

Legend

- Sample Location
- Existing Road
- Existing Pad
Limit of Disturbance

RMV 108-4
Arsenic Background Sample Location Map
T7S R94W, Section 4

May 2, 2014





09-Apr-2014

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

Re: **WPX RMV 108-4 Cuttings 3.31.14**

Work Order: **1404025**

Dear Mark,

ALS Environmental received 6 samples on 01-Apr-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 29.

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

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

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

Environmental ALS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Work Order: 1404025

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>
1404025-01	Cuttings	Soil		3/31/2014 10:45	4/1/2014 09:30	<input type="checkbox"/>
1404025-02	RMV 108-4-B-1	Soil		3/31/2014 10:55	4/1/2014 09:30	<input type="checkbox"/>
1404025-03	RMV 108-4-B-2	Soil		3/31/2014 11:00	4/1/2014 09:30	<input type="checkbox"/>
1404025-04	RMV 108-4-B-3	Soil		3/31/2014 11:05	4/1/2014 09:30	<input type="checkbox"/>
1404025-05	RMV 108-4-B-4	Soil		3/31/2014 11:10	4/1/2014 09:30	<input type="checkbox"/>
1404025-06	RMV 108-4-B-5	Soil		3/31/2014 11:15	4/1/2014 09:30	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Work Order: 1404025

Case Narrative

Batch 57168 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

Batch 57201 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

<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 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

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

<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
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: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: Cuttings
Collection Date: 3/31/2014 10:45 AM

Work Order: 1404025
Lab ID: 1404025-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep: SW3541 / 4/2/14	Analyst: IT
DRO (C10-C28)	140		5.6	mg/Kg-dry	1	4/2/2014 07:22 PM
<i>Surr: 4-Terphenyl-d14</i>	89.5		39-115	%REC	1	4/2/2014 07:22 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015		Prep: SW5035 / 4/1/14	Analyst: IT
GRO (C6-C10)	ND		3.4	mg/Kg-dry	1	4/2/2014 10:18 PM
<i>Surr: Toluene-d8</i>	108		50-150	%REC	1	4/2/2014 10:18 PM
MERCURY BY CVAA			SW7471		Prep: SW7471 / 4/3/14	Analyst: LR
Mercury	0.055		0.017	mg/Kg-dry	1	4/3/2014 11:40 AM
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 4/3/14	Analyst: ML
Arsenic	2.6		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Barium	8,000		210	mg/Kg-dry	500	4/4/2014 04:09 PM
Cadmium	ND		0.84	mg/Kg-dry	5	4/4/2014 05:15 AM
Chromium	9.1		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Copper	18		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Lead	11		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Nickel	8.9		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Selenium	ND		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Silver	ND		2.1	mg/Kg-dry	5	4/4/2014 05:15 AM
Zinc	54		4.2	mg/Kg-dry	5	4/4/2014 05:15 AM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep: USDA Method 20B / 4/4/14	Analyst: ML
Calcium	76		10	mg/L	20	4/7/2014 09:12 PM
Magnesium	ND		4.0	mg/L	20	4/7/2014 09:12 PM
Sodium	940		4.0	mg/L	20	4/7/2014 09:12 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep: USDA Method 20B / 4/4/14	Analyst: ML
Sodium Adsorption Ratio	29		0.010	none	1	4/7/2014
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3541 / 4/2/14	Analyst: RM
Acenaphthene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Acenaphthylene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Anthracene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Benzo(a)anthracene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Benzo(a)pyrene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Benzo(b)fluoranthene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Benzo(g,h,i)perylene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Benzo(k)fluoranthene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Chrysene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM

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

ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: Cuttings
Collection Date: 3/31/2014 10:45 AM

Work Order: 1404025
Lab ID: 1404025-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Dibenzo(a,h)anthracene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Fluoranthene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Fluorene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Indeno(1,2,3-cd)pyrene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Naphthalene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Pyrene	ND		8.9	µg/Kg-dry	1	4/8/2014 03:50 PM
Surr: 2-Fluorobiphenyl	69.5		12-100	%REC	1	4/8/2014 03:50 PM
Surr: 4-Terphenyl-d14	95.3		25-137	%REC	1	4/8/2014 03:50 PM
Surr: Nitrobenzene-d5	86.6		37-107	%REC	1	4/8/2014 03:50 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Prep: SW5035 / 4/1/14	Analyst: AK
Benzene	ND		40	µg/Kg-dry	1	4/2/2014 06:34 AM
Ethylbenzene	ND		40	µg/Kg-dry	1	4/2/2014 06:34 AM
m,p-Xylene	ND		81	µg/Kg-dry	1	4/2/2014 06:34 AM
o-Xylene	ND		40	µg/Kg-dry	1	4/2/2014 06:34 AM
Toluene	ND		40	µg/Kg-dry	1	4/2/2014 06:34 AM
Xylenes, Total	ND		120	µg/Kg-dry	1	4/2/2014 06:34 AM
Surr: 1,2-Dichloroethane-d4	95.0		70-130	%REC	1	4/2/2014 06:34 AM
Surr: 4-Bromofluorobenzene	97.4		70-130	%REC	1	4/2/2014 06:34 AM
Surr: Dibromofluoromethane	96.9		70-130	%REC	1	4/2/2014 06:34 AM
Surr: Toluene-d8	101		70-130	%REC	1	4/2/2014 06:34 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 4/4/14	Analyst: JB
Electrical Conductivity @ Saturation	4.4		0.050	mmhos/cm @25	10	4/5/2014 10:30 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	7.5		0.67	mg/Kg-dry	1	4/7/2014 02:48 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep: SW3060A / 4/1/14	Analyst: MB
Chromium, Hexavalent	1.7		0.67	mg/Kg-dry	1	4/2/2014 03:00 PM
MOISTURE			A2540 G			Analyst: AT
Moisture	26		0.050	% of sample	1	4/1/2014 02:05 PM
PH			SW9045D		Prep: EXTRACT / 4/1/14	Analyst: AT
pH	8.4			s.u.	1	4/1/2014 04:46 PM

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

ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: RMV 108-4-B-1
Collection Date: 3/31/2014 10:55 AM

Work Order: 1404025
Lab ID: 1404025-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 4/3/14	Analyst: ML
Arsenic	6.7		2.2	mg/Kg-dry	5	4/4/2014 05:21 AM
MOISTURE			A2540 G			Analyst: AT
Moisture	18		0.050	% of sample	1	4/1/2014 02:05 PM

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

ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: RMV 108-4-B-2
Collection Date: 3/31/2014 11:00 AM

Work Order: 1404025
Lab ID: 1404025-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 4/3/14	Analyst: ML
Arsenic	4.5		2.4	mg/Kg-dry	5	4/4/2014 05:27 AM
MOISTURE			A2540 G			Analyst: AT
Moisture	17		0.050	% of sample	1	4/1/2014 02:05 PM

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

ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: RMV 108-4-B-3
Collection Date: 3/31/2014 11:05 AM

Work Order: 1404025
Lab ID: 1404025-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 4/3/14	Analyst: ML
Arsenic	12		2.3	mg/Kg-dry	5	4/4/2014 05:33 AM
MOISTURE			A2540 G			Analyst: AT
Moisture	24		0.050	% of sample	1	4/1/2014 02:05 PM

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

ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: RMV 108-4-B-4
Collection Date: 3/31/2014 11:10 AM

Work Order: 1404025
Lab ID: 1404025-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 4/3/14	Analyst: ML
Arsenic	3.8		2.6	mg/Kg-dry	5	4/4/2014 05:39 AM
MOISTURE			A2540 G			Analyst: AT
Moisture	20		0.050	% of sample	1	4/1/2014 02:05 PM

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

ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc
Project: WPX RMV 108-4 Cuttings 3.31.14
Sample ID: RMV 108-4-B-5
Collection Date: 3/31/2014 11:15 AM

Work Order: 1404025
Lab ID: 1404025-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 4/3/14	Analyst: ML
Arsenic	4.3		2.2	mg/Kg-dry	5	4/4/2014 05:45 AM
MOISTURE			A2540 G			Analyst: AT
Moisture	19		0.050	% of sample	1	4/1/2014 02:05 PM

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

Client: HRL Compliance Solutions, Inc

QC BATCH REPORT

Work Order: 1404025

Project: WPX RMV 108-4 Cuttings 3.31.14

Batch ID: 57136

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-57136-57136				Units: mg/Kg		Analysis Date: 4/2/2014 04:53 PM		
Client ID:		Run ID: GC8_140402C				SeqNo: 2697528		Prep Date: 4/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
<i>Surr: 4-Terphenyl-d14</i>	1.263	0	1.667	0	75.8	39-115	0			

LCS		Sample ID: DLCSS1-57136-57136				Units: mg/Kg		Analysis Date: 4/2/2014 05:22 PM		
Client ID:		Run ID: GC8_140402C				SeqNo: 2697529		Prep Date: 4/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	149.5	4.2	166.7	0	89.7	49-124	0			
<i>Surr: 4-Terphenyl-d14</i>	1.298	0	1.667	0	77.9	39-115	0			

MS		Sample ID: 1404093-01A MS				Units: mg/Kg		Analysis Date: 4/2/2014 05:52 PM		
Client ID:		Run ID: GC8_140402C				SeqNo: 2697530		Prep Date: 4/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	275.3	8.0	318.1	0	86.6	49-130	0			
<i>Surr: 4-Terphenyl-d14</i>	2.536	0	3.181	0	79.7	39-115	0			

MSD		Sample ID: 1404093-01A MSD				Units: mg/Kg		Analysis Date: 4/2/2014 06:22 PM		
Client ID:		Run ID: GC8_140402C				SeqNo: 2697531		Prep Date: 4/2/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	274	7.9	316.6	0	86.5	49-130	275.3	0.494	30	
<i>Surr: 4-Terphenyl-d14</i>	2.548	0	3.166	0	80.5	39-115	2.536	0.479	30	

The following samples were analyzed in this batch: | 1404025-01B |

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57095** Instrument ID **GC9** Method: **PUBL-SW-140**

MBLK	Sample ID: MBLK-57095-57095				Units: µg/Kg			Analysis Date: 4/2/2014 10:38 AM		
Client ID:	Run ID: GC9_140402A				SeqNo: 2696711		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) ND 1,000

MBLK	Sample ID: MBLK-57095-57095				Units: µg/Kg			Analysis Date: 4/2/2014 06:03 PM		
Client ID:	Run ID: GC9_140402B				SeqNo: 2696852		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) ND 2,500

Surr: Toluene-d8 4900 0 5000 0 98 50-150 0

LCS	Sample ID: LCS-57095-57095				Units: µg/Kg			Analysis Date: 4/2/2014 09:45 AM		
Client ID:	Run ID: GC9_140402A				SeqNo: 2696710		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 11340 1,000 10000 0 113 80-120 0

LCS	Sample ID: LCS-57095-57095				Units: µg/Kg			Analysis Date: 4/2/2014 04:20 PM		
Client ID:	Run ID: GC9_140402B				SeqNo: 2696850		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 542300 2,500 500000 0 108 70-130 0

Surr: Toluene-d8 4472 0 5000 0 89.4 50-150 0

LCSD	Sample ID: LCSD-57095-57095				Units: µg/Kg			Analysis Date: 4/2/2014 03:01 PM		
Client ID:	Run ID: GC9_140402A				SeqNo: 2696713		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 11480 1,000 10000 0 115 80-120 11340 1.2 20

MS	Sample ID: 14031415-01A MS				Units: µg/Kg			Analysis Date: 4/3/2014 03:31 AM		
Client ID:	Run ID: GC9_140402B				SeqNo: 2696871		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 541500 2,500 500000 0 108 70-130 0

Surr: Toluene-d8 4510 0 5000 0 90.2 50-150 0

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57095** Instrument ID **GC9** Method: **PUBL-SW-140**

MSD		Sample ID: 14031415-01A MSD				Units: µg/Kg		Analysis Date: 4/3/2014 03:56 AM		
Client ID:		Run ID: GC9_140402B			SeqNo: 2696872		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	527900	2,500	500000	0	106	70-130	541500	2.54	30	
<i>Surr: Toluene-d8</i>	<i>4696</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>93.9</i>	<i>50-150</i>	<i>4510</i>	<i>4.05</i>	<i>30</i>	

The following samples were analyzed in this batch: 1404025-01A

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57171** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-57171-57171				Units: mg/Kg		Analysis Date: 4/3/2014 11:35 AM		
Client ID:		Run ID: HG1_140403A				SeqNo: 2697909		Prep Date: 4/3/2014		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-57171-57171				Units: mg/Kg		Analysis Date: 4/3/2014 11:37 AM		
Client ID:		Run ID: HG1_140403A				SeqNo: 2697910		Prep Date: 4/3/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1697 0.020 0.1665 0 102 80-120 0

MS		Sample ID: 1404093-01AMS				Units: mg/Kg		Analysis Date: 4/3/2014 11:56 AM		
Client ID:		Run ID: HG1_140403A				SeqNo: 2697930		Prep Date: 4/3/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1404 0.014 0.1144 0.02161 104 75-125 0

MSD		Sample ID: 1404093-01AMSD				Units: mg/Kg		Analysis Date: 4/3/2014 11:58 AM		
Client ID:		Run ID: HG1_140403A				SeqNo: 2697931		Prep Date: 4/3/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1347 0.013 0.1098 0.02161 103 75-125 0.1404 4.15 35

The following samples were analyzed in this batch: 1404025-01B

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1404025
 Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57201** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-57201-57201				Units: mg/Kg		Analysis Date: 4/4/2014 03:32 AM		
Client ID:		Run ID: ICPMS1_140403A			SeqNo: 2699209		Prep Date: 4/3/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-57201-57201				Units: mg/Kg		Analysis Date: 4/4/2014 03:56 AM		
Client ID:		Run ID: ICPMS1_140403A			SeqNo: 2699213		Prep Date: 4/3/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.518	0.25	5	0	90.4	80-120	0			
Barium	4.634	0.25	5	0	92.7	80-120	0			
Cadmium	4.649	0.10	5	0	93	80-120	0			
Chromium	4.693	0.25	5	0	93.9	80-120	0			
Copper	4.668	0.25	5	0	93.4	80-120	0			
Lead	4.709	0.25	5	0	94.2	80-120	0			
Nickel	4.633	0.25	5	0	92.7	80-120	0			
Selenium	4.29	0.25	5	0	85.8	80-120	0			
Silver	4.54	0.25	5	0	90.8	80-120	0			
Zinc	4.49	0.50	5	0	89.8	80-120	0			

MS		Sample ID: 1404029-05BMS				Units: mg/Kg		Analysis Date: 4/4/2014 05:57 AM		
Client ID:		Run ID: ICPMS1_140403A			SeqNo: 2699235		Prep Date: 4/3/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.754	0.35	6.944	0.7282	86.8	75-125	0			
Barium	11.57	0.35	6.944	6.509	72.9	75-125	0			S
Cadmium	6.349	0.14	6.944	0.009973	91.3	75-125	0			
Chromium	8	0.35	6.944	2.247	82.8	75-125	0			
Copper	7.34	0.35	6.944	1.964	77.4	75-125	0			
Lead	7.424	0.35	6.944	1.546	84.6	75-125	0			
Nickel	7.486	0.35	6.944	1.518	85.9	75-125	0			
Selenium	5.836	0.35	6.944	0.3781	78.6	75-125	0			
Silver	5.877	0.35	6.944	0.005943	84.5	75-125	0			
Zinc	9.146	0.69	6.944	3.225	85.3	75-125	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57201** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 1404029-05BMSD				Units: mg/Kg		Analysis Date: 4/4/2014 06:03 AM		
Client ID:		Run ID: ICPMS1_140403A			SeqNo: 2699237		Prep Date: 4/3/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.395	0.34	6.849	0.7282	82.7	75-125	6.754	5.47	25	
Barium	12.45	0.34	6.849	6.509	86.7	75-125	11.57	7.29	25	
Cadmium	6.349	0.14	6.849	0.009973	92.5	75-125	6.349	0.0003	25	
Chromium	8.329	0.34	6.849	2.247	88.8	75-125	8	4.03	25	
Copper	7.671	0.34	6.849	1.964	83.3	75-125	7.34	4.41	25	
Lead	7.534	0.34	6.849	1.546	87.4	75-125	7.424	1.48	25	
Nickel	7.712	0.34	6.849	1.518	90.4	75-125	7.486	2.98	25	
Selenium	5.964	0.34	6.849	0.3781	81.6	75-125	5.836	2.17	25	
Silver	5.878	0.34	6.849	0.005943	85.7	75-125	5.877	0.017	25	
Zinc	9.74	0.68	6.849	3.225	95.1	75-125	9.146	6.29	25	

The following samples were analyzed in this batch:

1404025-01B	1404025-02A	1404025-03A
1404025-04A	1404025-05A	1404025-06A

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57261** Instrument ID **ICPMS1** Method: **SW6020A**

DUP		Sample ID: 1404093-01CDUP				Units: mg/L		Analysis Date: 4/7/2014 09:24 PM		
Client ID:		Run ID: ICPMS1_140407A			SeqNo: 2702177		Prep Date: 4/4/2014		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	485.8	10	0	0	0	0-0	468	3.73		
Magnesium	194.9	4.0	0	0	0	0-0	199.9	2.52		
Sodium	1809	4.0	0	0	0	0-0	1995	9.77		

DUP		Sample ID: 1404093-01CDUP				Units: none		Analysis Date: 4/7/2014		
Client ID:		Run ID: SAR_140407A			SeqNo: 2702530		Prep Date: 4/4/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	17.53	0.010	0	0	0		19.45	10.4	50	

The following samples were analyzed in this batch: | 1404025-01C |

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57134** Instrument ID **SVMS8** Method: **SW8270**

MBLK		Sample ID: SBLKS1-57134-57134				Units: µg/Kg		Analysis Date: 4/2/2014 06:18 PM		
Client ID:		Run ID: SVMS8_140402A			SeqNo: 2697991		Prep Date: 4/2/2014		DF: 1	
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>	1110	0	1667	0	66.6	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1785	0	1667	0	107	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1311	0	1667	0	78.7	37-107	0			

LCS		Sample ID: SLCSS1-57134-57134				Units: µg/Kg		Analysis Date: 4/2/2014 06:39 PM		
Client ID:		Run ID: SVMS8_140402A			SeqNo: 2698033		Prep Date: 4/2/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	482	6.7	666.7	0	72.3	45-110	0			
Acenaphthylene	488.7	6.7	666.7	0	73.3	45-105	0			
Anthracene	591.3	6.7	666.7	0	88.7	55-105	0			
Benzo(a)anthracene	622.3	6.7	666.7	0	93.3	50-110	0			
Benzo(a)pyrene	615.7	6.7	666.7	0	92.3	50-110	0			
Benzo(b)fluoranthene	596.3	6.7	666.7	0	89.4	45-115	0			
Benzo(g,h,i)perylene	650.3	6.7	666.7	0	97.5	40-125	0			
Benzo(k)fluoranthene	608.7	6.7	666.7	0	91.3	45-115	0			
Chrysene	607.7	6.7	666.7	0	91.1	55-110	0			
Dibenzo(a,h)anthracene	604	6.7	666.7	0	90.6	40-125	0			
Fluoranthene	539	6.7	666.7	0	80.8	55-115	0			
Fluorene	488.3	6.7	666.7	0	73.2	50-110	0			
Indeno(1,2,3-cd)pyrene	643.3	6.7	666.7	0	96.5	40-120	0			
Naphthalene	423	6.7	666.7	0	63.4	40-105	0			
Pyrene	673.7	6.7	666.7	0	101	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1113	0	1667	0	66.8	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1799	0	1667	0	108	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1333	0	1667	0	80	37-107	0			

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1404025
 Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: 57134 Instrument ID SVMS8 Method: SW8270

MS				Sample ID: 14031362-01B MS			Units: µg/Kg		Analysis Date: 4/2/2014 08:41 PM		
Client ID:		Run ID: SVMS8_140402A		SeqNo: 2698007		Prep Date: 4/2/2014		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1578	20	1979	0	79.7	45-110	0				
Acenaphthylene	1650	20	1979	0	83.4	45-105	0				
Anthracene	1819	20	1979	0	91.9	55-105	0				
Benzo(a)anthracene	1796	20	1979	0	90.7	50-110	0				
Benzo(a)pyrene	1835	20	1979	0	92.7	50-110	0				
Benzo(b)fluoranthene	1800	20	1979	0	90.9	45-115	0				
Benzo(g,h,i)perylene	1944	20	1979	0	98.2	40-125	0				
Benzo(k)fluoranthene	1711	20	1979	0	86.4	45-115	0				
Chrysene	1716	20	1979	0	86.7	55-110	0				
Dibenzo(a,h)anthracene	1738	20	1979	0	87.8	40-125	0				
Fluoranthene	1609	20	1979	0	81.3	55-115	0				
Fluorene	1574	20	1979	0	79.5	50-110	0				
Indeno(1,2,3-cd)pyrene	1973	20	1979	0	99.7	40-120	0				
Naphthalene	1408	20	1979	0	71.1	40-105	0				
Pyrene	1899	20	1979	0	95.9	45-125	0				
Surr: 2-Fluorobiphenyl	3810	0	4947	0	77	12-100	0				
Surr: 4-Terphenyl-d14	5146	0	4947	0	104	25-137	0				
Surr: Nitrobenzene-d5	4702	0	4947	0	95	37-107	0				

MSD				Sample ID: 14031362-01B MSD			Units: µg/Kg		Analysis Date: 4/2/2014 09:01 PM		
Client ID:		Run ID: SVMS8_140402A		SeqNo: 2698008		Prep Date: 4/2/2014		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1506	20	1975	0	76.2	45-110	1578	4.7	30		
Acenaphthylene	1539	20	1975	0	77.9	45-105	1650	6.97	30		
Anthracene	1691	20	1975	0	85.6	55-105	1819	7.26	30		
Benzo(a)anthracene	1776	20	1975	0	89.9	50-110	1796	1.1	30		
Benzo(a)pyrene	1761	20	1975	0	89.2	50-110	1835	4.12	30		
Benzo(b)fluoranthene	1662	20	1975	0	84.1	45-115	1800	7.98	30		
Benzo(g,h,i)perylene	1901	20	1975	0	96.3	40-125	1944	2.22	30		
Benzo(k)fluoranthene	1707	20	1975	0	86.4	45-115	1711	0.217	30		
Chrysene	1717	20	1975	0	86.9	55-110	1716	0.0705	30		
Dibenzo(a,h)anthracene	1726	20	1975	0	87.4	40-125	1738	0.731	30		
Fluoranthene	1544	20	1975	0	78.2	55-115	1609	4.1	30		
Fluorene	1461	20	1975	0	74	50-110	1574	7.45	30		
Indeno(1,2,3-cd)pyrene	1946	20	1975	0	98.5	40-120	1973	1.38	30		
Naphthalene	1387	20	1975	0	70.2	40-105	1408	1.49	30		
Pyrene	1864	20	1975	0	94.4	45-125	1899	1.85	30		
Surr: 2-Fluorobiphenyl	3708	0	4936	0	75.1	12-100	3810	2.72	40		
Surr: 4-Terphenyl-d14	5044	0	4936	0	102	25-137	5146	2	40		
Surr: Nitrobenzene-d5	4559	0	4936	0	92.4	37-107	4702	3.08	40		

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57134** Instrument ID **SVMS8** Method: **SW8270**

The following samples were analyzed in this batch:

1404025-01B

Client: HRL Compliance Solutions, Inc
 Work Order: 1404025
 Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57094** Instrument ID **VMS8** Method: **SW8260B**

MBLK		Sample ID: MBLK-57094-57094				Units: µg/Kg		Analysis Date: 4/1/2014 02:18 PM		
Client ID:		Run ID: VMS8_140401A				SeqNo: 2695218		Prep Date: 4/1/2014		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	930.5	0	1000	0	93	70-130	0			
Surr: 4-Bromofluorobenzene	1008	0	1000	0	101	70-130	0			
Surr: Dibromofluoromethane	964	0	1000	0	96.4	70-130	0			
Surr: Toluene-d8	980	0	1000	0	98	70-130	0			

LCS		Sample ID: LCS-57094-57094				Units: µg/Kg		Analysis Date: 4/1/2014 11:52 AM		
Client ID:		Run ID: VMS8_140401A				SeqNo: 2695215		Prep Date: 4/1/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	959	30	1000	0	95.9	75-125	0			
Ethylbenzene	939.5	30	1000	0	94	75-125	0			
m,p-Xylene	1862	60	2000	0	93.1	80-125	0			
o-Xylene	940.5	30	1000	0	94	75-125	0			
Toluene	918.5	30	1000	0	91.8	70-125	0			
Xylenes, Total	2802	90	3000	0	93.4	75-125	0			
Surr: 1,2-Dichloroethane-d4	958.5	0	1000	0	95.8	70-130	0			
Surr: 4-Bromofluorobenzene	986	0	1000	0	98.6	70-130	0			
Surr: Dibromofluoromethane	984.5	0	1000	0	98.4	70-130	0			
Surr: Toluene-d8	984.5	0	1000	0	98.4	70-130	0			

MS		Sample ID: 14031398-07A MS				Units: µg/Kg		Analysis Date: 4/1/2014 09:38 PM		
Client ID:		Run ID: VMS8_140401A				SeqNo: 2695251		Prep Date: 4/1/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	959	30	1000	0	95.9	75-125	0			
Ethylbenzene	930	30	1000	0	93	75-125	0			
m,p-Xylene	1834	60	2000	0	91.7	80-125	0			
o-Xylene	925	30	1000	0	92.5	75-125	0			
Toluene	901.5	30	1000	0	90.2	70-125	0			
Xylenes, Total	2760	90	3000	0	92	75-125	0			
Surr: 1,2-Dichloroethane-d4	954.5	0	1000	0	95.4	70-130	0			
Surr: 4-Bromofluorobenzene	1022	0	1000	0	102	70-130	0			
Surr: Dibromofluoromethane	976	0	1000	0	97.6	70-130	0			
Surr: Toluene-d8	979	0	1000	0	97.9	70-130	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57094** Instrument ID **VMS8** Method: **SW8260B**

MSD		Sample ID: 14031398-07A MSD				Units: µg/Kg		Analysis Date: 4/1/2014 10:02 PM		
Client ID:		Run ID: VMS8_140401A			SeqNo: 2695255		Prep Date: 4/1/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	964.5	30	1000	0	96.4	75-125	959	0.572	30	
Ethylbenzene	946	30	1000	0	94.6	75-125	930	1.71	30	
m,p-Xylene	1879	60	2000	0	94	80-125	1834	2.4	30	
o-Xylene	952.5	30	1000	0	95.2	75-125	925	2.93	30	
Toluene	919	30	1000	0	91.9	70-125	901.5	1.92	30	
Xylenes, Total	2832	90	3000	0	94.4	75-125	2760	2.58	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	956.5	0	1000	0	95.6	70-130	954.5	0.209	30	
<i>Surr: 4-Bromofluorobenzene</i>	991	0	1000	0	99.1	70-130	1022	3.13	30	
<i>Surr: Dibromofluoromethane</i>	977.5	0	1000	0	97.8	70-130	976	0.154	30	
<i>Surr: Toluene-d8</i>	978	0	1000	0	97.8	70-130	979	0.102	30	

The following samples were analyzed in this batch: | 1404025-01A |

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

Client: HRL Compliance Solutions, Inc
Work Order: 1404025
Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57118** Instrument ID **WETCHEM** Method: **SW9045D**

LCS	Sample ID: LCS-57118-57118		Units: s.u.		Analysis Date: 4/1/2014 04:46 PM					
Client ID:	Run ID: WETCHEM_140401K		SeqNo: 2694580		Prep Date: 4/1/2014 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 3.95 0 4 0 98.8 90-110 0

DUP	Sample ID: 1404009-04B DUP		Units: s.u.		Analysis Date: 4/1/2014 04:46 PM					
Client ID:	Run ID: WETCHEM_140401K		SeqNo: 2694587		Prep Date: 4/1/2014 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 8.7 0 0 0 0 0-0 8.73 0.344 20

The following samples were analyzed in this batch:

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1404025
 Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **57168** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-57168-57168		Units: mg/Kg		Analysis Date: 4/2/2014 03:00 PM					
Client ID:	Run ID: WETCHEM_1404020		SeqNo: 2696816		Prep Date: 4/1/2014 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

LCS	Sample ID: LCS-57168-57168		Units: mg/Kg		Analysis Date: 4/2/2014 03:00 PM					
Client ID:	Run ID: WETCHEM_1404020		SeqNo: 2696815		Prep Date: 4/1/2014 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.944 0.50 2 0 97.2 80-120 0

MS	Sample ID: 1404009-01B MS		Units: mg/Kg		Analysis Date: 4/2/2014 03:00 PM					
Client ID:	Run ID: WETCHEM_1404020		SeqNo: 2696805		Prep Date: 4/1/2014 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.9449 0.49 1.969 0.1647 39.6 75-125 0 S

MS	Sample ID: 1404009-01B MSI		Units: mg/Kg		Analysis Date: 4/2/2014 03:00 PM					
Client ID:	Run ID: WETCHEM_1404020		SeqNo: 2696807		Prep Date: 4/1/2014 DF: 100					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 736.9 50 855.6 0.1647 86.1 75-125 0

MSD	Sample ID: 1404009-01B MSD		Units: mg/Kg		Analysis Date: 4/2/2014 03:00 PM					
Client ID:	Run ID: WETCHEM_1404020		SeqNo: 2696806		Prep Date: 4/1/2014 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.082 0.49 1.953 0.1647 47 75-125 0.9449 13.5 20 S

The following samples were analyzed in this batch: 1404025-01B

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

Client: HRL Compliance Solutions, Inc
 Work Order: 1404025
 Project: WPX RMV 108-4 Cuttings 3.31.14

QC BATCH REPORT

Batch ID: **R138218** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R138218		Units: % of sample				Analysis Date: 4/1/2014 02:05 PM			
Client ID:	Run ID: MOIST_140401B		SeqNo: 2695522		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-R138218		Units: % of sample				Analysis Date: 4/1/2014 02:05 PM			
Client ID:	Run ID: MOIST_140401B		SeqNo: 2695521		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1404009-01B DUP		Units: % of sample				Analysis Date: 4/1/2014 02:05 PM			
Client ID:	Run ID: MOIST_140401B		SeqNo: 2695490		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 8.75 0.050 0 0 0 0-0 9.36 6.74 20

DUP	Sample ID: 1404029-01B DUP		Units: % of sample				Analysis Date: 4/1/2014 02:05 PM			
Client ID:	Run ID: MOIST_140401B		SeqNo: 2695515		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 9.55 0.050 0 0 0 0-0 8.68 9.54 20

The following samples were analyzed in this batch:

1404025-01B	1404025-02A	1404025-03A
1404025-04A	1404025-05A	1404025-06A

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



ALS Laboratory Group

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

Chain-of-Custody

Form 202r8

WORKORDER #	1404025
-------------	---------

PROJECT NAME		WPX RMV 108-4 cuttings		SAMPLER		Reed Wold		DATE		3/31/14		PAGE		1 of 1		
PROJECT No.				SITE ID		RMV 108-4		TURNAROUND		Standard		DISPOSAL		(By Lab) or Return to Client		
COMPANY NAME		HRL Compliance		BILL TO COMPANY		WPX		BTFX/60								
SEND REPORT TO		Mark Mumby		INVOICE ATTN TO		Karolina Blaney		DR/PAH/MS								
ADDRESS		2385 F 1/2 Rd		ADDRESS		1058 Co Rd 215		SAR/Scp								
CITY / STATE / ZIP		Grand Junction, CO 81508		CITY / STATE / ZIP		Parachute CO 81635		Arsenic								
PHONE		970-243-3271		PHONE		970-883-2285										
FAX		970-243-3280		FAX												
E-MAIL		mmumby@hrlcomp.com rwold@hrlcomp.com		E-MAIL		Karolina.blaney@wpxenergy.com										
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC									
1	cuttings	SO	3/31/14	10:45	3	8		X	X	X						
2	RMV 108-4-B-1	↓	↓	10:55	1					X						
3	RMV 108-4-B-2			11:00	1						X					
4	RMV 108-4-B-3			11:05	1						X					
5	RMV 108-4-B-4			11:10	1						X					
6	RMV 108-4-B-5			11:15	1						X					

Handwritten signature and date: 3/31/14

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **01-Apr-14 09:30**

Work Order: **1404025**

Received by: **DS**

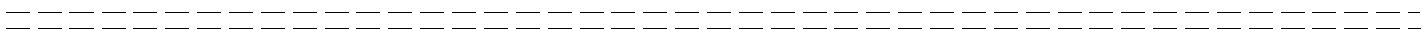
Checklist completed by Diane Shaw 01-Apr-14
eSignature Date

Reviewed by: Ann Preston 01-Apr-14
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"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<input type="text" value="5.4 c"/>		
Cooler(s)/Kit(s):	<input type="text"/>		
Date/Time sample(s) sent to storage:	<input type="text" value="4/1/2014 11:46:36 AM"/>		
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:	<input type="text"/>		

Login Notes:



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction:

From: (878) 424-4748
Lab Hsh, LLC
127 E First Street
PARACHUTE, CO 81835

Origin ID: RLA



Ship Date: 31MAR14
Acct Wgt: 74.0 LB
CAC: 103823400NET3400
Dim: 24 X 13 X 18 IN

Delivery Address Bar Code



Ref # 1001-033114-8
Invoice #
PO #
Dept #

14101-03091028

BILL RECEIPT

SHIP TO: (810) 399-8078
Sample receiving
ALS Holland
3352 128TH AVE
HOLLAND, MI 49424

1 of 2

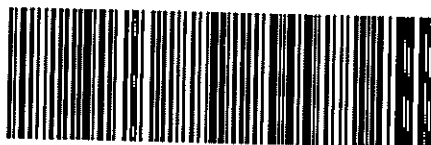
TUE - 01 APR 10:30A
PRIORITY OVERNIGHT

TRK# 7983 8710 4442
[6287]

MASTER

49424
MS-UB
GRR

XX GRRR



5000 WPC0M720




After printing this label:

1. Use the "Print" button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income, interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

 ALS Environmental 3352 128th Ave #105 Holland, Michigan 49424 Tel. +1 616 399 8070 Fax. +1 616 399 8185	CUSTODY SEAL		Seal Broken By:
	Date: 3/31/14	Time: 1600	Date:
Name: Cathy	Company: Lab Hsh		