



16-Oct-2014

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

Re: **Koch Exploration -A-30 Stockpiled Soil 10.7.14**

Work Order: **1410563**

Dear Kris,

ALS Environmental received 1 sample on 09-Oct-2014 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with NELAP standard requirements and QC results achieved 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 23.

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: MN 532786

### Report of Laboratory Analysis

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Environmental 

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**Client:** HRL Compliance Solutions, Inc  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14  
**Work Order:** 1410563

**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>
1410563-01	Stockpiled Soil Composite Sample	Soil		10/7/2014 13:50	10/9/2014 09:30	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions, Inc  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14  
**Work Order:** 1410563

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**Case Narrative**

Batch 63761 MS/MSD data for PAHs is not related to this project's samples. No data requires qualification.

Batch 63768 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

Batch 63893 sample 1410563-01 MS/MSD recoveries for Hexavalent Chromium were below the lower control limit. The corresponding result in the parent sample may be biased low for Hexavalent Chromium.

<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 is present at an estimated concentration between the MDL and Report 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
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

# ALS Group USA, Corp

Date: 16-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14  
**Sample ID:** Stockpiled Soil Composite Sample  
**Collection Date:** 10/7/2014 01:50 PM

**Work Order:** 1410563  
**Lab ID:** 1410563-01  
**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>21</b>		<b>SW8015M</b>		Prep: SW3541 / 10/10/14	Analyst: <b>IT</b>
Surr: 4-Terphenyl-d14	76.4		4.8	mg/Kg-dry	1	10/11/2014 04:53 AM
			39-133	%REC	1	10/11/2014 04:53 AM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015</b>		Prep: SW5035 / 10/10/14	Analyst: <b>IT</b>
Surr: Toluene-d8	109		2.9	mg/Kg-dry	1	10/11/2014 12:48 PM
			50-150	%REC	1	10/11/2014 12:48 PM
<b>MERCURY BY CVAA</b>						
<b>Mercury</b>	<b>0.019</b>		<b>SW7471</b>		Prep: SW7471 / 10/10/14	Analyst: <b>LR</b>
			0.017	mg/Kg-dry	1	10/10/2014 04:09 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
			<b>SW846 6010C</b>		Prep: USDA Method 20B / 10/11/14	Analyst: <b>JEC</b>
<b>Calcium</b>	<b>140</b>		<b>5.0</b>	<b>mg/L</b>	10	10/13/2014 02:38 PM
<b>Magnesium</b>	<b>22</b>		<b>2.0</b>	<b>mg/L</b>	10	10/13/2014 02:38 PM
<b>Sodium</b>	<b>9.1</b>		<b>2.0</b>	<b>mg/L</b>	10	10/13/2014 02:38 PM
<b>METALS BY ICP-MS</b>						
			<b>SW6020A</b>		Prep: SW3050B / 10/10/14	Analyst: <b>ML</b>
<b>Arsenic</b>	<b>6.2</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Barium</b>	<b>190</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Cadmium</b>	<b>ND</b>		<b>0.84</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Chromium</b>	<b>10</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Copper</b>	<b>13</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Lead</b>	<b>13</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Nickel</b>	<b>13</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Selenium</b>	<b>2.6</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Silver</b>	<b>ND</b>		<b>2.1</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>Zinc</b>	<b>54</b>		<b>4.2</b>	<b>mg/Kg-dry</b>	5	10/10/2014 11:44 PM
<b>SODIUM ADSORPTION RATIO</b>						
			<b>USDA H60 METHOD</b>		Prep: USDA Method 20B / 10/11/14	Analyst: <b>JEC</b>
<b>Sodium Adsorption Ratio</b>	<b>0.19</b>		<b>0.010</b>	<b>none</b>	1	10/13/2014
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW846 8270D</b>		Prep: SW3541 / 10/10/14	Analyst: <b>RM</b>
<b>Acenaphthene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Acenaphthylene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Anthracene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Benzo(a)anthracene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Benzo(a)pyrene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Benzo(b)fluoranthene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Benzo(g,h,i)perylene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Benzo(k)fluoranthene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
<b>Chrysene</b>	<b>ND</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM

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

# ALS Group USA, Corp

Date: 16-Oct-14

**Client:** HRL Compliance Solutions, Inc  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14  
**Sample ID:** Stockpiled Soil Composite Sample  
**Collection Date:** 10/7/2014 01:50 PM

**Work Order:** 1410563  
**Lab ID:** 1410563-01  
**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		7.7	µg/Kg-dry	1	10/13/2014 07:28 PM
<b>Fluoranthene</b>	<b>8.5</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
Fluorene	ND		7.7	µg/Kg-dry	1	10/13/2014 07:28 PM
Indeno(1,2,3-cd)pyrene	ND		7.7	µg/Kg-dry	1	10/13/2014 07:28 PM
Naphthalene	ND		7.7	µg/Kg-dry	1	10/13/2014 07:28 PM
<b>Pyrene</b>	<b>9.2</b>		<b>7.7</b>	<b>µg/Kg-dry</b>	1	10/13/2014 07:28 PM
Surr: 2-Fluorobiphenyl	78.8		12-100	%REC	1	10/13/2014 07:28 PM
Surr: 4-Terphenyl-d14	102		25-137	%REC	1	10/13/2014 07:28 PM
Surr: Nitrobenzene-d5	74.6		37-107	%REC	1	10/13/2014 07:28 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>	Prep: SW5035 / 10/10/14 Analyst: <b>AK</b>		
Benzene	ND		35	µg/Kg-dry	1	10/13/2014 02:35 PM
Ethylbenzene	ND		35	µg/Kg-dry	1	10/13/2014 02:35 PM
m,p-Xylene	ND		69	µg/Kg-dry	1	10/13/2014 02:35 PM
o-Xylene	ND		35	µg/Kg-dry	1	10/13/2014 02:35 PM
Toluene	ND		35	µg/Kg-dry	1	10/13/2014 02:35 PM
Xylenes, Total	ND		100	µg/Kg-dry	1	10/13/2014 02:35 PM
Surr: 1,2-Dichloroethane-d4	96.8		70-130	%REC	1	10/13/2014 02:35 PM
Surr: 4-Bromofluorobenzene	97.6		70-130	%REC	1	10/13/2014 02:35 PM
Surr: Dibromofluoromethane	96.4		70-130	%REC	1	10/13/2014 02:35 PM
Surr: Toluene-d8	96.4		70-130	%REC	1	10/13/2014 02:35 PM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHOD</b>	Prep: USDA Method 20B / 10/11/14 Analyst: <b>MELB</b>		
Electrical Conductivity @ Saturation	<b>0.98</b>		<b>0.050</b>	mmhos/cm @25	10	10/14/2014 02:00 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>	Analyst: <b>MB</b>		
Chromium, Trivalent	<b>10</b>		<b>0.58</b>	mg/Kg-dry	1	10/14/2014 04:30 PM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>	Prep: SW3060A / 10/10/14 Analyst: <b>MB</b>		
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	10/14/2014 10:00 AM
<b>MOISTURE</b>			<b>A2540 G</b>	Analyst: <b>RLM</b>		
Moisture	<b>13</b>		<b>0.050</b>	% of sample	1	10/13/2014 06:20 PM
<b>PH</b>			<b>SW9045D</b>	Prep: EXTRACT / 10/10/14 Analyst: <b>STP</b>		
pH	<b>7.9</b>			s.u.	1	10/10/2014 12:40 PM

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

Client: HRL Compliance Solutions, Inc

## QC BATCH REPORT

Work Order: 1410563

Project: Koch Exploration -A-30 Stockpiled Soil 10.7.14

Batch ID: 63762

Instrument ID GC8

Method: SW8015M

<b>MBLK</b>		Sample ID: <b>DBLKS1-63762-63762</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 10:28 PM</b>		
Client ID:		Run ID: <b>GC8_141010A</b>				SeqNo: <b>2978412</b>		Prep Date: <b>10/10/2014</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	1.452	0	1.667	0	87.1	39-133	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-63762-63762</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 10:55 PM</b>		
Client ID:		Run ID: <b>GC8_141010A</b>				SeqNo: <b>2978413</b>		Prep Date: <b>10/10/2014</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)	145	4.2	166.7	0	87	61-109	0			
Surr: 4-Terphenyl-d14	1.175	0	1.667	0	70.5	39-133	0			

<b>MS</b>		Sample ID: <b>1410499-01B MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 11:23 PM</b>		
Client ID:		Run ID: <b>GC8_141010A</b>				SeqNo: <b>2978414</b>		Prep Date: <b>10/10/2014</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)	325.9	8.0	319.8	0	102	48-110	0			
Surr: 4-Terphenyl-d14	2.656	0	3.198	0	83	39-133	0			

<b>MSD</b>		Sample ID: <b>1410499-01B MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 11:50 PM</b>		
Client ID:		Run ID: <b>GC8_141010A</b>				SeqNo: <b>2978415</b>		Prep Date: <b>10/10/2014</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)	330.9	8.3	331.8	0	99.7	48-110	325.9	1.52	30	
Surr: 4-Terphenyl-d14	2.828	0	3.318	0	85.2	39-133	2.656	6.27	30	

The following samples were analyzed in this batch: 1410563-01A

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63772**      Instrument ID **GC9**      Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>MBLK-63772-63772</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>10/10/2014 07:22 PM</b>		
Client ID:		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978500</b>		Prep Date: <b>10/10/2014</b>		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	2,500								
<i>Surr: Toluene-d8</i>	4614	0	5000	0	92.3	50-150	0			

<b>LCS</b>		Sample ID: <b>LCS-63772-63772</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>10/10/2014 06:57 PM</b>		
Client ID:		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978499</b>		Prep Date: <b>10/10/2014</b>		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)	548600	2,500	500000	0	110	70-130	0			
<i>Surr: Toluene-d8</i>	5380	0	5000	0	108	50-150	0			

<b>MS</b>		Sample ID: <b>1410406-03B MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>10/10/2014 09:03 PM</b>		
Client ID:		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978503</b>		Prep Date: <b>10/10/2014</b>		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)	600900	2,500	500000	0	120	70-130	0			
<i>Surr: Toluene-d8</i>	5398	0	5000	0	108	50-150	0			

<b>MSD</b>		Sample ID: <b>1410406-03B MSD</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>10/10/2014 09:28 PM</b>		
Client ID:		Run ID: <b>GC9_141010A</b>				SeqNo: <b>2978504</b>		Prep Date: <b>10/10/2014</b>		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)	572600	2,500	500000	0	115	70-130	600900	4.83	30	
<i>Surr: Toluene-d8</i>	4671	0	5000	0	93.4	50-150	5398	14.4	30	

The following samples were analyzed in this batch:

1410563-01A



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63769** Instrument ID **HG1** Method: **SW7471**

<b>MBLK</b>		Sample ID: <b>MBLK-63769-63769</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 03:32 PM</b>		
Client ID:		Run ID: <b>HG1_141010A</b>				SeqNo: <b>2978174</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

<b>LCS</b>		Sample ID: <b>LCS-63769-63769</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 03:34 PM</b>		
Client ID:		Run ID: <b>HG1_141010A</b>				SeqNo: <b>2978175</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1718 0.020 0.1665 0 103 80-120 0

<b>MS</b>		Sample ID: <b>1410563-01AMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 04:12 PM</b>		
Client ID: <b>Stockpiled Soil Composite Sample</b>		Run ID: <b>HG1_141010A</b>				SeqNo: <b>2978189</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1356 0.014 0.1148 0.01606 104 75-125 0

<b>MSD</b>		Sample ID: <b>1410563-01AMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/10/2014 04:14 PM</b>		
Client ID: <b>Stockpiled Soil Composite Sample</b>		Run ID: <b>HG1_141010A</b>				SeqNo: <b>2978190</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1284 0.014 0.1156 0.01606 97.1 75-125 0.1356 5.51 35

The following samples were analyzed in this batch: 1410563-01A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63750** Instrument ID **ICP2** Method: **SW846 6010C**

DUP				Sample ID: 1410561-03BDUP				Units:mg/L			Analysis Date: 10/13/2014 02:26 PM		
Client ID:				Run ID: ICP2_141013A				SeqNo:2979061		Prep Date: 10/11/2014		DF: 10	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Calcium		171.2	5.0	0	0	0	0-0	0					
Magnesium		19.62	2.0	0	0	0	0-0	0					
Sodium		12.22	2.0	0	0	0	0-0	0					

The following samples were analyzed in this batch:

1410563-01B

Batch ID: **63750** Instrument ID **SAR** Method: **USDA H60 Method**

DUP		Sample ID: 1410561-03BDUP				Units:none		Analysis Date: 10/13/2014		
Client ID:		Run ID: SAR_141013A				SeqNo:2979093		Prep Date: 10/11/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.2358	0.010	0	0	0		0.2391	1.4	50	

The following samples were analyzed in this batch:

1410563-01B

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63768** Instrument ID **ICPMS1** Method: **SW6020A**

Sample ID: <b>MBLK-63768-63768</b>				Units: <b>mg/Kg</b>			Analysis Date: <b>10/10/2014 07:23 PM</b>			
Client ID:		Run ID: <b>ICPMS1_141010A</b>			SeqNo: <b>2977408</b>		Prep Date: <b>10/10/2014</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								
Barium	0.04838	0.25								J
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	0.1068	0.25								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	0.001634	0.25								J
Zinc	0.2365	0.50								J

LCS					Sample ID: LCS-63768-63768			Units:mg/Kg		Analysis Date: 10/10/2014 07:29 PM	
Client ID:			Run ID: ICPMS1_141010A			SeqNo:2977409		Prep Date: 10/10/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	4.444	0.25	5	0	88.9	80-120	0				
Barium	4.68	0.25	5	0	93.6	80-120	0				
Cadmium	4.556	0.10	5	0	91.1	80-120	0				
Chromium	4.6	0.25	5	0	92	80-120	0				
Copper	4.67	0.25	5	0	93.4	80-120	0				
Lead	4.629	0.25	5	0	92.6	80-120	0				
Nickel	4.626	0.25	5	0	92.5	80-120	0				
Selenium	4.258	0.25	5	0	85.2	80-120	0				
Silver	4.676	0.25	5	0	93.5	80-120	0				
Zinc	4.796	0.50	5	0	95.9	80-120	0				

MS					Sample ID: 1410491-09AMS		Units:mg/Kg		Analysis Date: 10/10/2014 09:18 PM		
Client ID:			Run ID: ICPMS1_141010A			SeqNo:2977427		Prep Date: 10/10/2014		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	9.767	1.3	6.702	3.71	90.4	75-125	0				
Barium	44.02	1.3	6.702	33.79	153	75-125	0			SO	
Cadmium	6.582	0.54	6.702	0.1349	96.2	75-125	0				
Chromium	16.56	1.3	6.702	7.174	140	75-125	0			S	
Lead	12.4	1.3	6.702	6.056	94.6	75-125	0				
Nickel	13.56	1.3	6.702	5.156	125	75-125	0			S	
Silver	6.55	1.3	6.702	0.027	97.3	75-125	0				
Zinc	32.23	2.7	6.702	18.97	198	75-125	0			S	

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1410563  
 Project: Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: 63768 Instrument ID ICPMS1 Method: SW6020A

<b>MS</b>		Sample ID: 1410491-09AMS				Units:mg/Kg		Analysis Date: 10/11/2014 08:25 PM		
Client ID:		Run ID: ICPMS1_141011A				SeqNo:2977934		Prep Date: 10/10/2014		DF: 40
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Selenium	6.643	13	6.702	-0.1418	101	75-125	0			J
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<b>MS</b>		Sample ID: 1410491-09AMS				Units:mg/Kg		Analysis Date: 10/14/2014 02:17 AM		
Client ID:		Run ID: ICPMS2_141013A				SeqNo:2979711		Prep Date: 10/10/2014		DF: 40
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Copper	10.64	13	6.702	3.582	105	75-125	0			J
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<b>MSD</b>		Sample ID: 1410491-09AMSD				Units:mg/Kg		Analysis Date: 10/10/2014 09:24 PM		
Client ID:		Run ID: ICPMS1_141010A				SeqNo:2977428		Prep Date: 10/10/2014		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	8.605	1.3	6.605	3.71	74.1	75-125	9.767	12.6	25	S
Barium	33.08	1.3	6.605	33.79	-10.9	75-125	44.02	28.4	25	SRO
Cadmium	6.095	0.53	6.605	0.1349	90.2	75-125	6.582	7.68	25	
Chromium	13.61	1.3	6.605	7.174	97.5	75-125	16.56	19.5	25	
Lead	11	1.3	6.605	6.056	74.8	75-125	12.4	12	25	S
Nickel	11.86	1.3	6.605	5.156	102	75-125	13.56	13.4	25	
Silver	6.132	1.3	6.605	0.027	92.4	75-125	6.55	6.58	25	
Zinc	25.55	2.6	6.605	18.97	99.6	75-125	32.23	23.1	25	

<b>MSD</b>		Sample ID: 1410491-09AMSD				Units:mg/Kg		Analysis Date: 10/11/2014 08:31 PM		
Client ID:		Run ID: ICPMS1_141011A				SeqNo:2977935		Prep Date: 10/10/2014		DF: 40
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Selenium	8.201	13	6.605	-0.1418	126	75-125	6.643	0	25	JS
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<b>MSD</b>		Sample ID: 1410491-09AMSD				Units:mg/Kg		Analysis Date: 10/14/2014 02:24 AM		
Client ID:		Run ID: ICPMS2_141013A				SeqNo:2979712		Prep Date: 10/10/2014		DF: 40
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Copper	10.18	13	6.605	3.582	99.9	75-125	10.64	0	25	J
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The following samples were analyzed in this batch:

1410563-01A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63761**      Instrument ID **SVMS8**      Method: **SW846 8270D**

MBLK		Sample ID: <b>SBLKS1-63761-63761</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>10/13/2014 11:26 AM</b>		
Client ID:		Run ID: <b>SVMS8_141013A</b>				SeqNo: <b>2980994</b>		Prep Date: <b>10/10/2014</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	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1205	0	1667	0	72.3	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1877	0	1667	0	113	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1226	0	1667	0	73.6	37-107	0			

LCS		Sample ID: <b>SLCSS1-63761-63761</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>10/13/2014 11:46 AM</b>		
Client ID:		Run ID: <b>SVMS8_141013A</b>				SeqNo: <b>2980995</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	571.7	6.7	666.7	0	85.7	45-110	0			
Acenaphthylene	592	6.7	666.7	0	88.8	45-105	0			
Anthracene	636.7	6.7	666.7	0	95.5	55-105	0			
Benzo(a)anthracene	620.7	6.7	666.7	0	93.1	50-110	0			
Benzo(a)pyrene	674	6.7	666.7	0	101	50-110	0			
Benzo(b)fluoranthene	697.3	6.7	666.7	0	105	45-115	0			
Benzo(g,h,i)perylene	570.3	6.7	666.7	0	85.5	40-125	0			
Benzo(k)fluoranthene	684.7	6.7	666.7	0	103	45-115	0			
Chrysene	666	6.7	666.7	0	99.9	55-110	0			
Dibenzo(a,h)anthracene	587.3	6.7	666.7	0	88.1	40-125	0			
Fluoranthene	595	6.7	666.7	0	89.2	55-115	0			
Fluorene	571	6.7	666.7	0	85.6	50-110	0			
Indeno(1,2,3-cd)pyrene	606.7	6.7	666.7	0	91	40-120	0			
Naphthalene	546	6.7	666.7	0	81.9	40-105	0			
Pyrene	781.7	6.7	666.7	0	117	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1402	0	1667	0	84.1	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	2031	0	1667	0	122	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1367	0	1667	0	82	37-107	0			

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63761**      Instrument ID **SVMS8**      Method: **SW846 8270D**

MS				Sample ID: 1410452-01A MS			Units: µg/Kg		Analysis Date: 10/13/2014 04:07 PM		
Client ID:		Run ID: SVMS8_141013A			SeqNo:2981007		Prep Date: 10/10/2014		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1277	130	1283	0	99.5	45-110	0				
Acenaphthylene	1623	130	1283	0	126	45-105	0			S	
Anthracene	2034	130	1283	0	158	55-105	0			S	
Benzo(a)anthracene	5396	130	1283	3720	131	50-110	0			S	
Benzo(a)pyrene	5460	130	1283	0	425	50-110	0			S	
Benzo(b)fluoranthene	8110	130	1283	0	632	45-115	0			S	
Benzo(g,h,i)perylene	4318	130	1283	0	336	40-125	0			S	
Benzo(k)fluoranthene	3477	130	1283	0	271	45-115	0			S	
Chrysene	6788	130	1283	0	529	55-110	0			S	
Dibenzo(a,h)anthracene	1707	130	1283	620.5	84.6	40-125	0				
Fluoranthene	12590	130	1283	0	981	55-115	0			S	
Fluorene	1585	130	1283	0	123	50-110	0			S	
Indeno(1,2,3-cd)pyrene	4581	130	1283	2881	132	40-120	0			S	
Naphthalene	1084	130	1283	0	84.5	40-105	0				
Pyrene	9938	130	1283	0	774	45-125	0			S	
Surr: 2-Fluorobiphenyl	2496	0	3208	0	77.8	12-100	0				
Surr: 4-Terphenyl-d14	2733	0	3208	0	85.2	25-137	0				
Surr: Nitrobenzene-d5	2400	0	3208	0	74.8	37-107	0				

MSD					Sample ID: 1410452-01A MSD		Units: µg/Kg		Analysis Date: 10/13/2014 04:27 PM		
Client ID:			Run ID: SVMS8_141013A			SeqNo:2981010		Prep Date: 10/10/2014		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1229	130	1287	0	95.5	45-110	1277	3.85	30		
Acenaphthylene	1698	130	1287	0	132	45-105	1623	4.51	30	S	
Anthracene	2078	130	1287	0	161	55-105	2034	2.13	30	S	
Benzo(a)anthracene	5468	130	1287	3720	136	50-110	5396	1.32	30	S	
Benzo(a)pyrene	5333	130	1287	0	414	50-110	5460	2.36	30	S	
Benzo(b)fluoranthene	7783	130	1287	0	605	45-115	8110	4.11	30	S	
Benzo(g,h,i)perylene	4213	130	1287	0	327	40-125	4318	2.45	30	S	
Benzo(k)fluoranthene	3570	130	1287	0	277	45-115	3477	2.63	30	S	
Chrysene	6658	130	1287	0	517	55-110	6788	1.94	30	S	
Dibenzo(a,h)anthracene	1730	130	1287	620.5	86.3	40-125	1707	1.38	30		
Fluoranthene	12580	130	1287	0	978	55-115	12590	0.0493	30	S	
Fluorene	1525	130	1287	0	118	50-110	1585	3.88	30	S	
Indeno(1,2,3-cd)pyrene	4728	130	1287	2881	144	40-120	4581	3.16	30	S	
Naphthalene	1055	130	1287	0	82	40-105	1084	2.75	30		
Pyrene	9642	130	1287	0	749	45-125	9938	3.02	30	S	
Surr: 2-Fluorobiphenyl	2502	0	3216	0	77.8	12-100	2496	0.257	40		
Surr: 4-Terphenyl-d14	2817	0	3216	0	87.6	25-137	2733	3.03	40		
Surr: Nitrobenzene-d5	2361	0	3216	0	73.4	37-107	2400	1.63	40		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

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Batch ID: **63761** Instrument ID **SVMS8** Method: **SW846 8270D**

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The following samples were analyzed in this batch:

1410563-01A
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**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63782**      Instrument ID **VMS5**      Method: **SW8260B**

Sample ID: <b>MBLK-63782-63782</b>				Units: <b>µg/Kg</b>			Analysis Date: <b>10/10/2014 05:18 PM</b>			
Client ID:		Run ID: <b>VMS5_141010A</b>			SeqNo: <b>2977359</b>		Prep Date: <b>10/10/2014</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>949</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>94.9</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>995.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>966.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.6</i>	<i>70-130</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>970</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97</i>	<i>70-130</i>	<i>0</i>			

LCS				Sample ID: LCS-63782-63782			Units: µg/Kg		Analysis Date: 10/10/2014 04:00 PM		
Client ID:			Run ID: VMS5_141010A			SeqNo: 2977358		Prep Date: 10/10/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1001	30	1000	0	100	75-125	0				
Ethylbenzene	991.5	30	1000	0	99.2	75-125	0				
m,p-Xylene	1990	60	2000	0	99.5	80-125	0				
o-Xylene	978.5	30	1000	0	97.8	75-125	0				
Toluene	960.5	30	1000	0	96	70-125	0				
Xylenes, Total	2968	90	3000	0	98.9	75-125	0				
Surr: 1,2-Dichloroethane-d4	920	0	1000	0	92	70-130	0				
Surr: 4-Bromofluorobenzene	1018	0	1000	0	102	70-130	0				
Surr: Dibromofluoromethane	977.5	0	1000	0	97.8	70-130	0				
Surr: Toluene-d8	983.5	0	1000	0	98.4	70-130	0				

MS				Sample ID: 1410562-01A MS				Units: µg/Kg			Analysis Date: 10/15/2014 01:49 AM	
Client ID:			Run ID: VMS6_141014A				SeqNo:2982281		Prep Date: 10/10/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	905	30	1000	0	90.5	75-125	0					
Ethylbenzene	903.5	30	1000	0	90.4	75-125	0					
m,p-Xylene	1830	60	2000	0	91.5	80-125	0					
o-Xylene	896	30	1000	0	89.6	75-125	0					
Toluene	902.5	30	1000	0	90.2	70-125	0					
Xylenes, Total	2726	90	3000	0	90.9	75-125	0					
Surr: 1,2-Dichloroethane-d4	976	0	1000	0	97.6	70-130	0					
Surr: 4-Bromofluorobenzene	1006	0	1000	0	101	70-130	0					
Surr: Dibromofluoromethane	996.5	0	1000	0	99.6	70-130	0					
Surr: Toluene-d8	977.5	0	1000	0	97.8	70-130	0					

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63782**      Instrument ID **VMS5**      Method: **SW8260B**

MSD				Sample ID: <b>1410562-01A MSD</b>			Units: <b>µg/Kg</b>		Analysis Date: <b>10/15/2014 02:15 AM</b>	
Client ID:		Run ID: <b>VMS6_141014A</b>			SeqNo: <b>2982282</b>		Prep Date: <b>10/10/2014</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	888	30	1000	0	88.8	75-125	905	1.9	30	
Ethylbenzene	891.5	30	1000	0	89.2	75-125	903.5	1.34	30	
m,p-Xylene	1807	60	2000	0	90.4	80-125	1830	1.26	30	
o-Xylene	891	30	1000	0	89.1	75-125	896	0.56	30	
Toluene	873	30	1000	0	87.3	70-125	902.5	3.32	30	
Xylenes, Total	2698	90	3000	0	89.9	75-125	2726	1.03	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	975.5	0	1000	0	97.6	70-130	976	0.0512	30	
<i>Surr: 4-Bromofluorobenzene</i>	1021	0	1000	0	102	70-130	1006	1.53	30	
<i>Surr: Dibromofluoromethane</i>	978.5	0	1000	0	97.8	70-130	996.5	1.82	30	
<i>Surr: Toluene-d8</i>	964.5	0	1000	0	96.4	70-130	977.5	1.34	30	

The following samples were analyzed in this batch: 1410563-01A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63779** Instrument ID **WETCHEM** Method: **SW9045D**

Sample ID: 1410411-01A DUP					Units: s.u.			Analysis Date: 10/10/2014 12:40 PM			
Client ID:			Run ID: WETCHEM_141010J			SeqNo: 2976929		Prep Date: 10/10/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH	7.21	0	0	0	0	0-0	7.04	2.39	20		

DUP					Sample ID: 1410412-01A DUP					Units: s.u.			Analysis Date: 10/10/2014 12:40 PM				
Client ID:					Run ID: WETCHEM_141010J					SeqNo: 2976931			Prep Date: 10/10/2014			DF: 1	
Analyte					Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH					7.85	0	0	0	0	0-0	7.85	0	20				

The following samples were analyzed in this batch:

1410563-01A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **63893** Instrument ID **WETCHEM** Method: **SW7196A**

<b>MBLK</b>		Sample ID: <b>MBLK-63893-63893</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/14/2014 10:00 AM</b>		
Client ID:		Run ID: <b>WETCHEM_141014G</b>				SeqNo: <b>2980305</b>		Prep Date: <b>10/10/2014</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-63893-63893</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/14/2014 10:00 AM</b>		
Client ID:		Run ID: <b>WETCHEM_141014G</b>				SeqNo: <b>2980304</b>		Prep Date: <b>10/10/2014</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 1.772 0.50 2 0 88.6 80-120 0

<b>MS</b>		Sample ID: <b>1410563-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/14/2014 10:00 AM</b>		
Client ID: <b>Stockpiled Soil Composite Sample</b>		Run ID: <b>WETCHEM_141014G</b>				SeqNo: <b>2980293</b>		Prep Date: <b>10/10/2014</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 1.012 0.50 1.984 0.2134 40.2 75-125 0 S

<b>MS</b>		Sample ID: <b>1410563-01A MSI</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/14/2014 10:00 AM</b>		
Client ID: <b>Stockpiled Soil Composite Sample</b>		Run ID: <b>WETCHEM_141014G</b>				SeqNo: <b>2980295</b>		Prep Date: <b>10/10/2014</b>		DF: <b>100</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 970 50 1036 0.2134 93.6 75-125 0

<b>MSD</b>		Sample ID: <b>1410563-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>10/14/2014 10:00 AM</b>		
Client ID: <b>Stockpiled Soil Composite Sample</b>		Run ID: <b>WETCHEM_141014G</b>				SeqNo: <b>2980294</b>		Prep Date: <b>10/10/2014</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 0.8611 0.50 1.984 0.2134 32.6 75-125 1.012 16.1 20 S

The following samples were analyzed in this batch: 1410563-01A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1410563  
**Project:** Koch Exploration -A-30 Stockpiled Soil 10.7.14

## QC BATCH REPORT

Batch ID: **R150226**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>		Sample ID: <b>WBLKS-R150226</b>				Units: % of sample		Analysis Date: <b>10/13/2014 06:20 PM</b>		
Client ID:		Run ID: <b>MOIST_141013D</b>				SeqNo: <b>2980758</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-R150226</b>				Units: % of sample		Analysis Date: <b>10/13/2014 06:20 PM</b>		
Client ID:		Run ID: <b>MOIST_141013D</b>				SeqNo: <b>2980757</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>1410452-02A DUP</b>				Units: % of sample		Analysis Date: <b>10/13/2014 06:20 PM</b>		
Client ID:		Run ID: <b>MOIST_141013D</b>				SeqNo: <b>2980736</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      16.36      0.050      0      0      0      0-0      16.86      3.01      20

<b>DUP</b>		Sample ID: <b>1410491-09A DUP</b>				Units: % of sample		Analysis Date: <b>10/13/2014 06:20 PM</b>		
Client ID:		Run ID: <b>MOIST_141013D</b>				SeqNo: <b>2980746</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      11.11      0.050      0      0      0      0-0      10.95      1.45      20

The following samples were analyzed in this batch:

1410563-01A

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



# ALS Laboratory Group

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

## Chain-of-Custody

Form 282r8

WORKORDER #

1410563

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

SAMPLER

Jordan Cario

DATE

10/7/14

PROJECT NAME

Koch Exploration - A-30 Stockpiled Soil

SITE ID

Koch Federal A-30 Well Pad

TURNAROUND

Standard 5 Day

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME

HRL Compliance Solutions Inc (HCSI)

BILL TO COMPANY

HRL Compliance Solutions, Inc.

SEND REPORT TO

Kris Rowe

INVOICE ATTN TO

Kris Rowe

ADDRESS

2385 F 1/2 RD

ADDRESS

2385 F 1/2 Rd

CITY/STATE/ZIP

Grand Junction, CO 81505

CITY/STATE/ZIP

Grand Junction, CO 81505

PHONE

970-243-3271

PHONE

970-243-3271

FAX

970-243-3280

FAX

E-MAIL

krowe@hrlcomp.com

E-MAIL

krowe@hrlcomp.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

# Bottles

Pres.

QC

DRO

GRO

BTEX

910-1 Metals

PAH

SAR/EC/PH

1

Stockpiled Soil Composite Sample

S

10/7/2014

1:50

1 jar  
1 bag

X

X

X

X

X

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

For metals or anions, please detail analytes below.

Comments:

3.2°

QC PACKAGE (check below)

LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms + raw data)

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

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

Jordan Cario

W/M

W/M

Kathy Wierencia

10/7/14

10/7/14

10/7/14

10/9/14

4:07

4:10

4:30

0930

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **09-Oct-14 09:30**

Work Order: **1410563**

Received by: **KRW**

Checklist completed by Keith Wurenga  
eSignature

09-Oct-14  
Date

Reviewed by: Ann Preston  
eSignature

09-Oct-14  
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"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.2 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>10/9/2014 2:36:02 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:

From: (816) 399-6870  
 Nick Martinez  
 ALS Environmental  
 127 E. 1st Street  
 PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 07OCT14  
 ActWgt: 48.0 LB  
 CAD: 2264840INET3550

Dims: 14 X 26 X 15 IN

SHIP TO: (816) 399-6070  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE  
 HOLLAND, MI 49424

BILL SENDER

Delivery Address Bar Code

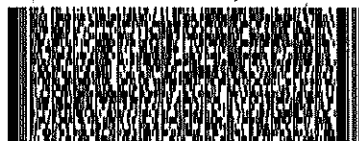
Ref # 100714-1  
 Invoice #  
 PO # Parachute  
 Dept #

WED - 08 OCT 10:30A  
 PRIORITY OVERNIGHT

TRK# 7714 1747 3325  
 6261

XX HLMA

49424  
 MI-US  
 GRR



522G14DF648AC9

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ALS Parachute Custody Seal

DATE

Time

Name