

Gunnison Energy – SPU 23-33 Produced Water Release Analytical Results

Gunnison Energy SPU 23-33	Sample Location
	Excavation Confirmation
TEPH (DRO)	34
TVPH (GRO)	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENE TOTAL	ND
ACENAPHTHENE	ND
ANTHRACENE	ND
BENZO(A)ANTHRACENE	ND
BENZO(A)PYRENE	ND
BENZO(B)FLUORANTHENE	ND
BENZO(G,H,I)PERYLEN	ND
BENZO(K)FLUORANTHENE	ND
CHRYSENE	ND
DIBENZO(A,H)ANTHRACENE	ND
FLUORANTHENE	ND
FLUORENE	ND
INDENO(1,2,3-CD)PYRENE	ND
NAPHTHALENE	ND
PYRENE	ND
ARSENIC	ND
BARIUM	270
CADMIUM	ND
CHROMIUM	16
CHROMIUM (III)	16
CHROMIUM (IV)	ND
COPPER	16
LEAD	11
MERCURY	ND
NICKEL	20
SELENIUM	ND
SILVER	ND
ZINC	41
ELECTRICAL CONDUCTIVITY (EC) (mmho/cm)	0.98
pH	7.9
SODIUM ADSORPTION RATIO (SAR)	0.55
CALCIUM (ppm)	150
MAGNESIUM (ppm)	30
SODIUM (ppm)	31

Note: Results are reported in mg/kg, unless otherwise noted

### Background Analytical Results

Sample Location	Analysis			
	Arsenic	Sodium Absorption Ratio	Electrical Conductivity	pH
BKGD 1	2.6	0.27	0.54	6.88
BKGD 2	2.2			
BKGD 3	1.9			

Note: Results are reported in mg/kg, unless otherwise noted



07-Jun-2013

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

Re: **Gunnison SPU 23-33 Prod. Water Release 5/24/13**

Work Order: **13051147**

Dear Kris,

ALS Environmental received 1 sample on 30-May-2013 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 24.

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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# ALS Group USA, Corp

Date: 07-Jun-13

**Client:** HRL Compliance Solutions  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13  
**Work Order:** 13051147

## 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>
13051147-01	Excavation Confirmation	Soil		5/24/2013 11:00	5/30/2013 09:30	<input type="checkbox"/>

## ALS Group USA, Corp

Date: 07-Jun-13

**Client:** HRL Compliance Solutions  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13  
**Work Order:** 13051147

### Case Narrative

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Batch 48760 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

Batch 48775 MS/MSD data for PAHs is not related to this project's samples. No data requires qualification.

Client: HRL Compliance Solutions  
Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13  
WorkOrder: 13051147

**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
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<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
mmhos/cm @25°F	Microhms-Centimeter at 25 Degrees Fahrenheit
none	
s.u.	Standard Units

# ALS Group USA, Corp

Date: 07-Jun-13

**Client:** HRL Compliance Solutions  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13  
**Sample ID:** Excavation Confirmation  
**Collection Date:** 5/24/2013 11:00 AM

**Work Order:** 13051147  
**Lab ID:** 13051147-01  
**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>34</b>		<b>SW8015M</b>		Prep Date: 5/31/2013	Analyst: CW
			<b>5.1</b>	<b>mg/Kg-dry</b>	<b>1</b>	6/3/2013 03:06 PM
Surr: 4-Terphenyl-d14	45.6		39-115	%REC	1	6/3/2013 03:06 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>ND</b>		<b>SW8015</b>			Analyst: CW
			<b>3.1</b>	<b>mg/Kg-dry</b>	<b>50</b>	6/3/2013 06:25 PM
Surr: Toluene-d8	103		50-150	%REC	50	6/3/2013 06:25 PM
<b>MERCURY BY CVAA</b>						
Mercury	ND		<b>SW7471</b>		Prep Date: 6/3/2013	Analyst: LR
			<b>0.018</b>	<b>mg/Kg-dry</b>	<b>1</b>	6/3/2013 05:37 PM
<b>METALS BY ICP-MS</b>						
Arsenic	ND		<b>SW6020A</b>		Prep Date: 5/31/2013	Analyst: ML
			<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Barium	270		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Cadmium	ND		<b>0.84</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Chromium	16		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Copper	16		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Lead	11		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Nickel	20		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Selenium	ND		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Silver	ND		<b>2.1</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
Zinc	41		<b>4.2</b>	<b>mg/Kg-dry</b>	<b>5</b>	5/31/2013 09:34 PM
<b>SOLUBLE CATIONS FOR SAR</b>						
<b>Calcium</b>	<b>150</b>		<b>SW6020A</b>		Prep Date: 5/30/2013	Analyst: RH
			<b>12</b>	<b>mg/L-dry</b>	<b>20</b>	6/3/2013 05:33 PM
<b>Magnesium</b>	<b>30</b>		<b>4.9</b>	<b>mg/L-dry</b>	<b>20</b>	6/3/2013 05:33 PM
<b>Sodium</b>	<b>31</b>		<b>4.9</b>	<b>mg/L-dry</b>	<b>20</b>	6/3/2013 05:33 PM
<b>SODIUM ADSORPTION RATIO</b>						
<b>Sodium Adsorption Ratio</b>	<b>0.55</b>		<b>USDA H60 METHO</b>		Prep Date: 5/30/2013	Analyst: ML
			<b>0.010</b>	<b>none</b>	<b>1</b>	6/3/2013
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>Acenaphthene</b>	<b>ND</b>		<b>SW8270</b>		Prep Date: 5/31/2013	Analyst: HL
			<b>18</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Acenaphthylene	ND		<b>18</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Anthracene	ND		<b>18</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Benzo(a)anthracene	ND		<b>18</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Benzo(a)pyrene	ND		<b>21</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Benzo(b)fluoranthene	ND		<b>22</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Benzo(g,h,i)perylene	ND		<b>30</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Benzo(k)fluoranthene	ND		<b>21</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Chrysene	ND		<b>18</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Dibenzo(a,h)anthracene	ND		<b>22</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM
Fluoranthene	ND		<b>18</b>	<b>µg/Kg-dry</b>	<b>1</b>	6/3/2013 05:53 PM

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

# ALS Group USA, Corp

Date: 07-Jun-13

Client: HRL Compliance Solutions

Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

Work Order: 13051147

Sample ID: Excavation Confirmation

Lab ID: 13051147-01

Collection Date: 5/24/2013 11:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		18	µg/Kg-dry	1	6/3/2013 05:53 PM
Indeno(1,2,3-cd)pyrene	ND		23	µg/Kg-dry	1	6/3/2013 05:53 PM
Naphthalene	ND		18	µg/Kg-dry	1	6/3/2013 05:53 PM
Pyrene	ND		24	µg/Kg-dry	1	6/3/2013 05:53 PM
Surr: 2-Fluorobiphenyl	58.6		12-100	%REC	1	6/3/2013 05:53 PM
Surr: 4-Terphenyl-d14	103		25-137	%REC	1	6/3/2013 05:53 PM
Surr: Nitrobenzene-d5	62.6		37-107	%REC	1	6/3/2013 05:53 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>		Prep Date: 5/30/2013	Analyst: AK
Benzene	ND		37	µg/Kg-dry	1	5/31/2013 08:27 AM
Ethylbenzene	ND		37	µg/Kg-dry	1	5/31/2013 08:27 AM
m,p-Xylene	ND		73	µg/Kg-dry	1	5/31/2013 08:27 AM
o-Xylene	ND		37	µg/Kg-dry	1	5/31/2013 08:27 AM
Toluene	ND		37	µg/Kg-dry	1	5/31/2013 08:27 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	5/31/2013 08:27 AM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	5/31/2013 08:27 AM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	5/31/2013 08:27 AM
Surr: Dibromofluoromethane	99.2		70-130	%REC	1	5/31/2013 08:27 AM
Surr: Toluene-d8	94.8		70-130	%REC	1	5/31/2013 08:27 AM
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: 5/30/2013	Analyst: JB
Electrical Conductivity @ Saturation	0.98		0.050	mmhos/cm @25	10	6/3/2013 01:50 PM
<b>CHROMIUM, TRIVALENT</b>			<b>CALCULATION</b>			Analyst: MB
Chromium, Trivalent	16		0.61	mg/Kg-dry	1	6/5/2013 09:20 AM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep Date: 5/30/2013	Analyst: MB
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	5/31/2013 01:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: BD
Moisture	18		0.050	% of sample	1	5/30/2013 12:00 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: CH
pH	7.9			s.u.	1	5/30/2013 12:00 PM

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



**ALS Group USA, Corp**

Date: 11-Feb-13

Client: HRL Compliance Solutions

Project: Gunnison SPU 23-33 Prod. Water Spill 13-121

Work Order: 1302160

Sample ID: BKGD 1

Lab ID: 1302160-04

Collection Date: 2/4/2013 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: 2/7/2013	Analyst: <b>CES</b>
Arsenic	2.6		1.2	mg/Kg-dry	5	2/7/2013 05:46 PM
<b>SOLUBLE CATIONS FOR SAR</b>			<b>SW6020A</b>		Prep Date: 2/8/2013	Analyst: <b>RH</b>
Calcium	180		7.9	mg/L-dry	10	2/8/2013 04:08 PM
Magnesium	69		3.1	mg/L-dry	10	2/8/2013 04:08 PM
Sodium	21		3.1	mg/L-dry	10	2/8/2013 04:08 PM
<b>SODIUM ADSORPTION RATIO</b>			<b>USDA H60 METHO</b>		Prep Date: 2/8/2013	Analyst: <b>RH</b>
Sodium Adsorption Ratio	0.27		0.010	none	1	2/8/2013
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			<b>USDA H60 METHO</b>		Prep Date: 2/8/2013	Analyst: <b>JB</b>
Electrical Conductivity @ Saturation	0.54		0.0075	mmhos/cm @2	1.5	2/8/2013 03:00 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>LR</b>
Moisture	36		0.050	% of sample	1	2/6/2013 03:25 PM
<b>PH</b>			<b>SW9045D</b>			Analyst: <b>JB</b>
pH	6.88			s.u.	1	2/6/2013 10:00 AM

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

**ALS Group USA, Corp****Date:** 11-Feb-13**Client:** HRL Compliance Solutions**Project:** Gunnison SPU 23-33 Prod. Water Spill 13-121**Work Order:** 1302160**Sample ID:** BKGD 2**Lab ID:** 1302160-05**Collection Date:** 2/4/2013 03:50 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: 2/7/2013	Analyst: <b>CES</b>
Arsenic	2.2		1.3	mg/Kg-dry	5	2/7/2013 05:52 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: <b>LR</b>
Moisture	36		0.050	% of sample	1	2/6/2013 03:25 PM

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

**ALS Group USA, Corp**

Date: 11-Feb-13

Client: HRL Compliance Solutions

Project: Gunnison SPU 23-33 Prod. Water Spill 13-121

Work Order: 1302160

Sample ID: BKGD 3

Lab ID: 1302160-06

Collection Date: 2/4/2013 04:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>METALS BY ICP-MS</b>			<b>SW6020A</b>		Prep Date: 2/7/2013	Analyst: CES
Arsenic	1.9		1.2	mg/Kg-dry	5	2/7/2013 05:58 PM
<b>MOISTURE</b>			<b>A2540 G</b>			Analyst: LR
Moisture	37		0.050	% of sample	1	2/6/2013 03:25 PM

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

# ALS Group USA, Corp

Date: 07-Jun-13

**Client:** HRL Compliance Solutions

**Work Order:** 13051147

**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48776 Instrument ID GC8 Method: SW8015M

MBLK	Sample ID: DBLKS1-48776-48776				Units: mg/Kg		Analysis Date: 6/3/2013 08:35 AM			
Client ID:	Run ID: GC8_130603A				SeqNo: 2337976		Prep Date: 5/31/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	0.9337	0	1.667	0	56	39-115	0			

LCS		Sample ID: <b>DLCSS1-48776-48776</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/3/2013 09:05 AM</b>			
Client ID:		Run ID: <b>GC8_130603A</b>				SeqNo: <b>2337977</b>		Prep Date: <b>5/31/2013</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)	148.5	4.2	166.7	0	89.1	49-124	0				
<i>Surr: 4-Terphenyl-d14</i>	<i>0.738</i>	0	1.667	0	44.3	39-115	0				

MS		Sample ID: 13051126-01B MS				Units: mg/Kg		Analysis Date: 6/3/2013 09:35 AM		
Client ID:		Run ID: GC8_130603A				SeqNo: 2337978		Prep Date: 5/31/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	274.1	7.9	317.3	20.49	79.9	49-130	0			
Surr: 4-Terphenyl-d14	1.368	0	3.173	0	43.1	39-115	0			

MSD		Sample ID: 13051126-01B MSD				Units: mg/Kg		Analysis Date: 6/3/2013 10:05 AM		
Client ID:		Run ID: GC8_130603A				SeqNo: 2337979		Prep Date: 5/31/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	293.3	8.1	323.1	20.49	84.4	49-130	274.1	6.76	30	
Surr: 4-Terphenyl-d14	1.446	0	3.231	0	44.8	39-115	1.368	5.53	30	

The following samples were analyzed in this batch:

13051147-01B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: **R121680**      Instrument ID: **GC10**      Method: **SW8015**

<b>MBLK</b>	Sample ID: <b>GBLK1-130603-R121680</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/3/2013 01:28 PM</b>			
Client ID:	Run ID: <b>GC10_130603A</b>				SeqNo: <b>2338883</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								
Surr: Toluene-d8	108.4	0	100	0	108	70-130	0			

<b>LCS</b>	Sample ID: <b>GLCS1-130603-R121680</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/3/2013 01:04 PM</b>			
Client ID:	Run ID: <b>GC10_130603A</b>				SeqNo: <b>2338882</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)	8390	200	10000	0	83.9	70-130	0			
Surr: Toluene-d8	112.3	0	100	0	112	70-130	0			

<b>MS</b>	Sample ID: <b>13051189-01A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/3/2013 08:53 PM</b>			
Client ID:	Run ID: <b>GC10_130603A</b>				SeqNo: <b>2338887</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)	8752	200	10000	0	87.5	70-130	0			
Surr: Toluene-d8	107	0	100	0	107	70-130	0			

<b>MSD</b>	Sample ID: <b>13051189-01A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/3/2013 09:17 PM</b>			
Client ID:	Run ID: <b>GC10_130603A</b>				SeqNo: <b>2338888</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)	8648	200	10000	0	86.5	70-130	8752	1.19	30	
Surr: Toluene-d8	109.8	0	100	0	110	70-130	107	2.56	30	

The following samples were analyzed in this batch:

13051147-01A

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

Client: HRL Compliance Solutions  
 Work Order: 13051147  
 Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48812 Instrument ID HG1 Method: SW7471

<b>MBLK</b>	Sample ID: <b>MBLK-48812-48812</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>6/3/2013 04:05 PM</b>			
Client ID:	Run ID: <b>HG1_130603A</b>				SeqNo: <b>2338187</b>		Prep Date: <b>6/3/2013</b>		DF: <b>1</b>	
<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>SPK Val</b>	<b>SPK Ref Value</b>	<b>%REC</b>	<b>Control Limit</b>	<b>RPD Ref Value</b>	<b>%RPD</b>	<b>RPD Limit</b>	<b>Qual</b>
Mercury	ND	0.020								

LCS	Sample ID: LCS-48812-48812				Units: mg/Kg		Analysis Date: 6/3/2013 04:07 PM			
Client ID:	Run ID: HG1_130603A				SeqNo: 2338188		Prep Date: 6/3/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1788	0.020	0.1665	0	107	80-120	0			

MS	Sample ID: 13051126-02BMS				Units: mg/Kg		Analysis Date: 6/3/2013 04:13 PM			
Client ID:	Run ID: HG1_130603A				SeqNo: 2338191		Prep Date: 6/3/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1468	0.015	0.1243	0.01405	107	75-125	0			

MSD	Sample ID: 13051126-02BMSD				Units: mg/Kg		Analysis Date: 6/3/2013 04:15 PM			
Client ID:	Run ID: HG1_130603A				SeqNo: 2338192		Prep Date: 6/3/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1476	0.015	0.1229	0.01405	109	75-125	0.1468	0.568	35	

The following samples were analyzed in this batch:

13051147-01B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: **48758**      Instrument ID **ICPMS2**      Method: **SW6020A**      (Dissolve)

DUP	Sample ID: 13051126-05BDUP				Units: mg/L		Analysis Date: 6/3/2013 04:51 PM			
Client ID:	Run ID: ICPMS2_130603A				SeqNo: 2338255		Prep Date: 5/30/2013		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	116.7	10	0	0	0	0-0	111.3	4.67		
Magnesium	17.25	4.0	0	0	0	0-0	16.4	5.1		
Sodium	3.2	4.0	0	0	0	0-0	3.18	0		J

The following samples were analyzed in this batch:

13051147-01C

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: **48783**      Instrument ID **ICPMS1**      Method: **SW6020A**

<b>MBLK</b>		Sample ID: <b>MBLK-48783-48783</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>5/31/2013 06:40 PM</b>				
Client ID:		Run ID: <b>ICPMS1_130531A</b>		SeqNo: <b>2337435</b>		Prep Date: <b>5/31/2013</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	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	0.0615	0.25								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.0872	0.50								J

<b>LCS</b>		Sample ID: <b>LCS-48783-48783</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>5/31/2013 06:47 PM</b>				
Client ID:		Run ID: <b>ICPMS1_130531A</b>		SeqNo: <b>2337436</b>		Prep Date: <b>5/31/2013</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.412	0.25	5	0	88.2	80-120	0			
Barium	4.714	0.25	5	0	94.3	80-120	0			
Cadmium	4.622	0.10	5	0	92.4	80-120	0			
Chromium	4.758	0.25	5	0	95.2	80-120	0			
Copper	4.642	0.25	5	0	92.8	80-120	0			
Lead	4.922	0.25	5	0	98.4	80-120	0			
Nickel	4.646	0.25	5	0	92.9	80-120	0			
Selenium	4.134	0.25	5	0	82.7	80-120	0			
Silver	4.912	0.25	5	0	98.2	80-120	0			
Zinc	4.304	0.50	5	0	86.1	80-120	0			

<b>MS</b>		Sample ID: <b>13051060-01AMS</b>		Units: <b>mg/Kg</b>		Analysis Date: <b>5/31/2013 08:04 PM</b>				
Client ID:		Run ID: <b>ICPMS1_130531A</b>		SeqNo: <b>2337460</b>		Prep Date: <b>5/31/2013</b>		DF: <b>5</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.68	1.7	6.72	0.1994	96.4	75-125	0			
Barium	11.63	1.7	6.72	4.845	101	75-125	0			
Cadmium	6.667	0.67	6.72	0.01457	99	75-125	0			
Chromium	7.776	1.7	6.72	1.558	92.5	75-125	0			
Copper	7.003	1.7	6.72	1.112	87.7	75-125	0			
Lead	7.534	1.7	6.72	0.6869	102	75-125	0			
Nickel	8.085	1.7	6.72	2.089	89.2	75-125	0			
Selenium	6.223	1.7	6.72	0.0004993	92.6	75-125	0			
Silver	6.274	1.7	6.72	-0.01563	93.6	75-125	0			
Zinc	8.192	3.4	6.72	2.418	85.9	75-125	0			

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



**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48783      Instrument ID ICPMS1      Method: SW6020A

MSD		Sample ID: 13051060-01AMSD			Units: mg/Kg		Analysis Date: 5/31/2013 08:10 PM			
Client ID:		Run ID: ICPMS1_130531A			SeqNo: 2337462		Prep Date: 5/31/2013		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.232	1.6	6.435	0.1994	93.8	75-125	6.68	6.94	25	
Barium	10.57	1.6	6.435	4.845	88.9	75-125	11.63	9.61	25	
Cadmium	6.059	0.64	6.435	0.01457	93.9	75-125	6.667	9.56	25	
Chromium	7.297	1.6	6.435	1.558	89.2	75-125	7.776	6.35	25	
Copper	6.631	1.6	6.435	1.112	85.8	75-125	7.003	5.45	25	
Lead	6.908	1.6	6.435	0.6869	96.7	75-125	7.534	8.66	25	
Nickel	7.532	1.6	6.435	2.089	84.6	75-125	8.085	7.08	25	
Selenium	5.711	1.6	6.435	0.0004993	88.7	75-125	6.223	8.58	25	
Silver	5.859	1.6	6.435	-0.01563	91.3	75-125	6.274	6.83	25	
Zinc	8.259	3.2	6.435	2.418	90.8	75-125	8.192	0.816	25	

The following samples were analyzed in this batch:

13051147-01B

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

Client: HRL Compliance Solutions  
 Work Order: 13051147  
 Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48775 Instrument ID SVMS4 Method: SW8270

MBLK Sample ID: SBLKS1-48775-48775 Units: µg/Kg Analysis Date: 6/3/2013 11:22 AM

Client ID: Run ID: SVMS4\_130603A SeqNo: 2337860 Prep Date: 5/31/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Acenaphthylene	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	1273	0	1667	0	76.4	12-100	0			
Surr: 4-Terphenyl-d14	1819	0	1667	0	109	25-137	0			
Surr: Nitrobenzene-d5	1243	0	1667	0	74.6	37-107	0			

LCS Sample ID: SLCSS1-48775-48775 Units: µg/Kg Analysis Date: 6/3/2013 10:45 AM

Client ID: Run ID: SVMS4\_130603A SeqNo: 2337859 Prep Date: 5/31/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	552.7	30	666.7	0	82.9	45-110	0			
Acenaphthylene	552.3	30	666.7	0	82.8	45-105	0			
Anthracene	561.7	30	666.7	0	84.2	55-105	0			
Benzo(a)anthracene	601.7	30	666.7	0	90.2	50-110	0			
Benzo(a)pyrene	630.7	30	666.7	0	94.6	50-110	0			
Benzo(b)fluoranthene	599.7	30	666.7	0	89.9	45-115	0			
Benzo(g,h,i)perylene	585	30	666.7	0	87.7	40-125	0			
Benzo(k)fluoranthene	701.7	30	666.7	0	105	45-115	0			
Chrysene	676.7	30	666.7	0	101	55-110	0			
Dibenzo(a,h)anthracene	566.3	30	666.7	0	84.9	40-125	0			
Fluoranthene	589.3	30	666.7	0	88.4	55-115	0			
Fluorene	546.7	30	666.7	0	82	50-110	0			
Indeno(1,2,3-cd)pyrene	581.7	30	666.7	0	87.2	40-120	0			
Naphthalene	526.3	30	666.7	0	78.9	40-105	0			
Pyrene	639	30	666.7	0	95.8	45-125	0			
Surr: 2-Fluorobiphenyl	1253	0	1667	0	75.2	12-100	0			
Surr: 4-Terphenyl-d14	1859	0	1667	0	112	25-137	0			
Surr: Nitrobenzene-d5	1248	0	1667	0	74.9	37-107	0			

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

Client: HRL Compliance Solutions  
 Work Order: 13051147  
 Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48775 Instrument ID: SVMS4 Method: SW8270

MS		Sample ID: 13051157-04B MS		Units: µg/Kg		Analysis Date: 6/3/2013 05:24 PM				
Client ID:		Run ID: SVMS4_130603A		SeqNo: 2338769		Prep Date: 5/31/2013		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1361	1,200	1309	0	104	45-110	0			
Acenaphthylene	1466	1,200	1309	0	112	45-105	0			S
Anthracene	1400	1,200	1309	1530	-9.91	55-105	0			S
Benzo(a)anthracene	1413	1,200	1309	0	108	50-110	0			
Benzo(a)pyrene	1427	1,200	1309	0	109	50-110	0			
Benzo(b)fluoranthene	1466	1,200	1309	0	112	45-115	0			
Benzo(g,h,i)perylene	1021	1,200	1309	0	78	40-125	0			J
Benzo(k)fluoranthene	1492	1,200	1309	0	114	45-115	0			
Chrysene	1413	1,200	1309	0	108	55-110	0			
Dibenzo(a,h)anthracene	955.4	1,200	1309	0	73	40-125	0			J
Fluoranthene	1413	1,200	1309	0	108	55-115	0			
Fluorene	1871	1,200	1309	602.7	96.9	50-110	0			
Indeno(1,2,3-cd)pyrene	968.5	1,200	1309	0	74	40-120	0			J
Naphthalene	1126	1,200	1309	0	86	40-105	0			J
Pyrene	1427	1,200	1309	0	109	45-125	0			
Surr: 2-Fluorobiphenyl	2631	0	3272	0	80.4	12-100	0			
Surr: 4-Terphenyl-d14	3520	0	3272	0	108	25-137	0			
Surr: Nitrobenzene-d5	2421	0	3272	0	74	37-107	0			

MSD		Sample ID: 13051157-04B MSD		Units: µg/Kg		Analysis Date: 6/3/2013 05:56 PM				
Client ID:		Run ID: SVMS4_130603A		SeqNo: 2338770		Prep Date: 5/31/2013		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1244	1,200	1283	0	97	45-110	1361	8.96	30	
Acenaphthylene	1450	1,200	1283	0	113	45-105	1466	1.11	30	S
Anthracene	1296	1,200	1283	1530	-18.3	55-105	1400	7.76	30	S
Benzo(a)anthracene	1257	1,200	1283	0	98	50-110	1413	11.7	30	
Benzo(a)pyrene	1155	1,200	1283	0	90	50-110	1427	0	30	J
Benzo(b)fluoranthene	1475	1,200	1283	0	115	45-115	1466	0.648	30	
Benzo(g,h,i)perylene	1013	1,200	1283	0	79	40-125	1021	0	30	J
Benzo(k)fluoranthene	1450	1,200	1283	0	113	45-115	1492	2.88	30	
Chrysene	1360	1,200	1283	0	106	55-110	1413	3.86	30	
Dibenzo(a,h)anthracene	949.3	1,200	1283	0	74	40-125	955.4	0	30	J
Fluoranthene	1334	1,200	1283	0	104	55-115	1413	5.77	30	
Fluorene	1732	1,200	1283	602.7	88	50-110	1871	7.75	30	
Indeno(1,2,3-cd)pyrene	962.2	1,200	1283	0	75	40-120	968.5	0	30	J
Naphthalene	1103	1,200	1283	0	86	40-105	1126	0	30	J
Pyrene	1475	1,200	1283	0	115	45-125	1427	3.36	30	
Surr: 2-Fluorobiphenyl	2489	0	3207	0	77.6	12-100	2631	5.54	40	
Surr: 4-Terphenyl-d14	3335	0	3207	0	104	25-137	3520	5.4	40	
Surr: Nitrobenzene-d5	2335	0	3207	0	72.8	37-107	2421	3.63	40	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

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Batch ID: **48775**      Instrument ID **SVMS4**      Method: **SW8270**

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The following samples were analyzed in this batch:

13051147-01B
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions  
 Work Order: 13051147  
 Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48749 Instrument ID VMS8 Method: SW8260

MBLK	Sample ID: MBLK-48749-48749				Units: µg/Kg		Analysis Date: 5/30/2013 02:04 PM			
Client ID:	Run ID: VMS8_130530A				SeqNo: 2336176		Prep Date: 5/30/2013		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	1004	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	982.5	0	1000	0	98.2	70-130	0			
Surr: Dibromofluoromethane	983.5	0	1000	0	98.4	70-130	0			
Surr: Toluene-d8	979	0	1000	0	97.9	70-130	0			

LCS	Sample ID: LCS1-48749-48749				Units: µg/Kg		Analysis Date: 5/30/2013 12:29 PM			
Client ID:	Run ID: VMS8_130530A				SeqNo: 2336175		Prep Date: 5/30/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	995	30	1000	0	99.5	75-125	0			
Ethylbenzene	1004	30	1000	0	100	75-125	0			
m,p-Xylene	1976	60	2000	0	98.8	80-125	0			
o-Xylene	992	30	1000	0	99.2	75-125	0			
Toluene	946	30	1000	0	94.6	70-125	0			
Xylenes, Total	2968	90	3000	0	98.9	75-125	0			
Surr: 1,2-Dichloroethane-d4	994.5	0	1000	0	99.4	70-130	0			
Surr: 4-Bromofluorobenzene	989	0	1000	0	98.9	70-130	0			
Surr: Dibromofluoromethane	1013	0	1000	0	101	70-130	0			
Surr: Toluene-d8	993	0	1000	0	99.3	70-130	0			

MS		Sample ID: 13051125-04A MS				Units: µg/Kg		Analysis Date: 5/30/2013 09:38 PM			
Client ID:		Run ID: VMS8_130530A				SeqNo: 2336180		Prep Date: 5/30/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1014	30	1000	0	101	75-125	0				
Ethylbenzene	986	30	1000	0	98.6	75-125	0				
m,p-Xylene	1994	60	2000	0	99.7	80-125	0				
o-Xylene	999.5	30	1000	0	100	75-125	0				
Toluene	921.5	30	1000	0	92.2	70-125	0				
Xylenes, Total	2994	90	3000	0	99.8	75-125	0				
Surr: 1,2-Dichloroethane-d4	950.5	0	1000	0	95	70-130	0				
Surr: 4-Bromofluorobenzene	1000	0	1000	0	100	70-130	0				
Surr: Dibromofluoromethane	967.5	0	1000	0	96.8	70-130	0				
Surr: Toluene-d8	937	0	1000	0	93.7	70-130	0				

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

Client: HRL Compliance Solutions  
 Work Order: 13051147  
 Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: 48749 Instrument ID VMS8 Method: SW8260

MSD	Sample ID: 13051125-04A MSD					Units: µg/Kg		Analysis Date: 5/30/2013 10:02 PM		
Client ID:		Run ID: VMS8_130530A				SeqNo: 2336181		Prep Date: 5/30/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	997	30	1000	0	99.7	75-125	1014	1.64	30	
Ethylbenzene	1004	30	1000	0	100	75-125	986	1.81	30	
m,p-Xylene	2035	60	2000	0	102	80-125	1994	2.01	30	
o-Xylene	1023	30	1000	0	102	75-125	999.5	2.32	30	
Toluene	948.5	30	1000	0	94.8	70-125	921.5	2.89	30	
Xylenes, Total	3058	90	3000	0	102	75-125	2994	2.12	30	
Surr: 1,2-Dichloroethane-d4	944	0	1000	0	94.4	70-130	950.5	0.686	30	
Surr: 4-Bromofluorobenzene	1042	0	1000	0	104	70-130	1000	4.11	30	
Surr: Dibromofluoromethane	971.5	0	1000	0	97.2	70-130	967.5	0.413	30	
Surr: Toluene-d8	960.5	0	1000	0	96	70-130	937	2.48	30	

The following samples were analyzed in this batch:

13051147-01A

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: **48758** Instrument ID **WETCHEM** Method: **USDA H60 Method**

**DUP** Sample ID: **13051126-05B DUP** Units: **mmhos/cm @25°F** Analysis Date: **6/3/2013 01:50 PM**

Client ID: Run ID: **WETCHEM\_130603G** SeqNo: **2338026** Prep Date: **5/30/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.764	0.050	0	0	0		0.731	4.41	50	

The following samples were analyzed in this batch:

13051147-01C

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: **48760**      Instrument ID **WETCHEM**      Method: **SW7196A**

MBLK	Sample ID: MBLK-48760-48760				Units: mg/Kg		Analysis Date: 5/31/2013 01:00 PM			
Client ID:	Run ID: WETCHEM_130531G				SeqNo: 2336801		Prep Date: 5/30/2013		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-48760-48760					Units: mg/Kg		Analysis Date: 5/31/2013 01:00 PM		
Client ID:	Run ID: WETCHEM_130531G				SeqNo: 2336800		Prep Date: 5/30/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	1.817	0.50	1.992	0	91.2	75-110	0			

MS	Sample ID: 13051146-01B MS				Units: mg/Kg		Analysis Date: 5/31/2013 01:00 PM			
Client ID:	Run ID: WETCHEM_130531G				SeqNo: 2336794		Prep Date: 5/30/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	0.50	2	0	0	60-130	0			S

MSD		Sample ID: 13051146-01B MSD				Units: mg/Kg		Analysis Date: 5/31/2013 01:00 PM			
Client ID:		Run ID: WETCHEM_130531G				SeqNo: 2336795		Prep Date: 5/30/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chromium, Hexavalent	ND	0.50	2	0	0	60-130	0	0	30	S	

The following samples were analyzed in this batch:

13051147-01B

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



Client: HRL Compliance Solutions  
 Work Order: 13051147  
 Project: Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: R121511 Instrument ID WETCHEM Method: A4500-H B

<b>LCS</b>		Sample ID: <b>WLCSW1-130530-R121511</b>				Units: <b>s.u.</b>		Analysis Date: <b>5/30/2013 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130530I</b>				SeqNo: <b>2335540</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
pH	4.37	0	4.4	0	99.3	90-110	0			

<b>LCS</b>		Sample ID: <b>WLCSW1-130530-R121511</b>				Units: <b>s.u.</b>		Analysis Date: <b>5/30/2013 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130530I</b>				SeqNo: <b>2335879</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
pH	4.37	0	4.4	0	99.3	90-110	0			

<b>DUP</b>		Sample ID: <b>13051165-01B DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>5/30/2013 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130530I</b>				SeqNo: <b>2335792</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
pH	7.65	0	0	0	0	0-0	7.65	0	20	

<b>DUP</b>		Sample ID: <b>13051150-01A DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>5/30/2013 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130530I</b>				SeqNo: <b>2335884</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
pH	6.12	0	0	0	0	0-0	6.12	0	20	

<b>DUP</b>		Sample ID: <b>13051119-02D DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>5/30/2013 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_130530I</b>				SeqNo: <b>2336705</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
pH	8.15	0	0	0	0	0-0	8.15	0	20	

The following samples were analyzed in this batch:

13051147-01B

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

**Client:** HRL Compliance Solutions  
**Work Order:** 13051147  
**Project:** Gunnison SPU 23-33 Prod. Water Release 5/24/13

## QC BATCH REPORT

Batch ID: **R121551**      Instrument ID **MOIST**      Method: **A2540 G**

<b>MBLK</b>		Sample ID: <b>WBLKS-R121551</b>		Units: % of sample		Analysis Date: <b>5/30/2013 12:00 PM</b>				
Client ID:		Run ID: <b>MOIST_130530B</b>		SeqNo: <b>2336341</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-R121551</b>		Units: % of sample		Analysis Date: <b>5/30/2013 12:00 PM</b>				
Client ID:		Run ID: <b>MOIST_130530B</b>		SeqNo: <b>2336340</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>13051127-02A DUP</b>		Units: % of sample		Analysis Date: <b>5/30/2013 12:00 PM</b>				
Client ID:		Run ID: <b>MOIST_130530B</b>		SeqNo: <b>2336319</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	14.34	0.050	0	0	0	0-0	14.61	1.87	20	

<b>DUP</b>		Sample ID: <b>13051146-01B DUP</b>		Units: % of sample		Analysis Date: <b>5/30/2013 12:00 PM</b>				
Client ID:		Run ID: <b>MOIST_130530B</b>		SeqNo: <b>2336330</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	12.83	0.050	0	0	0	0-0	12.84	0.0779	20	

The following samples were analyzed in this batch:

13051147-01B

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





## Chain-of-Custody

Form 2028

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

**For metals or anions, please detail analytes below.**

Comments:		QC PACKAGE (check below)	
<p>0.02</p> 		<input type="checkbox"/>	LEVEL II (Standard QC)
		<input type="checkbox"/>	LEVEL III (Std QC + forms)
		<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
		<input type="checkbox"/>	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035			

For metals or anions, please detail analytes below.		RECEIVED BY		SIGNATURE		PRINTED NAME		DATE		TIME	
		RECEIVED BY				Kris Rowe		5/29/2013		17:00	
		RECEIVED BY				Diare F Shaw		5/30/13		0930	
		RECEIVED BY									
		RECEIVED BY									
		RECEIVED BY									

Preservative Key:	1-HCl	2-HNO <sub>3</sub>	3-H <sub>2</sub> SO <sub>4</sub>	4-NaOH	5-NaHSO <sub>4</sub>	7-Other	8-4 degrees C	9-5035
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# ALS Group USA, Corp

## Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 30-May-13 09:30

Work Order: 13051147

Received by: DS

Checklist completed by Diane Shaw  
eSignature

30-May-13  
Date

Reviewed by: Ann Preston  
eSignature

02-Jun-13  
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>6.0 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/30/2013 1:28:03 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:

