/2011	Analyst: CES
Barium	290		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Cadmium	ND		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Chromium	16		0.38	mg/Kg-dry	2	7/6/2011 01:07 PM
Copper	18		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Lead	11		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Nickel	29		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Selenium	1.3		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Silver	ND		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
Zinc	47		0.95	mg/Kg-dry	2	7/6/2011 01:07 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT			Analyst: A&LGL
			as noted		1	7/8/2011
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270		Prep Date: 7/5/2011	Analyst: HL
Anthracene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Chrysene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Fluoranthene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Fluorene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Naphthalene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
Pyrene	ND		34	µg/Kg-dry	1	7/6/2011 02:05 PM
<i>Surr: 2,4,6-Tribromophenol</i>	<i>71.8</i>		<i>34-140</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 02:05 PM</i>

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: West Pit Wall at 2 ft
Collection Date: 7/1/2011 12:00 PM

Work Order: 1107050
Lab ID: 1107050-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	45.7		12-100	%REC	1	7/6/2011 02:05 PM
<i>Surr: 2-Fluorophenol</i>	63.4		33-117	%REC	1	7/6/2011 02:05 PM
<i>Surr: 4-Terphenyl-d14</i>	103		25-137	%REC	1	7/6/2011 02:05 PM
<i>Surr: Nitrobenzene-d5</i>	55.2		37-107	%REC	1	7/6/2011 02:05 PM
<i>Surr: Phenol-d6</i>	61.4		40-106	%REC	1	7/6/2011 02:05 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: MK
Benzene	ND		120	µg/Kg-dry	100	7/5/2011 07:24 PM
Ethylbenzene	ND		120	µg/Kg-dry	100	7/5/2011 07:24 PM
m,p-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 07:24 PM
o-Xylene	ND		120	µg/Kg-dry	100	7/5/2011 07:24 PM
Toluene	ND		120	µg/Kg-dry	100	7/5/2011 07:24 PM
Xylenes, Total	ND		350	µg/Kg-dry	100	7/5/2011 07:24 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	103		70-120	%REC	100	7/5/2011 07:24 PM
<i>Surr: 4-Bromofluorobenzene</i>	100		75-120	%REC	100	7/5/2011 07:24 PM
<i>Surr: Dibromofluoromethane</i>	95.0		85-115	%REC	100	7/5/2011 07:24 PM
<i>Surr: Toluene-d8</i>	100		85-115	%REC	100	7/5/2011 07:24 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: ED
Chromium, Trivalent	16			mg/L-dry	1	7/6/2011 05:50 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 7/6/2011	Analyst: MB
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	7/6/2011 02:45 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	15		0.050	% of sample	1	7/5/2011 11:55 AM
PH			SW9045D			Analyst: JS
pH	9.04			s.u.	1	7/5/2011 10:20 AM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 1
Collection Date: 7/1/2011 12:15 PM

Work Order: 1107050
Lab ID: 1107050-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	130		SW8015M		Prep Date: 7/5/2011	Analyst: RM
			4.5	mg/Kg-dry	1	7/6/2011 02:56 PM
Surr: 4-Terphenyl-d14	113		39-115	%REC	1	7/6/2011 02:56 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			5.6	mg/Kg-dry	100	7/5/2011 10:03 PM
Surr: Toluene-d8	102		50-150	%REC	100	7/5/2011 10:03 PM
METALS BY ICP-MS						
Arsenic	3.5		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.87	mg/Kg-dry	2	7/6/2011 01:13 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT			Analyst: A&LGL
			as noted		1	7/8/2011
VOLATILE ORGANIC COMPOUNDS						
			SW8260			Analyst: MK
Benzene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Ethylbenzene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
m,p-Xylene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
o-Xylene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Toluene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Xylenes, Total	ND		330	µg/Kg-dry	100	7/5/2011 07:48 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	100	7/5/2011 07:48 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	100	7/5/2011 07:48 PM
Surr: Dibromofluoromethane	96.3		85-115	%REC	100	7/5/2011 07:48 PM
Surr: Toluene-d8	100		85-115	%REC	100	7/5/2011 07:48 PM
MOISTURE						
Moisture	10		A2540 G			Analyst: JS
			0.050	% of sample	1	7/5/2011 11:55 AM
PH						
pH	8.70		SW9045D			Analyst: JS
			s.u.		1	7/5/2011 10:20 AM

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

Report Number: F11187-0111

Account 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: 1107050

DATE RECEIVED: 07/06/2011

DATE REPORTED: 07/08/2011

PAGE: 1

P.O. NUMBER: 20-122010363

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
5395	01B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	4.35	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	187	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	121	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	2146	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	29.9	-	USDA Handbook 60
5396	02B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	3.64	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	45	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	22	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	2769	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	84.3	-	USDA Handbook 60
5397	03B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	3.91	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	81	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	54	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	2674	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	56.2	-	USDA Handbook 60
5398	04B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.39	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	24	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	6.1	-	USDA Handbook 60

Report Number: F11187-0111

Account Number: 91000

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www.algreatlakes.com • lab@algreatlakes.com



QUALITY ANALYSES FOR INFORMED DECISIONS

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

RE: 1107050

DATE RECEIVED: 07/06/2011

DATE REPORTED: 07/08/2011

PAGE: 2

P.O. NUMBER: 20-122010363

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
5399	05B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.33	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	59	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	6	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	11	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	0.4	-	USDA Handbook 60

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 2
Collection Date: 7/1/2011 12:30 PM

Work Order: 1107050
Lab ID: 1107050-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	28		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>95.7</i>		<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 02:56 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 10:30 PM</i>
METALS BY ICP-MS						
Arsenic	4.5		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.78	mg/Kg-dry	2	<i>7/6/2011 01:19 PM</i>
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		SW8260			Analyst: MK
<i>Ethylbenzene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>m,p-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>o-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Toluene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Xylenes, Total</i>	<i>ND</i>		<i>330</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>103</i>		<i>70-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>102</i>		<i>75-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: Dibromofluoromethane</i>	<i>94.7</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: Toluene-d8</i>	<i>100</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
MOISTURE						
Moisture	10		A2540 G			Analyst: JS
			0.050	% of sample	1	<i>7/5/2011 11:55 AM</i>

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 3
Collection Date: 7/1/2011 12:45 PM

Work Order: 1107050
Lab ID: 1107050-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	65		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>90.6</i>		<i>4.4</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>7/6/2011 03:21 PM</i>
			<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 03:21 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>5.4</i>	<i>mg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 10:57 PM</i>
			<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 10:57 PM</i>
METALS BY ICP-MS						
Arsenic	3.2		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.77	mg/Kg-dry	2	<i>7/6/2011 01:25 PM</i>
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		SW8260			Analyst: MK
<i>Ethylbenzene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>m,p-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>o-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Toluene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Xylenes, Total</i>	<i>ND</i>		<i>320</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>104</i>		<i>70-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>100</i>		<i>75-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: Dibromofluoromethane</i>	<i>95.2</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: Toluene-d8</i>	<i>100</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
MOISTURE						
Moisture	7.0		A2540 G			Analyst: JS
			0.050	% of sample	1	<i>7/5/2011 11:55 AM</i>

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1107050

Project: Williams RWF 24-4 Pit Remediation

Batch ID: **34172** Instrument ID **GC8** Method: **SW8015M**

MBLK	Sample ID: DBLKS1-34172-34172				Units: mg/Kg		Analysis Date: 7/6/2011 01:18 PM			
Client ID:	Run ID: GC8_110705A				SeqNo: 1670875		Prep Date: 7/5/2011		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								
<i>Surr: 4-Terphenyl-d14</i>	1.385	0	1.667	0	83.1	39-115	0			

LCS	Sample ID: DLCSS1-34172-34172				Units: mg/Kg		Analysis Date: 7/7/2011 10:09 AM			
Client ID:	Run ID: GC8_110705A				SeqNo: 1671599		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	131	4.2	166.7	0	78.6	60-130	0			
<i>Surr: 4-Terphenyl-d14</i>	1.353	0	1.667	0	81.2	39-115	0			

LCSD	Sample ID: DLCSDS1-34172-34172				Units: mg/Kg		Analysis Date: 7/6/2011 11:58 PM			
Client ID:	Run ID: GC8_110705A				SeqNo: 1671591		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	124.7	4.2	166.7	0	74.8	60-130	131	4.93	30	
<i>Surr: 4-Terphenyl-d14</i>	1.173	0	1.667	0	70.4	39-115	1.353	14.2	30	

MS	Sample ID: 1107005-04A MS				Units: mg/Kg		Analysis Date: 7/7/2011 10:09 AM			
Client ID:	Run ID: GC8_110705A				SeqNo: 1671871		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	232.6	8.3	330.2	2.459	69.7	60-130	0			
<i>Surr: 4-Terphenyl-d14</i>	3.074	0	3.302	0	93.1	39-115	0			

MSD	Sample ID: 1107005-04A MSD				Units: mg/Kg		Analysis Date: 7/7/2011 12:23 PM			
Client ID:	Run ID: GC8_110705A				SeqNo: 1671600		Prep Date: 7/5/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	204.2	8.0	319.6	2.459	63.1	60-130	232.6	13	30	
<i>Surr: 4-Terphenyl-d14</i>	2.023	0	3.196	0	63.3	39-115	3.074	41.3	30	R

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A	1107050-05A	1107050-06A
1107050-07A		

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91920** Instrument ID **GC9** Method: **SW8015**

MBLK	Sample ID: MBLK-R91920-R91920				Units: µg/L		Analysis Date: 7/5/2011 07:50 PM			
Client ID:	Run ID: GC9_110705A				SeqNo: 1670090		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								
<i>Surr: Toluene-d8</i>	<i>105.8</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>106</i>	<i>70-130</i>	<i>0</i>			

LCS	Sample ID: LCS-R91920-R91920				Units: µg/L		Analysis Date: 7/5/2011 06:31 PM			
Client ID:	Run ID: GC9_110705A				SeqNo: 1670088		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)	25510	200	25000	0	102	70-130	0			
<i>Surr: Toluene-d8</i>	<i>100.5</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

LCSD	Sample ID: LCSD-R91920-R91920				Units: µg/L		Analysis Date: 7/5/2011 06:57 PM			
Client ID:	Run ID: GC9_110705A				SeqNo: 1670089		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)	25470	200	25000	0	102	70-130	25510	0.164	30	
<i>Surr: Toluene-d8</i>	<i>106.2</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>106</i>	<i>70-130</i>	<i>100.5</i>	<i>5.44</i>	<i>30</i>	

MS	Sample ID: 1107005-03B MS				Units: µg/Kg		Analysis Date: 7/6/2011 05:05 AM			
Client ID:	Run ID: GC9_110705A				SeqNo: 1670111		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1289000	2,500	1250000	0	103	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4924</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>98.5</i>	<i>50-150</i>	<i>0</i>			

MSD	Sample ID: 1107005-03B MSD				Units: µg/Kg		Analysis Date: 7/6/2011 05:31 AM			
Client ID:	Run ID: GC9_110705A				SeqNo: 1670112		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1225000	2,500	1250000	0	98	70-130	1289000	5.08	30	
<i>Surr: Toluene-d8</i>	<i>4973</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>99.5</i>	<i>50-150</i>	<i>4924</i>	<i>1</i>	<i>30</i>	

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A	1107050-05A	1107050-06A
1107050-07A		

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34199** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-34199-34199				Units: mg/Kg			Analysis Date: 7/6/2011 04:27 PM		
Client ID:	Run ID: HG1_110706A				SeqNo: 1670957			Prep Date: 7/6/2011		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-34199-34199				Units: mg/Kg			Analysis Date: 7/6/2011 04:29 PM		
Client ID:	Run ID: HG1_110706A				SeqNo: 1670958			Prep Date: 7/6/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1679	0.020	0.1665		0	101	80-120	0		

LCSD	Sample ID: LCSD-34199-34199				Units: mg/Kg			Analysis Date: 7/6/2011 04:31 PM		
Client ID:	Run ID: HG1_110706A				SeqNo: 1670959			Prep Date: 7/6/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1715	0.020	0.1665		0	103	80-120	0.1679	2.11	20

MS	Sample ID: 1107083-01AMS				Units: mg/Kg			Analysis Date: 7/6/2011 04:59 PM		
Client ID:	Run ID: HG1_110706A				SeqNo: 1670971			Prep Date: 7/6/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1528	0.018	0.1489	0.03383	79.9	75-125		0		

MSD	Sample ID: 1107083-01AMSD				Units: mg/Kg			Analysis Date: 7/6/2011 05:01 PM		
Client ID:	Run ID: HG1_110706A				SeqNo: 1670972			Prep Date: 7/6/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1604	0.018	0.15	0.03383	84.4	75-125	0.1528	4.81	35	

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A		

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34177** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK	Sample ID: MBLK-34177-34177		Units: mg/Kg		Analysis Date: 7/6/2011 12:32 PM					
Client ID:	Run ID: ICPMS1_110706A		SeqNo: 1670803		Prep Date: 7/5/2011		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	ND	0.25								
Cadmium	ND	0.10								
Chromium	0.003202	0.25								J
Copper	0.02876	0.25								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS	Sample ID: LCS-34177-34177		Units: mg/Kg		Analysis Date: 7/6/2011 12:38 PM					
Client ID:	Run ID: ICPMS1_110706A		SeqNo: 1670804		Prep Date: 7/5/2011		DF: 2			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.566	0.50	5	0	91.3	80-120	0			
Barium	4.672	0.50	5	0	93.4	80-120	0			
Cadmium	4.588	0.20	5	0	91.8	80-120	0			
Chromium	4.78	0.50	5	0	95.6	80-120	0			
Copper	4.809	0.50	5	0	96.2	80-120	0			
Lead	4.669	0.50	5	0	93.4	80-120	0			
Nickel	4.697	0.50	5	0	93.9	80-120	0			
Selenium	4.412	0.50	5	0	88.2	80-120	0			
Silver	4.678	0.50	5	0	93.6	80-120	0			
Zinc	4.593	1.0	5	0	91.9	80-120	0			

LCSD	Sample ID: LCSD-34177-34177		Units: mg/Kg		Analysis Date: 7/6/2011 12:44 PM					
Client ID:	Run ID: ICPMS1_110706A		SeqNo: 1670805		Prep Date: 7/5/2011		DF: 2			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.467	0.50	5	0	89.3	80-120	4.566	2.19	20	
Barium	4.573	0.50	5	0	91.5	80-120	4.672	2.14	20	
Cadmium	4.509	0.20	5	0	90.2	80-120	4.588	1.74	20	
Chromium	4.737	0.50	5	0	94.7	80-120	4.78	0.904	20	
Copper	5.104	0.50	5	0	102	80-120	4.809	5.95	20	
Lead	4.624	0.50	5	0	92.5	80-120	4.669	0.968	20	
Nickel	4.629	0.50	5	0	92.6	80-120	4.697	1.46	20	
Selenium	4.477	0.50	5	0	89.5	80-120	4.412	1.46	20	
Silver	4.626	0.50	5	0	92.5	80-120	4.678	1.12	20	
Zinc	4.573	1.0	5	0	91.5	80-120	4.593	0.436	20	

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34177** Instrument ID **ICPMS1** Method: **SW6020A**

MS		Sample ID: 1106813-01BMS				Units: mg/Kg		Analysis Date: 7/6/2011 02:30 PM		
Client ID:		Run ID: ICPMS1_110706A				SeqNo: 1670819		Prep Date: 7/5/2011		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.52	1.6	8.237	3.913	92.3	80-120	0			
Barium	34.5	1.6	8.237	29.2	64.3	80-120	0			S
Cadmium	7.928	0.66	8.237	0.6405	88.5	80-120	0			
Chromium	23.57	1.6	8.237	17.46	74.2	80-120	0			S
Copper	11.84	1.6	8.237	9.238	31.5	80-120	0			S
Lead	14.76	1.6	8.237	7.992	82.2	80-120	0			
Nickel	10.62	1.6	8.237	3.697	84	80-120	0			
Selenium	7.911	1.6	8.237	0.5962	88.8	80-120	0			
Silver	7.219	1.6	8.237	0.08563	86.6	80-120	0			
Zinc	44.02	3.3	8.237	38.9	62.1	80-120	0			SO

MSD		Sample ID: 1106813-01BMSD				Units: mg/Kg		Analysis Date: 7/6/2011 02:36 PM		
Client ID:		Run ID: ICPMS1_110706A				SeqNo: 1670820		Prep Date: 7/5/2011		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.37	1.5	7.587	3.913	85.1	80-120	11.52	10.5	25	
Barium	35.78	1.5	7.587	29.2	86.8	80-120	34.5	3.65	25	
Cadmium	7.584	0.61	7.587	0.6405	91.5	80-120	7.928	4.43	25	
Chromium	23.54	1.5	7.587	17.46	80.2	80-120	23.57	0.127	25	
Copper	10.34	1.5	7.587	9.238	14.6	80-120	11.84	13.5	25	S
Lead	14.49	1.5	7.587	7.992	85.6	80-120	14.76	1.91	25	
Nickel	10.27	1.5	7.587	3.697	86.6	80-120	10.62	3.34	25	
Selenium	7.199	1.5	7.587	0.5962	87	80-120	7.911	9.43	25	
Silver	6.64	1.5	7.587	0.08563	86.4	80-120	7.219	8.35	25	
Zinc	47.62	3.0	7.587	38.9	115	80-120	44.02	7.85	25	O

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A	1107050-05A	1107050-06A
1107050-07A		

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34171** Instrument ID **SVMS5** Method: **SW8270**

MBLK Sample ID: **SBLKS1-34171-34171** Units: **µg/Kg** Analysis Date: **7/6/2011 11:37 AM**

Client ID: Run ID: **SVMS5_110706A** SeqNo: **1670373** Prep Date: **7/5/2011** 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								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>913.3</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>54.8</i>	<i>34-140</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>842</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>50.5</i>	<i>12-100</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>923.7</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>55.4</i>	<i>33-117</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>1545</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>92.7</i>	<i>25-137</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>902.3</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>54.1</i>	<i>37-107</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>877</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>52.6</i>	<i>40-106</i>	<i>0</i>			

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34171** Instrument ID **SVMS5** Method: **SW8270**

LCS		Sample ID: SLCSS1-34171-34171				Units: µg/Kg		Analysis Date: 7/6/2011 12:11 PM		
Client ID:		Run ID: SVMS5_110706A				SeqNo: 1670374		Prep Date: 7/5/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	922.7	30	1333	0	69.2	45-110	0			
Anthracene	1238	30	1333	0	92.8	55-105	0			
Benzo(a)anthracene	1173	30	1333	0	88	50-110	0			
Benzo(a)pyrene	1279	30	1333	0	95.9	50-110	0			
Benzo(b)fluoranthene	1199	30	1333	0	89.9	45-115	0			
Benzo(g,h,i)perylene	1309	30	1333	0	98.2	40-125	0			
Benzo(k)fluoranthene	1353	30	1333	0	102	45-115	0			
Chrysene	1214	30	1333	0	91	55-110	0			
Dibenzo(a,h)anthracene	1326	30	1333	0	99.4	40-125	0			
Fluoranthene	1243	30	1333	0	93.2	55-115	0			
Fluorene	1119	30	1333	0	83.9	50-110	0			
Indeno(1,2,3-cd)pyrene	1317	30	1333	0	98.8	40-120	0			
Naphthalene	726.7	30	1333	0	54.5	40-105	0			
Pyrene	1276	30	1333	0	95.7	45-125	0			
Surr: 2,4,6-Tribromophenol	1209	0	1667	0	72.5	34-140	0			
Surr: 2-Fluorobiphenyl	882.7	0	1667	0	53	12-100	0			
Surr: 2-Fluorophenol	831.3	0	1667	0	49.9	33-117	0			
Surr: 4-Terphenyl-d14	1618	0	1667	0	97.1	25-137	0			
Surr: Nitrobenzene-d5	860.3	0	1667	0	51.6	37-107	0			
Surr: Phenol-d6	798	0	1667	0	47.9	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34171** Instrument ID **SVMS5** Method: **SW8270**

LCSD		Sample ID: SLCSDS1-34171-34171				Units: µg/Kg		Analysis Date: 7/6/2011 12:45 PM		
Client ID:		Run ID: SVMS5_110706A				SeqNo: 1670375		Prep Date: 7/5/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	787.3	30	1333	0	59.1	45-110	922.7	15.8	25	
Anthracene	1023	30	1333	0	76.7	55-105	1238	19	25	
Benzo(a)anthracene	1013	30	1333	0	76	50-110	1173	14.6	25	
Benzo(a)pyrene	1060	30	1333	0	79.5	50-110	1279	18.7	25	
Benzo(b)fluoranthene	993	30	1333	0	74.5	45-115	1199	18.8	25	
Benzo(g,h,i)perylene	1104	30	1333	0	82.8	40-125	1309	17	25	
Benzo(k)fluoranthene	1140	30	1333	0	85.5	45-115	1353	17.1	25	
Chrysene	1003	30	1333	0	75.2	55-110	1214	19	25	
Dibenzo(a,h)anthracene	1123	30	1333	0	84.3	40-125	1326	16.5	25	
Fluoranthene	1027	30	1333	0	77	55-115	1243	19	25	
Fluorene	942.3	30	1333	0	70.7	50-110	1119	17.1	25	
Indeno(1,2,3-cd)pyrene	1110	30	1333	0	83.2	40-120	1317	17.1	25	
Naphthalene	596.7	30	1333	0	44.8	40-105	726.7	19.6	25	
Pyrene	1074	30	1333	0	80.5	45-125	1276	17.2	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1009</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>60.5</i>	<i>34-140</i>	<i>1209</i>	<i>18</i>	<i>40</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>747.7</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>44.9</i>	<i>12-100</i>	<i>882.7</i>	<i>16.6</i>	<i>40</i>	
<i>Surr: 2-Fluorophenol</i>	<i>689.7</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>41.4</i>	<i>33-117</i>	<i>831.3</i>	<i>18.6</i>	<i>40</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1358</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>81.5</i>	<i>25-137</i>	<i>1618</i>	<i>17.4</i>	<i>40</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>716.3</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>43</i>	<i>37-107</i>	<i>860.3</i>	<i>18.3</i>	<i>40</i>	
<i>Surr: Phenol-d6</i>	<i>674</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>40.4</i>	<i>40-106</i>	<i>798</i>	<i>16.8</i>	<i>40</i>	

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34171** Instrument ID **SVMS5** Method: **SW8270**

MS				Sample ID: 1107005-04A MS			Units: µg/Kg		Analysis Date: 7/6/2011 01:20 PM	
Client ID:				Run ID: SVMS5_110706A			SeqNo: 1670592		Prep Date: 7/5/2011	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1808	59	2628	0	68.8	45-110	0			
Anthracene	2099	59	2628	0	79.9	55-105	0			
Benzo(a)anthracene	2035	59	2628	0	77.4	50-110	0			
Benzo(a)pyrene	2117	59	2628	0	80.6	50-110	0			
Benzo(b)fluoranthene	2209	59	2628	0	84.1	45-115	0			
Benzo(g,h,i)perylene	2356	59	2628	0	89.7	40-125	0			
Benzo(k)fluoranthene	2043	59	2628	0	77.8	45-115	0			
Chrysene	1991	59	2628	0	75.8	55-110	0			
Dibenzo(a,h)anthracene	2277	59	2628	0	86.7	40-125	0			
Fluoranthene	2114	59	2628	0	80.5	55-115	0			
Fluorene	2030	59	2628	0	77.3	50-110	0			
Indeno(1,2,3-cd)pyrene	2274	59	2628	0	86.5	40-120	0			
Naphthalene	1498	59	2628	0	57	40-105	0			
Pyrene	2126	59	2628	0	80.9	45-125	0			
Surr: 2,4,6-Tribromophenol	2274	0	3285	0	69.2	34-140	0			
Surr: 2-Fluorobiphenyl	1850	0	3285	0	56.3	12-100	0			
Surr: 2-Fluorophenol	1673	0	3285	0	50.9	33-117	0			
Surr: 4-Terphenyl-d14	2718	0	3285	0	82.8	25-137	0			
Surr: Nitrobenzene-d5	1767	0	3285	0	53.8	37-107	0			
Surr: Phenol-d6	1636	0	3285	0	49.8	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34171** Instrument ID **SVMS5** Method: **SW8270**

MSD				Sample ID: 1107005-04A MSD			Units: µg/Kg		Analysis Date: 7/6/2011 01:54 PM		
Client ID:		Run ID: SVMS5_110706A			SeqNo: 1670593		Prep Date: 7/5/2011		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1313	58	2557	0	51.4	45-110	1808	31.7	30	R	
Anthracene	1605	58	2557	0	62.8	55-105	2099	26.7	30		
Benzo(a)anthracene	1557	58	2557	0	60.9	50-110	2035	26.6	30		
Benzo(a)pyrene	1643	58	2557	0	64.3	50-110	2117	25.2	30		
Benzo(b)fluoranthene	1735	58	2557	0	67.9	45-115	2209	24	30	R	
Benzo(g,h,i)perylene	1825	58	2557	0	71.4	40-125	2356	25.4	30		
Benzo(k)fluoranthene	1541	58	2557	0	60.3	45-115	2043	28	30		
Chrysene	1571	58	2557	0	61.4	55-110	1991	23.6	30		
Dibenzo(a,h)anthracene	1774	58	2557	0	69.4	40-125	2277	24.9	30		
Fluoranthene	1594	58	2557	0	62.3	55-115	2114	28.1	30		
Fluorene	1490	58	2557	0	58.3	50-110	2030	30.7	30		
Indeno(1,2,3-cd)pyrene	1778	58	2557	0	69.5	40-120	2274	24.5	30		
Naphthalene	1152	58	2557	0	45.1	40-105	1498	26.1	30		
Pyrene	1653	58	2557	0	64.7	45-125	2126	25	30		
Surr: 2,4,6-Tribromophenol	1755	0	3197	0	54.9	34-140	2274	25.7	40		
Surr: 2-Fluorobiphenyl	1364	0	3197	0	42.7	12-100	1850	30.2	40		
Surr: 2-Fluorophenol	1386	0	3197	0	43.4	33-117	1673	18.8	40		
Surr: 4-Terphenyl-d14	2138	0	3197	0	66.9	25-137	2718	23.9	40		
Surr: Nitrobenzene-d5	1398	0	3197	0	43.7	37-107	1767	23.4	40		
Surr: Phenol-d6	1324	0	3197	0	41.4	40-106	1636	21.1	40		

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A		

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91846** Instrument ID **VMS9** Method: **SW8260**

MBLK	Sample ID: VBLKW1-110705-R91846				Units: µg/L		Analysis Date: 7/5/2011 12:38 PM			
Client ID:	Run ID: VMS9_110705A				SeqNo: 1669704		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	102.6	0	100	0	103	70-120	0			
Surr: 4-Bromofluorobenzene	99.92	0	100	0	99.9	75-120	0			
Surr: Dibromofluoromethane	98.98	0	100	0	99	85-115	0			
Surr: Toluene-d8	100.5	0	100	0	100	85-120	0			

LCS	Sample ID: VLCSW1-110705-R91846				Units: µg/L		Analysis Date: 7/5/2011 11:27 AM			
Client ID:	Run ID: VMS9_110705A				SeqNo: 1668329		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.8	1.0	20	0	99	80-120	0			
Ethylbenzene	18.88	1.0	20	0	94.4	75-125	0			
m,p-Xylene	38.26	2.0	40	0	95.6	75-130	0			
o-Xylene	18.9	1.0	20	0	94.5	80-120	0			
Toluene	18.91	1.0	20	0	94.6	75-120	0			
Xylenes, Total	57.16	2.0	60	0	95.3	75-130	0			
Surr: 1,2-Dichloroethane-d4	102.2	0	100	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	103	0	100	0	103	75-120	0			
Surr: Dibromofluoromethane	104.4	0	100	0	104	85-115	0			
Surr: Toluene-d8	100.5	0	100	0	100	85-120	0			

LCSD	Sample ID: VLCSDW1-110705-R91846				Units: µg/L		Analysis Date: 7/5/2011 11:51 AM			
Client ID:	Run ID: VMS9_110705A				SeqNo: 1668333		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.77	1.0	20	0	104	80-120	19.8	4.78	30	
Ethylbenzene	19.63	1.0	20	0	98.2	75-125	18.88	3.9	30	
m,p-Xylene	39.64	2.0	40	0	99.1	75-130	38.26	3.54	30	
o-Xylene	19.66	1.0	20	0	98.3	80-120	18.9	3.94	30	
Toluene	19.74	1.0	20	0	98.7	75-120	18.91	4.29	30	
Xylenes, Total	59.3	2.0	60	0	98.8	75-130	57.16	3.68	30	
Surr: 1,2-Dichloroethane-d4	103	0	100	0	103	70-120	102.2	0.779	30	
Surr: 4-Bromofluorobenzene	101.8	0	100	0	102	75-120	103	1.08	30	
Surr: Dibromofluoromethane	104.2	0	100	0	104	85-115	104.4	0.173	30	
Surr: Toluene-d8	100.3	0	100	0	100	85-120	100.5	0.189	30	

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91846** Instrument ID **VMS9** Method: **SW8260**

The following samples were analyzed in this batch:

1107050-03A	1107050-04A	1107050-05A
1107050-06A	1107050-07A	

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91899** Instrument ID **VMS6** Method: **SW8260**

MBLK	Sample ID: VBLKW2-110705-R91899				Units: µg/L		Analysis Date: 7/5/2011 06:39 PM			
Client ID:	Run ID: VMS6_110705A				SeqNo: 1669600		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	101.9	0	100	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	98.16	0	100	0	98.2	75-120	0			
Surr: Dibromofluoromethane	100.8	0	100	0	101	85-115	0			
Surr: Toluene-d8	100.4	0	100	0	100	85-120	0			

LCS	Sample ID: VLCSW1-110705-R91899				Units: µg/L		Analysis Date: 7/5/2011 05:23 PM			
Client ID:	Run ID: VMS6_110705A				SeqNo: 1669598		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.94	1.0	20	0	105	80-120	0			
Ethylbenzene	20.75	1.0	20	0	104	75-125	0			
m,p-Xylene	43.49	2.0	40	0	109	75-130	0			
o-Xylene	21.95	1.0	20	0	110	80-120	0			
Toluene	20.66	1.0	20	0	103	75-120	0			
Xylenes, Total	65.44	2.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	101.3	0	100	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	98.88	0	100	0	98.9	75-120	0			
Surr: Dibromofluoromethane	101.8	0	100	0	102	85-115	0			
Surr: Toluene-d8	99.96	0	100	0	100	85-120	0			

LCSD	Sample ID: VLCSW1-110705-R91899				Units: µg/L		Analysis Date: 7/5/2011 05:48 PM			
Client ID:	Run ID: VMS6_110705A				SeqNo: 1669599		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.42	1.0	20	0	107	80-120	20.94	2.27	30	
Ethylbenzene	21.36	1.0	20	0	107	75-125	20.75	2.9	30	
m,p-Xylene	44.86	2.0	40	0	112	75-130	43.49	3.1	30	
o-Xylene	22.61	1.0	20	0	113	80-120	21.95	2.96	30	
Toluene	21.3	1.0	20	0	106	75-120	20.66	3.05	30	
Xylenes, Total	67.47	2.0	60	0	112	75-130	65.44	3.05	30	
Surr: 1,2-Dichloroethane-d4	100.2	0	100	0	100	70-120	101.3	1.03	30	
Surr: 4-Bromofluorobenzene	99.47	0	100	0	99.5	75-120	98.88	0.595	30	
Surr: Dibromofluoromethane	101.6	0	100	0	102	85-115	101.8	0.226	30	
Surr: Toluene-d8	100.1	0	100	0	100	85-120	99.96	0.17	30	

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91899** Instrument ID **VMS6** Method: **SW8260**

The following samples were analyzed in this batch:

1107050-01A	1107050-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **34204** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-34204-34204				Units: mg/Kg		Analysis Date: 7/6/2011 02:45 PM			
Client ID:	Run ID: WETCHEM_110706K				SeqNo: 1670678		Prep Date: 7/6/2011		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-34204-34204				Units: mg/Kg		Analysis Date: 7/6/2011 02:45 PM			
Client ID:	Run ID: WETCHEM_110706K				SeqNo: 1670676		Prep Date: 7/6/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.916	0.50	1.992	0	96.2	75-110	0			

LCSD	Sample ID: LCSD-34204-34204				Units: mg/Kg		Analysis Date: 7/6/2011 02:45 PM			
Client ID:	Run ID: WETCHEM_110706K				SeqNo: 1670677		Prep Date: 7/6/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.864	0.48	1.938	0	96.2	75-110	1.916	2.75	20	

MS	Sample ID: 1107016-01A MS				Units: mg/Kg		Analysis Date: 7/6/2011 02:45 PM			
Client ID:	Run ID: WETCHEM_110706K				SeqNo: 1670669		Prep Date: 7/6/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.648	0.49	1.976	0	83.4	60-130	0			

MSD	Sample ID: 1107016-01A MSD				Units: mg/Kg		Analysis Date: 7/6/2011 02:45 PM			
Client ID:	Run ID: WETCHEM_110706K				SeqNo: 1670670		Prep Date: 7/6/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.61	0.50	1.992	0	80.8	60-130	1.648	2.37	30	

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A		

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91848** Instrument ID **WETCHEM** Method: **SW9045D**

DUP Sample ID: **1107050-01ADUP** Units: **s.u.** Analysis Date: **7/5/2011 10:20 AM**

Client ID: **North Pit Bottom at 11 ft** Run ID: **WETCHEM_110705A** SeqNo: **1668398** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.83	0	0	0	0	0-0	8.83	0	20	

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A	1107050-05A	

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

Client: HRL Compliance Solutions
Work Order: 1107050
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91925** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R91925				Units: % of sample			Analysis Date: 7/5/2011 11:55 AM		
Client ID:	Run ID: MOIST_110705A				SeqNo: 1670172		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS	Sample ID: LCS-R91925				Units: % of sample			Analysis Date: 7/5/2011 11:55 AM		
Client ID:	Run ID: MOIST_110705A				SeqNo: 1670171		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP	Sample ID: 1107041-02ADUP				Units: % of sample			Analysis Date: 7/5/2011 11:55 AM		
Client ID:	Run ID: MOIST_110705A				SeqNo: 1670161		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	2.29	0.050	0	0	0	0-0	2.22	3.1	20	

DUP	Sample ID: 1107050-01ADUP				Units: % of sample			Analysis Date: 7/5/2011 11:55 AM		
Client ID: North Pit Bottom at 11 ft	Run ID: MOIST_110705A				SeqNo: 1670163		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.85	0.050	0	0	0	0-0	14.96	0.738	20	

The following samples were analyzed in this batch:

1107050-01A	1107050-02A	1107050-03A
1107050-04A	1107050-05A	1107050-06A
1107050-07A		

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
#

1107050

PROJECT NAME		Grey Hawk RWF 24-4 Pit Remediation		SAMPLER		Kris Rowe		DATE		7/1/2011		PAGE		1 of 1	
PROJECT No.		11-205		SITE ID				TURNAROUND		24 hr		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HRL COMPLIANCE SOLUTIONS Inc.		BILL TO COMPANY		Williams Productin RMT									
SEND REPORT TO		KRIS ROWE		INVOICE ATTN TO		Karolina Blaney									
ADDRESS		744 HORIZON CT SUITE 140		ADDRESS		1058 CR 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		KROWE@HRLCOMP.COM		E-MAIL		Karolina.Blaney@williams.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	TEPH	TVPH	BTEX	Semi Vols - PAH	Total Metals - 910.1	SAR / EC / pH	Arsenic	
1	North Pit Bottom at 11 ft	SO	7/1/2011	11:00	12			X	X	X	X	X	X		
2	South Pit Bottom at 13 ft	SO	7/1/2011	11:45	12			X	X	X	X	X	X		
3	Middle of Pit Bottom at 13 ft	SO	7/1/2011	11:30	12			X	X	X	X	X	X		
4	West Pit Wall at 2 ft	SO	7/1/2011	12:00	12			X	X	X	X	X	X		
5	BKGD 1	SO	7/1/2011	12:15	12			X	X	X		X	X		
6	BKGD 2	SO	7/1/2011	12:30	12			X	X	X			X		
7	BKGD 3	SO	7/1/2011	12:45	3			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: 4.4°C	QC PACKAGE (check below)	
	<input type="checkbox"/>	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>	
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
	Kris Rowe	7/1/2011	17:00
RECEIVED BY		07/02/11	1015
RECEIVED BY			
RECEIVED BY			
RECEIVED BY			

4.4°C



Environmental

Subcontractor:A & L Great Lakes Agricultural Lab
3505 Conestoga Dr

Ft. Wayne, IN 46808

TEL: (260) 483-4759

FAX:

Acct #: 91000

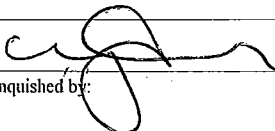
CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: 05-Jul-11COC ID: 2982Due Date 08-Jul-11

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	20-122010363	Project Name	1107050	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		
1107050-01B (North Pit Bottom at 11 ft)	Soil	1/Jul/2011 11:00	(1) MISC	X											
1107050-02B (South Pit Bottom at 13 ft)	Soil	1/Jul/2011 11:45	(1) MISC	X											
1107050-03B (Middle of Pit Bottom at 13 ft)	Soil	1/Jul/2011 11:30	(1) MISC	X											
1107050-04B (West Pit Wall at 2 ft)	Soil	1/Jul/2011 12:00	(1) MISC	X											
1107050-05B (BKGD 1)	Soil	1/Jul/2011 12:15	(1) MISC	X											

Comments:Please analyze for SAR-EC. Email results to Ann Preston.

Relinquished by: 	Date/Time: <u>7/5/11</u>	Received by:	Date/Time:	Cooler IDs:	Report/QC Level
					Std
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **02-Jul-11 10:15**

Work Order: **1107050**

Received by: **TBB**

Checklist completed by Tom Bramish
eSignature

02-Jul-11
Date

Reviewed by: Bill Carey
eSignature

05-Jul-11
Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

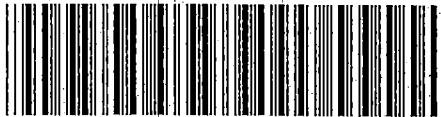
Regarding:

Comments:

CorrectiveAction:

From
Date 7-1-11
Sender's Name CASEY RICHARDSON Phone 970 243-3271
Company HL COMPLIANCE SOLUTIONS INC
Address 7441 HORIZON CT 142
City GRAND JCT State CO ZIP 81506
Your Internal Billing Reference

To
Recipient's Name SAMPLE RECEIVING Phone 616 399-6070
Company ALS LABS
Address 3352 128TH AVE
City HOLLAND State CO ZIP 49424



8758 3475 6149

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Next Business Day
06 ☐ FedEx First Overnight
01 ☒ FedEx Priority Overnight
05 ☐ FedEx Standard Overnight
2 or 3 Business Days
49 ☐ NEW FedEx 2Day A.M.
03 ☐ FedEx 2Day
20 ☐ FedEx Express Saver

5 Packaging * Declared value limit \$500.
06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 01 ☒ Other

6 Special Handling and Delivery Signature Options
03 ☒ SATURDAY DELIVERY

☒ No Signature Required
☐ Direct Signature
☐ Indirect Signature
Does this shipment contain dangerous goods?
04 ☒ No 06 ☐ Dry Ice
01 ☐ Yes
03 ☐ Yes
05 ☐ Cash/Check

7 Payment Bill to:
1 ☐ Sender 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check
Total Packages 1 Total Weight 73 lbs.
612



Appendix 2: Background Raw Analytical Data

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 1
Collection Date: 7/1/2011 12:15 PM

Work Order: 1107050
Lab ID: 1107050-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	130		SW8015M		Prep Date: 7/5/2011	Analyst: RM
			4.5	mg/Kg-dry	1	7/6/2011 02:56 PM
Surr: 4-Terphenyl-d14	113		39-115	%REC	1	7/6/2011 02:56 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			5.6	mg/Kg-dry	100	7/5/2011 10:03 PM
Surr: Toluene-d8	102		50-150	%REC	100	7/5/2011 10:03 PM
METALS BY ICP-MS						
Arsenic	3.5		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.87	mg/Kg-dry	2	7/6/2011 01:13 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT			Analyst: A&LGL
			as noted		1	7/8/2011
VOLATILE ORGANIC COMPOUNDS						
			SW8260			Analyst: MK
Benzene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Ethylbenzene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
m,p-Xylene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
o-Xylene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Toluene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Xylenes, Total	ND		330	µg/Kg-dry	100	7/5/2011 07:48 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	100	7/5/2011 07:48 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	100	7/5/2011 07:48 PM
Surr: Dibromofluoromethane	96.3		85-115	%REC	100	7/5/2011 07:48 PM
Surr: Toluene-d8	100		85-115	%REC	100	7/5/2011 07:48 PM
MOISTURE						
Moisture	10		A2540 G			Analyst: JS
			0.050	% of sample	1	7/5/2011 11:55 AM
PH						
pH	8.70		SW9045D			Analyst: JS
			s.u.		1	7/5/2011 10:20 AM

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

Report Number: F11187-0111

Account 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: 1107050

DATE RECEIVED: 07/06/2011

DATE REPORTED: 07/08/2011

PAGE: 2

P.O. NUMBER: 20-122010363

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
5399	05B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.33	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	59	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	6	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	11	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	0.4	-	USDA Handbook 60

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 2
Collection Date: 7/1/2011 12:30 PM

Work Order: 1107050
Lab ID: 1107050-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	28		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>95.7</i>		<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 02:56 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 10:30 PM</i>
METALS BY ICP-MS						
Arsenic	4.5		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.78	mg/Kg-dry	2	<i>7/6/2011 01:19 PM</i>
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		SW8260			Analyst: MK
<i>Ethylbenzene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>m,p-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>o-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Toluene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Xylenes, Total</i>	<i>ND</i>		<i>330</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>103</i>		<i>70-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>102</i>		<i>75-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: Dibromofluoromethane</i>	<i>94.7</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: Toluene-d8</i>	<i>100</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
MOISTURE						
Moisture	10		A2540 G			Analyst: JS
			0.050	% of sample	1	<i>7/5/2011 11:55 AM</i>

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 3
Collection Date: 7/1/2011 12:45 PM

Work Order: 1107050
Lab ID: 1107050-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	65		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>90.6</i>		<i>4.4</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>7/6/2011 03:21 PM</i>
			<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 03:21 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>5.4</i>	<i>mg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 10:57 PM</i>
			<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 10:57 PM</i>
METALS BY ICP-MS						
Arsenic	3.2		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.77	mg/Kg-dry	2	<i>7/6/2011 01:25 PM</i>
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		SW8260			Analyst: MK
<i>Ethylbenzene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>m,p-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>o-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Toluene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Xylenes, Total</i>	<i>ND</i>		<i>320</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>104</i>		<i>70-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>100</i>		<i>75-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: Dibromofluoromethane</i>	<i>95.2</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: Toluene-d8</i>	<i>100</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
MOISTURE						
Moisture	7.0		A2540 G			Analyst: JS
			0.050	% of sample	1	<i>7/5/2011 11:55 AM</i>

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



22-Jul-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Williams RWF 24-4 Pit Remediation 7/20/11**

Work Order: **1107517**

Dear Kris,

ALS Environmental received 5 samples on 21-Jul-2011 11:25 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 14.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: IL100452

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental The ALS logo, a stylized blue triangle with a yellow flame inside.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 7/20/11
Work Order: 1107517

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1107517-01	Background 4	Soil		7/20/2011 11:33	7/21/2011 11:25	<input type="checkbox"/>
1107517-02	Background 5	Soil		7/20/2011 11:51	7/21/2011 11:25	<input type="checkbox"/>
1107517-03	Background 6	Soil		7/20/2011 12:07	7/21/2011 11:25	<input type="checkbox"/>
1107517-04	Background 7	Soil		7/20/2011 12:20	7/21/2011 11:25	<input type="checkbox"/>
1107517-05	Background 8	Soil		7/20/2011 12:39	7/21/2011 11:25	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 7/20/11
Work Order: 1107517

Case Narrative

Batch 34471 sample Background 8 MS recovery for Arsenic was above control limits due to matrix, causing the RPD to be above control limits. The result for Arsenic in the parent sample may be biased high if the same matrix interference was present in the sample aliquot used for the parent sample.

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 7/20/11
WorkOrder: 1107517

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 4

Lab ID: 1107517-01

Collection Date: 7/20/2011 11:33 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	4.4		0.96	mg/Kg-dry	2	7/22/2011 02:12 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	15		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 5

Lab ID: 1107517-02

Collection Date: 7/20/2011 11:51 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	4.9		0.94	mg/Kg-dry	2	7/22/2011 02:18 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	17		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 6

Lab ID: 1107517-03

Collection Date: 7/20/2011 12:07 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	3.7		0.84	mg/Kg-dry	2	7/22/2011 02:24 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	17		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 7

Lab ID: 1107517-04

Collection Date: 7/20/2011 12:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	5.1		0.85	mg/Kg-dry	2	7/22/2011 02:30 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	17		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 8

Lab ID: 1107517-05

Collection Date: 7/20/2011 12:39 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	7.3		0.90	mg/Kg-dry	2	7/22/2011 02:36 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	14		0.050	% of sample	1	7/21/2011 01:09 PM

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1107517

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Batch ID: **34471** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK	Sample ID: MBLK-34471-34471				Units: mg/Kg		Analysis Date: 7/22/2011 01:31 PM			
Client ID:	Run ID: ICPMS1_110722B				SeqNo: 1684269		Prep Date: 7/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.02426	0.25								J

LCS	Sample ID: LCS-34471-34471				Units: mg/Kg		Analysis Date: 7/22/2011 02:01 PM			
Client ID:	Run ID: ICPMS1_110722B				SeqNo: 1684272		Prep Date: 7/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.314	0.25	5	0	86.3	80-120	0			

LCSD	Sample ID: LCSD-34471-34471				Units: mg/Kg		Analysis Date: 7/22/2011 02:07 PM			
Client ID:	Run ID: ICPMS1_110722B				SeqNo: 1684273		Prep Date: 7/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.369	0.25	5	0	87.4	80-120	4.314	1.27	20	

MS	Sample ID: 1107517-05AMS				Units: mg/Kg		Analysis Date: 7/22/2011 02:42 PM			
Client ID: Background 8	Run ID: ICPMS1_110722B				SeqNo: 1684279		Prep Date: 7/21/2011		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	47.35	0.75	7.496	6.267	548	80-120	0			S

MSD	Sample ID: 1107517-05AMSD				Units: mg/Kg		Analysis Date: 7/22/2011 02:47 PM			
Client ID: Background 8	Run ID: ICPMS1_110722B				SeqNo: 1684280		Prep Date: 7/21/2011		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.02	0.75	7.53	6.267	89.7	80-120	47.35	114	25	R

The following samples were analyzed in this batch:

1107517-01A	1107517-02A	1107517-03A
1107517-04A	1107517-05A	

Client: HRL Compliance Solutions
Work Order: 1107517
Project: Williams RWF 24-4 Pit Remediation 7/20/11

QC BATCH REPORT

Batch ID: **R92507** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R92507				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID:	Run ID: MOIST_110721C				SeqNo: 1683714			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS	Sample ID: LCS-R92507				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID:	Run ID: MOIST_110721C				SeqNo: 1683713			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	99.99	0.050	100	0	100	99.5-100.5	0			

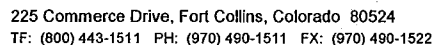
DUP	Sample ID: 1107511-05BDUP				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID:	Run ID: MOIST_110721C				SeqNo: 1683695			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.85	0.050	0	0	0	0-0	9.1	7.92	20	

DUP	Sample ID: 1107517-01ADUP				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID: Background 4	Run ID: MOIST_110721C				SeqNo: 1683697			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.05	0.050	0	0	0	0-0	15.47	2.75	20	

The following samples were analyzed in this batch:



1107517-01A	1107517-02A	1107517-03A
1107517-04A	1107517-05A	

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



1107517

Form 202r8

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Kris Rowe	7/20/2011	17:00
RECEIVED BY		KEITH WIERENGA	7/21/11	1125
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 21-Jul-11 11:25

Work Order: 1107517

Received by: KRW

Checklist completed by Keith Wurenga
eSignature

21-Jul-11
Date

Reviewed by: Ann Preston
eSignature

21-Jul-11
Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>0.8 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Air Transportation Tax Included A federal excise tax when required by the Internal Revenue Code on the air transportation portion of this service, if any, is paid by us. **Money-Back Guarantee** In the event of untimely delivery, FedEx will, at your request and with some limitations, refund or credit all transportation charges. See the current FedEx Service Guide for more information.

C.O.D. Services C.O.D. Service is required, please use a FedEx C.O.D. AIRBILL. THIS AIRBILL IF C.O.D. SERVICE IS NOT AVAILABLE WITH FedEx Service.

for proving the actual loss or damage. the total declared value, which is less. You are responsible but may not exceed the maximum allowable declared value(s) or is limited to the actual value of the package(s) lost or damaged. declared value of up to US\$250,000 in that case, our liability described above. (Example: 5 packages can have a total the US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed

- You may send more than one package on this Airbill and fill the US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed
- Items of extraordinary value include shipments containing such items as artwork, jewelry, furs, precious metals, negotiable instruments, and other items listed in the current FedEx Service Guide.
- For a US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed
- The 1. FedEx
- For a US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed

but not limited to loss of income or profits. knowledge that such damages might be incurred, including declared value of a shipment, whether or not FedEx had direct, incidental, special, or consequential, in excess of the in any event, we will not be liable for any damage, whether liability insurance.

• Unless a higher value is declared and paid for, our liability for each package is limited to US\$100. You may pay an additional charge for each additional US\$100 of declared value. The declared value does not constitute, nor do we provide, cargo

CUSTODY SEAL

DATE 7/20/11
SIGNATURE [Signature]

Filing A Claim YOU MUST MAKE ALL CLAIMS IN WRITING or online at fedex.com and notify us of your claim within strict time limits set out in the current FedEx Service Guide. You may call our Customer Service department at 1.800.GoFedEx 1.800.463.3339 to report a claim; however, to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim. If the recipient accepts your package without noting any damage on the delivery record, we will assume the package was delivered in good condition. For us to process your claim, you must make the original shipping cartons and packing

with actual authority, or acts of public authorities strikes, civil commotions, or acts of public enemies, war, the air, weather conditions, acts of public enemies, war, control, including but not limited to acts of God, perils of for loss, damage, or delay caused by events we cannot for loss of or damage to shipments of prohibited items, our Agreement, if you or the recipient violates any of the terms of an interest in the package, improper or insufficient packing, securing, marking, or for your acts or omissions, including but not limited to addressing, or those of the recipient or anyone else with

Responsibility For Packaging And Completing Airbill You are responsible for adequately packaging your goods and properly filling out this Airbill. Packages and/or weight on our best estimate of determined by us. **Responsibility For Payment** Instructions, as well as delivery costs, as well as your package to you or warehousing it pending disposition.

Not Assumed Unless a higher value is declared and paid for, our liability for each package is limited to US\$100. You may pay an additional charge for each additional US\$100 of declared value. The declared value does not constitute, nor do we provide, cargo

Terms And Conditions Summary

For the current FedEx Service Guide, which contains the complete Terms and Conditions, go to fedex.com.

FedEx Express NEW Package US Airbill

Tracking Number: **8757 1479 5737**

1 From
Date: 7/20/11
Sender's Name: Red Wolf
Company: HCSI
Address: 744 Horizon St Suite 140
City: Grand Junction State: CO ZIP: 81506

2 Your Internal Billing Reference

3 To
Recipient's Name: Sample Receiving
Company: ALS Group
Address: 3352 126th Ave
City: Holland State: MI ZIP: 49424

FedEx Retrieval Code: 0200

4 Express Package Service
NOTE: Service order has changed. Please select carefully.

Next Business Day
06 ☐ FedEx First Overnight
01 ☒ FedEx Priority Overnight
05 ☐ FedEx Standard Overnight

2 or 3 Business Days
49 ☐ NEW FedEx 2Day A.M.
03 ☐ FedEx 2Day
20 ☐ FedEx Express Saver

5 Packaging
06 ☐ FedEx Envelope
02 ☐ FedEx Pak
03 ☐ FedEx Box
04 ☐ FedEx Tube
01 ☒ FedEx Tube

6 Special Handling and Delivery Signature Options
03 ☒ SATURDAY DELIVERY
No Signature Required
Direct Signature
Indirect Signature

Does this shipment contain dangerous goods?
No 04 ☐ Yes 06 ☐ Dry Ice
Cargo Aircraft Only

7 Payment Bill to:
1 ☐ Sender
2 ☒ Recipient
3 ☐ Third Party
4 ☐ Credit Card
5 ☐ Cash/Chk



Appendix 3: Spruce Creek Raw Analytical Data



07-Jul-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Williams RWF 24-4 Pit Remediation**

Work Order: **1107049**

Dear Kris,

ALS Environmental received 2 samples on 02-Jul-2011 10:15 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 14.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: IL100452

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental The ALS logo, a stylized blue triangle with a yellow flame inside.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Work Order: 1107049

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1107049-01	Spruce Creek Upgradient	Surface Water		7/1/2011 09:15	7/2/2011 10:15	<input type="checkbox"/>
1107049-02	Spruce Creek Downgradient	Surface Water		7/1/2011 09:30	7/2/2011 10:15	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
WorkOrder: 1107049

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
SQL	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

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

ALS Group USA, Corp

Date: 07-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: Spruce Creek Upgradient
Collection Date: 7/1/2011 09:15 AM

Work Order: 1107049
Lab ID: 1107049-01
Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 7/5/2011	Analyst: RM
DRO (C10-C28)	ND		0.10	mg/L	1	7/6/2011 01:43 PM
Surr: 4-Terphenyl-d14	50.0		26-109	%REC	1	7/6/2011 01:43 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: RM
GRO (C6-C10)	ND		0.20	mg/L	1	7/5/2011 11:23 PM
Surr: Toluene-d8	100		70-130	%REC	1	7/5/2011 11:23 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260			Analyst: AK
Benzene	ND		1.0	µg/L	1	7/5/2011 05:35 PM
Ethylbenzene	ND		1.0	µg/L	1	7/5/2011 05:35 PM
m,p-Xylene	ND		2.0	µg/L	1	7/5/2011 05:35 PM
o-Xylene	ND		1.0	µg/L	1	7/5/2011 05:35 PM
Toluene	ND		1.0	µg/L	1	7/5/2011 05:35 PM
Xylenes, Total	ND		2.0	µg/L	1	7/5/2011 05:35 PM
Surr: 1,2-Dichloroethane-d4	97.4		70-120	%REC	1	7/5/2011 05:35 PM
Surr: 4-Bromofluorobenzene	94.5		75-120	%REC	1	7/5/2011 05:35 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	7/5/2011 05:35 PM
Surr: Toluene-d8	100		85-120	%REC	1	7/5/2011 05:35 PM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056			Analyst: ED
Chloride	2.8		1.0	mg/L	1	7/6/2011 11:55 AM
Sulfate	34		20	mg/L	20	7/6/2011 11:15 AM
TOTAL DISSOLVED SOLIDS						
			A2540 C			Analyst: RD
Total Dissolved Solids	290		10	mg/L	1	7/5/2011 10:44 AM

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

ALS Group USA, Corp

Date: 07-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: Spruce Creek Downgradient
Collection Date: 7/1/2011 09:30 AM

Work Order: 1107049
Lab ID: 1107049-02
Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 7/5/2011	Analyst: RM
DRO (C10-C28)	ND		0.10	mg/L	1	7/6/2011 01:43 PM
Surr: 4-Terphenyl-d14	58.5		26-109	%REC	1	7/6/2011 01:43 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: RM
GRO (C6-C10)	ND		0.20	mg/L	1	7/5/2011 11:49 PM
Surr: Toluene-d8	102		70-130	%REC	1	7/5/2011 11:49 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260			Analyst: AK
Benzene	ND		1.0	µg/L	1	7/5/2011 05:59 PM
Ethylbenzene	ND		1.0	µg/L	1	7/5/2011 05:59 PM
m,p-Xylene	ND		2.0	µg/L	1	7/5/2011 05:59 PM
o-Xylene	ND		1.0	µg/L	1	7/5/2011 05:59 PM
Toluene	ND		1.0	µg/L	1	7/5/2011 05:59 PM
Xylenes, Total	ND		2.0	µg/L	1	7/5/2011 05:59 PM
Surr: 1,2-Dichloroethane-d4	99.1		70-120	%REC	1	7/5/2011 05:59 PM
Surr: 4-Bromofluorobenzene	95.2		75-120	%REC	1	7/5/2011 05:59 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	7/5/2011 05:59 PM
Surr: Toluene-d8	101		85-120	%REC	1	7/5/2011 05:59 PM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056			Analyst: ED
Chloride	2.6		1.0	mg/L	1	7/6/2011 12:15 PM
Sulfate	33		20	mg/L	20	7/6/2011 11:34 AM
TOTAL DISSOLVED SOLIDS						
			A2540 C			Analyst: RD
Total Dissolved Solids	270		10	mg/L	1	7/5/2011 10:44 AM

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

ALS Group USA, Corp

Date: 07-Jul-11

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1107049

Project: Williams RWF 24-4 Pit Remediation

Batch ID: **34174**

Instrument ID **GC8**

Method: **SW8015M**

MBLK	Sample ID: DBLKW1-34174-34174				Units: mg/L		Analysis Date: 7/6/2011 01:18 PM			
Client ID:	Run ID: GC8_110705A				SeqNo: 1670864		Prep Date: 7/5/2011		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								
<i>Surr: 4-Terphenyl-d14</i>	<i>0.03813</i>	<i>0</i>	<i>0.05</i>	<i>0</i>	<i>76.3</i>	<i>26-109</i>	<i>0</i>			

The following samples were analyzed in this batch:

1107049-01B

1107049-02B

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

Client: HRL Compliance Solutions
Work Order: 1107049
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91920** Instrument ID **GC9** Method: **SW8015**

MBLK	Sample ID: MBLK-R91920-R91920				Units: µg/L			Analysis Date: 7/5/2011 07:50 PM		
Client ID:	Run ID: GC9_110705A				SeqNo: 1670090			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								
<i>Surr: Toluene-d8</i>	<i>105.8</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>106</i>	<i>70-130</i>	<i>0</i>			

LCS	Sample ID: LCS-R91920-R91920				Units: µg/L			Analysis Date: 7/5/2011 06:31 PM		
Client ID:	Run ID: GC9_110705A				SeqNo: 1670088			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)	25510	200	25000	0	102	70-130	0			
<i>Surr: Toluene-d8</i>	<i>100.5</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

LCSD	Sample ID: LCSD-R91920-R91920				Units: µg/L			Analysis Date: 7/5/2011 06:57 PM		
Client ID:	Run ID: GC9_110705A				SeqNo: 1670089			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)	25470	200	25000	0	102	70-130	25510	0.164	30	
<i>Surr: Toluene-d8</i>	<i>106.2</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>106</i>	<i>70-130</i>	<i>100.5</i>	<i>5.44</i>	<i>30</i>	

MS	Sample ID: 1107005-03B MS				Units: µg/Kg			Analysis Date: 7/6/2011 05:05 AM		
Client ID:	Run ID: GC9_110705A				SeqNo: 1670111			Prep Date: DF: 50		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1289000	2,500	1250000	0	103	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4924</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>98.5</i>	<i>50-150</i>	<i>0</i>			

MSD	Sample ID: 1107005-03B MSD				Units: µg/Kg			Analysis Date: 7/6/2011 05:31 AM		
Client ID:	Run ID: GC9_110705A				SeqNo: 1670112			Prep Date: DF: 50		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1225000	2,500	1250000	0	98	70-130	1289000	5.08	30	
<i>Surr: Toluene-d8</i>	<i>4973</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>99.5</i>	<i>50-150</i>	<i>4924</i>	<i>1</i>	<i>30</i>	

The following samples were analyzed in this batch: | 1107049-01A | 1107049-02A |

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

Client: HRL Compliance Solutions
Work Order: 1107049
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91847A** Instrument ID **VMS5** Method: **SW8260**

MBLK	Sample ID: VBLKW1-110705-R91847A				Units: µg/L		Analysis Date: 7/5/2011 12:42 PM			
Client ID:	Run ID: VMS5_110705A				SeqNo: 1669465		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								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>100.5</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>100</i>	<i>70-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>97.72</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>97.7</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>99.75</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>99.8</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>101.6</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>85-120</i>	<i>0</i>			

LCS	Sample ID: VLCSW1-110705-R91847A				Units: µg/L		Analysis Date: 7/5/2011 11:30 AM			
Client ID:	Run ID: VMS5_110705A				SeqNo: 1668330		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.97	1.0	20	0	99.8	80-120	0			
Ethylbenzene	19.47	1.0	20	0	97.4	75-125	0			
m,p-Xylene	37.93	2.0	40	0	94.8	75-130	0			
o-Xylene	18.81	1.0	20	0	94	80-120	0			
Toluene	19.45	1.0	20	0	97.2	75-120	0			
Xylenes, Total	56.74	2.0	60	0	94.6	75-130	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>98.59</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>98.6</i>	<i>70-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>99.76</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>99.8</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>101.6</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>99.65</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>99.6</i>	<i>85-120</i>	<i>0</i>			

LCSD	Sample ID: VLCSW1-110705-R91847A				Units: µg/L		Analysis Date: 7/5/2011 11:54 AM			
Client ID:	Run ID: VMS5_110705A				SeqNo: 1668331		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	19.97	1.49	30	
Ethylbenzene	19.99	1.0	20	0	100	75-125	19.47	2.64	30	
m,p-Xylene	38.89	2.0	40	0	97.2	75-130	37.93	2.5	30	
o-Xylene	19.22	1.0	20	0	96.1	80-120	18.81	2.16	30	
Toluene	19.91	1.0	20	0	99.6	75-120	19.45	2.34	30	
Xylenes, Total	58.11	2.0	60	0	96.8	75-130	56.74	2.39	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>98.72</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>98.7</i>	<i>70-120</i>	<i>98.59</i>	<i>0.132</i>	<i>30</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>100.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>99.76</i>	<i>0.37</i>	<i>30</i>	
<i>Surr: Dibromofluoromethane</i>	<i>100.9</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>101.6</i>	<i>0.672</i>	<i>30</i>	
<i>Surr: Toluene-d8</i>	<i>99.63</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>99.6</i>	<i>85-120</i>	<i>99.65</i>	<i>0.0201</i>	<i>30</i>	

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

Client: HRL Compliance Solutions
Work Order: 1107049
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91847A** Instrument ID **VMS5** Method: **SW8260**

MS				Sample ID: 1107004-08A MS			Units: µg/L		Analysis Date: 7/5/2011 08:48 PM		
Client ID:		Run ID: VMS5_110705A			SeqNo: 1669474		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.03	1.0	20	0	95.2	80-120	0				
Ethylbenzene	18.97	1.0	20	0	94.8	75-125	0				
m,p-Xylene	40.59	2.0	40	0	101	75-130	0				
o-Xylene	18.22	1.0	20	0	91.1	80-120	0				
Toluene	19.14	1.0	20	0	95.7	75-120	0				
Xylenes, Total	58.81	2.0	60	0	98	75-130	0				
Surr: 1,2-Dichloroethane-d4	94.72	0	100	0	94.7	70-120	0				
Surr: 4-Bromofluorobenzene	98.05	0	100	0	98	75-120	0				
Surr: Dibromofluoromethane	99.99	0	100	0	100	85-115	0				
Surr: Toluene-d8	98.72	0	100	0	98.7	85-120	0				

MSD				Sample ID: 1107004-08A MSD			Units: µg/L		Analysis Date: 7/5/2011 09:12 PM		
Client ID:		Run ID: VMS5_110705A			SeqNo: 1669475		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	18.28	1.0	20	0	91.4	80-120	19.03	4.02	30		
Ethylbenzene	18.2	1.0	20	0	91	75-125	18.97	4.14	30		
m,p-Xylene	36.5	2.0	40	0	91.2	75-130	40.59	10.6	30		
o-Xylene	17.41	1.0	20	0	87	80-120	18.22	4.55	30		
Toluene	18.56	1.0	20	0	92.8	75-120	19.14	3.08	30		
Xylenes, Total	53.91	2.0	60	0	89.8	75-130	58.81	8.69	30		
Surr: 1,2-Dichloroethane-d4	94.31	0	100	0	94.3	70-120	94.72	0.434	30		
Surr: 4-Bromofluorobenzene	97.55	0	100	0	97.6	75-120	98.05	0.511	30		
Surr: Dibromofluoromethane	100.7	0	100	0	101	85-115	99.99	0.747	30		
Surr: Toluene-d8	98.96	0	100	0	99	85-120	98.72	0.243	30		

The following samples were analyzed in this batch:

1107049-01A 1107049-02A

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

Client: HRL Compliance Solutions
Work Order: 1107049
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91913** Instrument ID **TDS** Method: **A2540 C**

MBLK Sample ID: **WBLKW1-110705-R91913** Units: **mg/L** Analysis Date: **7/5/2011 10:44 AM**

Client ID: Run ID: **TDS_110705A** SeqNo: **1669964** 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: **WLCSW1-110705-R91913** Units: **mg/L** Analysis Date: **7/5/2011 10:44 AM**

Client ID: Run ID: **TDS_110705A** SeqNo: **1669965** 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	481	10	495	0	97.2	80-120	0			

LCSD Sample ID: **WLCSDW1-110705-R91913** Units: **mg/L** Analysis Date: **7/5/2011 10:44 AM**

Client ID: Run ID: **TDS_110705A** SeqNo: **1669972** 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	484	10	495	0	97.8	80-120	481	0.622	20	

DUP Sample ID: **1107052-01A DUP** Units: **mg/L** Analysis Date: **7/5/2011 10:44 AM**

Client ID: Run ID: **TDS_110705A** SeqNo: **1669970** 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	614	10	0	0	0	0-0	609	0.818	20	

The following samples were analyzed in this batch:

1107049-01C	1107049-02C
-------------	-------------

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

Client: HRL Compliance Solutions
Work Order: 1107049
Project: Williams RWF 24-4 Pit Remediation

QC BATCH REPORT

Batch ID: **R91929** Instrument ID **IC4** Method: **SW9056**

MBLK	Sample ID: CCB/MBLK-R91929			Units: mg/L			Analysis Date: 7/6/2011 10:01 AM			
Client ID:	Run ID: IC4_110706A			SeqNo: 1670823			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	1.0								
Sulfate	ND	1.0								

LCS	Sample ID: CCV/LCS-R91929			Units: mg/L			Analysis Date: 7/6/2011 10:21 AM			
Client ID:	Run ID: IC4_110706A			SeqNo: 1670825			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	10.15	1.0	10	0	101	88-107	0			
Sulfate	9.908	1.0	10	0	99.1	85-110	0			

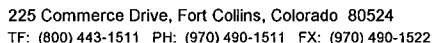
LCSD	Sample ID: CCV/LCSD-R91929			Units: mg/L			Analysis Date: 7/6/2011 10:41 AM			
Client ID:	Run ID: IC4_110706A			SeqNo: 1670828			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	10.17	1.0	10	0	102	88-107	10.15	0.194	20	
Sulfate	9.97	1.0	10	0	99.7	85-110	9.908	0.616	20	

MS	Sample ID: 1106833-01C MS			Units: mg/L			Analysis Date: 7/6/2011 12:57 PM			
Client ID:	Run ID: IC4_110706A			SeqNo: 1670834			Prep Date:		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	229.2	20	100	131.8	97.4	75-125	0			
Sulfate	128.8	20	100	30.15	98.6	75-125	0			

MSD	Sample ID: 1106833-01C MSD			Units: mg/L			Analysis Date: 7/6/2011 01:17 PM			
Client ID:	Run ID: IC4_110706A			SeqNo: 1670835			Prep Date:		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	230.4	20	100	131.8	98.6	75-125	229.2	0.51	20	
Sulfate	128.8	20	100	30.15	98.7	75-125	128.8	0.059	20	

The following samples were analyzed in this batch: | 1107049-01D | 1107049-02D |




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



1107049

Form 202r8

For metals or anions, please detail analytes below.

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Kris Rowe	7/1/2011	17:00
RECEIVED BY		TOM BEAMISH	07/02/11	1015
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

4.216

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 02-Jul-11 10:15

Work Order: 1107049

Received by: TBB

Checklist completed by Tom Bramish
eSignature

02-Jul-11
Date

Reviewed by: Bill Carey
eSignature

05-Jul-11
Date

Matrices: water

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			
Login Notes:			

=====

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

FedEx
Tracking
Number

8758 3475 6149

0200

Form
ID No.

FedEx Retrieval Copy

From
Date 7.1.11
Sender's FedEx
Account Number

Sender's
Name CASEY RICHARDSON Phone 970 243-3271

Company H&L COMPLIANCE SOLUTIONS INC

Address 7441 HORIZON CT 142
Dept./Floor/Suite/Room

City GRAND JCT State CO ZIP 81506

Your Internal Billing Reference

To
Recipient's
Name SAMPLE RECEIVING Phone 616 399-6070

Company ALS LABS

Address 3352 125TH AVE
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 HOLLAND State CO ZIP 49424

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 ☐



8758 3475 6149

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Next Business Day
06 ☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
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.

2 or 3 Business Days
49 ☐ **NEW FedEx 2Day A.M.**
Second business morning. * Saturday Delivery NOT available.
03 ☐ **FedEx 2Day**
Second business afternoon. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
20 ☐ **FedEx Express Saver**
Third business day. * Saturday Delivery NOT available.

5 Packaging. * Declared value limit \$500.
06 ☐ **FedEx Envelope*** **02** ☐ **FedEx 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.

Does this shipment contain dangerous goods?
One box must be checked.
☒ **No** **04** ☐ **Yes**
As per attached Shipper's Declaration. ☐ **Shipper's Declaration not required.** **06** ☐ **Dry Ice**
Dry ice, 9, UN 1845 _____ x _____ kg
☐ **Cargo Aircraft Only**

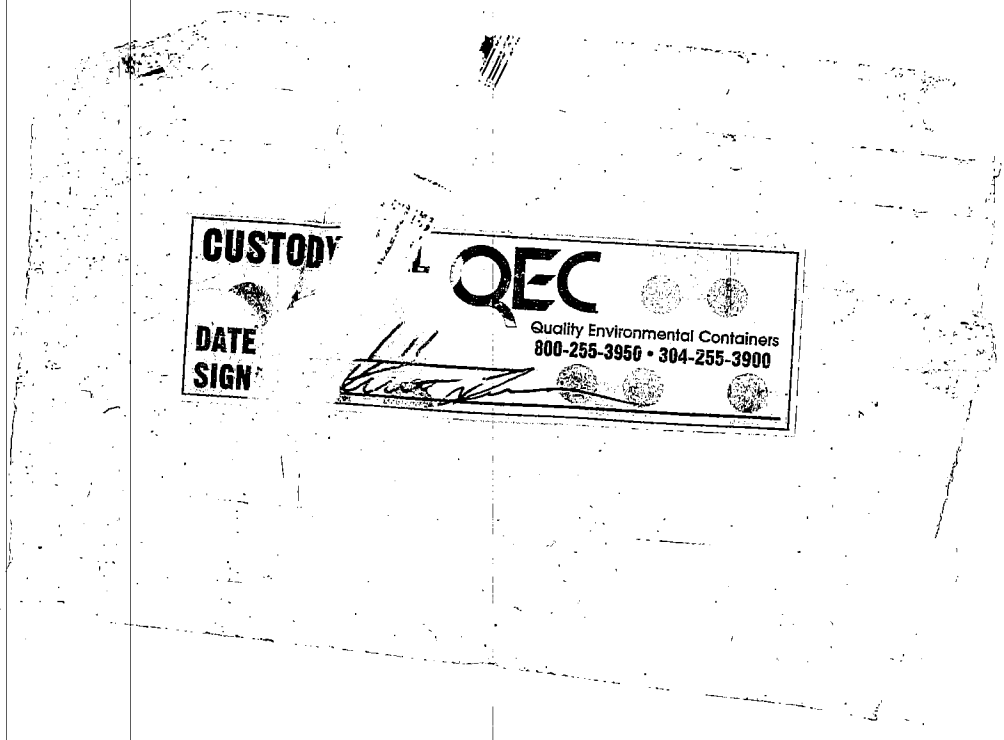
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐
1 ☐ **Sender** Acct. No. in Section 1 will be billed. **2** ☒ **Recipient** **3** ☐ **Third Party** **4** ☐ **Credit Card** **5** ☐ **Cash/Check**

Total Packages 1 Total Weight 73 lbs. Credit Card Auth. 612

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

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Appendix 4: Sundry Form 4

State of Colorado
Oil and Gas Conservation Commission

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



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	4. Contact Name Karolina Blaney	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Williams Production RMT Company	Phone: 970-683-2295	
3. Address: 1058 County Road 215 City: Parachute State: CO Zip: 81635	Fax: 970-285-9573	
5. API Number 05- N/A	OGCC Facility ID Number 414573	
6. Well/Facility Name: BERNKLAU RWF 24-4	7. Well/Facility Number RWF 24-4	Survey Plat
8. Location (Qtr/Tr, Sec, Twp, Rng, Meridian): SESW, Sec 4, T7S, R94W, 6th PM		Directional Survey
9. County: Garfield	10. Field Name: Rutison	Surface Eqpm Diagram
11. Federal, Indian or State Lease Number:		Technical Info Page X
		Other

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNL/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Tr, Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No
	Distance to nearest well same formation
	Surface owner consultation date:
GPS DATA:	
Date of Measurement	PDOP Reading
	Instrument Operator's Name
<input type="checkbox"/> CHANGE SPACING UNIT	<input type="checkbox"/> Remove from surface bond
Formation	Signed surface use agreement attached
Formation Code	
Spacing order number	
Unit Acreage	
Unit configuration	
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	<input type="checkbox"/> CHANGE WELL NAME
Effective Date:	NUMBER
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	From:
	To:
	Effective Date:
<input type="checkbox"/> ABANDONED LOCATION:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date well shut in or temporarily abandoned:
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Ready for Inspection:	MIT required if shut in longer than two years. Date of last MIT
<input type="checkbox"/> SPUD DATE:	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
<input type="checkbox"/> 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
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.	
Final reclamation will commence on approximately	
<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Report of Work Done	
Approximate Start Date:	Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)		
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Background	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: 7/26/2011 Email: Karolina.Blaney@williams.com
Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved: Title: Date:

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 96850	API Number: N/A
2. Name of Operator: Williams Production RMT	OGCC Facility ID # 414573
3. Well/Facility Name: BERNKLAU RWF 24-4	Well/Facility Number: RWF 24-4
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW, Sec 4, T7S, R94W, 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 BERNKLAU RWF 24-4 well pad relative to production pit closure at the subject facility in accordance with footnote 1 to the COGCC Table 9101-1.

The request is based on the analytical results below (see attached analytical)

Two (2) 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.

Pit Bottom - South End - 7.4 mg/kg
East Wall Middle - 4.52 mg/kg

Eight (8) grab samples were collected from nearby non-impacted, native soil from surface to 6" below to establish the background arsenic concentrations.

BKGD 1 - 3.5 mg/kg
BKGD 2 - 4.5 mg/kg
BKGD 3 - 3.2 mg/kg
BKGD 4 - 4.4 mg/kg
BKGD 5 - 4.9 mg/kg
BKGD 6 - 3.7 mg/kg
BKGD 7 - 5.1 mg/kg
BKGD 8 - 7.3 mg/kg

Williams is requesting this approval in order to proceed with closure and reclamation of the produced water pit on the BERNKLAU RWF 24-4 well pad.

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 1
Collection Date: 7/1/2011 12:15 PM

Work Order: 1107050
Lab ID: 1107050-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	130		SW8015M		Prep Date: 7/5/2011	Analyst: RM
			4.5	mg/Kg-dry	1	7/6/2011 02:56 PM
Surr: 4-Terphenyl-d14	113		39-115	%REC	1	7/6/2011 02:56 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			5.6	mg/Kg-dry	100	7/5/2011 10:03 PM
Surr: Toluene-d8	102		50-150	%REC	100	7/5/2011 10:03 PM
METALS BY ICP-MS						
Arsenic	3.5		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.87	mg/Kg-dry	2	7/6/2011 01:13 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See attached		SUBCONTRACT			Analyst: A&LGL
			as noted		1	7/8/2011
VOLATILE ORGANIC COMPOUNDS						
			SW8260			Analyst: MK
Benzene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Ethylbenzene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
m,p-Xylene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
o-Xylene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Toluene	ND		110	µg/Kg-dry	100	7/5/2011 07:48 PM
Xylenes, Total	ND		330	µg/Kg-dry	100	7/5/2011 07:48 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	100	7/5/2011 07:48 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	100	7/5/2011 07:48 PM
Surr: Dibromofluoromethane	96.3		85-115	%REC	100	7/5/2011 07:48 PM
Surr: Toluene-d8	100		85-115	%REC	100	7/5/2011 07:48 PM
MOISTURE						
Moisture	10		A2540 G			Analyst: JS
			0.050	% of sample	1	7/5/2011 11:55 AM
PH						
pH	8.70		SW9045D			Analyst: JS
			s.u.		1	7/5/2011 10:20 AM

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

Report Number: F11187-0111

Account 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: 1107050

DATE RECEIVED: 07/06/2011

DATE REPORTED: 07/08/2011

PAGE: 2

P.O. NUMBER: 20-122010363

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
5399	05B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.33	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	59	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	6	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	11	ppm	USDA Handbook 60
		Sodium Adsorption Ratio	0.4	-	USDA Handbook 60

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 2
Collection Date: 7/1/2011 12:30 PM

Work Order: 1107050
Lab ID: 1107050-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	28		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>95.7</i>		<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 02:56 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 10:30 PM</i>
METALS BY ICP-MS						
Arsenic	4.5		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.78	mg/Kg-dry	2	<i>7/6/2011 01:19 PM</i>
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		SW8260			Analyst: MK
<i>Ethylbenzene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>m,p-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>o-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Toluene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Xylenes, Total</i>	<i>ND</i>		<i>330</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>103</i>		<i>70-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>102</i>		<i>75-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: Dibromofluoromethane</i>	<i>94.7</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
<i>Surr: Toluene-d8</i>	<i>100</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:12 PM</i>
MOISTURE						
Moisture	10		A2540 G			Analyst: JS
			0.050	% of sample	1	<i>7/5/2011 11:55 AM</i>

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation
Sample ID: BKGD 3
Collection Date: 7/1/2011 12:45 PM

Work Order: 1107050
Lab ID: 1107050-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	65		SW8015M		Prep Date: 7/5/2011	Analyst: RM
<i>Surr: 4-Terphenyl-d14</i>	<i>90.6</i>		<i>4.4</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>7/6/2011 03:21 PM</i>
			<i>39-115</i>	<i>%REC</i>	<i>1</i>	<i>7/6/2011 03:21 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>5.4</i>	<i>mg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 10:57 PM</i>
			<i>50-150</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 10:57 PM</i>
METALS BY ICP-MS						
Arsenic	3.2		SW6020A		Prep Date: 7/5/2011	Analyst: CES
			0.77	mg/Kg-dry	2	<i>7/6/2011 01:25 PM</i>
VOLATILE ORGANIC COMPOUNDS						
Benzene	ND		SW8260			Analyst: MK
<i>Ethylbenzene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>m,p-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>o-Xylene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Toluene</i>	<i>ND</i>		<i>110</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Xylenes, Total</i>	<i>ND</i>		<i>320</i>	<i>µg/Kg-dry</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>104</i>		<i>70-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>100</i>		<i>75-120</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: Dibromofluoromethane</i>	<i>95.2</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
<i>Surr: Toluene-d8</i>	<i>100</i>		<i>85-115</i>	<i>%REC</i>	<i>100</i>	<i>7/5/2011 08:35 PM</i>
MOISTURE						
Moisture	7.0		A2540 G			Analyst: JS
			0.050	% of sample	1	<i>7/5/2011 11:55 AM</i>

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



11-Jul-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Williams RWF 24-4 Pit Remediation 11-205**

Work Order: **1107016**

Dear Kris,

ALS Environmental received 3 samples on 01-Jul-2011 10:00 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,

A handwritten signature in black ink that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: IL100452

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RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 11-205
Work Order: 1107016

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1107016-01	Pit Bottom - South End	Soil		6/30/2011 12:00	7/1/2011 10:00	<input type="checkbox"/>
1107016-02	Pit Bottom - Northeast Corner	Soil		6/30/2011 12:30	7/1/2011 10:00	<input type="checkbox"/>
1107016-03	Pit Bottom - Middle	Soil		6/30/2011 13:00	7/1/2011 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 11-205
Work Order: 1107016

Case Narrative

Batch 34156 MS/MSD data for Metals is not related to this project's samples.

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 11-205
WorkOrder: 1107016

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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

<u>Units Reported</u>	<u>Description</u>
% 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: 11-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 11-205

Work Order: 1107016

Sample ID: Pit Bottom - South End

Lab ID: 1107016-01

Collection Date: 6/30/2011 12:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	41		24	mg/Kg-dry	5	Analyst: RM 7/5/2011 02:44 PM
Surr: 4-Terphenyl-d14	41.5		39-115	%REC	5	7/5/2011 02:44 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		5.7	mg/Kg-dry	100	Analyst: RM 7/1/2011 07:06 PM
Surr: Toluene-d8	102		50-150	%REC	100	7/1/2011 07:06 PM
MERCURY BY CVAA						
Mercury	0.027		0.018	mg/Kg-dry	1	Analyst: CES 7/5/2011 02:02 PM
METALS BY ICP-MS						
Arsenic	7.4		0.81	mg/Kg-dry	2	Analyst: CES 7/5/2011 03:23 PM
Barium	5,000		81	mg/Kg-dry	200	7/5/2011 03:35 PM
Cadmium	ND		0.32	mg/Kg-dry	2	7/5/2011 03:23 PM
Chromium	16		0.81	mg/Kg-dry	2	7/5/2011 03:23 PM
Copper	14		0.81	mg/Kg-dry	2	7/5/2011 03:23 PM
Lead	13		0.81	mg/Kg-dry	2	7/5/2011 03:23 PM
Nickel	24		0.81	mg/Kg-dry	2	7/5/2011 03:23 PM
Selenium	0.98		0.81	mg/Kg-dry	2	7/5/2011 03:23 PM
Silver	ND		0.81	mg/Kg-dry	2	7/5/2011 03:23 PM
Zinc	42		1.6	mg/Kg-dry	2	7/5/2011 03:23 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	7/7/11		attached		1	Analyst: A&LGL 7/7/2011
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		34	µg/Kg-dry	1	Analyst: HL 7/5/2011 01:33 PM
Anthracene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Chrysene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Fluoranthene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Fluorene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Naphthalene	59		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Pyrene	ND		34	µg/Kg-dry	1	7/5/2011 01:33 PM
Surr: 2,4,6-Tribromophenol	84.8		34-140	%REC	1	7/5/2011 01:33 PM

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

ALS Group USA, Corp

Date: 11-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 11-205

Work Order: 1107016

Sample ID: Pit Bottom - South End

Lab ID: 1107016-01

Collection Date: 6/30/2011 12:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	48.3		12-100	%REC	1	7/5/2011 01:33 PM
<i>Surr: 2-Fluorophenol</i>	54.3		33-117	%REC	1	7/5/2011 01:33 PM
<i>Surr: 4-Terphenyl-d14</i>	81.3		25-137	%REC	1	7/5/2011 01:33 PM
<i>Surr: Nitrobenzene-d5</i>	48.3		37-107	%REC	1	7/5/2011 01:33 PM
<i>Surr: Phenol-d6</i>	53.5		40-106	%REC	1	7/5/2011 01:33 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG
Benzene	ND		110	µg/Kg-dry	100	7/1/2011 06:30 PM
Ethylbenzene	ND		110	µg/Kg-dry	100	7/1/2011 06:30 PM
m,p-Xylene	ND		110	µg/Kg-dry	100	7/1/2011 06:30 PM
o-Xylene	ND		110	µg/Kg-dry	100	7/1/2011 06:30 PM
Toluene	ND		110	µg/Kg-dry	100	7/1/2011 06:30 PM
Xylenes, Total	ND		340	µg/Kg-dry	100	7/1/2011 06:30 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	102		70-120	%REC	100	7/1/2011 06:30 PM
<i>Surr: 4-Bromofluorobenzene</i>	99.4		75-120	%REC	100	7/1/2011 06:30 PM
<i>Surr: Dibromofluoromethane</i>	96.2		85-115	%REC	100	7/1/2011 06:30 PM
<i>Surr: Toluene-d8</i>	101		85-115	%REC	100	7/1/2011 06:30 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	16			mg/Kg-dry	1	7/6/2011 04:00 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 7/6/2011	Analyst: MB
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	7/6/2011 02:45 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	12		0.050	% of sample	1	7/1/2011 01:48 PM
PH			SW9045D			Analyst: JS
pH	8.44			s.u.	1	7/5/2011 10:20 AM

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



22-Jul-2011

Kris Rowe
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **Williams RWF 24-4 Pit Remediation 7/20/11**

Work Order: **1107517**

Dear Kris,

ALS Environmental received 5 samples on 21-Jul-2011 11:25 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 14.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: IL100452

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Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 7/20/11
Work Order: 1107517

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1107517-01	Background 4	Soil		7/20/2011 11:33	7/21/2011 11:25	<input type="checkbox"/>
1107517-02	Background 5	Soil		7/20/2011 11:51	7/21/2011 11:25	<input type="checkbox"/>
1107517-03	Background 6	Soil		7/20/2011 12:07	7/21/2011 11:25	<input type="checkbox"/>
1107517-04	Background 7	Soil		7/20/2011 12:20	7/21/2011 11:25	<input type="checkbox"/>
1107517-05	Background 8	Soil		7/20/2011 12:39	7/21/2011 11:25	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 7/20/11
Work Order: 1107517

Case Narrative

Batch 34471 sample Background 8 MS recovery for Arsenic was above control limits due to matrix, causing the RPD to be above control limits. The result for Arsenic in the parent sample may be biased high if the same matrix interference was present in the sample aliquot used for the parent sample.

Client: HRL Compliance Solutions
Project: Williams RWF 24-4 Pit Remediation 7/20/11
WorkOrder: 1107517

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 4

Lab ID: 1107517-01

Collection Date: 7/20/2011 11:33 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	4.4		0.96	mg/Kg-dry	2	7/22/2011 02:12 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	15		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 5

Lab ID: 1107517-02

Collection Date: 7/20/2011 11:51 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	4.9		0.94	mg/Kg-dry	2	7/22/2011 02:18 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	17		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 6

Lab ID: 1107517-03

Collection Date: 7/20/2011 12:07 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	3.7		0.84	mg/Kg-dry	2	7/22/2011 02:24 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	17		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 7

Lab ID: 1107517-04

Collection Date: 7/20/2011 12:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	5.1		0.85	mg/Kg-dry	2	7/22/2011 02:30 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	17		0.050	% of sample	1	7/21/2011 01:09 PM

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

ALS Group USA, Corp

Date: 22-Jul-11

Client: HRL Compliance Solutions

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Work Order: 1107517

Sample ID: Background 8

Lab ID: 1107517-05

Collection Date: 7/20/2011 12:39 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 7/21/2011	Analyst: CES
Arsenic	7.3		0.90	mg/Kg-dry	2	7/22/2011 02:36 PM
MOISTURE			A2540 G			Analyst: JS
Moisture	14		0.050	% of sample	1	7/21/2011 01:09 PM

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1107517

Project: Williams RWF 24-4 Pit Remediation 7/20/11

Batch ID: **34471** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK	Sample ID: MBLK-34471-34471				Units: mg/Kg		Analysis Date: 7/22/2011 01:31 PM			
Client ID:	Run ID: ICPMS1_110722B				SeqNo: 1684269		Prep Date: 7/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.02426	0.25								J

LCS	Sample ID: LCS-34471-34471				Units: mg/Kg		Analysis Date: 7/22/2011 02:01 PM			
Client ID:	Run ID: ICPMS1_110722B				SeqNo: 1684272		Prep Date: 7/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.314	0.25	5	0	86.3	80-120	0			

LCSD	Sample ID: LCSD-34471-34471				Units: mg/Kg		Analysis Date: 7/22/2011 02:07 PM			
Client ID:	Run ID: ICPMS1_110722B				SeqNo: 1684273		Prep Date: 7/21/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.369	0.25	5	0	87.4	80-120	4.314	1.27	20	

MS	Sample ID: 1107517-05AMS				Units: mg/Kg		Analysis Date: 7/22/2011 02:42 PM			
Client ID: Background 8	Run ID: ICPMS1_110722B				SeqNo: 1684279		Prep Date: 7/21/2011		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	47.35	0.75	7.496	6.267	548	80-120	0			S

MSD	Sample ID: 1107517-05AMSD				Units: mg/Kg		Analysis Date: 7/22/2011 02:47 PM			
Client ID: Background 8	Run ID: ICPMS1_110722B				SeqNo: 1684280		Prep Date: 7/21/2011		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.02	0.75	7.53	6.267	89.7	80-120	47.35	114	25	R

The following samples were analyzed in this batch:

1107517-01A	1107517-02A	1107517-03A
1107517-04A	1107517-05A	

Client: HRL Compliance Solutions
Work Order: 1107517
Project: Williams RWF 24-4 Pit Remediation 7/20/11

QC BATCH REPORT

Batch ID: **R92507** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R92507				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID:	Run ID: MOIST_110721C				SeqNo: 1683714			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS	Sample ID: LCS-R92507				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID:	Run ID: MOIST_110721C				SeqNo: 1683713			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	99.99	0.050	100	0	100	99.5-100.5	0			

DUP	Sample ID: 1107511-05BDUP				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID:	Run ID: MOIST_110721C				SeqNo: 1683695			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	9.85	0.050	0	0	0	0-0	9.1	7.92	20	

DUP	Sample ID: 1107517-01ADUP				Units: % of sample			Analysis Date: 7/21/2011 01:09 PM		
Client ID: Background 4	Run ID: MOIST_110721C				SeqNo: 1683697			Prep Date: DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.05	0.050	0	0	0	0-0	15.47	2.75	20	

The following samples were analyzed in this batch:



1107517-01A	1107517-02A	1107517-03A
1107517-04A	1107517-05A	

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



1107517

Form 202r8

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Kris Rowe	7/20/2011	17:00
RECEIVED BY		KEITH WIERENGA	7/21/11	1125
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 21-Jul-11 11:25

Work Order: 1107517

Received by: KRW

Checklist completed by Keith Wurenga
eSignature

21-Jul-11
Date

Reviewed by: Ann Preston
eSignature

21-Jul-11
Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>0.8 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Air Transportation Tax Included A federal excise tax when required by the Internal Revenue Code on the air transportation portion of this service, if any, is paid by us. **Money-Back Guarantee** In the event of untimely delivery, FedEx will, at your request and with some limitations, refund or credit all transportation charges. See the current FedEx Service Guide for more information.

C.O.D. Services C.O.D. Service is required, please use a FedEx C.O.D. AIRBILL. THIS AIRBILL IF C.O.D. SERVICE IS NOT AVAILABLE WITH FedEx Service.

for proving the actual loss or damage. the total declared value, which is less. You are responsible but may not exceed the maximum allowable declared value(s) or is limited to the actual value of the package(s) lost or damaged. declared value of up to US\$250,000 in that case, our liability described above. (Example: 5 packages can have a total the US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed

- You may send more than one package on this Airbill and fill the US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed
- Items of extraordinary value include shipments containing such items as artwork, jewelry, furs, precious metals, negotiable instruments, and other items listed in the current FedEx Service Guide.
- For a US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed
- The 1. FedEx
- For a US\$500, US\$1,000, or US\$50,000 per package limit in the total declared value for all packages, not to exceed

but not limited to loss of income or profits. knowledge that such damages might be incurred, including declared value of a shipment, whether or not FedEx had direct, incidental, special, or consequential, in excess of the in any event, we will not be liable for any damage, whether liability insurance.

• Unless a higher value is declared and paid for, our liability for each additional US\$100 of declared value. The charge for each additional US\$100 of declared value. The declared value does not constitute, nor do we provide, cargo

Not Assumed

Limitations On Our Liability And Liabilities

your package to you or warehousing it pending disposition. all delivery costs, as well as payment instructions, you are responsible for. We are not responsible for any loss of or damage to your package, whether or not it is based on our best estimate of the value of the package, and/or an estimated "declared" value. We are not responsible for any loss of or damage to your package, whether or not it is based on our best estimate of the value of the package, and/or an estimated "declared" value.

CUSTODY SEAL

DATE 7/20/11
SIGNATURE [Signature]

Filing A Claim YOU MUST MAKE ALL CLAIMS IN WRITING or online at fedex.com and notify us of your claim within strict time limits set out in the current FedEx Service Guide. You may call our Customer Service department at 1.800.GoFedEx 1.800.463.3339 to report a claim; however, to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim. If the recipient accepts your package without noting any damage on the delivery record, we will assume the package was delivered in good condition. For us to process your claim, you must make the original shipping cartons and packing

with actual authority, or acts of public authorities strikes, civil commotions, or acts of public authorities control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, war, for loss, damage, or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, war, for loss of or damage to shipments of prohibited items, if you or the recipient violates any of the terms of our Agreement, an interest in the package, improper or insufficient packing, securing, marking, or addressing, or those of the recipient or anyone else with for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking, or addressing, or those of the recipient or anyone else with an interest in the package.

• We won't be liable:

Responsibility For Packaging And Completing Airbill

You are responsible for adequately packaging your goods and properly filling out this Airbill. We are not responsible for any loss of or damage to your package, whether or not it is based on our best estimate of the value of the package, and/or an estimated "declared" value. We are not responsible for any loss of or damage to your package, whether or not it is based on our best estimate of the value of the package, and/or an estimated "declared" value.

Definitions On this Airbill, "we," "our," "us," and "FedEx" refer to Federal Express Corporation, its employees, and agents. "you" and "your" refer to the sender, its employees, and agents. By giving us your package to deliver, you agree to all the terms on this Airbill and in the current FedEx Service Guide, which is available at fedex.com or at a FedEx location. You also agree to those terms on behalf of any third party with an interest in the package. If there is a conflict between the current FedEx Service Guide and this Airbill, the current FedEx Service Guide will control. No one is authorized to change the terms of our Agreement.

Terms And Conditions Summary

For the current FedEx Service Guide, which contains the complete Terms and Conditions, go to fedex.com.

FedEx Express NEW Package US Airbill

Tracking Number: **8757 1479 5737**

1 From
Date: 7/20/11
Sender's Name: Red Wolf
Company: HCSI
Address: 744 Horizon St Suite 140
City: Grand Junction State: CO ZIP: 81506
Sender's FedEx Account Number: 0200
Phone: 970 243-3271

2 Your Internal Billing Reference

3 To
Recipient's Name: Sample Receiving
Company: ALS Group
Address: 3352 126th Ave
City: Holland State: MI ZIP: 49424
Phone: 616 399-6070

4 Address
Address: 3352 126th Ave
City: Holland State: MI ZIP: 49424

FedEx Retrieval Code

4 Express Package Service
NOTE: Service order has changed. Please select carefully.

Next Business Day
06 ☐ FedEx First Overnight
01 ☒ FedEx Priority Overnight
05 ☐ FedEx Standard Overnight

2 or 3 Business Days
49 ☐ NEW FedEx 2Day A.M.
03 ☐ FedEx 2Day
20 ☐ FedEx Express Saver

5 Packaging
06 ☐ FedEx Envelope
02 ☐ FedEx Pak
03 ☐ FedEx Box
04 ☐ FedEx Tube
01 ☒ FedEx Tube

6 Special Handling and Delivery Signature Options
03 ☒ SATURDAY DELIVERY
No Signature Required
Direct Signature
Indirect Signature

Does this shipment contain dangerous goods?
No 04 ☐ Yes 06 ☐ Dry Ice
Cargo Aircraft Only

7 Payment Bill to:
1 ☐ Sender
2 ☒ Recipient
3 ☐ Third Party
4 ☐ Credit Card
5 ☐ Cash/Chk

