

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: 6720	4. Contact Name: Habib Guerrero	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Robert L. Bayless LLC	Phone: 505-564-7810	
3. Address: PO BOX 168 City: Farmington State: NM Zip: 87499	Fax: 505-326-6911	
5. API Number 05- See Page 2	OGCC Facility ID Number N/A	Survey Plat
6. Well/Facility Name: Philadelphia Creek	7. Well/Facility Number N/A	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): See Page 2		Surface Eqpm Diagram
9. County: Rio Blanco	10. Field Name: Philadelphia Creek	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number:		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"/>
Bottomhole location Qtr/Qtr, 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 <input type="checkbox"/>
	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	
Formation	Formation Code
Spacing order number	Unit Acreage
	Unit configuration
<input type="checkbox"/> Remove from surface bond	
Signed surface use agreement attached	
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	
Effective Date:	
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	
<input type="checkbox"/> CHANGE WELL NAME	
From:	NUMBER
To:	
Effective Date:	
<input type="checkbox"/> ABANDONED LOCATION:	
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date Ready for inspection:	
<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS	
Date well shut in or temporarily abandoned:	
Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No	
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	
Method used	Cementing tool setting/perf depth
Cement volume	Cement top
Cement bottom	Date
*submit cbl and cement job summaries	
<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"/> Change Drilling Plans	<input type="checkbox"/> Repair Well
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Pit Closures
	<input type="checkbox"/> E&P Waste Disposal
	<input type="checkbox"/> Beneficial Reuse of E&P Waste
	<input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases

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

Signed: Habib Guerrero Date: 1/4/2013 Email: hguerrero@rlbayless.com  
Print Name: Habib Guerrero Title: Operation Engineer

COGCC Approved: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:



# TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 6720 API Number: See Below
2. Name of Operator: Robert L. Bayless LLC OGCC Facility ID # N/A
3. Well/Facility Name: Philadelphia Creek Well/Facility Number: N/A
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): See Below

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**

Robert L. Bayless (Bayless) is submitting this Sundry Notice Form 4 as notice of cloures for the pits listed below located in the Philadelphia Creek unit, in Rio Blanco County. By definition as outlined in COGCC Rule 903, these piggings/blow down pits do not require the necessary Form 15 permitting.

Samples have been collected from each of the pits listed from a depth of 0-12" below surface to be analyzed for COGCC Table 910-1. Analysis indicates that soils with the pits do not exceed standards setforth in COGCC Table 910-1. It was noted that these pigging/blowdown pits may have been construced in the early 1980's and were never put into use.

Bayless is requesting approval to backfill the pigging/blowdown pits listed below;

Philadelphia Creek # 30	API # 05-103-08376	Location: NESW, Sec 2, T2S, R101W , 6th PM
Philadelphia Creek # 36	API # 05-103-08422	Location: NWSE, Sec 36, T1S, R101W, 6th PM
Philadelphia Creek # 41	API # 05-103-08515	Location: NWSW, Sec 28, T1S, R101W, 6th PM
Philadephia Creek # 42	API # 05-103-08525	Location: NWNW, Sec 28, T1S, R101W, 6th PM
Philadephia Creek # 43	API # 05-103-08516	Location: SENE, Sec 28, T1S, R101W, 6th PM

Attached is the analyitcal results for each of the pits listed above.

Attachment 5: Philadelphia Creek #43 Analytical Results



06-Jul-2012

Kris Rowe  
HRL Compliance Solutions  
2385 F 1/2 Road  
Grand Junction, CO 81505

Re: **Bayless Pit Closure Philadelphia Creek #43 6/26/12**

Work Order: **1206950**

Dear Kris,

ALS Environmental received 5 samples on 28-Jun-2012 09:00 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 32.

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: MN331938

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

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

Environmental

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** HRL Compliance Solutions  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12  
**Work Order:** 1206950

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**Work Order Sample Summary**

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<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>
1206950-01	Pit Bottom (ETC)	Soil		6/26/2012 11:00	6/28/2012 09:00	<input type="checkbox"/>
1206950-02	Pit Bottom (BAY)	Soil		6/26/2012 11:05	6/28/2012 09:00	<input type="checkbox"/>
1206950-03	BKGD 1	Soil		6/26/2012 11:10	6/28/2012 09:00	<input type="checkbox"/>
1206950-04	BKGD 2	Soil		6/26/2012 11:15	6/28/2012 09:00	<input type="checkbox"/>
1206950-05	BKGD 3	Soil		6/26/2012 11:20	6/28/2012 09:00	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12  
**Work Order:** 1206950

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**Case Narrative**

Batch 42051 MS/MSD data for PAHs is not related to this project's samples.

Batch 42093 sample Pit Bottom (ETC) MS/MSD recoveries for Barium and Zinc were below control limits, however, the results in the parent sample were greater than 4x the spiked amount. No qualification is required for Barium and Zinc. The MS/MSD recoveries for several other metals were also below control limits. The sample results may be biased low for these elements in the parent sample.

Batch 42154 MS/MSD data for Hexavalent Chromium is not related to this project's samples.

**Client:** HRL Compliance Solutions  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12  
**WorkOrder:** 1206950

## **QUALIFIERS, ACRONYMS, UNITS**

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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% 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: 06-Jul-12

Client: HRL Compliance Solutions

Project: Bayless Pit Closure Philadelphia Creek #43 6/26/12

Work Order: 1206950

Sample ID: Pit Bottom (ETC)

Lab ID: 1206950-01

Collection Date: 6/26/2012 11:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>41</b>		<b>SW8015M</b>		Prep Date: <b>6/29/2012</b>	Analyst: <b>CW</b>
			<b>4.3</b>	<b>mg/Kg-dry</b>	1	6/29/2012 07:56 PM
Surr: 4-Terphenyl-d14	41.1		39-115	%REC	1	6/29/2012 07:56 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015</b>			Analyst: <b>CW</b>
			<b>2.7</b>	<b>mg/Kg-dry</b>	50	7/2/2012 12:18 PM
Surr: Toluene-d8	113		50-150	%REC	50	7/2/2012 12:18 PM
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.79</b>		<b>SW7471</b>		Prep Date: <b>6/29/2012</b>	Analyst: <b>LR</b>
			<b>0.099</b>	<b>mg/Kg-dry</b>	5	6/29/2012 03:02 PM
<b>METALS BY ICP-MS</b>						
<b>Arsenic</b>	<b>5.2</b>		<b>SW6020A</b>		Prep Date: <b>7/2/2012</b>	Analyst: <b>ML</b>
			<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Barium</b>	<b>240</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Cadmium</b>	<b>0.50</b>		<b>0.32</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Chromium</b>	<b>9.6</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Copper</b>	<b>24</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Lead</b>	<b>22</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Nickel</b>	<b>16</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Selenium</b>	<b>1.3</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Silver</b>	<b>ND</b>		<b>0.81</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>Zinc</b>	<b>70</b>		<b>1.6</b>	<b>mg/Kg-dry</b>	2	7/2/2012 07:02 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>		<b>Rcvd 7/5/12</b>	<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
			<b>as noted</b>		1	7/5/2012
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>Acenaphthene</b>	<b>ND</b>		<b>SW8270</b>		Prep Date: <b>6/29/2012</b>	Analyst: <b>RM</b>
			<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Anthracene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Benzo(a)anthracene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Benzo(a)pyrene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Benzo(b)fluoranthene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Benzo(g,h,i)perylene</b>	<b>ND</b>		<b>31</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Benzo(k)fluoranthene</b>	<b>ND</b>		<b>31</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Chrysene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Dibenzo(a,h)anthracene</b>	<b>ND</b>		<b>19</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Fluoranthene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Fluorene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Indeno(1,2,3-cd)pyrene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Naphthalene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
<b>Pyrene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	1	7/2/2012 08:38 PM
Surr: 2-Fluorobiphenyl	74.4		12-100	%REC	1	7/2/2012 08:38 PM

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



# ALS Group USA, Corp

Date: 06-Jul-12

**Client:** HRL Compliance Solutions

**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

**Work Order:** 1206950

**Sample ID:** Pit Bottom (ETC)

**Lab ID:** 1206950-01

**Collection Date:** 6/26/2012 11:00 AM

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Terphenyl-d14	83.5		25-137	%REC	1	7/2/2012 08:38 PM
Surr: Nitrobenzene-d5	64.5		37-107	%REC	1	7/2/2012 08:38 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>		Prep Date: 6/29/2012	Analyst: BG
Benzene	ND		32	µg/Kg-dry	1	7/2/2012 07:54 PM
Ethylbenzene	ND		32	µg/Kg-dry	1	7/2/2012 07:54 PM
m,p-Xylene	ND		64	µg/Kg-dry	1	7/2/2012 07:54 PM
o-Xylene	ND		32	µg/Kg-dry	1	7/2/2012 07:54 PM
Toluene	ND		32	µg/Kg-dry	1	7/2/2012 07:54 PM
Xylenes, Total	ND		96	µg/Kg-dry	1	7/2/2012 07:54 PM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	7/2/2012 07:54 PM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	7/2/2012 07:54 PM
Surr: Dibromofluoromethane	94.8		70-130	%REC	1	7/2/2012 07:54 PM
Surr: Toluene-d8	98.4		70-130	%REC	1	7/2/2012 07:54 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: MB
Chromium, Trivalent	9.6		0.54	mg/Kg-dry	1	7/5/2012 05:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 7/2/2012	Analyst: MB
Chromium, Hexavalent	ND		0.53	mg/Kg-dry	1	7/5/2012 03:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: CG
Moisture	6.7		0.050	% of sample	1	6/28/2012 03:09 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: NZ
pH	8.17			s.u.	1	6/29/2012 12:00 PM

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

# ALS Group USA, Corp

Date: 06-Jul-12

Client: HRL Compliance Solutions

Project: Bayless Pit Closure Philadelphia Creek #43 6/26/12

Work Order: 1206950

Sample ID: Pit Bottom (BAY)

Lab ID: 1206950-02

Collection Date: 6/26/2012 11:05 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>24</b>		<b>4.3</b>	<b>mg/Kg-dry</b>	<b>1</b>	<b>Analyst: CW</b> 6/29/2012 07:56 PM
Surr: 4-Terphenyl-d14	47.6		39-115	%REC	1	6/29/2012 07:56 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>2.6</b>	<b>mg/Kg-dry</b>	<b>50</b>	<b>Analyst: CW</b> 7/2/2012 12:43 PM
Surr: Toluene-d8	111		50-150	%REC	50	7/2/2012 12:43 PM
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.17</b>		<b>0.019</b>	<b>mg/Kg-dry</b>	<b>1</b>	<b>Analyst: LR</b> 6/29/2012 01:59 PM
<b>METALS BY ICP-MS</b>						
<b>Arsenic</b>	<b>6.8</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	<b>Analyst: ML</b> 7/3/2012 12:42 PM
<b>Barium</b>	<b>190</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Cadmium</b>	<b>0.62</b>		<b>0.28</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Chromium</b>	<b>6.8</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Copper</b>	<b>31</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/3/2012 12:42 PM
<b>Lead</b>	<b>19</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Nickel</b>	<b>16</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Selenium</b>	<b>1.3</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Silver</b>	<b>ND</b>		<b>0.70</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/2/2012 07:51 PM
<b>Zinc</b>	<b>76</b>		<b>1.4</b>	<b>mg/Kg-dry</b>	<b>2</b>	7/3/2012 12:42 PM
<b>SUBCONTRACTED ANALYSES</b>						
<b>Subcontracted Analyses</b>	<b>Rcvd 7/5/12</b>		<b>SUBCONTRACT</b>	<b>as noted</b>	<b>1</b>	<b>Analyst: A&amp;LGL</b> 7/5/2012
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>Acenaphthene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	<b>Analyst: RM</b> 7/2/2012 09:15 PM
<b>Anthracene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Benzo(a)anthracene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Benzo(a)pyrene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Benzo(b)fluoranthene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Benzo(g,h,i)perylene</b>	<b>ND</b>		<b>31</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Benzo(k)fluoranthene</b>	<b>ND</b>		<b>31</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Chrysene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Dibenzo(a,h)anthracene</b>	<b>ND</b>		<b>19</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Fluoranthene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Fluorene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Indeno(1,2,3-cd)pyrene</b>	<b>ND</b>		<b>21</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Naphthalene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
<b>Pyrene</b>	<b>ND</b>		<b>16</b>	<b>µg/Kg-dry</b>	<b>1</b>	7/2/2012 09:15 PM
Surr: 2-Fluorobiphenyl	70.9		12-100	%REC	1	7/2/2012 09:15 PM

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

# ALS Group USA, Corp

Date: 06-Jul-12

**Client:** HRL Compliance Solutions

**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

**Work Order:** 1206950

**Sample ID:** Pit Bottom (BAY)

**Lab ID:** 1206950-02

**Collection Date:** 6/26/2012 11:05 AM

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Terphenyl-d14	85.8		25-137	%REC	1	7/2/2012 09:15 PM
Surr: Nitrobenzene-d5	66.7		37-107	%REC	1	7/2/2012 09:15 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>		Prep Date: 6/29/2012	Analyst: BG
Benzene	ND		31	µg/Kg-dry	1	7/2/2012 08:18 PM
Ethylbenzene	ND		31	µg/Kg-dry	1	7/2/2012 08:18 PM
m,p-Xylene	ND		62	µg/Kg-dry	1	7/2/2012 08:18 PM
o-Xylene	ND		31	µg/Kg-dry	1	7/2/2012 08:18 PM
Toluene	ND		31	µg/Kg-dry	1	7/2/2012 08:18 PM
Xylenes, Total	ND		93	µg/Kg-dry	1	7/2/2012 08:18 PM
Surr: 1,2-Dichloroethane-d4	103		70-130	%REC	1	7/2/2012 08:18 PM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	7/2/2012 08:18 PM
Surr: Dibromofluoromethane	92.2		70-130	%REC	1	7/2/2012 08:18 PM
Surr: Toluene-d8	100		70-130	%REC	1	7/2/2012 08:18 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: MB
Chromium, Trivalent	6.8		0.52	mg/Kg-dry	1	7/5/2012 05:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 7/2/2012	Analyst: MB
Chromium, Hexavalent	ND		0.52	mg/Kg-dry	1	7/5/2012 03:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: CG
Moisture	3.6		0.050	% of sample	1	6/28/2012 03:09 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: NZ
pH	8.87			s.u.	1	6/29/2012 12:00 PM

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

**ALS Group USA, Corp****Date:** 06-Jul-12**Client:** HRL Compliance Solutions**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12**Work Order:** 1206950**Sample ID:** BKGD 1**Lab ID:** 1206950-03**Collection Date:** 6/26/2012 11:10 AM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>6/29/2012</b>	Analyst: <b>ML</b>
Arsenic	4.7		0.65	mg/Kg-dry	2	6/30/2012 06:50 AM
<b>SUBCONTRACTED ANALYSES</b>			<b>SUBCONTRACT</b>			Analyst: <b>A&amp;LGL</b>
Subcontracted Analyses	Rcvd 7/5/12			as noted	1	7/5/2012
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	0.73		0.050	% of sample	1	6/28/2012 03:09 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>NZ</b>
pH	7.99			s.u.	1	6/29/2012 08:00 AM

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

## ALS Group USA, Corp

Date: 06-Jul-12

**Client:** HRL Compliance Solutions

**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

**Work Order:** 1206950

**Sample ID:** BKGD 2

**Lab ID:** 1206950-04

**Collection Date:** 6/26/2012 11:15 AM

**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>6/29/2012</b>	Analyst: <b>ML</b>
Arsenic	4.2		0.82	mg/Kg-dry	2	6/30/2012 06:56 AM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	0.15		0.050	% of sample	1	6/28/2012 03:09 PM

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

**ALS Group USA, Corp****Date:** 06-Jul-12**Client:** HRL Compliance Solutions**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12**Work Order:** 1206950**Sample ID:** BKGD 3**Lab ID:** 1206950-05**Collection Date:** 6/26/2012 11:20 AM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: <b>6/29/2012</b>	Analyst: <b>ML</b>
Arsenic	4.1		0.80	mg/Kg-dry	2	6/30/2012 07:02 AM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>CG</b>
Moisture	0.18		0.050	% of sample	1	6/28/2012 03:09 PM

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



Report Number: F12185-0124

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: PROJECT 1206950

DATE RECEIVED: 07/03/2012

DATE REPORTED: 07/05/2012

PAGE: 1

P.O. NUMBER: 20-1206950

ATTN: ANN PRESTON

## REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
55339	PITBOTTOMETC	Sat'd Paste Extraction with DIW			USDA Handbook 60
		Conductivity (ECe)	0.68	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	73	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	24	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	90	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	2.3	-	USDA Handbook 60
55340	PITBOTTOMBAY	Sat'd Paste Extraction with DIW			USDA Handbook 60
		Conductivity (ECe)	0.35	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	6	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	3	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	243	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	20.2	-	USDA Handbook 60
55341	BKGD1	Sat'd Paste Extraction with DIW			USDA Handbook 60
		Conductivity (ECe)	0.40	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	22	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	19	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	152	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	5.7	-	USDA Handbook 60

# ALS Group USA, Corp

Date: 06-Jul-12

**Client:** HRL Compliance Solutions

## QC BATCH REPORT

**Work Order:** 1206950

**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

Batch ID: **42052A**

Instrument ID **GC8**

Method: **SW8015M**

<b>MBLK</b>		Sample ID: <b>DBLKS1-42052-42052A</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/29/2012 04:13 PM</b>		
Client ID:		Run ID: <b>GC8_120629A</b>				SeqNo: <b>2018148</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	0.7427	0	1.667	0	44.6	39-115	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-42052-42052A</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/29/2012 04:13 PM</b>		
Client ID:		Run ID: <b>GC8_120629A</b>				SeqNo: <b>2018142</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	134.2	4.2	166.7	0	80.5	60-130	0			
Surr: 4-Terphenyl-d14	0.9407	0	1.667	0	56.4	39-115	0			

<b>MS</b>		Sample ID: <b>1206946-01B MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/29/2012 04:38 PM</b>		
Client ID:		Run ID: <b>GC8_120629A</b>				SeqNo: <b>2018149</b>		Prep Date: <b>6/29/2012</b>		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	395.5	41	327.3	113	86.3	60-130	0			
Surr: 4-Terphenyl-d14	1.466	0	3.273	0	44.8	39-115	0			

<b>MSD</b>		Sample ID: <b>1206946-01B MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/29/2012 04:38 PM</b>		
Client ID:		Run ID: <b>GC8_120629A</b>				SeqNo: <b>2018143</b>		Prep Date: <b>6/29/2012</b>		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	495.1	42	332.4	113	115	60-130	395.5	22.4	30	
Surr: 4-Terphenyl-d14	1.802	0	3.324	0	54.2	39-115	1.466	20.5	30	

The following samples were analyzed in this batch: | 1206950-01B | 1206950-02B |

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **R106827**      Instrument ID **GC9**      Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>MBLK-R106827-R106827</b>				Units: <b>µg/L</b>		Analysis Date: <b>7/2/2012 09:02 AM</b>		
Client ID:		Run ID: <b>GC9_120702A</b>				SeqNo: <b>2018643</b>		Prep Date:		DF: <b>1</b>
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>100.8</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

<b>LCS</b>		Sample ID: <b>LCS-R106827-R106827</b>				Units: <b>µg/L</b>		Analysis Date: <b>7/2/2012 08:37 AM</b>		
Client ID:		Run ID: <b>GC9_120702A</b>				SeqNo: <b>2018642</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	25360	200	25000	0	101	70-130	0			
<i>Surr: Toluene-d8</i>	<i>101.4</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

<b>MS</b>		Sample ID: <b>1206960-01A MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/2/2012 05:39 PM</b>		
Client ID:		Run ID: <b>GC9_120702A</b>				SeqNo: <b>2018663</b>		Prep Date:		DF: <b>50</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1498000	2,500	1250000	0	120	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4880</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>97.6</i>	<i>50-150</i>	<i>0</i>			

<b>MSD</b>		Sample ID: <b>1206960-01A MSD</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/2/2012 06:04 PM</b>		
Client ID:		Run ID: <b>GC9_120702A</b>				SeqNo: <b>2018664</b>		Prep Date:		DF: <b>50</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1457000	2,500	1250000	0	117	70-130	1498000	2.78	30	
<i>Surr: Toluene-d8</i>	<i>4864</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>97.3</i>	<i>50-150</i>	<i>4880</i>	<i>0.318</i>	<i>30</i>	

The following samples were analyzed in this batch:

1206950-01A	1206950-02A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42057**      Instrument ID **HG1**      Method: **SW7471**

MBLK		Sample ID: MBLK-42057-42057				Units: mg/Kg		Analysis Date: 6/29/2012 12:58 PM		
Client ID:		Run ID: HG1_120629A				SeqNo: 2016879		Prep Date: 6/29/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.002417	0.020								J

LCS		Sample ID: LCS-42057-42057					Units: mg/Kg		Analysis Date: 6/29/2012 01:00 PM		
Client ID:		Run ID: HG1_120629A			SeqNo: 2016880		Prep Date: 6/29/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.177	0.020	0.1665	0	106	80-120	0				

MS		Sample ID: 1206943-05AMS				Units: mg/Kg		Analysis Date: 6/29/2012 01:04 PM		
Client ID:		Run ID: HG1_120629A			SeqNo: 2016882		Prep Date: 6/29/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1436	0.016	0.1355	0.00768	100	75-125	0			

MSD		Sample ID: 1206943-05AMSD				Units: mg/Kg		Analysis Date: 6/29/2012 01:07 PM		
Client ID:		Run ID: HG1_120629A				SeqNo: 2016883		Prep Date: 6/29/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1377	0.016	0.1359	0.00768	95.7	75-125	0.1436	4.17	35	

The following samples were analyzed in this batch:

1206950-01B	1206950-02B
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42062**      Instrument ID **ICPMS1**      Method: **SW6020A**

<b>MBLK</b>	Sample ID: <b>MBLK-42062-42062</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/30/2012 04:22 AM</b>		
Client ID:	Run ID: <b>ICPMS1_120629A</b>				SeqNo: <b>2017769</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      ND      0.25

<b>LCS</b>	Sample ID: <b>LCS-42062-42062</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/30/2012 04:28 AM</b>		
Client ID:	Run ID: <b>ICPMS1_120629A</b>				SeqNo: <b>2017770</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      4.738      0.25      5      0      94.8      80-120      0

<b>MS</b>	Sample ID: <b>1206949-02AMS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/30/2012 06:07 AM</b>		
Client ID:	Run ID: <b>ICPMS1_120629A</b>				SeqNo: <b>2017786</b>		Prep Date: <b>6/29/2012</b>		DF: <b>2</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      9.97      0.82      8.21      2.597      89.8      80-120      0

<b>MSD</b>	Sample ID: <b>1206949-02AMSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>6/30/2012 06:13 AM</b>		
Client ID:	Run ID: <b>ICPMS1_120629A</b>				SeqNo: <b>2017787</b>		Prep Date: <b>6/29/2012</b>		DF: <b>2</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic      9.411      0.82      8.157      2.597      83.5      80-120      9.97      5.77      25

The following samples were analyzed in this batch:

1206950-03A	1206950-04A	1206950-05A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42093**      Instrument ID **ICPMS1**      Method: **SW6020A**

<b>MBLK</b>		Sample ID: <b>MBLK-42093-42093</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/2/2012 05:30 PM</b>		
Client ID:		Run ID: <b>ICPMS1_120702A</b>				SeqNo: <b>2018770</b>		Prep Date: <b>7/2/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.42								
Barium	ND	0.42								
Cadmium	ND	0.17								
Chromium	0.02696	0.42								J
Copper	0.05431	0.42								J
Lead	ND	0.42								
Nickel	0.02248	0.42								J
Selenium	ND	0.42								
Silver	ND	0.42								
Zinc	0.04978	0.83								J

<b>LCS</b>		Sample ID: <b>LCS-42093-42093</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/2/2012 05:36 PM</b>		
Client ID:		Run ID: <b>ICPMS1_120702A</b>				SeqNo: <b>2018771</b>		Prep Date: <b>7/2/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.026	0.42	8.333	0	84.3	80-120	0			
Barium	7.698	0.42	8.333	0	92.4	80-120	0			
Cadmium	7.832	0.17	8.333	0	94	80-120	0			
Chromium	7.242	0.42	8.333	0	86.9	80-120	0			
Copper	7.121	0.42	8.333	0	85.4	80-120	0			
Lead	7.792	0.42	8.333	0	93.5	80-120	0			
Nickel	7.116	0.42	8.333	0	85.4	80-120	0			
Selenium	7.098	0.42	8.333	0	85.2	80-120	0			
Silver	7.332	0.42	8.333	0	88	80-120	0			
Zinc	7.415	0.83	8.333	0	89	80-120	0			

<b>MS</b>		Sample ID: <b>1206950-01BMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/2/2012 07:14 PM</b>		
Client ID: <b>Pit Bottom (ETC)</b>		Run ID: <b>ICPMS1_120702A</b>				SeqNo: <b>2018787</b>		Prep Date: <b>7/2/2012</b>		DF: <b>2</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.338	0.68	6.821	4.891	65.2	80-120	0			S
Barium	191.1	0.68	6.821	225.9	-510	80-120	0			SO
Cadmium	6.147	0.27	6.821	0.4688	83.2	80-120	0			
Chromium	12.62	0.68	6.821	8.989	53.3	80-120	0			S
Copper	24.54	0.68	6.821	22.12	35.5	80-120	0			S
Lead	22.16	0.68	6.821	20.08	30.5	80-120	0			S
Nickel	18.51	0.68	6.821	14.81	54.3	80-120	0			S
Selenium	6.008	0.68	6.821	1.213	70.3	80-120	0			S
Silver	5.029	0.68	6.821	0.08706	72.4	80-120	0			S
Zinc	63.37	1.4	6.821	65.17	-26.3	80-120	0			SO

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42093**      Instrument ID **ICPMS1**      Method: **SW6020A**

MSD		Sample ID: <b>1206950-01BMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/2/2012 07:20 PM</b>		
Client ID: <b>Pit Bottom (ETC)</b>		Run ID: <b>ICPMS1_120702A</b>				SeqNo: <b>2018788</b>		Prep Date: <b>7/2/2012</b>		DF: <b>2</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.74	0.77	7.68	4.891	76.2	80-120	9.338	14	25	S
Barium	191.4	0.77	7.68	225.9	-449	80-120	191.1	0.139	25	SO
Cadmium	7.324	0.31	7.68	0.4688	89.3	80-120	6.147	17.5	25	
Chromium	14.58	0.77	7.68	8.989	72.8	80-120	12.62	14.4	25	S
Copper	25.41	0.77	7.68	22.12	42.8	80-120	24.54	3.46	25	S
Lead	22.3	0.77	7.68	20.08	29	80-120	22.16	0.669	25	S
Nickel	19.2	0.77	7.68	14.81	57.2	80-120	18.51	3.65	25	S
Selenium	7.061	0.77	7.68	1.213	76.1	80-120	6.008	16.1	25	S
Silver	6.022	0.77	7.68	0.08706	77.3	80-120	5.029	18	25	S
Zinc	68.56	1.5	7.68	65.17	44.1	80-120	63.37	7.86	25	SO

The following samples were analyzed in this batch:      1206950-01B      1206950-02B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42051**      Instrument ID **SVMS5**      Method: **SW8270**

MBLK		Sample ID: <b>SBLKS1-42051-42051</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/2/2012 01:55 PM</b>		
Client ID:		Run ID: <b>SVMS5_120702A</b>				SeqNo: <b>2018517</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
Surr: 2-Fluorobiphenyl										
	1607	0	1667	0	96.4	12-100	0			
Surr: 4-Terphenyl-d14										
	1495	0	1667	0	89.7	25-137	0			
Surr: Nitrobenzene-d5										
	1453	0	1667	0	87.2	37-107	0			

LCS		Sample ID: <b>SLCSS1-42051-42051</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/2/2012 01:19 PM</b>		
Client ID:		Run ID: <b>SVMS5_120702A</b>				SeqNo: <b>2018516</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	488.7	30	666.7	0	73.3	45-110	0			
Anthracene	500.7	30	666.7	0	75.1	55-105	0			
Benzo(a)anthracene	530	30	666.7	0	79.5	50-110	0			
Benzo(a)pyrene	537	30	666.7	0	80.5	50-110	0			
Benzo(b)fluoranthene	556	30	666.7	0	83.4	45-115	0			
Benzo(g,h,i)perylene	581	30	666.7	0	87.1	40-125	0			
Benzo(k)fluoranthene	574.7	30	666.7	0	86.2	45-115	0			
Chrysene	532.7	30	666.7	0	79.9	55-110	0			
Dibenzo(a,h)anthracene	522.7	30	666.7	0	78.4	40-125	0			
Fluoranthene	521.7	30	666.7	0	78.2	55-115	0			
Fluorene	529	30	666.7	0	79.3	50-110	0			
Indeno(1,2,3-cd)pyrene	535.3	30	666.7	0	80.3	40-120	0			
Naphthalene	532	30	666.7	0	79.8	40-105	0			
Pyrene	510.7	30	666.7	0	76.6	45-125	0			
Surr: 2-Fluorobiphenyl										
	1400	0	1667	0	84	12-100	0			
Surr: 4-Terphenyl-d14										
	1304	0	1667	0	78.2	25-137	0			
Surr: Nitrobenzene-d5										
	1359	0	1667	0	81.5	37-107	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42051**      Instrument ID **SVMS5**      Method: **SW8270**

MS				Units: <b>µg/Kg</b>			Analysis Date: <b>7/2/2012 03:43 PM</b>			
Sample ID: <b>1206946-01B MS</b>		Run ID: <b>SVMS5_120702A</b>		SeqNo: <b>2020561</b>		Prep Date: <b>6/29/2012</b>		DF: <b>20</b>		
Client ID:										
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	916.4	1,200	1309	0	70	45-110	0			J
Anthracene	968.7	1,200	1309	0	74	55-105	0			J
Benzo(a)anthracene	2435	1,200	1309	703.2	132	50-110	0			S
Benzo(a)pyrene	1335	1,200	1309	0	102	50-110	0			
Benzo(b)fluoranthene	3260	1,200	1309	1179	159	45-115	0			S
Benzo(g,h,i)perylene	1833	1,200	1309	481.8	103	40-125	0			
Benzo(k)fluoranthene	2631	1,200	1309	1224	107	45-115	0			
Chrysene	2121	1,200	1309	1211	69.5	55-110	0			
Dibenzo(a,h)anthracene	1178	1,200	1309	0	90	40-125	0			J
Fluoranthene	2304	1,200	1309	1224	82.5	55-115	0			
Fluorene	968.7	1,200	1309	0	74	50-110	0			J
Indeno(1,2,3-cd)pyrene	1649	1,200	1309	436.3	92.7	40-120	0			
Naphthalene	811.6	1,200	1309	0	62	40-105	0			J
Pyrene	2095	1,200	1309	696.7	107	45-125	0			
Surr: 2-Fluorobiphenyl	1990	0	3273	0	60.8	12-100	0			
Surr: 4-Terphenyl-d14	1911	0	3273	0	58.4	25-137	0			
Surr: Nitrobenzene-d5	1767	0	3273	0	54	37-107	0			

MSD				Units: <b>µg/Kg</b>			Analysis Date: <b>7/2/2012 04:19 PM</b>			
Sample ID: <b>1206946-01B MSD</b>		Run ID: <b>SVMS5_120702A</b>		SeqNo: <b>2020562</b>		Prep Date: <b>6/29/2012</b>		DF: <b>20</b>		
Client ID:										
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	944	1,200	1330	0	71	45-110	916.4	0	30	J
Anthracene	1064	1,200	1330	0	80	55-105	968.7	0	30	J
Benzo(a)anthracene	2420	1,200	1330	703.2	129	50-110	2435	0.617	30	S
Benzo(a)pyrene	1449	1,200	1330	0	109	50-110	1335	8.19	30	
Benzo(b)fluoranthene	3058	1,200	1330	1179	141	45-115	3260	6.38	30	S
Benzo(g,h,i)perylene	2008	1,200	1330	481.8	115	40-125	1833	9.11	30	
Benzo(k)fluoranthene	2766	1,200	1330	1224	116	45-115	2631	4.98	30	S
Chrysene	2792	1,200	1330	1211	119	55-110	2121	27.3	30	S
Dibenzo(a,h)anthracene	1316	1,200	1330	0	99	40-125	1178	11.1	30	
Fluoranthene	2872	1,200	1330	1224	124	55-115	2304	21.9	30	S
Fluorene	997.2	1,200	1330	0	75	50-110	968.7	0	30	J
Indeno(1,2,3-cd)pyrene	1808	1,200	1330	436.3	103	40-120	1649	9.19	30	
Naphthalene	784.5	1,200	1330	0	59	40-105	811.6	0	30	J
Pyrene	2380	1,200	1330	696.7	127	45-125	2095	12.8	30	S
Surr: 2-Fluorobiphenyl	1795	0	3324	0	54	12-100	1990	10.3	40	
Surr: 4-Terphenyl-d14	2247	0	3324	0	67.6	25-137	1911	16.2	40	
Surr: Nitrobenzene-d5	1728	0	3324	0	52	37-107	1767	2.22	40	

The following samples were analyzed in this batch:      1206950-01B      1206950-02B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42094**      Instrument ID **VMS7**      Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>MBLK-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/29/2012 08:27 PM</b>		
Client ID:		Run ID: <b>VMS7_120629B</b>				SeqNo: <b>2017648</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>										
<i>Surr: 4-Bromofluorobenzene</i>										
<i>Surr: Dibromofluoromethane</i>										
<i>Surr: Toluene-d8</i>										

<b>MBLK</b>		Sample ID: <b>MBLK-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/2/2012 01:30 PM</b>		
Client ID:		Run ID: <b>VMS8_120702A</b>				SeqNo: <b>2018992</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>										
<i>Surr: 4-Bromofluorobenzene</i>										
<i>Surr: Dibromofluoromethane</i>										
<i>Surr: Toluene-d8</i>										

<b>MBLK</b>		Sample ID: <b>MBLK-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/3/2012 03:54 PM</b>		
Client ID:		Run ID: <b>VMS7_120703A</b>				SeqNo: <b>2020238</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>										
<i>Surr: 4-Bromofluorobenzene</i>										
<i>Surr: Dibromofluoromethane</i>										
<i>Surr: Toluene-d8</i>										

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42094**      Instrument ID **VMS7**      Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>MBLK-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/5/2012 04:24 PM</b>		
Client ID:		Run ID: <b>VMS5_120705A</b>				SeqNo: <b>2021107</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	976.5	0	1000	0	97.6	70-130	0			
Surr: 4-Bromofluorobenzene	968.5	0	1000	0	96.8	70-130	0			
Surr: Dibromofluoromethane	1018	0	1000	0	102	70-130	0			
Surr: Toluene-d8	962.5	0	1000	0	96.2	70-130	0			

<b>LCS</b>		Sample ID: <b>LCS-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/29/2012 07:37 PM</b>		
Client ID:		Run ID: <b>VMS7_120629B</b>				SeqNo: <b>2017647</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	948.5	30	1000	0	94.8	75-125	0			
Ethylbenzene	1018	30	1000	0	102	75-125	0			
m,p-Xylene	2035	60	2000	0	102	80-125	0			
o-Xylene	1019	30	1000	0	102	75-125	0			
Toluene	981	30	1000	0	98.1	70-125	0			
Xylenes, Total	3054	90	3000	0	102	75-125	0			
Surr: 1,2-Dichloroethane-d4	874.5	0	1000	0	87.4	70-130	0			
Surr: 4-Bromofluorobenzene	939	0	1000	0	93.9	70-130	0			
Surr: Dibromofluoromethane	918	0	1000	0	91.8	70-130	0			
Surr: Toluene-d8	954	0	1000	0	95.4	70-130	0			

<b>LCS</b>		Sample ID: <b>LCS-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/2/2012 12:18 PM</b>		
Client ID:		Run ID: <b>VMS8_120702A</b>				SeqNo: <b>2018991</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1018	30	1000	0	102	75-125	0			
Ethylbenzene	1028	30	1000	0	103	75-125	0			
m,p-Xylene	2039	60	2000	0	102	80-125	0			
o-Xylene	1013	30	1000	0	101	75-125	0			
Toluene	1027	30	1000	0	103	70-125	0			
Xylenes, Total	3052	90	3000	0	102	75-125	0			
Surr: 1,2-Dichloroethane-d4	1019	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	990.5	0	1000	0	99	70-130	0			
Surr: Dibromofluoromethane	1018	0	1000	0	102	70-130	0			
Surr: Toluene-d8	1019	0	1000	0	102	70-130	0			

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42094**      Instrument ID **VMS7**      Method: **SW8260**

LCS Sample ID: <b>LCS-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/3/2012 02:38 PM</b>				
Client ID:		Run ID: <b>VMS7_120703A</b>		SeqNo: <b>2020237</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1074	30	1000	0	107	75-125	0			
Ethylbenzene	1134	30	1000	0	113	75-125	0			
m,p-Xylene	2255	60	2000	0	113	80-125	0			
o-Xylene	1112	30	1000	0	111	75-125	0			
Toluene	1106	30	1000	0	111	70-125	0			
Xylenes, Total	3368	90	3000	0	112	75-125	0			
Surr: 1,2-Dichloroethane-d4	1027	0	1000	0	103	70-130	0			
Surr: 4-Bromofluorobenzene	1034	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	1059	0	1000	0	106	70-130	0			
Surr: Toluene-d8	1074	0	1000	0	107	70-130	0			

LCS Sample ID: <b>LCS-42094-42094</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>7/5/2012 02:20 PM</b>				
Client ID:		Run ID: <b>VMS5_120705A</b>		SeqNo: <b>2021106</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	950	30	1000	0	95	75-125	0			
Ethylbenzene	994	30	1000	0	99.4	75-125	0			
m,p-Xylene	1846	60	2000	0	92.3	80-125	0			
o-Xylene	912.5	30	1000	0	91.2	75-125	0			
Toluene	1001	30	1000	0	100	70-125	0			
Xylenes, Total	2758	90	3000	0	92	75-125	0			
Surr: 1,2-Dichloroethane-d4	960	0	1000	0	96	70-130	0			
Surr: 4-Bromofluorobenzene	1012	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	941	0	1000	0	94.1	70-130	0			
Surr: Toluene-d8	980.5	0	1000	0	98	70-130	0			

MS Sample ID: <b>1206960-07A MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>6/30/2012 04:48 AM</b>				
Client ID:		Run ID: <b>VMS7_120629B</b>		SeqNo: <b>2018318</b>		Prep Date: <b>6/29/2012</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	912	30	1000	0	91.2	75-125	0			
Ethylbenzene	977.5	30	1000	0	97.8	75-125	0			
m,p-Xylene	1936	60	2000	0	96.8	80-125	0			
o-Xylene	973.5	30	1000	0	97.4	75-125	0			
Toluene	936	30	1000	0	93.6	70-125	0			
Xylenes, Total	2909	90	3000	0	97	75-125	0			
Surr: 1,2-Dichloroethane-d4	855	0	1000	0	85.5	70-130	0			
Surr: 4-Bromofluorobenzene	935	0	1000	0	93.5	70-130	0			
Surr: Dibromofluoromethane	874.5	0	1000	0	87.4	70-130	0			
Surr: Toluene-d8	949.5	0	1000	0	95	70-130	0			

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42094**      Instrument ID **VMS7**      Method: **SW8260**

MSD				Sample ID: 1206960-07A MSD				Units: µg/Kg			Analysis Date: 6/30/2012 05:13 AM			
Client ID:				Run ID: VMS7_120629B				SeqNo: 2018319			Prep Date: 6/29/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	898	30	1000	0	89.8	75-125	912	1.55	30					
Ethylbenzene	958.5	30	1000	0	95.8	75-125	977.5	1.96	30					
m,p-Xylene	1910	60	2000	0	95.5	80-125	1936	1.35	30					
o-Xylene	957.5	30	1000	0	95.8	75-125	973.5	1.66	30					
Toluene	927	30	1000	0	92.7	70-125	936	0.966	30					
Xylenes, Total	2867	90	3000	0	95.6	75-125	2909	1.45	30					
Surr: 1,2-Dichloroethane-d4	815	0	1000	0	81.5	70-130	855	4.79	30					
Surr: 4-Bromofluorobenzene	935	0	1000	0	93.5	70-130	935	0	30					
Surr: Dibromofluoromethane	867.5	0	1000	0	86.8	70-130	874.5	0.804	30					
Surr: Toluene-d8	951.5	0	1000	0	95.2	70-130	949.5	0.21	30					

The following samples were analyzed in this batch:      1206950-01A      1206950-02A

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **42154**      Instrument ID **WETCHEM**      Method: **SW7196A**

<b>MBLK</b>	Sample ID: <b>MBLK-42154-42154</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>7/5/2012 03:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_120705E</b>				SeqNo: <b>2020974</b>		Prep Date: <b>7/2/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      ND      0.50

<b>LCS</b>	Sample ID: <b>LCS-42154-42154</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>7/5/2012 03:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_120705E</b>				SeqNo: <b>2020973</b>		Prep Date: <b>7/2/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.96      0.50      1.992      0      98.4      75-110      0

<b>MS</b>	Sample ID: <b>1206951-02B MS</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>7/5/2012 03:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_120705E</b>				SeqNo: <b>2020961</b>		Prep Date: <b>7/2/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.035      0.49      1.961      0      52.8      60-130      0      S

<b>MSD</b>	Sample ID: <b>1206951-02B MSD</b>					Units: <b>mg/Kg</b>		Analysis Date: <b>7/5/2012 03:00 PM</b>		
Client ID:	Run ID: <b>WETCHEM_120705E</b>				SeqNo: <b>2020962</b>		Prep Date: <b>7/2/2012</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent      1.189      0.49      1.969      0      60.4      60-130      1.035      13.8      30

The following samples were analyzed in this batch:

1206950-01B      1206950-02B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **R106729** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-R106729-R106729					Units: s.u.		Analysis Date: 6/29/2012 08:00 AM		
Client ID:			Run ID: WETCHEM_120629B			SeqNo: 2016561		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	3.98	0	4.4	0	90.5	90-110	0			
----	------	---	-----	---	------	--------	---	--	--	--

DUP		Sample ID: 1206951-03A DUP				Units: s.u.		Analysis Date: 6/29/2012 08:00 AM		
Client ID:		Run ID: WETCHEM_120629B				SeqNo: 2016607		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	7.84	0	0	0	0	0-0	7.84	0	20	
----	------	---	---	---	---	-----	------	---	----	--

DUP				Sample ID: 1206960-01B DUP				Units: s.u.			Analysis Date: 6/29/2012 08:00 AM			
Client ID:				Run ID: WETCHEM_120629B				SeqNo: 2016617			Prep Date:		DF: 1	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH	5.8	0	0	0	0	0-0	5.8	0	20	
----	-----	---	---	---	---	-----	-----	---	----	--

The following samples were analyzed in this batch:

1206950-03A

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **R106734**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>	Sample ID: <b>WBLKS1-R106734</b>					Units: % of sample		Analysis Date: <b>6/28/2012 03:09 PM</b>		
Client ID:	Run ID: <b>MOIST_120628C</b>				SeqNo: <b>2016671</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      ND      0.050

<b>LCS</b>	Sample ID: <b>LCS-R106734</b>					Units: % of sample		Analysis Date: <b>6/28/2012 03:09 PM</b>		
Client ID:	Run ID: <b>MOIST_120628C</b>				SeqNo: <b>2016670</b>		Prep Date:		DF: <b>1</b>	
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

<b>DUP</b>	Sample ID: <b>1206947-05ADUP</b>					Units: % of sample		Analysis Date: <b>6/28/2012 03:09 PM</b>		
Client ID:	Run ID: <b>MOIST_120628C</b>				SeqNo: <b>2016626</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      ND      0.050      0      0      0      0-0      0      0      20

<b>DUP</b>	Sample ID: <b>1206950-05ADUP</b>					Units: % of sample		Analysis Date: <b>6/28/2012 03:09 PM</b>		
Client ID: <b>BKGD 3</b>	Run ID: <b>MOIST_120628C</b>				SeqNo: <b>2016657</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture      0.18      0.050      0      0      0      0-0      0.18      0      20

The following samples were analyzed in this batch:

1206950-01B	1206950-02B	1206950-03A
1206950-04A	1206950-05A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1206950  
**Project:** Bayless Pit Closure Philadelphia Creek #43 6/26/12

## QC BATCH REPORT

Batch ID: **R106759** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-R106759-R106759					Units: s.u.			Analysis Date: 6/29/2012 12:00 PM			
Client ID:					Run ID: WETCHEM_120629G					SeqNo: 2017222			Prep Date:		DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH					3.99		0	4.4	0	90.7	90-110	0				

DUP					Sample ID: 12061001-01A DUP					Units: s.u.			Analysis Date: 6/29/2012 12:00 PM		
Client ID:				Run ID: WETCHEM_120629G				SeqNo: 2017462			Prep Date:		DF: 1		
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH		10.81	0	0	0	0	0-0	10.81	0	20					

The following samples were analyzed in this batch:

1206950-01B 1206950-02B

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



WORKORDER 1206950


Form 202r8

(ALS)		SAMPLER	Luke Miley						DATE	6/27/2012							PAGE	1 of 1		
PROJECT NAME	Bayless Pit Closure Philadelphia Creek # 43	SITE ID		TURNAROUND	Standard 5 Day							DISPOSAL	By Lab or Return to Client							
PROJECT No.		EDD/FORMAT		TABLE 910-1 X Arsenic SAR, EC, pH																
		PURCHASE ORDER																		
COMPANY NAME	HRL Compliance Solutions, Inc.	BILL TO COMPANY																		
SEND REPORT TO:	Kris Rowe	INVOICE ATTN TO																		
ADDRESS	744 Horizon Ct. Suite 140	ADDRESS																		
CITY / STATE / ZIP	Grand Junction, CO. 81506	CITY / STATE / ZIP																		
PHONE	970-243-3271	PHONE																		
FAX	970-243-3280	FAX																		
E-MAIL	Krowe@hrlcomp.com	E-MAIL																		
Lab ID	FIELD ID	Matrix	Sample Date	Sample time	# Bottles	Pres.	QC													
1	Pit Bottom (ETC)	S	6/26/2012	1100	3	4°C		x												
2	Pit Bottom (BAY)	S	6/26/2012	1105	3	4°C		x												
3	BKGD 1	S	6/26/2012	1110	2	4°C			x	x										
4	BKGD 2	S	6/26/2012	1115	1	4°C			x											
5	BKGD 3	S	6/26/2012	1120	1	4°C			x											

X DRO/GRC/BTEX  
Pb, Mn, Fe, Pb  
Sat - CC  
CRGIS

\*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.**

<b>Comments:</b> 	QC Pack AGE (check below)	
	x	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
<b>Preservative Key:</b> 1-HCl    2-HNO3    3-H2SO4    4-NaOH    5-NaHSO4    7-Other    8-4 degrees C    9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
REINQUISHED BY	<i>Luke Miley</i>	Luke Miley	6/27/2012	1700
RECEIVED BY	<i>Di F Shaw</i>	Diane F Shaw	6/28/12	0900
REINQUISHED BY				
RECEIVED BY				
REINQUISHED BY				
RECEIVED BY				



Environmental

**Subcontractor:**

A & L Great Lakes Agricultural La

3505 Conestoga Dr

TEL: (260) 483-4759

FAX: (260) 483-5274

Ft. Wayne, IN 46808

Acct #: 91000

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: **28-Jun-12**

COC ID: **3728**

Due D **05-Jul-12**

Salesperson **Bruce Schlatter**

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order		Project Name	1206950	A	Subcontracted Analyses (SUBCONTRACT) <b>SAR-EC</b>										
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											
ALS Sample ID	Client Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J	
1206950-01C	Pit Bottom (ETC)	Soil	26/Jun/2012 11:00	(1) MISC	X										
1206950-02C	Pit Bottom (BAY)	Soil	26/Jun/2012 11:05	(1) MISC	X										
1206950-03B	BKGD 1	Soil	26/Jun/2012 11:10	(1) MISC	X										

**Comments:**

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

Relinquished by:

Date/Time

Received by:

Date/Time

Cooler IDs

Report/QC Level

Relinquished by:

Date/Time

Received by:

Date/Time

Std

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **28-Jun-12 09:00**

Work Order: **1206950**

Received by: **DS**

Checklist completed by *Diane Shaw* 28-Jun-12  
eSignature Date

Reviewed by: *Ann Preston* 28-Jun-12  
eSignature 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>4.0-5.4 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:



4.0 - 5.4°C

CUSTODY SEAL

DATE

SIGNATURE

QEC

Quality Environmental Containers  
800-255-3950 • 304-255-3900

Express **US Airbill**

8001 2142 0359

0200 Form 10 No.

FedEx Retrieval Copy

1 From  
Date 6/29/12  
Sender's Name [Redacted]  
Company [Redacted]  
Address 744 [Redacted] St. 140  
City [Redacted] State CO ZIP 81506

2 Your Internal Billing Reference  
3 To  
Recipient's Name Sample Receiving  
Company AL'S Group  
Address 3352 128th Ave  
City [Redacted] State MI ZIP 48174

4 Express Package Service  
06 ☐ FedEx First Overnight  
01 ☒ FedEx Priority Overnight  
05 ☐ FedEx Standard Overnight  
5 Packaging  
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?  
No 04 Yes As per attached Shipper's Declaration 06 Dry Ice  
7 Payment Bill to:  
Sender Recipient 2 Third Party 3 Credit Card 4 Cash/Check 5

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