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01-Oct-2012

Mark Mumby
HRL Compliance Solutions
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **Lone Mt Production Pit Closure 12-102 9/19/12**

Work Order: **1209668**

Dear Mark,

ALS Environmental received 1 sample on 25-Sep-2012 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 26.

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: Lone Mt Production Pit Closure 12-102 9/19/12
Work Order: 1209668**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>
1209668-01	Pit 2 Bottom	Soil		9/19/2012 10:10	9/25/2012 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: Lone Mt Production Pit Closure 12-102 9/19/12
Work Order: 1209668

Case Narrative

Batch 43770 MS/MSD data for Hexavalent Chromium is not related to this project's samples.
No data requires qualification.

Client: HRL Compliance Solutions
Project: Lone Mt Production Pit Closure 12-102 9/19/12
WorkOrder: 1209668

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
RPD	Relative Percent Difference
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
µmhos/cm @25°	
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 01-Oct-12

Client: HRL Compliance Solutions

Project: Lone Mt Production Pit Closure 12-102 9/19/12

Work Order: 1209668

Sample ID: Pit 2 Bottom

Lab ID: 1209668-01

Collection Date: 9/19/2012 10:10 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	52		4.5	mg/Kg-dry	1	9/27/2012 11:34 PM
Surr: 4-Terphenyl-d14	63.3		39-115	%REC	1	9/27/2012 11:34 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		2.8	mg/Kg-dry	50	9/26/2012 12:06 PM
Surr: Toluene-d8	107		50-150	%REC	50	9/26/2012 12:06 PM
MERCURY BY CVAA						
Mercury	0.032		0.019	mg/Kg-dry	1	9/28/2012 03:18 PM
METALS BY ICP-MS						
Arsenic	4.7		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Barium	59		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Cadmium	ND		0.35	mg/Kg-dry	2	9/28/2012 06:44 PM
Chromium	7.9		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Copper	8.8		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Lead	11		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Nickel	12		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Selenium	1.5		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Silver	ND		0.88	mg/Kg-dry	2	9/28/2012 06:44 PM
Zinc	38		1.8	mg/Kg-dry	2	9/28/2012 06:44 PM
SOLUBLE CATIONS FOR SAR						
Calcium	650		5.6	mg/L-dry	10	9/28/2012 02:50 PM
Magnesium	360		2.2	mg/L-dry	10	9/28/2012 02:50 PM
Sodium	1,100		2.2	mg/L-dry	10	9/28/2012 02:50 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	8.5		0.010	none	1	9/28/2012
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		16	µg/Kg-dry	1	9/29/2012 12:42 PM
Anthracene	ND		16	µg/Kg-dry	1	9/29/2012 12:42 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	9/29/2012 12:42 PM
Benzo(a)pyrene	ND		18	µg/Kg-dry	1	9/29/2012 12:42 PM
Benzo(b)fluoranthene	ND		20	µg/Kg-dry	1	9/29/2012 12:42 PM
Benzo(g,h,i)perylene	ND		30	µg/Kg-dry	1	9/29/2012 12:42 PM
Benzo(k)fluoranthene	ND		20	µg/Kg-dry	1	9/29/2012 12:42 PM
Chrysene	ND		16	µg/Kg-dry	1	9/29/2012 12:42 PM
Dibenzo(a,h)anthracene	ND		20	µg/Kg-dry	1	9/29/2012 12:42 PM
Fluoranthene	ND		16	µg/Kg-dry	1	9/29/2012 12:42 PM
Fluorene	ND		16	µg/Kg-dry	1	9/29/2012 12:42 PM

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

ALS Group USA, Corp

Date: 01-Oct-12

Client: HRL Compliance Solutions

Project: Lone Mt Production Pit Closure 12-102 9/19/12

Work Order: 1209668

Sample ID: Pit 2 Bottom

Lab ID: 1209668-01

Collection Date: 9/19/2012 10:10 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND		22	µg/Kg-dry	1	9/29/2012 12:42 PM
Naphthalene	ND		16	µg/Kg-dry	1	9/29/2012 12:42 PM
Pyrene	30		16	µg/Kg-dry	1	9/29/2012 12:42 PM
Surr: 2-Fluorobiphenyl	61.4		12-100	%REC	1	9/29/2012 12:42 PM
Surr: 4-Terphenyl-d14	85.7		25-137	%REC	1	9/29/2012 12:42 PM
Surr: Nitrobenzene-d5	61.3		37-107	%REC	1	9/29/2012 12:42 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 9/25/2012	Analyst: CW
Benzene	ND		34	µg/Kg-dry	1	9/29/2012 02:02 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	9/29/2012 02:02 AM
m,p-Xylene	ND		67	µg/Kg-dry	1	9/29/2012 02:02 AM
o-Xylene	ND		34	µg/Kg-dry	1	9/29/2012 02:02 AM
Toluene	ND		34	µg/Kg-dry	1	9/29/2012 02:02 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	9/29/2012 02:02 AM
Surr: 1,2-Dichloroethane-d4	99.9		70-130	%REC	1	9/29/2012 02:02 AM
Surr: 4-Bromofluorobenzene	103		70-130	%REC	1	9/29/2012 02:02 AM
Surr: Dibromofluoromethane	94.6		70-130	%REC	1	9/29/2012 02:02 AM
Surr: Toluene-d8	102		70-130	%REC	1	9/29/2012 02:02 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 9/28/2012	Analyst: KV
Electrical Conductivity @ Saturation	13		0.025	mmhos/cm @25	5	9/28/2012 12:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	7.9		0.56	mg/Kg-dry	1	10/1/2012 07:46 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 9/26/2012	Analyst: MB
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	9/28/2012 11:30 AM
MOISTURE			A2540 G			Analyst: LR
Moisture	11		0.050	% of sample	1	9/26/2012 12:00 PM
PH			SW9045D			Analyst: JJG
pH	7.60			s.u.	1	9/26/2012 09:30 AM

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1209668

Project: Lone Mt Production Pit Closure 12-102 9/19/12

Batch ID: 43753

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-43753-43753				Units: mg/Kg		Analysis Date: 9/27/2012 06:13 PM		
Client ID:		Run ID: GC8_120927A				SeqNo: 2093657		Prep Date: 9/27/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.038	0	1.667	0	62.3	39-115	0			

LCS		Sample ID: DLCSS1-43753-43753				Units: mg/Kg		Analysis Date: 9/27/2012 06:40 PM		
Client ID:		Run ID: GC8_120927A				SeqNo: 2093658		Prep Date: 9/27/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	111.5	4.2	166.7	0	66.9	60-130	0			
Surr: 4-Terphenyl-d14	1.211	0	1.667	0	72.7	39-115	0			

MS		Sample ID: 1209633-07B MS				Units: mg/Kg		Analysis Date: 9/27/2012 07:07 PM		
Client ID:		Run ID: GC8_120927A				SeqNo: 2093659		Prep Date: 9/27/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	214.7	8.1	325.3	0	66	60-130	0			
Surr: 4-Terphenyl-d14	2.488	0	3.253	0	76.5	39-115	0			

MSD		Sample ID: 1209633-07B MSD				Units: mg/Kg		Analysis Date: 9/27/2012 07:34 PM		
Client ID:		Run ID: GC8_120927A				SeqNo: 2093660		Prep Date: 9/27/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	203.4	7.9	317.8	0	64	60-130	214.7	5.41	30	
Surr: 4-Terphenyl-d14	2.375	0	3.178	0	74.7	39-115	2.488	4.64	30	

The following samples were analyzed in this batch: 1209668-01B

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **R110326** Instrument ID **GC10** Method: **SW8015**

MBLK		Sample ID: GBLK1-120926-R110326				Units: µg/L		Analysis Date: 9/26/2012 09:34 AM		
Client ID:		Run ID: GC10_120926A				SeqNo: 2091611		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>128.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>128</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: GLCS1-120926-R110326				Units: µg/L		Analysis Date: 9/26/2012 09:10 AM		
Client ID:		Run ID: GC10_120926A				SeqNo: 2091610		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)	11360	200	10000	0	114	70-130	0			
<i>Surr: Toluene-d8</i>	<i>111.6</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>112</i>	<i>70-130</i>	<i>0</i>			

MS		Sample ID: 1209677-03A MS				Units: µg/Kg		Analysis Date: 9/26/2012 07:03 PM		
Client ID:		Run ID: GC10_120926A				SeqNo: 2091839		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)	503600	2,500	500000	0	101	70-130	0			
<i>Surr: Toluene-d8</i>	<i>5143</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>103</i>	<i>50-150</i>	<i>0</i>			

MSD		Sample ID: 1209677-03A MSD				Units: µg/Kg		Analysis Date: 9/26/2012 07:28 PM		
Client ID:		Run ID: GC10_120926A				SeqNo: 2091840		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)	536300	2,500	500000	0	107	70-130	503600	6.28	30	
<i>Surr: Toluene-d8</i>	<i>5360</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>107</i>	<i>50-150</i>	<i>5143</i>	<i>4.12</i>	<i>30</i>	

The following samples were analyzed in this batch:

1209668-01A

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43803** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-43803-43803					Units: mg/Kg		Analysis Date: 9/28/2012 03:10 PM		
Client ID:	Run ID: HG1_120928A				SeqNo: 2095072		Prep Date: 9/28/2012		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-43803-43803					Units: mg/Kg		Analysis Date: 9/28/2012 03:12 PM		
Client ID:	Run ID: HG1_120928A				SeqNo: 2095073		Prep Date: 9/28/2012		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

MS	Sample ID: 1209685-03AMS					Units: mg/Kg		Analysis Date: 9/28/2012 04:01 PM		
Client ID:	Run ID: HG1_120928A				SeqNo: 2095219		Prep Date: 9/28/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1549 0.017 0.1427 0.002242 107 75-125 0

MSD	Sample ID: 1209685-03AMSD					Units: mg/Kg		Analysis Date: 9/28/2012 04:03 PM		
Client ID:	Run ID: HG1_120928A				SeqNo: 2095220		Prep Date: 9/28/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1562 0.017 0.1433 0.002242 107 75-125 0.1549 0.844 35

The following samples were analyzed in this batch:

1209668-01B

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43778** Instrument ID **ICPMS1** Method: **SW6020A** **(Dissolve)**

DUP		Sample ID: 1209677-04C DUP				Units: mg/L		Analysis Date: 9/28/2012 02:10 PM		
Client ID:		Run ID: ICPMS1_120928A				SeqNo: 2094993		Prep Date: 9/28/2012		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	108.1	5.0	0	0	0	0-0	111.8	3.37		
Magnesium	5.875	2.0	0	0	0	0-0	5.995	2.02		
Sodium	7.957	2.0	0	0	0	0-0	8.22	3.25		

DUP		Sample ID: 1209677-04C DUP				Units: none		Analysis Date: 9/28/2012		
Client ID:		Run ID: SAR_120928A				SeqNo: 2095098		Prep Date: 9/28/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.2019	0.010	0	0	0		0.2052	1.62	50	

The following samples were analyzed in this batch: | 1209668-01C |

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43794** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-43794-43794				Units: mg/Kg		Analysis Date: 9/28/2012 02:56 PM		
Client ID:		Run ID: ICPMS1_120928A				SeqNo: 2095001		Prep Date: 9/28/2012		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	0.0145	0.10								J
Chromium	0.01558	0.25								J
Copper	0.2246	0.25								J
Lead	ND	0.25								
Nickel	0.0159	0.25								J
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-43794-43794				Units: mg/Kg		Analysis Date: 9/28/2012 03:19 PM		
Client ID:		Run ID: ICPMS1_120928A				SeqNo: 2095010		Prep Date: 9/28/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.542	0.25	5	0	90.8	80-120	0			
Barium	4.579	0.25	5	0	91.6	80-120	0			
Cadmium	4.884	0.10	5	0	97.7	80-120	0			
Chromium	4.607	0.25	5	0	92.1	80-120	0			
Copper	4.528	0.25	5	0	90.6	80-120	0			
Lead	4.784	0.25	5	0	95.7	80-120	0			
Nickel	4.542	0.25	5	0	90.8	80-120	0			
Selenium	4.425	0.25	5	0	88.5	80-120	0			
Silver	4.592	0.25	5	0	91.8	80-120	0			
Zinc	4.65	0.50	5	0	93	80-120	0			

MS		Sample ID: 1209625-05BMS				Units: mg/Kg		Analysis Date: 9/28/2012 03:38 PM		
Client ID:		Run ID: ICPMS1_120928A				SeqNo: 2095016		Prep Date: 9/28/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.23	0.37	7.375	0.6732	88.9	75-125	0			
Barium	17.19	0.37	7.375	10.63	88.9	75-125	0			
Cadmium	7.181	0.15	7.375	0.04412	96.8	75-125	0			
Chromium	9.373	0.37	7.375	2.673	90.9	75-125	0			
Copper	7.537	0.37	7.375	1.04	88.1	75-125	0			
Lead	8.164	0.37	7.375	1.059	96.3	75-125	0			
Nickel	8.363	0.37	7.375	1.809	88.9	75-125	0			
Selenium	6.404	0.37	7.375	0.1627	84.6	75-125	0			
Silver	6.621	0.37	7.375	0.0041	89.7	75-125	0			
Zinc	9.137	0.74	7.375	2.75	86.6	75-125	0			

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43794** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 1209625-05BMSD				Units: mg/Kg		Analysis Date: 9/28/2012 03:43 PM		
Client ID:		Run ID: ICPMS1_120928A				SeqNo: 2095107		Prep Date: 9/28/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.501	0.38	7.587	0.6732	90	75-125	7.23	3.67	25	
Barium	17.46	0.38	7.587	10.63	90	75-125	17.19	1.55	25	
Cadmium	7.322	0.15	7.587	0.04412	95.9	75-125	7.181	1.96	25	
Chromium	9.545	0.38	7.587	2.673	90.6	75-125	9.373	1.81	25	
Copper	7.754	0.38	7.587	1.04	88.5	75-125	7.537	2.84	25	
Lead	8.323	0.38	7.587	1.059	95.7	75-125	8.164	1.93	25	
Nickel	8.528	0.38	7.587	1.809	88.6	75-125	8.363	1.96	25	
Selenium	6.632	0.38	7.587	0.1627	85.3	75-125	6.404	3.5	25	
Silver	6.76	0.38	7.587	0.0041	89	75-125	6.621	2.08	25	
Zinc	9.499	0.76	7.587	2.75	89	75-125	9.137	3.89	25	

The following samples were analyzed in this batch: 1209668-01B

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43752** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKS1-43752-43752				Units: µg/Kg		Analysis Date: 9/28/2012 12:13 PM		
Client ID:		Run ID: SVMS7_120928A				SeqNo: 2095786		Prep Date: 9/27/2012		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-Fluorobiphenyl</i>	1308	0	1667	0	78.5	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1680	0	1667	0	101	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1356	0	1667	0	81.3	37-107	0			

LCS		Sample ID: SLCSS1-43752-43752				Units: µg/Kg		Analysis Date: 9/28/2012 11:45 AM		
Client ID:		Run ID: SVMS7_120928A				SeqNo: 2095785		Prep Date: 9/27/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	552.3	30	666.7	0	82.8	45-110	0			
Anthracene	582.7	30	666.7	0	87.4	55-105	0			
Benzo(a)anthracene	551	30	666.7	0	82.6	50-110	0			
Benzo(a)pyrene	622.7	30	666.7	0	93.4	50-110	0			
Benzo(b)fluoranthene	504	30	666.7	0	75.6	45-115	0			
Benzo(g,h,i)perylene	523.3	30	666.7	0	78.5	40-125	0			
Benzo(k)fluoranthene	673	30	666.7	0	101	45-115	0			
Chrysene	590	30	666.7	0	88.5	55-110	0			
Dibenzo(a,h)anthracene	579.3	30	666.7	0	86.9	40-125	0			
Fluoranthene	630.3	30	666.7	0	94.5	55-115	0			
Fluorene	595.7	30	666.7	0	89.3	50-110	0			
Indeno(1,2,3-cd)pyrene	558.3	30	666.7	0	83.7	40-120	0			
Naphthalene	531.3	30	666.7	0	79.7	40-105	0			
Pyrene	546.3	30	666.7	0	81.9	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1256	0	1667	0	75.4	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1627	0	1667	0	97.6	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1287	0	1667	0	77.2	37-107	0			

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43752** Instrument ID **SVMS7** Method: **SW8270**

MS				Units: µg/Kg				Analysis Date: 9/28/2012 12:40 PM		
Sample ID: 1209633-07B MS		Run ID: SVMS7_120928A		SeqNo: 2095787		Prep Date: 9/27/2012		DF: 1		
Client ID:										
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1104	59	1301	0	84.8	45-110	0			
Anthracene	1191	59	1301	0	91.5	55-105	0			
Benzo(a)anthracene	1111	59	1301	0	85.4	50-110	0			
Benzo(a)pyrene	1235	59	1301	0	94.9	50-110	0			
Benzo(b)fluoranthene	1079	59	1301	0	82.9	45-115	0			
Benzo(g,h,i)perylene	1068	59	1301	0	82.1	40-125	0			
Benzo(k)fluoranthene	1200	59	1301	0	92.2	45-115	0			
Chrysene	1164	59	1301	0	89.5	55-110	0			
Dibenzo(a,h)anthracene	1157	59	1301	0	88.9	40-125	0			
Fluoranthene	1254	59	1301	0	96.4	55-115	0			
Fluorene	1202	59	1301	0	92.4	50-110	0			
Indeno(1,2,3-cd)pyrene	1117	59	1301	0	85.8	40-120	0			
Naphthalene	1050	59	1301	0	80.7	40-105	0			
Pyrene	1090	59	1301	0	83.8	45-125	0			
Surr: 2-Fluorobiphenyl	2525	0	3253	0	77.6	12-100	0			
Surr: 4-Terphenyl-d14	3214	0	3253	0	98.8	25-137	0			
Surr: Nitrobenzene-d5	2549	0	3253	0	78.4	37-107	0			

MSD				Units: µg/Kg				Analysis Date: 9/28/2012 01:08 PM		
Sample ID: 1209633-07B MSD		Run ID: SVMS7_120928A		SeqNo: 2095788		Prep Date: 9/27/2012		DF: 1		
Client ID:										
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1149	60	1327	0	86.5	45-110	1104	3.97	30	
Anthracene	1236	60	1327	0	93.1	55-105	1191	3.67	30	
Benzo(a)anthracene	1150	60	1327	0	86.6	50-110	1111	3.44	30	
Benzo(a)pyrene	1305	60	1327	0	98.3	50-110	1235	5.51	30	
Benzo(b)fluoranthene	1159	60	1327	0	87.3	45-115	1079	7.16	30	
Benzo(g,h,i)perylene	1125	60	1327	0	84.8	40-125	1068	5.23	30	
Benzo(k)fluoranthene	1269	60	1327	0	95.6	45-115	1200	5.66	30	
Chrysene	1213	60	1327	0	91.4	55-110	1164	4.09	30	
Dibenzo(a,h)anthracene	1231	60	1327	0	92.7	40-125	1157	6.17	30	
Fluoranthene	1296	60	1327	0	97.6	55-115	1254	3.28	30	
Fluorene	1228	60	1327	0	92.5	50-110	1202	2.15	30	
Indeno(1,2,3-cd)pyrene	1189	60	1327	0	89.6	40-120	1117	6.26	30	
Naphthalene	1079	60	1327	0	81.3	40-105	1050	2.73	30	
Pyrene	1125	60	1327	0	84.7	45-125	1090	3.12	30	
Surr: 2-Fluorobiphenyl	2595	0	3318	0	78.2	12-100	2525	2.76	40	
Surr: 4-Terphenyl-d14	3407	0	3318	0	103	25-137	3214	5.82	40	
Surr: Nitrobenzene-d5	2660	0	3318	0	80.2	37-107	2549	4.24	40	

The following samples were analyzed in this batch: 1209668-01B

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43712** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: MBLK-43712-43712				Units: µg/Kg		Analysis Date: 9/27/2012 03:01 PM		
Client ID:		Run ID: VMS9_120927A				SeqNo: 2093720		Prep Date: 9/25/2012		DF: 1
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	1024	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	933	0	1000	0	93.3	70-130	0			
Surr: Dibromofluoromethane	937.5	0	1000	0	93.8	70-130	0			
Surr: Toluene-d8	998	0	1000	0	99.8	70-130	0			

MBLK		Sample ID: MBLK-43712-43712				Units: µg/Kg		Analysis Date: 9/28/2012 12:40 PM		
Client ID:		Run ID: VMS6_120928A				SeqNo: 2095234		Prep Date: 9/25/2012		DF: 1
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	1002	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1012	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	970.5	0	1000	0	97	70-130	0			
Surr: Toluene-d8	1003	0	1000	0	100	70-130	0			

MBLK		Sample ID: MBLK-43712-43712				Units: µg/Kg		Analysis Date: 9/28/2012 06:51 PM		
Client ID:		Run ID: VMS5_120928A				SeqNo: 2095471		Prep Date: 9/25/2012		DF: 1
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	1007	0	1000	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	991	0	1000	0	99.1	70-130	0			
Surr: Dibromofluoromethane	969.5	0	1000	0	97	70-130	0			
Surr: Toluene-d8	1002	0	1000	0	100	70-130	0			

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43712** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: MBLK-43712-43712				Units: µg/Kg		Analysis Date: 9/29/2012 12:50 PM		
Client ID:		Run ID: VMS6_120928B				SeqNo: 2095746		Prep Date: 9/25/2012		DF: 1
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>1002</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1029</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>957</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95.7</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>1010</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			

MBLK		Sample ID: MBLK-43712-43712				Units: µg/Kg		Analysis Date: 9/30/2012 02:43 AM		
Client ID:		Run ID: VMS9_120929A				SeqNo: 2096663		Prep Date: 9/25/2012		DF: 1
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>1130</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>113</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>851.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>85.2</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>1058</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>106</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>999.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>			

LCS		Sample ID: LCS-43712-43712				Units: µg/Kg		Analysis Date: 9/27/2012 01:45 PM		
Client ID:		Run ID: VMS9_120927A				SeqNo: 2093719		Prep Date: 9/25/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	876.5	30	1000	0	87.6	75-125	0			
Ethylbenzene	892	30	1000	0	89.2	75-125	0			
m,p-Xylene	1828	60	2000	0	91.4	80-125	0			
o-Xylene	900	30	1000	0	90	75-125	0			
Toluene	937.5	30	1000	0	93.8	70-125	0			
Xylenes, Total	2728	90	3000	0	90.9	75-125	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>944.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>94.4</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>1014</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>987</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.7</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>984</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.4</i>	<i>70-130</i>	<i>0</i>			

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43712** Instrument ID **VMS9** Method: **SW8260**

LCS Sample ID: LCS-43712-43712				Units: µg/Kg		Analysis Date: 9/28/2012 11:28 AM				
Client ID:		Run ID: VMS6_120928A		SeqNo: 2095233		Prep Date: 9/25/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1034	30	1000	0	103	75-125	0			
Ethylbenzene	1042	30	1000	0	104	75-125	0			
m,p-Xylene	2091	60	2000	0	105	80-125	0			
o-Xylene	1030	30	1000	0	103	75-125	0			
Toluene	1022	30	1000	0	102	70-125	0			
Xylenes, Total	3122	90	3000	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	973.5	0	1000	0	97.4	70-130	0			
Surr: 4-Bromofluorobenzene	976	0	1000	0	97.6	70-130	0			
Surr: Dibromofluoromethane	990.5	0	1000	0	99	70-130	0			
Surr: Toluene-d8	973	0	1000	0	97.3	70-130	0			

LCS Sample ID: LCS-43712-43712				Units: µg/Kg		Analysis Date: 9/28/2012 05:39 PM				
Client ID:		Run ID: VMS5_120928A		SeqNo: 2095470		Prep Date: 9/25/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	922	30	1000	0	92.2	75-125	0			
Ethylbenzene	990	30	1000	0	99	75-125	0			
m,p-Xylene	1892	60	2000	0	94.6	80-125	0			
o-Xylene	930	30	1000	0	93	75-125	0			
Toluene	937	30	1000	0	93.7	70-125	0			
Xylenes, Total	2822	90	3000	0	94	75-125	0			
Surr: 1,2-Dichloroethane-d4	999.5	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1004	0	1000	0	100	70-130	0			
Surr: Dibromofluoromethane	1008	0	1000	0	101	70-130	0			
Surr: Toluene-d8	998.5	0	1000	0	99.8	70-130	0			

LCS Sample ID: LCS-43712-43712				Units: µg/Kg		Analysis Date: 9/28/2012 11:37 PM				
Client ID:		Run ID: VMS6_120928B		SeqNo: 2095745		Prep Date: 9/25/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1106	30	1000	0	111	75-125	0			
Ethylbenzene	1110	30	1000	0	111	75-125	0			
m,p-Xylene	2240	60	2000	0	112	80-125	0			
o-Xylene	1100	30	1000	0	110	75-125	0			
Toluene	1085	30	1000	0	108	70-125	0			
Xylenes, Total	3340	90	3000	0	111	75-125	0			
Surr: 1,2-Dichloroethane-d4	1018	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	1046	0	1000	0	105	70-130	0			
Surr: Dibromofluoromethane	1032	0	1000	0	103	70-130	0			
Surr: Toluene-d8	1021	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: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43712** Instrument ID **VMS9** Method: **SW8260**

LCS				Sample ID: LCS-43712-43712				Units: µg/Kg			Analysis Date: 9/30/2012 01:52 AM			
Client ID:				Run ID: VMS9_120929A				SeqNo: 2096661			Prep Date: 9/25/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	1068	30	1000	0	107	75-125	0							
Ethylbenzene	1040	30	1000	0	104	75-125	0							
m,p-Xylene	1952	60	2000	0	97.6	80-125	0							
o-Xylene	1048	30	1000	0	105	75-125	0							
Toluene	1020	30	1000	0	102	70-125	0							
Xylenes, Total	3001	90	3000	0	100	75-125	0							
Surr: 1,2-Dichloroethane-d4	1118	0	1000	0	112	70-130	0							
Surr: 4-Bromofluorobenzene	992	0	1000	0	99.2	70-130	0							
Surr: Dibromofluoromethane	963	0	1000	0	96.3	70-130	0							
Surr: Toluene-d8	1046	0	1000	0	105	70-130	0							

MS				Sample ID: 1209677-03A MS				Units: µg/Kg			Analysis Date: 9/28/2012 08:23 PM			
Client ID:				Run ID: VMS6_120928A				SeqNo: 2095495			Prep Date: 9/25/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	1034	30	1000	0	103	75-125	0							
Ethylbenzene	1046	30	1000	0	105	75-125	0							
m,p-Xylene	2099	60	2000	0	105	80-125	0							
o-Xylene	1021	30	1000	0	102	75-125	0							
Toluene	1017	30	1000	0	102	70-125	0							
Xylenes, Total	3120	90	3000	0	104	75-125	0							
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0							
Surr: 4-Bromofluorobenzene	1022	0	1000	0	102	70-130	0							
Surr: Dibromofluoromethane	996.5	0	1000	0	99.6	70-130	0							
Surr: Toluene-d8	1022	0	1000	0	102	70-130	0							

MSD					Sample ID: 1209677-03A MSD		Units: µg/Kg		Analysis Date: 9/28/2012 08:47 PM		
Client ID:			Run ID: VMS6_120928A			SeqNo: 2095496		Prep Date: 9/25/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	996.5	30	1000	0	99.6	75-125	1034	3.74	30		
Ethylbenzene	995	30	1000	0	99.5	75-125	1046	4.95	30		
m,p-Xylene	2028	60	2000	0	101	80-125	2099	3.42	30		
o-Xylene	999.5	30	1000	0	100	75-125	1021	2.13	30		
Toluene	981	30	1000	0	98.1	70-125	1017	3.6	30		
Xylenes, Total	3028	90	3000	0	101	75-125	3120	2.99	30		
Surr: 1,2-Dichloroethane-d4	996.5	0	1000	0	99.6	70-130	1000	0.351	30		
Surr: 4-Bromofluorobenzene	1024	0	1000	0	102	70-130	1022	0.0978	30		
Surr: Dibromofluoromethane	981	0	1000	0	98.1	70-130	996.5	1.57	30		
Surr: Toluene-d8	999.5	0	1000	0	100	70-130	1022	2.23	30		

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43712** Instrument ID **VMS9** Method: **SW8260**

The following samples were analyzed in this batch:

1209668-01A

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43770** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-43770-43770					Units: mg/Kg		Analysis Date: 9/28/2012 11:30 AM		
Client ID:	Run ID: WETCHEM_120928J				SeqNo: 2094881		Prep Date: 9/26/2012		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-43770-43770					Units: mg/Kg		Analysis Date: 9/28/2012 11:30 AM		
Client ID:	Run ID: WETCHEM_120928J				SeqNo: 2094880		Prep Date: 9/26/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.749 0.50 1.984 0 88.1 75-110 0

MS	Sample ID: 1209677-05B MS					Units: mg/Kg		Analysis Date: 9/28/2012 11:30 AM		
Client ID:	Run ID: WETCHEM_120928J				SeqNo: 2094876		Prep Date: 9/26/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.167 0.50 2.008 0 58.1 60-130 0 S

MSD	Sample ID: 1209677-05B MSD					Units: mg/Kg		Analysis Date: 9/28/2012 11:30 AM		
Client ID:	Run ID: WETCHEM_120928J				SeqNo: 2094877		Prep Date: 9/26/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.157 0.50 1.992 0 58.1 60-130 1.167 0.8 30 S

The following samples were analyzed in this batch:

1209668-01B

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **43778** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 1209677-04C DUP				Units: mmhos/cm @25°F		Analysis Date: 9/28/2012 12:00 PM		
Client ID:		Run ID: WETCHEM_120928C				SeqNo: 2094629		Prep Date: 9/28/2012		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.622	0.025	0	0	0		0.627	0.801	50	

The following samples were analyzed in this batch:

1209668-01C

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **R110313** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-R110313-R110313					Units: s.u.			Analysis Date: 9/26/2012 09:30 AM		
Client ID:				Run ID: WETCHEM_120926S				SeqNo: 2091516			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: 1209667-01B DUP					Units: s.u.			Analysis Date: 9/26/2012 09:30 AM			
Client ID:					Run ID: WETCHEM_120926S					SeqNo: 2091518			Prep Date:		DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH					8.72		0	0	0	0	0-0	8.72	0	20		

DUP				Sample ID: 1209686-01A DUP				Units: s.u.			Analysis Date: 9/26/2012 09:30 AM		
Client ID:				Run ID: WETCHEM_120926S				SeqNo: 2091530		Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
pH		7.68	0	0	0	0	0-0	7.68	0	20			

The following samples were analyzed in this batch:

1209668-01B

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

Client: HRL Compliance Solutions
Work Order: 1209668
Project: Lone Mt Production Pit Closure 12-102 9/19/12

QC BATCH REPORT

Batch ID: **R110343** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R110343				Units: % of sample			Analysis Date: 9/26/2012 12:00 PM		
Client ID:	Run ID: MOIST_120926A				SeqNo: 2092181			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-R110343				Units: % of sample			Analysis Date: 9/26/2012 12:00 PM		
Client ID:	Run ID: MOIST_120926A				SeqNo: 2092177			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: 1209696-09A DUP				Units: % of sample			Analysis Date: 9/26/2012 12:00 PM		
Client ID:	Run ID: MOIST_120926A				SeqNo: 2092169			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 8.12 0.050 0 0 0 0-0 8.85 8.6 20 H

DUP	Sample ID: 1209696-14A DUP				Units: % of sample			Analysis Date: 9/26/2012 12:00 PM		
Client ID:	Run ID: MOIST_120926A				SeqNo: 2092175			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 2.72 0.050 0 0 0 0-0 2.69 1.11 20 H

The following samples were analyzed in this batch:

1209668-01B

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

WORKORDER
#

1209668

PAGE

1 of 1


DISPOSAL



By Lab (or) Return to Client

[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: <div style="text-align: center;"> <p>4.8°C</p>  </div>	QC PACKAGE (check below)							
	<input checked="" 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-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-NaHSO ₄ 7-Other 8-4 degrees C 9-5035								

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Renee W. Co.	7/24/12	5:00
RECEIVED BY		Diane F Shaw	7/25/12	1003
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **25-Sep-12 10:00**

Work Order: **1209668**

Received by: **DS**

Checklist completed by Diane Shaw 25-Sep-12
eSignature Date

Reviewed by: Ann Preston 28-Sep-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>4.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>9/25/2012 1:10:51 PM</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:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

**ALS Environmental**

3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 9/24/12 Time: 10:10
Name: ALCSE
Company: ALCSE

Seal Broken By:

Date:

**NEW Package
US Airbill**

8001 2126 9126

0200 Form 10 No.

FedEx Retrieval Copy

1 From [Redacted]
Date 9/24/12

Sender's Name Red WolfPhone 970 243 2071Company ALCSEAddress 2383 1/2 RDCity Grand Junction State CO ZIP 81506

2 Your Internal Billing Reference

3 To Recipient's Name Sam's Recycling Phone 616 599 6070

Company ALS GroupAddress 3360 B8th AVEAddress
Use this line for the HOLD location address or for continuation of your shipping address.City Holland State MI ZIP 49424

4 Express Package Service *To most locations.
NOTE: Shipment will be changed. Please select carefully.

Packages up to 150 lbs.
... packages over 150 lbs., use the new
FedEx Express Freight US Airbill.

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 delivery to select
locations. Friday shipments will be delivered on
Monday unless SATURDAY Delivery is selected.

05 ☐ FedEx Standard Overnight
Next business afternoon delivery to select
locations. Saturday Delivery NOT available.

49 ☐ NEW FedEx 2Day A.M.
Second business morning delivery to select
locations. Saturday Delivery NOT available.

03 ☐ FedEx 2Day
Second business afternoon delivery to select
locations. Saturday Delivery NOT available.

20 ☐ FedEx Express Saver
Third business day delivery to select
locations. Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

06 ☐ FedEx Envelope* 02 ☐ FedEx Pak* 03 ☐ FedEx Box 04 ☐ FedEx Tube 05 ☐ Other

6 Special Handling and Delivery Signature Options

SATURDAY DELIVERY

No Signature Required
Package may be held without
signature for delivery.

10 ☐ Direct Signature
Signature of 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. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

No 04 ☐ Yes
Yes per attached
Shipper's Declaration

Yes
Shipper's Declaration
not required

06 ☐ Dry Ice
Dry Ice, 3 UN 1845

Dangerous goods requiring dry ice will not be shipped in FedEx packaging
or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment Bill to:

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

Obtain recip.
Acct. No.

Sender Acct. No. in Section 1 of bill 2 ☒ Recipient 3 ☐ Third Party 4 ☐ Credit Card 5 ☐ Cash/Check

Total Packages 2 Total Weight 612 lbs.

Credit Card Auth.

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

612

8001 2126 9126

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