

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b)

RECEIVED
6/13/2012

1. OGCC Operator Number: <u>96B50</u>		4. Contact Name <u>Karolina Blaney</u>		Complete the Attachment Checklist OP OGCC
2. Name of Operator: <u>WPX Energy Rocky Mountain LLC</u>		Phone: <u>970 683 2295</u>		
3. Address: <u>1058 County Road 215</u> City: <u>Parachute</u> State: <u>CO</u> Zip: <u>81635</u>		Fax: <u>970 285 9573</u>		
5. API Number <u>05-</u>	OGCC Facility ID Number <u>335777</u>	Survey Plat		
6. Well/Facility Name: <u>Federal RMV 53-17</u>	7. Well/Facility Number	Directional Survey		
8. Location (Qtr/Tr, Sec, Twp, Rng, Meridian): <u>NWSE S28 T6S R95W 6pm</u>		Surface Eqpm Diagram		
9. County: <u>Garfield</u>	10. Field Name: <u>Rulison</u>	Technical Info Page		<input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number: <u>SENE S17 T6S R94W 6th PM</u>		Other		<input checked="" type="checkbox"/>

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat		(a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:		<input type="checkbox"/>	<input type="checkbox"/>
Change of Surface Footage to Exterior Section Lines:		<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:		<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:		<input type="checkbox"/>	<input type="checkbox"/>
Bottomhole location Qtr/Tr, Sec, Twp, Rng, Mer		attach directional survey	
Latitude	Distance to nearest property line	Distance to nearest bldg, public rd, utility or RR	
Longitude	Distance to nearest lease line	Is location in a High Density Area (rule 603b)?	Yes/No <input type="checkbox"/>
Ground Elevation	Distance to nearest well same formation	Surface owner consultation date:	
GPS DATA:			
Date of Measurement	PDOP Reading	Instrument Operator's Name	
<input type="checkbox"/> CHANGE SPACING UNIT		<input type="checkbox"/> Remove from surface bond	
Formation	Formation Code	Spacing order number	Unit Acreage
Unit configuration		Signed surface use agreement attached	
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):		<input type="checkbox"/> CHANGE WELL NAME	
Effective Date:		From:	
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual		To:	
		Effective Date:	
<input type="checkbox"/> ABANDONED LOCATION:		<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS	
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No		Date well shut in or temporarily abandoned:	
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date Ready for Inspection:		MIT required if shut in longer than two years. Date of last MIT	
<input type="checkbox"/> SPUD DATE:		<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)	
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK		*submit cbl and cement job summaries	
Method used	Cementing tool setting/perf depth	Cement volume	Cement top
			Cement bottom
			Date
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.			
Final reclamation will commence on approximately		<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent		<input type="checkbox"/> Report of Work Done	
Approximate Start Date:		Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)			
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal	
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste	
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input checked="" type="checkbox"/> Status Update/Change of Remediation Plans	
<input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Other:	for Spills and Releases	

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

Signed: Karolina Blaney
Print Name: Karolina BlaneyDate: 6/13/2012 Email: Karolina.Blaney@wpxenergy.com
Title: Environmental Specialist

COGCC Approved:

Title: FORDate: 06/19/2012

CONDITIONS OF APPROVAL IF ANY:

Chris Camfield
EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: _____ API Number: _____

2. Name of Operator: _____ OGCC Facility ID # _____

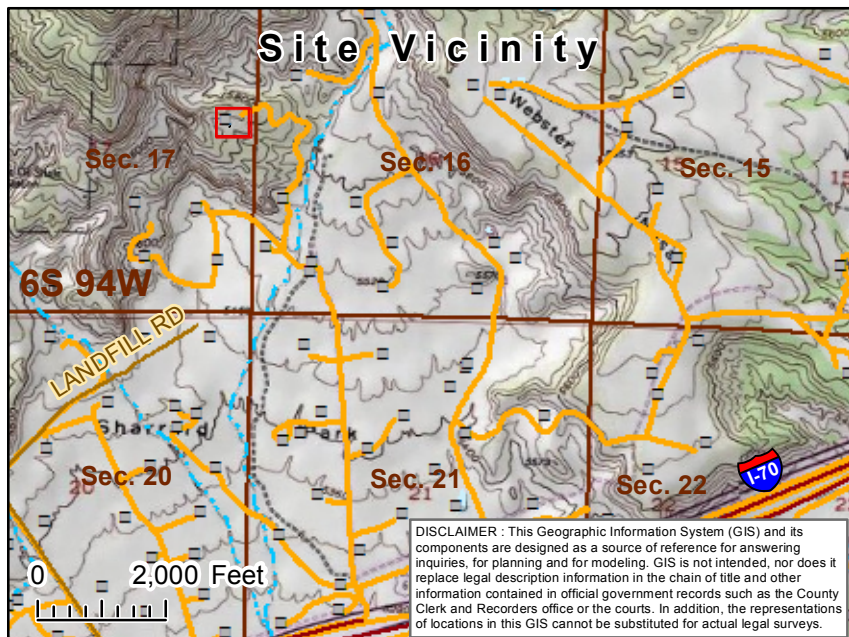
3. Well/Facility Name: _____ Well/Facility Number: _____

4. Location (QtrQtr, Sec, Twp, Rng, Meridian): _____

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5.

DESCRIBE PROPOSED OR COMPLETED OPERATIONS



Attachment A--Sample Location Map

Location: RMV 53-17

WPX Energy Rocky Mountain, LLC

Legend



Sample Location

Transportation Features

PLSS



Township



Section

Highways

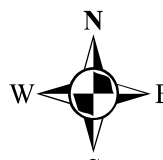
Public Roads

WPX Access Roads

Hydrographic Features

Perennial Stream

Intermittent Stream



0 37.5 75





16-Jan-2012

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **WPX Energy RMV 53-17 1/9/12**

Work Order: **1201217**

Dear Mark,

ALS Environmental received 4 samples on 11-Jan-2012 10:30 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.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 30.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN331938

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

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

Environmental The ALS logo, a stylized blue triangle with a yellow flame.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: WPX Energy RMV 53-17 1/9/12
Work Order: 1201217

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>
1201217-01	RMV 53-17 WPX Energy	Soil		1/9/2012 13:40	1/11/2012 10:30	<input type="checkbox"/>
1201217-02	BKGD 1	Soil		1/9/2012 13:45	1/11/2012 10:30	<input type="checkbox"/>
1201217-03	BKGD 2	Soil		1/9/2012 13:50	1/11/2012 10:30	<input type="checkbox"/>
1201217-04	BKGD 3	Soil		1/9/2012 13:55	1/11/2012 10:30	<input type="checkbox"/>

ALS Group USA, Corp

Date: 16-Jan-12

Client: HRL Compliance Solutions
Project: WPX Energy RMV 53-17 1/9/12
Work Order: 1201217

Case Narrative

Batch 38653 MS/MSD data for Metals is not related to this project's samples.

Batch R99963 pH duplicate data is not related to this project's samples.

Client: HRL Compliance Solutions
Project: WPX Energy RMV 53-17 1/9/12
WorkOrder: 1201217

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
µg/Kg-dry as noted	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group USA, Corp

Date: 16-Jan-12

Client: HRL Compliance Solutions

Project: WPX Energy RMV 53-17 1/9/12

Sample ID: RMV 53-17 WPX Energy

Collection Date: 1/9/2012 01:40 PM

Work Order: 1201217

Lab ID: 1201217-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 1/12/2012	Analyst: RM
DRO (C10-C28)	320		4.5	mg/Kg-dry	1	1/13/2012 12:26 PM
Surr: 4-Terphenyl-d14	103		39-115	%REC	1	1/13/2012 12:26 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: JD
GRO (C6-C10)	230		2.7	mg/Kg-dry	50	1/11/2012 09:44 PM
Surr: Toluene-d8	92.0		50-150	%REC	50	1/11/2012 09:44 PM
MERCURY BY CVAA						
			SW7471		Prep Date: 1/13/2012	Analyst: LR
Mercury	0.027		0.020	mg/Kg-dry	1	1/16/2012 03:05 PM
METALS BY ICP-MS						
			SW6020A		Prep Date: 1/12/2012	Analyst: CES
Arsenic	5.2		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Barium	3,700		64	mg/Kg-dry	200	1/13/2012 12:00 PM
Cadmium	0.69		0.26	mg/Kg-dry	2	1/12/2012 07:29 PM
Chromium	12		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Copper	14		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Lead	14		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Nickel	18		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Selenium	1.1		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Silver	ND		0.64	mg/Kg-dry	2	1/12/2012 07:29 PM
Zinc	230		1.3	mg/Kg-dry	2	1/12/2012 07:29 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses		Rcvd 1/16/12	SUBCONTRACT			Analyst: A&LGL
			as noted		1	1/16/2012
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep Date: 1/12/2012	Analyst: CW
Acenaphthene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Anthracene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Chrysene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Fluoranthene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Fluorene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Naphthalene	190		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Pyrene	ND		32	µg/Kg-dry	1	1/12/2012 10:00 PM
Surr: 2,4,6-Tribromophenol	84.8		34-140	%REC	1	1/12/2012 10:00 PM

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

ALS Group USA, Corp

Date: 16-Jan-12

Client: HRL Compliance Solutions

Project: WPX Energy RMV 53-17 1/9/12

Sample ID: RMV 53-17 WPX Energy

Collection Date: 1/9/2012 01:40 PM

Work Order: 1201217

Lab ID: 1201217-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 2-Fluorobiphenyl	75.7		12-100	%REC	1	1/12/2012 10:00 PM
Surr: 2-Fluorophenol	64.4		33-117	%REC	1	1/12/2012 10:00 PM
Surr: 4-Terphenyl-d14	77.6		25-137	%REC	1	1/12/2012 10:00 PM
Surr: Nitrobenzene-d5	71.2		37-107	%REC	1	1/12/2012 10:00 PM
Surr: Phenol-d6	79.7		40-106	%REC	1	1/12/2012 10:00 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG
Benzene	93		55	µg/Kg-dry	50	1/11/2012 06:23 PM
Ethylbenzene	120		110	µg/Kg-dry	50	1/11/2012 06:23 PM
m,p-Xylene	1,600		110	µg/Kg-dry	50	1/11/2012 06:23 PM
o-Xylene	240		55	µg/Kg-dry	50	1/11/2012 06:23 PM
Toluene	920		82	µg/Kg-dry	50	1/11/2012 06:23 PM
Xylenes, Total	1,800		160	µg/Kg-dry	50	1/11/2012 06:23 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	50	1/11/2012 06:23 PM
Surr: 4-Bromofluorobenzene	91.6		75-120	%REC	50	1/11/2012 06:23 PM
Surr: Dibromofluoromethane	94.7		85-115	%REC	50	1/11/2012 06:23 PM
Surr: Toluene-d8	109		85-115	%REC	50	1/11/2012 06:23 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	12		0.55	mg/Kg-dry	1	1/16/2012 04:32 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 1/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	1/13/2012 11:00 AM
MOISTURE			A2540 G			Analyst: CG
Moisture	8.4		0.050	% of sample	1	1/12/2012 01:06 PM
PH			SW9045D			Analyst: JJG
pH	9.14			s.u.	1	1/11/2012 08:05 AM

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

ALS Group USA, Corp

Date: 16-Jan-12

Client: HRL Compliance Solutions

Project: WPX Energy RMV 53-17 1/9/12

Sample ID: BKGD 1

Collection Date: 1/9/2012 01:45 PM

Work Order: 1201217

Lab ID: 1201217-02

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 1/12/2012	Analyst: CES
Arsenic	8.3		0.73	mg/Kg-dry	2	1/12/2012 07:34 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	14		0.050	% of sample	1	1/12/2012 01:06 PM

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

ALS Group USA, Corp**Date:** 16-Jan-12**Client:** HRL Compliance Solutions**Project:** WPX Energy RMV 53-17 1/9/12**Work Order:** 1201217**Sample ID:** BKGD 2**Lab ID:** 1201217-03**Collection Date:** 1/9/2012 01:50 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 1/12/2012	Analyst: CES
Arsenic	5.2		0.72	mg/Kg-dry	2	1/12/2012 07:39 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	15		0.050	% of sample	1	1/11/2012 01:15 PM

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

ALS Group USA, Corp**Date:** 16-Jan-12**Client:** HRL Compliance Solutions**Project:** WPX Energy RMV 53-17 1/9/12**Work Order:** 1201217**Sample ID:** BKGD 3**Lab ID:** 1201217-04**Collection Date:** 1/9/2012 01:55 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	7.3		SW6020A 0.72	mg/Kg-dry	Prep Date: 1/12/2012 2	Analyst: CES 1/12/2012 07:45 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	Rcvd 1/16/12		SUBCONTRACT as noted		1	Analyst: A&LGL 1/16/2012
MOISTURE						
Moisture	12		A2540 G 0.050	% of sample	1	Analyst: CG 1/11/2012 01:15 PM
PH						
pH	8.84		SW9045D	s.u.	1	Analyst: JJG 1/11/2012 08:05 AM

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

Report Number: F12012-0265

Account Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

3505 Conestoga Drive • Fort Wayne, Indiana 46808-4413 • Phone 260-483-4759 • Fax 260-483-5274

www.algreatlakes.com • lab@algreatlakes.com



QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: PROJ. 1201217

DATE RECEIVED: 01/12/2012

DATE REPORTED: 01/16/2012

PAGE: 1

P.O. NUMBER: 20-122011528

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
10527	01C	Sat'd Paste Extraction with DIW			USDA Handbook 60
		Conductivity (ECe)	1.58	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	25	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	7	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	1687	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	76.6	-	USDA Handbook 60
10528	04B	Sat'd Paste Extraction with DIW			USDA Handbook 60
		Conductivity (ECe)	0.26	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	46	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	6	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	22	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	0.8	-	USDA Handbook 60

ALS Group USA, Corp

Date: 16-Jan-12

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38647** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-38647-38647				Units: mg/Kg		Analysis Date: 1/13/2012 12:04 PM		
Client ID:		Run ID: GC8_120113A				SeqNo: 1874607		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	1.537	0	1.667	0	92.2	39-115	0			

LCS		Sample ID: DLCSS1-38647-38647				Units: mg/Kg		Analysis Date: 1/13/2012 10:34 AM		
Client ID:		Run ID: GC8_120113A				SeqNo: 1874605		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	150.4	4.2	166.7	0	90.2	60-130	0			
Surr: 4-Terphenyl-d14	1.259	0	1.667	0	75.5	39-115	0			

LCSD		Sample ID: DLCSDS1-38647-38647				Units: mg/Kg		Analysis Date: 1/13/2012 10:34 AM		
Client ID:		Run ID: GC8_120113A				SeqNo: 1874608		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	156.3	4.2	166.7	0	93.8	60-130	150.4	3.82	30	
Surr: 4-Terphenyl-d14	1.385	0	1.667	0	83.1	39-115	1.259	9.56	30	

MS		Sample ID: 1201221-05A MS				Units: mg/Kg		Analysis Date: 1/13/2012 10:57 AM		
Client ID:		Run ID: GC8_120113A				SeqNo: 1874606		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	358.3	12	471.9	0	75.9	60-130	0			
Surr: 4-Terphenyl-d14	3.04	0	4.719	0	64.4	39-115	0			

MSD		Sample ID: 1201221-05A MSD				Units: mg/Kg		Analysis Date: 1/13/2012 10:57 AM		
Client ID:		Run ID: GC8_120113A				SeqNo: 1874609		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	331	12	491.3	0	67.4	60-130	358.3	7.92	30	
Surr: 4-Terphenyl-d14	3.151	0	4.913	0	64.1	39-115	3.04	3.58	30	

The following samples were analyzed in this batch:

1201217-01B

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

Client: HRL Compliance Solutions
 Work Order: 1201217
 Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **R99985** Instrument ID **GC10** Method: **SW8015**

MBLK		Sample ID: MBLK-R99985-R99985				Units: µg/L		Analysis Date: 1/11/2012 01:30 PM		
Client ID:		Run ID: GC10_120111A				SeqNo: 1873617		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	88.05	0	100	0	88	70-130	0			

LCS		Sample ID: LCS-R99985-R99985				Units: µg/L		Analysis Date: 1/11/2012 12:15 PM		
Client ID:		Run ID: GC10_120111A				SeqNo: 1873615		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	25770	200	25000	0	103	70-130	0			
Surr: Toluene-d8	85.38	0	100	0	85.4	70-130	0			

LCSD		Sample ID: LCSD-R99985-R99985				Units: µg/L		Analysis Date: 1/11/2012 12:40 PM		
Client ID:		Run ID: GC10_120111A				SeqNo: 1873616		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	24390	200	25000	0	97.6	70-130	25770	5.47	30	
Surr: Toluene-d8	86.08	0	100	0	86.1	70-130	85.38	0.817	30	

MS		Sample ID: 1201108-01A MS				Units: µg/L		Analysis Date: 1/11/2012 10:09 PM		
Client ID:		Run ID: GC10_120111A				SeqNo: 1873622		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	21350	200	25000	0	85.4	70-130	0			
Surr: Toluene-d8	91.17	0	100	0	91.2	70-130	0			

MSD		Sample ID: 1201108-01A MSD				Units: µg/L		Analysis Date: 1/11/2012 10:34 PM		
Client ID:		Run ID: GC10_120111A				SeqNo: 1873623		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	20240	200	25000	0	81	70-130	21350	5.36	30	
Surr: Toluene-d8	91.26	0	100	0	91.3	70-130	91.17	0.0987	30	

The following samples were analyzed in this batch: 1201217-01A

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38669** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-38669-38669					Units: mg/Kg		Analysis Date: 1/16/2012 02:57 PM		
Client ID:	Run ID: HG1_120116A				SeqNo: 1875568		Prep Date: 1/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS	Sample ID: LCS-38669-38669					Units: mg/Kg		Analysis Date: 1/16/2012 02:59 PM		
Client ID:	Run ID: HG1_120116A				SeqNo: 1875569		Prep Date: 1/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1872 0.020 0.1665 0 112 80-120 0

LCSD	Sample ID: LCSD-38669-38669					Units: mg/Kg		Analysis Date: 1/16/2012 03:01 PM		
Client ID:	Run ID: HG1_120116A				SeqNo: 1875570		Prep Date: 1/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1853 0.020 0.1665 0 111 80-120 0.1872 0.984 20

MS	Sample ID: 1201282-07AMS					Units: mg/Kg		Analysis Date: 1/16/2012 03:21 PM		
Client ID:	Run ID: HG1_120116A				SeqNo: 1875579		Prep Date: 1/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1943 0.020 0.1646 0.01875 107 75-125 0

MSD	Sample ID: 1201282-07AMSD					Units: mg/Kg		Analysis Date: 1/16/2012 03:23 PM		
Client ID:	Run ID: HG1_120116A				SeqNo: 1875580		Prep Date: 1/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1898 0.020 0.1638 0.01875 104 75-125 0.1943 2.33 35

The following samples were analyzed in this batch:

1201217-01B

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38653** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-38653-38653				Units: mg/Kg		Analysis Date: 1/12/2012 04:48 PM		
Client ID:		Run ID: ICPMS1_120112A				SeqNo: 1874000		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.02078	0.25								J
Barium	ND	0.25								
Cadmium	0.002	0.10								J
Chromium	0.003911	0.25								J
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-38653-38653				Units: mg/Kg		Analysis Date: 1/12/2012 04:54 PM		
Client ID:		Run ID: ICPMS1_120112A				SeqNo: 1874001		Prep Date: 1/12/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.837	0.50	5	0	96.7	80-120	0			
Barium	4.662	0.50	5	0	93.2	80-120	0			
Cadmium	4.653	0.20	5	0	93.1	80-120	0			
Chromium	4.472	0.50	5	0	89.4	80-120	0			
Copper	4.404	0.50	5	0	88.1	80-120	0			
Lead	4.576	0.50	5	0	91.5	80-120	0			
Nickel	4.35	0.50	5	0	87	80-120	0			
Selenium	4.617	0.50	5	0	92.3	80-120	0			
Silver	4.118	0.50	5	0	82.4	80-120	0			
Zinc	4.802	1.0	5	0	96	80-120	0			

LCSD		Sample ID: LCSD-38653-38653				Units: mg/Kg		Analysis Date: 1/12/2012 04:59 PM		
Client ID:		Run ID: ICPMS1_120112A				SeqNo: 1874002		Prep Date: 1/12/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.641	0.50	5	0	92.8	80-120	4.837	4.14	20	
Barium	4.415	0.50	5	0	88.3	80-120	4.662	5.44	20	
Cadmium	4.473	0.20	5	0	89.5	80-120	4.653	3.94	20	
Chromium	4.322	0.50	5	0	86.4	80-120	4.472	3.41	20	
Copper	4.263	0.50	5	0	85.3	80-120	4.404	3.25	20	
Lead	4.421	0.50	5	0	88.4	80-120	4.576	3.45	20	
Nickel	4.246	0.50	5	0	84.9	80-120	4.35	2.42	20	
Selenium	4.526	0.50	5	0	90.5	80-120	4.617	1.99	20	
Silver	4.016	0.50	5	0	80.3	80-120	4.118	2.51	20	
Zinc	4.703	1.0	5	0	94.1	80-120	4.802	2.08	20	

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

Client: HRL Compliance Solutions
 Work Order: 1201217
 Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38653** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: 1201182-01BMS				Units: mg/Kg			Analysis Date: 1/12/2012 06:11 PM			
Client ID:		Run ID: ICPMS1_120112A			SeqNo: 1874014		Prep Date: 1/12/2012		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.56	1.4	7.112	9.631	97.4	80-120	0			
Barium	64.44	1.4	7.112	59.6	68.1	80-120	0			SO
Cadmium	6.717	0.57	7.112	0.3163	90	80-120	0			
Chromium	8.128	1.4	7.112	2.014	86	80-120	0			
Copper	22.64	1.4	7.112	16.68	83.8	80-120	0			
Lead	11.03	1.4	7.112	4.651	89.6	80-120	0			
Nickel	8.774	1.4	7.112	2.921	82.3	80-120	0			
Selenium	8.097	1.4	7.112	1.16	97.5	80-120	0			
Silver	5.587	1.4	7.112	0.01235	78.4	80-120	0			S
Zinc	19.41	2.8	7.112	12.7	94.4	80-120	0			

MSD Sample ID: 1201182-01BMSD				Units: mg/Kg			Analysis Date: 1/12/2012 06:16 PM			
Client ID:		Run ID: ICPMS1_120112A			SeqNo: 1874015		Prep Date: 1/12/2012		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.55	1.5	7.576	9.631	91.4	80-120	16.56	0.0185	25	
Barium	63.55	1.5	7.576	59.6	52.1	80-120	64.44	1.39	25	SO
Cadmium	7.179	0.61	7.576	0.3163	90.6	80-120	6.717	6.65	25	
Chromium	8.536	1.5	7.576	2.014	86.1	80-120	8.128	4.9	25	
Copper	23	1.5	7.576	16.68	83.4	80-120	22.64	1.59	25	
Lead	11.27	1.5	7.576	4.651	87.4	80-120	11.03	2.18	25	
Nickel	9.248	1.5	7.576	2.921	83.5	80-120	8.774	5.27	25	
Selenium	8.333	1.5	7.576	1.16	94.7	80-120	8.097	2.88	25	
Silver	6.024	1.5	7.576	0.01235	79.4	80-120	5.587	7.52	25	S
Zinc	19.6	3.0	7.576	12.7	91	80-120	19.41	0.954	25	

The following samples were analyzed in this batch:

1201217-01B	1201217-02A	1201217-03A
1201217-04A		

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38646** Instrument ID **SVMS6** Method: **SW8270**

MBLK		Sample ID: SBLKS1-38646-38646				Units: µg/Kg		Analysis Date: 1/12/2012 05:36 PM		
Client ID:		Run ID: SVMS6_120112A				SeqNo: 1873869		Prep Date: 1/12/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
Surr: 2,4,6-Tribromophenol	1310	0	1667	0	78.6	34-140		0		
Surr: 2-Fluorobiphenyl	1351	0	1667	0	81	12-100		0		
Surr: 2-Fluorophenol	1482	0	1667	0	88.9	33-117		0		
Surr: 4-Terphenyl-d14	1298	0	1667	0	77.9	25-137		0		
Surr: Nitrobenzene-d5	1316	0	1667	0	79	37-107		0		
Surr: Phenol-d6	1446	0	1667	0	86.8	40-106		0		

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38646** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: SLCSS1-38646-38646				Units: µg/Kg			Analysis Date: 1/12/2012 06:02 PM			
Client ID:		Run ID: SVMS6_120112A		SeqNo: 1873870		Prep Date: 1/12/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1157	30	1333	0	86.8	45-110	0			
Anthracene	1211	30	1333	0	90.9	55-105	0			
Benzo(a)anthracene	1219	30	1333	0	91.5	50-110	0			
Benzo(a)pyrene	1151	30	1333	0	86.3	50-110	0			
Benzo(b)fluoranthene	1239	30	1333	0	93	45-115	0			
Benzo(g,h,i)perylene	1152	30	1333	0	86.4	40-125	0			
Benzo(k)fluoranthene	1079	30	1333	0	80.9	45-115	0			
Chrysene	1207	30	1333	0	90.6	55-110	0			
Dibenzo(a,h)anthracene	1136	30	1333	0	85.2	40-125	0			
Fluoranthene	1201	30	1333	0	90.1	55-115	0			
Fluorene	1155	30	1333	0	86.6	50-110	0			
Indeno(1,2,3-cd)pyrene	1159	30	1333	0	86.9	40-120	0			
Naphthalene	1089	30	1333	0	81.7	40-105	0			
Pyrene	1156	30	1333	0	86.7	45-125	0			
Surr: 2,4,6-Tribromophenol	1550	0	1667	0	93	34-140	0			
Surr: 2-Fluorobiphenyl	1385	0	1667	0	83.1	12-100	0			
Surr: 2-Fluorophenol	1424	0	1667	0	85.4	33-117	0			
Surr: 4-Terphenyl-d14	1430	0	1667	0	85.8	25-137	0			
Surr: Nitrobenzene-d5	1334	0	1667	0	80.1	37-107	0			
Surr: Phenol-d6	1279	0	1667	0	76.7	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38646** Instrument ID **SVMS6** Method: **SW8270**

LCSD				Sample ID: SLCSDS1-38646-38646			Units: µg/Kg		Analysis Date: 1/12/2012 06:29 PM	
Client ID:				Run ID: SVMS6_120112A			SeqNo: 1873871		Prep Date: 1/12/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1132	30	1333	0	84.9	45-110	1157	2.18	25	
Anthracene	1172	30	1333	0	87.9	55-105	1211	3.3	25	
Benzo(a)anthracene	1224	30	1333	0	91.8	50-110	1219	0.355	25	
Benzo(a)pyrene	1171	30	1333	0	87.8	50-110	1151	1.75	25	
Benzo(b)fluoranthene	1254	30	1333	0	94.1	45-115	1239	1.18	25	
Benzo(g,h,i)perylene	1178	30	1333	0	88.4	40-125	1152	2.26	25	
Benzo(k)fluoranthene	1099	30	1333	0	82.4	45-115	1079	1.84	25	
Chrysene	1235	30	1333	0	92.6	55-110	1207	2.24	25	
Dibenzo(a,h)anthracene	1163	30	1333	0	87.2	40-125	1136	2.29	25	
Fluoranthene	1199	30	1333	0	90	55-115	1201	0.111	25	
Fluorene	1140	30	1333	0	85.5	50-110	1155	1.34	25	
Indeno(1,2,3-cd)pyrene	1186	30	1333	0	88.9	40-120	1159	2.3	25	
Naphthalene	1054	30	1333	0	79.1	40-105	1089	3.24	25	
Pyrene	1164	30	1333	0	87.3	45-125	1156	0.661	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1501</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>90</i>	<i>34-140</i>	<i>1550</i>	<i>3.26</i>	<i>40</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1332</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>79.9</i>	<i>12-100</i>	<i>1385</i>	<i>3.88</i>	<i>40</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1351</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>81</i>	<i>33-117</i>	<i>1424</i>	<i>5.26</i>	<i>40</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1421</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>85.3</i>	<i>25-137</i>	<i>1430</i>	<i>0.608</i>	<i>40</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1281</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>76.8</i>	<i>37-107</i>	<i>1334</i>	<i>4.1</i>	<i>40</i>	
<i>Surr: Phenol-d6</i>	<i>1233</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>74</i>	<i>40-106</i>	<i>1279</i>	<i>3.61</i>	<i>40</i>	

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38646** Instrument ID **SVMS6** Method: **SW8270**

MS				Sample ID: 1201221-05A MS			Units: µg/Kg		Analysis Date: 1/12/2012 06:55 PM	
Client ID:				Run ID: SVMS6_120112A			SeqNo: 1873872		Prep Date: 1/12/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	3181	87	3846	317.7	74.4	45-110	0			
Anthracene	3101	87	3846	0	80.6	55-105	0			
Benzo(a)anthracene	3225	87	3846	0	83.9	50-110	0			
Benzo(a)pyrene	3024	87	3846	0	78.6	50-110	0			
Benzo(b)fluoranthene	3082	87	3846	0	80.1	45-115	0			
Benzo(g,h,i)perylene	3133	87	3846	0	81.5	40-125	0			
Benzo(k)fluoranthene	2971	87	3846	0	77.3	45-115	0			
Chrysene	2898	87	3846	0	75.4	55-110	0			
Dibenzo(a,h)anthracene	3052	87	3846	0	79.4	40-125	0			
Fluoranthene	3040	87	3846	0	79	55-115	0			
Fluorene	2896	87	3846	0	75.3	50-110	0			
Indeno(1,2,3-cd)pyrene	3098	87	3846	0	80.6	40-120	0			
Naphthalene	2679	87	3846	0	69.7	40-105	0			
Pyrene	2962	87	3846	25.38	76.3	45-125	0			
Surr: 2,4,6-Tribromophenol	3927	0	4808	0	81.7	34-140	0			
Surr: 2-Fluorobiphenyl	3281	0	4808	0	68.2	12-100	0			
Surr: 2-Fluorophenol	3445	0	4808	0	71.6	33-117	0			
Surr: 4-Terphenyl-d14	3753	0	4808	0	78.1	25-137	0			
Surr: Nitrobenzene-d5	3283	0	4808	0	68.3	37-107	0			
Surr: Phenol-d6	3204	0	4808	0	66.6	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38646** Instrument ID **SVMS6** Method: **SW8270**

MSD				Sample ID: 1201221-05A MSD			Units: µg/Kg		Analysis Date: 1/12/2012 07:22 PM	
Client ID:				Run ID: SVMS6_120112A			SeqNo: 1873873		Prep Date: 1/12/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	3423	90	3994	317.7	77.7	45-110	3181	7.32	30	
Anthracene	3461	90	3994	0	86.7	55-105	3101	11	30	
Benzo(a)anthracene	3567	90	3994	0	89.3	50-110	3225	10.1	30	
Benzo(a)pyrene	3325	90	3994	0	83.3	50-110	3024	9.47	30	
Benzo(b)fluoranthene	3626	90	3994	0	90.8	45-115	3082	16.2	30	
Benzo(g,h,i)perylene	3384	90	3994	0	84.7	40-125	3133	7.7	30	
Benzo(k)fluoranthene	2797	90	3994	0	70	45-115	2971	6.06	30	
Chrysene	3283	90	3994	0	82.2	55-110	2898	12.4	30	
Dibenzo(a,h)anthracene	3301	90	3994	0	82.7	40-125	3052	7.83	30	
Fluoranthene	3455	90	3994	0	86.5	55-115	3040	12.8	30	
Fluorene	3220	90	3994	0	80.6	50-110	2896	10.6	30	
Indeno(1,2,3-cd)pyrene	3396	90	3994	0	85	40-120	3098	9.16	30	
Naphthalene	2966	90	3994	0	74.3	40-105	2679	10.1	30	
Pyrene	3279	90	3994	25.38	81.5	45-125	2962	10.2	30	
Surr: 2,4,6-Tribromophenol	4454	0	4993	0	89.2	34-140	3927	12.6	40	
Surr: 2-Fluorobiphenyl	3713	0	4993	0	74.4	12-100	3281	12.4	40	
Surr: 2-Fluorophenol	3867	0	4993	0	77.5	33-117	3445	11.6	40	
Surr: 4-Terphenyl-d14	4124	0	4993	0	82.6	25-137	3753	9.41	40	
Surr: Nitrobenzene-d5	3650	0	4993	0	73.1	37-107	3283	10.6	40	
Surr: Phenol-d6	3562	0	4993	0	71.3	40-106	3204	10.6	40	

The following samples were analyzed in this batch: | 1201217-01B |

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **R99933** Instrument ID **VMS9** Method: **SW8260**

MBLK Sample ID: VBLKW1-120111-R99933				Units: µg/L			Analysis Date: 1/11/2012 10:27 AM			
Client ID:		Run ID: VMS9_120111A		SeqNo: 1872973		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	106.2	0	100	0	106	70-120	0			
Surr: 4-Bromofluorobenzene	99.08	0	100	0	99.1	75-120	0			
Surr: Dibromofluoromethane	101.6	0	100	0	102	85-115	0			
Surr: Toluene-d8	98.94	0	100	0	98.9	85-120	0			

LCS Sample ID: VLCSW1-120111-R99933				Units: µg/L			Analysis Date: 1/11/2012 09:15 AM			
Client ID:		Run ID: VMS9_120111A		SeqNo: 1872567		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.34	1.0	20	0	107	80-120	0			
Ethylbenzene	20.7	1.0	20	0	104	75-125	0			
m,p-Xylene	40.88	2.0	40	0	102	75-130	0			
o-Xylene	20.29	1.0	20	0	101	80-120	0			
Toluene	20.08	1.0	20	0	100	75-120	0			
Xylenes, Total	61.17	3.0	60	0	102	75-130	0			
Surr: 1,2-Dichloroethane-d4	104.6	0	100	0	105	70-120	0			
Surr: 4-Bromofluorobenzene	104.3	0	100	0	104	75-120	0			
Surr: Dibromofluoromethane	100.7	0	100	0	101	85-115	0			
Surr: Toluene-d8	103.7	0	100	0	104	85-120	0			

LCSD Sample ID: VLCSW1-120111-R99933				Units: µg/L			Analysis Date: 1/11/2012 09:39 AM			
Client ID:		Run ID: VMS9_120111A		SeqNo: 1872568		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.99	1.0	20	0	105	80-120	21.34	1.65	30	
Ethylbenzene	20.09	1.0	20	0	100	75-125	20.7	2.99	30	
m,p-Xylene	39.71	2.0	40	0	99.3	75-130	40.88	2.9	30	
o-Xylene	19.86	1.0	20	0	99.3	80-120	20.29	2.14	30	
Toluene	19.35	1.0	20	0	96.8	75-120	20.08	3.7	30	
Xylenes, Total	59.57	3.0	60	0	99.3	75-130	61.17	2.65	30	
Surr: 1,2-Dichloroethane-d4	103.4	0	100	0	103	70-120	104.6	1.19	30	
Surr: 4-Bromofluorobenzene	102	0	100	0	102	75-120	104.3	2.19	30	
Surr: Dibromofluoromethane	100.1	0	100	0	100	85-115	100.7	0.607	30	
Surr: Toluene-d8	100.4	0	100	0	100	85-120	103.7	3.28	30	

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

Client: HRL Compliance Solutions
 Work Order: 1201217
 Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **R99933** Instrument ID **VMS9** Method: **SW8260**

MS				Sample ID: 1201179-04C MS				Units: µg/L		Analysis Date: 1/11/2012 06:47 PM	
Client ID:			Run ID: VMS9_120111A			SeqNo: 1872979		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.89	1.0	20	0	104	80-120		0			
Ethylbenzene	19.71	1.0	20	0	98.6	75-125		0			
m,p-Xylene	38.7	2.0	40	0	96.8	75-130		0			
o-Xylene	19.21	1.0	20	0	96	80-120		0			
Toluene	19.38	1.0	20	0	96.9	75-120		0			
Xylenes, Total	57.91	3.0	60	0	96.5	75-130		0			
Surr: 1,2-Dichloroethane-d4	100.6	0	100	0	101	70-120		0			
Surr: 4-Bromofluorobenzene	102.9	0	100	0	103	75-120		0			
Surr: Dibromofluoromethane	99.23	0	100	0	99.2	85-115		0			
Surr: Toluene-d8	102.6	0	100	0	103	85-120		0			

MSD				Sample ID: 1201179-04C MSD			Units: µg/L		Analysis Date: 1/11/2012 07:11 PM		
Client ID:				Run ID: VMS9_120111A			SeqNo: 1872980		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.18	1.0	20	0	101	80-120	20.89	3.46	30		
Ethylbenzene	19.08	1.0	20	0	95.4	75-125	19.71	3.25	30		
m,p-Xylene	37.36	2.0	40	0	93.4	75-130	38.7	3.52	30		
o-Xylene	18.53	1.0	20	0	92.6	80-120	19.21	3.6	30		
Toluene	18.64	1.0	20	0	93.2	75-120	19.38	3.89	30		
Xylenes, Total	55.89	3.0	60	0	93.2	75-130	57.91	3.55	30		
Surr: 1,2-Dichloroethane-d4	100.2	0	100	0	100	70-120	100.6	0.339	30		
Surr: 4-Bromofluorobenzene	101.4	0	100	0	101	75-120	102.9	1.5	30		
Surr: Dibromofluoromethane	99.25	0	100	0	99.2	85-115	99.23	0.0202	30		
Surr: Toluene-d8	101.4	0	100	0	101	85-120	102.6	1.11	30		

The following samples were analyzed in this batch:

1201217-01A

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **38675** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-38675-38675					Units: mg/Kg		Analysis Date: 1/13/2012 11:00 AM		
Client ID:	Run ID: WETCHEM_120113B				SeqNo: 1874421		Prep Date: 1/12/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS	Sample ID: LCS-38675-38675					Units: mg/Kg		Analysis Date: 1/13/2012 11:00 AM		
Client ID:	Run ID: WETCHEM_120113B				SeqNo: 1874419		Prep Date: 1/12/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.824 0.50 2 0 91.2 75-110 0

LCSD	Sample ID: LCSD-38675-38675					Units: mg/Kg		Analysis Date: 1/13/2012 11:00 AM		
Client ID:	Run ID: WETCHEM_120113B				SeqNo: 1874420		Prep Date: 1/12/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.876 0.50 2 0 93.8 75-110 1.824 2.81 20

MS	Sample ID: 1201215-01B MS					Units: mg/Kg		Analysis Date: 1/13/2012 11:00 AM		
Client ID:	Run ID: WETCHEM_120113B				SeqNo: 1874416		Prep Date: 1/12/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.071 0.50 1.984 0.3546 86.5 60-130 0

MSD	Sample ID: 1201215-01B MSD					Units: mg/Kg		Analysis Date: 1/13/2012 11:00 AM		
Client ID:	Run ID: WETCHEM_120113B				SeqNo: 1874417		Prep Date: 1/12/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.969 0.48 1.938 0.3546 83.3 60-130 2.071 5.07 30

The following samples were analyzed in this batch:

1201217-01B

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **R100014** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: MB-R100014-R100014					Units: % of sample		Analysis Date: 1/12/2012 01:06 PM		
Client ID:	Run ID: MOIST_120112A				SeqNo: 1874175		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-R100014-R100014					Units: % of sample		Analysis Date: 1/12/2012 01:06 PM		
Client ID:	Run ID: MOIST_120112A				SeqNo: 1874176		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 99.99 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1201181-04BDUP					Units: % of sample		Analysis Date: 1/12/2012 01:06 PM		
Client ID:	Run ID: MOIST_120112A				SeqNo: 1874177		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 42.95 0.050 0 0 0 0-0 40.36 6.22 20

DUP	Sample ID: 1201182-01BDUP					Units: % of sample		Analysis Date: 1/12/2012 01:06 PM		
Client ID:	Run ID: MOIST_120112A				SeqNo: 1874178		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 62.52 0.050 0 0 0 0-0 65.18 4.17 20

The following samples were analyzed in this batch:

1201217-01B 1201217-02A

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

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **R99963** Instrument ID **WETCHEM** Method: **A4500-H B**

LCS		Sample ID: LCS-R99963-R99963					Units: s.u.		Analysis Date: 1/11/2012 08:05 AM		
Client ID:			Run ID: WETCHEM_120111D			SeqNo: 1873090		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	4.28	0	4.4	0	97.3	90-110	0			
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LCS		Sample ID: LCS-R99963-R99963					Units: s.u.		Analysis Date: 1/11/2012 08:05 AM		
Client ID:		Run ID: WETCHEM_120111D			SeqNo: 1873094		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	4.28	0	4.4	0	97.3	90-110	0			
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DUP		Sample ID: 1201214-01A DUP				Units: s.u.		Analysis Date: 1/11/2012 08:05 AM		
Client ID:		Run ID: WETCHEM_120111D			SeqNo: 1873092		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	8.21	0	0	0	0	0-0	8.21	0	20	H
----	------	---	---	---	---	-----	------	---	----	---

DUP				Sample ID: 1201215-03A DUP				Units: s.u.			Analysis Date: 1/11/2012 08:05 AM			
Client ID:				Run ID: WETCHEM_120111D				SeqNo: 1873097			Prep Date:		DF: 1	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH	9	0	0	0	0	0-0	9	0	20	
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The following samples were analyzed in this batch:

1201217-01B	1201217-04A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1201217
Project: WPX Energy RMV 53-17 1/9/12

QC BATCH REPORT

Batch ID: **R99970** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: MB-R99970-R99970				Units: % of sample		Analysis Date: 1/11/2012 01:15 PM		
Client ID:		Run ID: MOIST_120111A				SeqNo: 1873297		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-R99970-R99970				Units: % of sample		Analysis Date: 1/11/2012 01:15 PM		
Client ID:		Run ID: MOIST_120111A				SeqNo: 1873298		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 99.99 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 1201217-04ADUP				Units: % of sample		Analysis Date: 1/11/2012 01:15 PM		
Client ID: BKGD 3		Run ID: MOIST_120111A				SeqNo: 1873301		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 10.9 0.050 0 0 0 0-0 11.51 5.44 20

The following samples were analyzed in this batch:

1201217-03A 1201217-04A

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 #

1201217

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME RMV 53-17 WPX Energy

SAMPLER

Reed Wold

DATE

1/9/2011

SITE ID

RMV 53-17

TURNAROUND

standard

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME

HRL Compliance

BILL TO COMPANY

WPX Energy

SEND REPORT TO

Mark Mumby

INVOICE ATTN TO

Karolina Blaney

ADDRESS

744 Horizon Ct Ste. 140

ADDRESS

1058 Co. Rd. 215

CITY / STATE / ZIP

Grand Junction, CO 81506

CITY / STATE / ZIP

Parachute, CO 81635

PHONE

970-243-3271

PHONE

970-683-2295

FAX

970-243-3280

FAX

E-MAIL

mmumby@hrlcomp.com

E-MAIL

Karolina.blaney@williams.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

RMV 53-17 WPX Energy

SO

1/9/2011

1:40

3

8

X

X

X

2

BKGD 1

SO

1/9/2011

1:45

1

8

X

3

BKGD 2

SO

1/9/2011

1:50

1

8

X

4

BKGD 3

SO

1/9/2011

1:55

2

8

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:

QC PACKAGE (check below)

X

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

Reed Wold

Reed Wold

1/9/12

5:00

RECEIVED BY

Diane F. Shaw

Diane F. Shaw

1/11/12

1030

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY



Environmental

Subcontractor:

A & L Great Lakes Agricultural La

3505 Conestoga Dr

TEL: (260) 483-4759

FAX: (260) 483-5274

Ft. Wayne, IN 46808

Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: 11-Jan-12

COC ID: 3406

Due D 17-Jan-12

Salesperson **Debbie Fazio**

Customer Information		Project Information		Parameter/Method Request for Analysis										
Purchase Order		Project Name	1201217	A	Subcontracted Analyses (SUBCONTRACT) <i>SAR-EC</i>									
Work Order		Project Number		B										
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C										
Send Report To	Ann Preston	Inv Attn	Accounts Payable	D										
Address	3352 128th Avenue	Address	3352 128th Avenue	E										
				F										
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	G										
Phone	(616) 399-6070	Phone	(616) 399-6070	H										
Fax	(616) 399-6185	Fax	(616) 399-6185	I										
eMail Address	ann.preston@alsglobal.com	eMail CC		J										
Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J	
1201217-01C	Soil	9/Jan/2012 13:40	(1) MISC	X										
1201217-04B	Soil	9/Jan/2012 13:55	(1) MISC	X										

Comments:

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

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
					Std <i>Ann Preston</i>

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **11-Jan-12 10:30**

Work Order: **1201217**

Received by: **DS**

Checklist completed by Diane Shaw 11-Jan-12
eSignature Date

Reviewed by: Ann Preston 11-Jan-12
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.6 c</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

fedex.com 1800.GoFedEx 1800.463.3339

800-268-3939
800-268-3939
800-268-3939

Customer Name

Company

Address

City

State

ZIP

2 Your Internal Billing Reference

3 To Recipient's Name

Company

Address

Address

State

ZIP



8769 1479 5691

Phone

Dept./Box/Street Name

NON-PROFIT DAY

001 FedEx First Overnight

011 FedEx Priority Overnight

051 FedEx Standard Overnight

5 Packaging

061 FedEx Envelope

071 FedEx Tube

081 FedEx Box

091 FedEx Pallet

101 FedEx Container

111 FedEx Pallet

121 FedEx Container

131 FedEx Pallet

141 FedEx Container

151 FedEx Pallet

161 FedEx Container

171 FedEx Pallet

181 FedEx Container

191 FedEx Pallet

201 FedEx Container

211 FedEx Pallet

221 FedEx Container

231 FedEx Pallet

241 FedEx Container

251 FedEx Pallet

261 FedEx Container

271 FedEx Pallet

281 FedEx Container

291 FedEx Pallet

301 FedEx Container

311 FedEx Pallet

321 FedEx Container

331 FedEx Pallet

341 FedEx Container

351 FedEx Pallet

361 FedEx Container

371 FedEx Pallet

381 FedEx Container

391 FedEx Pallet

401 FedEx Container

411 FedEx Pallet

421 FedEx Container

431 FedEx Pallet

441 FedEx Container

451 FedEx Pallet

461 FedEx Container

471 FedEx Pallet

481 FedEx Container

491 FedEx Pallet

501 FedEx Container

511 FedEx Pallet

521 FedEx Container

531 FedEx Pallet

541 FedEx Container

551 FedEx Pallet

561 FedEx Container

571 FedEx Pallet

581 FedEx Container

591 FedEx Pallet

601 FedEx Container

611 FedEx Pallet

621 FedEx Container

631 FedEx Pallet

641 FedEx Container

651 FedEx Pallet

661 FedEx Container

671 FedEx Pallet

681 FedEx Container

691 FedEx Pallet

701 FedEx Container

711 FedEx Pallet

721 FedEx Container

731 FedEx Pallet

741 FedEx Container

751 FedEx Pallet

761 FedEx Container

771 FedEx Pallet

781 FedEx Container

791 FedEx Pallet

801 FedEx Container

811 FedEx Pallet

821 FedEx Container

831 FedEx Pallet

841 FedEx Container

851 FedEx Pallet

861 FedEx Container

871 FedEx Pallet

881 FedEx Container

891 FedEx Pallet

901 FedEx Container

911 FedEx Pallet

921 FedEx Container

931 FedEx Pallet

941 FedEx Container

951 FedEx Pallet

961 FedEx Container

971 FedEx Pallet

981 FedEx Container

991 FedEx Pallet

1001 FedEx Container

1011 FedEx Pallet

1021 FedEx Container

1031 FedEx Pallet

1041 FedEx Container

1051 FedEx Pallet

1061 FedEx Container

1071 FedEx Pallet

1081 FedEx Container

1091 FedEx Pallet

1101 FedEx Container

1111 FedEx Pallet

1121 FedEx Container

1131 FedEx Pallet

1141 FedEx Container

1151 FedEx Pallet

1161 FedEx Container

1171 FedEx Pallet

1181 FedEx Container

1191 FedEx Pallet

1201 FedEx Container

1211 FedEx Pallet

1221 FedEx Container

1231 FedEx Pallet

1241 FedEx Container

1251 FedEx Pallet

1261 FedEx Container

1271 FedEx Pallet

1281 FedEx Container

1291 FedEx Pallet

1301 FedEx Container

1311 FedEx Pallet

1321 FedEx Container

1331 FedEx Pallet

1341 FedEx Container

1351 FedEx Pallet

1361 FedEx Container

1371 FedEx Pallet

1381 FedEx Container

1391 FedEx Pallet

1401 FedEx Container

1411 FedEx Pallet

1421 FedEx Container

1431 FedEx Pallet

1441 FedEx Container

1451 FedEx Pallet

1461 FedEx Container

1471 FedEx Pallet

1481 FedEx Container

1491 FedEx Pallet

1501 FedEx Container

1511 FedEx Pallet

1521 FedEx Container

1531 FedEx Pallet

1541 FedEx Container

1551 FedEx Pallet

1561 FedEx Container

1571 FedEx Pallet

1581 FedEx Container

1591 FedEx Pallet

1601 FedEx Container

1611 FedEx Pallet

1621 FedEx Container

1631 FedEx Pallet

1641 FedEx Container

1651 FedEx Pallet

1661 FedEx Container

1671 FedEx Pallet

1681 FedEx Container

1691 FedEx Pallet

1701 FedEx Container

1711 FedEx Pallet

1721 FedEx Container

1731 FedEx Pallet

1741 FedEx Container

1751 FedEx Pallet

1761 FedEx Container

1771 FedEx Pallet

1781 FedEx Container

1791 FedEx Pallet

1801 FedEx Container

1811 FedEx Pallet

1821 FedEx Container

1831 FedEx Pallet

1841 FedEx Container

1851 FedEx Pallet

1861 FedEx Container

1871 FedEx Pallet

1881 FedEx Container

1891 FedEx Pallet

1901 FedEx Container

1911 FedEx Pallet

1921 FedEx Container

1931 FedEx Pallet

1941 FedEx Container

1951 FedEx Pallet

1961 FedEx Container

1971 FedEx Pallet

1981 FedEx Container

1991 FedEx Pallet

2001 FedEx Container

2011 FedEx Pallet

2021 FedEx Container

2031 FedEx Pallet

2041 FedEx Container

2051 FedEx Pallet

2061 FedEx Container

2071 FedEx Pallet

2081 FedEx Container

2091 FedEx Pallet

2101 FedEx Container

2111 FedEx Pallet

2121 FedEx Container

2131 FedEx Pallet

2141 FedEx Container

2151 FedEx Pallet

2161 FedEx Container

2171 FedEx Pallet

2181 FedEx Container

2191 FedEx Pallet

2201 FedEx Container

2211 FedEx Pallet

2221 FedEx Container

2231 FedEx Pallet

2241 FedEx Container

2251 FedEx Pallet

2261 FedEx Container

2271 FedEx Pallet

2281 FedEx Container

2291 FedEx Pallet

2301 FedEx Container

2311 FedEx Pallet

2321 FedEx Container

2331 FedEx Pallet

2341 FedEx Container

2351 FedEx Pallet

2361 FedEx Container

2371 FedEx Pallet

2381 FedEx Container

2391 FedEx Pallet

2401 FedEx Container

2411 FedEx Pallet

2421 FedEx Container

2431 FedEx Pallet

2441 FedEx Container

2451 FedEx Pallet

2461 FedEx Container

2471 FedEx Pallet

2481 FedEx Container

2491 FedEx Pallet

2501 FedEx Container

2511 FedEx Pallet

2521 FedEx Container

2531 FedEx Pallet

2541 FedEx Container

2551 FedEx Pallet

2561 FedEx Container

2571 FedEx Pallet

2581 FedEx Container

2591 FedEx Pallet

2601 FedEx Container

2611 FedEx Pallet

2621 FedEx Container

2631 FedEx Pallet

2641 FedEx Container

2651 FedEx Pallet

2661 FedEx Container

2671 FedEx Pallet

2681 FedEx Container

2691 FedEx Pallet

2701 FedEx Container

2711 FedEx Pallet

2721 FedEx Container

2731 FedEx Pallet

2741 FedEx Container

2751 FedEx Pallet

2761 FedEx Container

2771 FedEx Pallet

2781 FedEx Container

2791 FedEx Pallet

2801 FedEx Container

2811 FedEx Pallet

2821 FedEx Container

2831 FedEx Pallet



20-Jan-2012

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **WPX Energy RMV 53-17 1/17/12**

Work Order: **1201429**

Dear Mark,

ALS Environmental received 1 sample on 19-Jan-2012 12:20 PM for the analyses presented in the following report.

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

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN331938

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

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Client: HRL Compliance Solutions
Project: WPX Energy RMV 53-17 1/17/12
Work Order: 1201429

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>
1201429-01	RMV 53-17	Soil		1/17/2012 16:00	1/19/2012 12:20	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: WPX Energy RMV 53-17 1/17/12
WorkOrder: 1201429

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 20-Jan-12

Client: HRL Compliance Solutions

Project: WPX Energy RMV 53-17 1/17/12

Sample ID: RMV 53-17

Collection Date: 1/17/2012 04:00 PM

Work Order: 1201429

Lab ID: 1201429-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 1/20/2012	Analyst: RM
DRO (C10-C28)	52		5.0	mg/Kg-dry	1	1/20/2012 02:55 PM
<i>Surr: 4-Terphenyl-d14</i>	<i>79.2</i>		<i>39-115</i>	<i>%REC</i>	<i>1</i>	1/20/2012 02:55 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: RM
GRO (C6-C10)	ND		3.0	mg/Kg-dry	50	1/20/2012 12:26 PM
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>50-150</i>	<i>%REC</i>	<i>50</i>	1/20/2012 12:26 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	17		0.050	% of sample	1	1/19/2012 04:20 PM

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

Client: HRL Compliance Solutions
Work Order: 1201429
Project: WPX Energy RMV 53-17 1/17/12

QC BATCH REPORT

Batch ID: **38777** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-38777-38777				Units: mg/Kg		Analysis Date: 1/20/2012 02:33 PM		
Client ID:		Run ID: GC8_120120A				SeqNo: 1879650		Prep Date: 1/20/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
<i>Surr: 4-Terphenyl-d14</i>	<i>1.441</i>	<i>0</i>	<i>1.667</i>	<i>0</i>	<i>86.5</i>	<i>39-115</i>	<i>0</i>			

The following samples were analyzed in this batch: | 1201429-01A |

Client: HRL Compliance Solutions
Work Order: 1201429
Project: WPX Energy RMV 53-17 1/17/12

QC BATCH REPORT

Batch ID: **R100289** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-R100289-R100289				Units: µg/L		Analysis Date: 1/20/2012 12:02 PM		
Client ID:		Run ID: GC9_120120A				SeqNo: 1879534		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
<i>Surr: Toluene-d8</i>	<i>105.4</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>105</i>	<i>70-130</i>	<i>0</i>			

The following samples were analyzed in this batch:

1201429-01A

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

Client: HRL Compliance Solutions
Work Order: 1201429
Project: WPX Energy RMV 53-17 1/17/12

QC BATCH REPORT

Batch ID: **R100270** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: MB-R100270-R100270					Units: % of sample		Analysis Date: 1/19/2012 04:20 PM		
Client ID:	Run ID: MOIST_120119A				SeqNo: 1879259		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-R100270-R100270					Units: % of sample		Analysis Date: 1/19/2012 04:20 PM		
Client ID:	Run ID: MOIST_120119A				SeqNo: 1879260		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: 1201413-01ADUP					Units: % of sample		Analysis Date: 1/19/2012 04:20 PM		
Client ID:	Run ID: MOIST_120119A				SeqNo: 1879262		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 0.85 0.050 0 0 0 0-0 0.86 1.17 20

DUP	Sample ID: 1201436-04ADUP					Units: % of sample		Analysis Date: 1/19/2012 04:20 PM		
Client ID:	Run ID: MOIST_120119A				SeqNo: 1879275		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 30.92 0.050 0 0 0 0-0 32.6 5.29 20

The following samples were analyzed in this batch:

1201429-01A

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 202r8

WORKORDER
#

1201429

PROJECT NAME		RMV 53-17 WPX Energy		SAMPLER		Reed Wold		DATE		1/18/2012		PAGE		1 of 1	
PROJECT No.				SITE ID		RMV 53-17		TURNAROUND		24 hr		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HRL Compliance		BILL TO COMPANY		WPX Energy		DRO/ GRO							
SEND REPORT TO		Mark Mumby		INVOICE ATTN TO		Karolina Blaney									
ADDRESS		744 Horizon Ct Ste. 140		ADDRESS		1058 Co. Rd. 215									
CITY / STATE / ZIP		Grand Junction, CO 81506		CITY / STATE / ZIP		Parachute, CO 81635									
PHONE		970-243-3271		PHONE		970-683-2295									
FAX		970-243-3280		FAX											
E-MAIL		mmumby@hrlcomp.com		E-MAIL		Karolina.blaney@williams.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC								
1	Rmv 53-17	SO	1/17/2012	4:00	1	8		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:	QC PACKAGE (check below)
<p>2.8% [Signature]</p>	X 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 [Signature]	Reed Wold	1/18/12	5:00
RECEIVED BY [Signature]	Kerry Wierenga	1/19/12	1220
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **19-Jan-12 12:20**

Work Order: **1201429**

Received by: **KRW**

Checklist completed by Keith Wurenga 19-Jan-12
eSignature Date

Reviewed by: Ann Preston 19-Jan-12
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.8 C</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

800-255-3900
800-255-3900
800-255-3900
Equalizing Environmental Containers

FedEx
Express

CUSTOMER SEAL
DATE
SIGNATURE

Retrieval Copy

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

1 From
Date 11/8/02
Sender's Name Reed D. [unclear]
Company HCSJ
Address 744 Madison St 140
City [unclear] State CO ZIP 80506
Phone 970 243 3271

2 Your Internal Billing Reference
3 To
Recipient's Name Sample Receiving
Company ALS Group
Address 3352 128th Ave
City Holland State MT ZIP 59924
Phone 406 379 6070

06 ☐ FedEx Overnight
01 ☒ FedEx Priority Overnight
05 ☐ FedEx Standard Overnight
49 ☐ NEW FedEx 2Day A.M.
03 ☐ FedEx 2Day
20 ☐ FedEx Express Saver

5 Packaging
06 ☐ FedEx Envelope
02 ☒ FedEx Pak
03 ☐ FedEx Box
04 ☐ FedEx Tube
01 ☐ Other

6 Special Handling and Delivery Signature Options
03 SATURDAY DELIVERY
No Signature Required
Direct Signature
Indirect Signature
Does this shipment contain dangerous goods?
No 04 Yes
Dry Ice
Cargo Aircraft Only

7 Payment Bill to:
Sender
Recipient
Third Party
Credit Card
Cash/Check
Total Packages
Total Weight
Credit Card Auth.



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612



16-Apr-2012

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **WPX RMV 53-17 Treatment Cell 3/30/12**

Work Order: **1204202**

Dear Mark,

ALS Environmental received 1 sample on 07-Apr-2012 11:15 AM for the analyses presented in the following report.

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

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN331938

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Environmental The ALS logo, a stylized blue triangle with a yellow flame inside.

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Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Treatment Cell 3/30/12
Work Order: 1204202

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>
1204202-01	RMV 53-17 Treatment cell	Soil		3/30/2012 15:20	4/7/2012 11:15	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Treatment Cell 3/30/12
Work Order: 1204202

Case Narrative

Batch 40398 MS/MSD data for PAHs is not related to this project's samples.

Batch 40407 MS/MSD data for Metals is not related to this project's samples.

Batch 40424 LCSD recovery for Hexavalent Chromium was above the upper control limit. All samples in this quality control batch were ND for Hexavalent Chromium. No data requires qualification.

Batch R103344 sample RMV 53-17 Treatment Cell pH was received after the hold time had expired. Results should be considered estimated.

Batch R103351 sample RMV 53-17 Treatment Cell % Moisture was received after the hold time had expired. Results should be considered estimated.

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Treatment Cell 3/30/12
WorkOrder: 1204202

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
µg/Kg-dry as noted	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group USA, Corp

Date: 16-Apr-12

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Treatment Cell 3/30/12
Sample ID: RMV 53-17 Treatment cell
Collection Date: 3/30/2012 03:20 PM

Work Order: 1204202
Lab ID: 1204202-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	74		SW8015M		Prep Date: 4/10/2012	Analyst: JD
			5.0	mg/Kg-dry	1	4/11/2012 04:08 PM
Surr: 4-Terphenyl-d14	81.8		39-115	%REC	1	4/11/2012 04:08 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			3.0	mg/Kg-dry	50	4/10/2012 02:01 PM
Surr: Toluene-d8	104		50-150	%REC	50	4/10/2012 02:01 PM
MERCURY BY CVAA						
Mercury	0.028		SW7471		Prep Date: 4/13/2012	Analyst: LR
			0.020	mg/Kg-dry	1	4/13/2012 03:56 PM
METALS BY ICP-MS						
Arsenic	4.0		SW6020A		Prep Date: 4/10/2012	Analyst: RH
			1.0	mg/Kg-dry	2	4/11/2012 06:18 PM
Barium	4,400		100	mg/Kg-dry	200	4/13/2012 04:39 AM
Cadmium	0.59		0.41	mg/Kg-dry	2	4/11/2012 06:18 PM
Chromium	11		1.0	mg/Kg-dry	2	4/13/2012 04:45 AM
Copper	15		1.0	mg/Kg-dry	2	4/13/2012 04:45 AM
Lead	15		1.0	mg/Kg-dry	2	4/11/2012 06:18 PM
Nickel	19		1.0	mg/Kg-dry	2	4/13/2012 04:45 AM
Selenium	ND		1.0	mg/Kg-dry	2	4/13/2012 02:52 PM
Silver	ND		1.0	mg/Kg-dry	2	4/13/2012 02:52 PM
Zinc	74		2.0	mg/Kg-dry	2	4/13/2012 02:52 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses		Rcvd 4/12/12	SUBCONTRACT			Analyst: A&LGL
			as noted		1	4/12/2012
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270		Prep Date: 4/10/2012	Analyst: HL
			18	µg/Kg-dry	1	4/12/2012 06:50 PM
Anthracene	59		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Benzo(a)anthracene	ND		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Benzo(a)pyrene	67		24	µg/Kg-dry	1	4/12/2012 06:50 PM
Benzo(b)fluoranthene	67		24	µg/Kg-dry	1	4/12/2012 06:50 PM
Benzo(g,h,i)perylene	ND		36	µg/Kg-dry	1	4/12/2012 06:50 PM
Benzo(k)fluoranthene	49		24	µg/Kg-dry	1	4/12/2012 06:50 PM
Chrysene	ND		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Dibenzo(a,h)anthracene	ND		21	µg/Kg-dry	1	4/12/2012 06:50 PM
Fluoranthene	67		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Fluorene	37		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Indeno(1,2,3-cd)pyrene	ND		30	µg/Kg-dry	1	4/12/2012 06:50 PM
Naphthalene	21		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Pyrene	69		18	µg/Kg-dry	1	4/12/2012 06:50 PM
Surr: 2,4,6-Tribromophenol	104		34-140	%REC	1	4/12/2012 06:50 PM

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

ALS Group USA, Corp

Date: 16-Apr-12

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Treatment Cell 3/30/12
Sample ID: RMV 53-17 Treatment cell
Collection Date: 3/30/2012 03:20 PM

Work Order: 1204202
Lab ID: 1204202-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	78.5		12-100	%REC	1	4/12/2012 06:50 PM
<i>Surr: 2-Fluorophenol</i>	85.2		33-117	%REC	1	4/12/2012 06:50 PM
<i>Surr: 4-Terphenyl-d14</i>	82.5		25-137	%REC	1	4/12/2012 06:50 PM
<i>Surr: Nitrobenzene-d5</i>	75.2		37-107	%REC	1	4/12/2012 06:50 PM
<i>Surr: Phenol-d6</i>	79.3		40-106	%REC	1	4/12/2012 06:50 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: CW
Benzene	ND		60	µg/Kg-dry	50	4/10/2012 03:53 AM
Ethylbenzene	ND		120	µg/Kg-dry	50	4/10/2012 03:53 AM
m,p-Xylene	ND		120	µg/Kg-dry	50	4/10/2012 03:53 AM
o-Xylene	ND		60	µg/Kg-dry	50	4/10/2012 03:53 AM
Toluene	ND		89	µg/Kg-dry	50	4/10/2012 03:53 AM
Xylenes, Total	ND		180	µg/Kg-dry	50	4/10/2012 03:53 AM
<i>Surr: 1,2-Dichloroethane-d4</i>	97.0		70-120	%REC	50	4/10/2012 03:53 AM
<i>Surr: 4-Bromofluorobenzene</i>	97.3		75-120	%REC	50	4/10/2012 03:53 AM
<i>Surr: Dibromofluoromethane</i>	97.8		85-115	%REC	50	4/10/2012 03:53 AM
<i>Surr: Toluene-d8</i>	97.6		85-115	%REC	50	4/10/2012 03:53 AM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	11		0.60	mg/Kg-dry	1	4/13/2012 04:27 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 4/10/2012	Analyst: MB
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	4/11/2012 02:00 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	16	H	0.050	% of sample	1	4/9/2012 03:20 PM
PH			SW9045D			Analyst: KV
pH	9.08	H		s.u.	1	4/8/2012 05:45 PM

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

Report Number: F12101-0394

Account Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

3505 Conestoga Drive • Fort Wayne, Indiana 46808-4413 • Phone 260-483-4759 • Fax 260-483-5274

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QUALITY ANALYSES FOR INFORMED DECISIONS

TO: ALS LABORATORY GROUP
3352 128TH AVE
HOLLAND, MI 49424-9263

RE: 1204202-01C

DATE RECEIVED: 04/10/2012

DATE REPORTED: 04/12/2012

PAGE: 1

P.O. NUMBER: 20-1204202

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
35437	RMV 53-17 TRMNT CELL	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	2.27	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	29	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	7	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	1365	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	58.9	-	USDA Handbook 60

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1204202

Project: WPX RMV 53-17 Treatment Cell 3/30/12

Batch ID: 40399

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-40399-40399				Units: mg/Kg		Analysis Date: 4/11/2012 03:23 PM		
Client ID:		Run ID: GC8_120411A				SeqNo: 1946571		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	4.2								
Surr: 4-Terphenyl-d14	0.6546	0	1.667	0	39.3	39-115	0			

LCS		Sample ID: DLCSS1-40399-40399				Units: mg/Kg		Analysis Date: 4/11/2012 02:17 PM		
Client ID:		Run ID: GC8_120411A				SeqNo: 1946573		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	195.2	4.2	166.7	0	117	60-130	0			
Surr: 4-Terphenyl-d14	0.8444	0	1.667	0	50.7	39-115	0			

LCSD		Sample ID: DLCSDS1-40399-40399				Units: mg/Kg		Analysis Date: 4/11/2012 02:17 PM		
Client ID:		Run ID: GC8_120411A				SeqNo: 1946572		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	163.5	4.2	166.7	0	98.1	60-130	195.2	17.7	30	
Surr: 4-Terphenyl-d14	0.6834	0	1.667	0	41	39-115	0.8444	21.1	30	

MS		Sample ID: 1204203-03A MS				Units: mg/Kg		Analysis Date: 4/11/2012 02:39 PM		
Client ID:		Run ID: GC8_120411A				SeqNo: 1947054		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	385.3	8.2	329.2	33.38	107	60-130	0			
Surr: 4-Terphenyl-d14	1.974	0	3.292	0	60	39-115	0			

MSD		Sample ID: 1204203-03A MSD				Units: mg/Kg		Analysis Date: 4/11/2012 02:39 PM		
Client ID:		Run ID: GC8_120411A				SeqNo: 1947059		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	361.9	8.1	323.1	33.38	102	60-130	385.3	6.26	30	
Surr: 4-Terphenyl-d14	1.721	0	3.231	0	53.3	39-115	1.974	13.7	30	

The following samples were analyzed in this batch:

1204202-01B

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **R103390** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-R103390-R103390				Units: µg/L		Analysis Date: 4/10/2012 10:33 AM		
Client ID:		Run ID: GC9_120410A				SeqNo: 1944839		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	111	0	100	0	111	70-130	0			

LCS		Sample ID: LCS-R103390-R103390				Units: µg/L		Analysis Date: 4/10/2012 09:15 AM		
Client ID:		Run ID: GC9_120410A				SeqNo: 1944837		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	24430	200	25000	0	97.7	70-130	0			
Surr: Toluene-d8	101.1	0	100	0	101	70-130	0			

LCSD		Sample ID: LCSD-R103390-R103390				Units: µg/L		Analysis Date: 4/10/2012 09:41 AM		
Client ID:		Run ID: GC9_120410A				SeqNo: 1944838		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	24670	200	25000	0	98.7	70-130	24430	0.98	30	
Surr: Toluene-d8	94.01	0	100	0	94	70-130	101.1	7.26	30	

MS		Sample ID: 1204044-02A MS				Units: µg/L		Analysis Date: 4/10/2012 02:27 PM		
Client ID:		Run ID: GC9_120410A				SeqNo: 1944841		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	25320	200	25000	0	101	70-130	0			
Surr: Toluene-d8	92.4	0	100	0	92.4	70-130	0			

MSD		Sample ID: 1204044-02A MSD				Units: µg/L		Analysis Date: 4/10/2012 02:53 PM		
Client ID:		Run ID: GC9_120410A				SeqNo: 1944842		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	24570	200	25000	0	98.3	70-130	25320	3.04	30	
Surr: Toluene-d8	92.5	0	100	0	92.5	70-130	92.4	0.108	30	

The following samples were analyzed in this batch: | 1204202-01A |

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40452** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-40452-40452				Units: mg/Kg		Analysis Date: 4/13/2012 03:44 PM		
Client ID:		Run ID: HG1_120413B				SeqNo: 1947533		Prep Date: 4/13/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-40452-40452				Units: mg/Kg		Analysis Date: 4/13/2012 03:47 PM		
Client ID:		Run ID: HG1_120413B				SeqNo: 1947534		Prep Date: 4/13/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1732 0.020 0.1665 0 104 80-120 0

LCSD		Sample ID: LCSD-40452-40452				Units: mg/Kg		Analysis Date: 4/13/2012 03:49 PM		
Client ID:		Run ID: HG1_120413B				SeqNo: 1947536		Prep Date: 4/13/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1763 0.020 0.1665 0 106 80-120 0.1732 1.81 20

MS		Sample ID: 1204204-04AMS				Units: mg/Kg		Analysis Date: 4/13/2012 04:24 PM		
Client ID:		Run ID: HG1_120413B				SeqNo: 1947553		Prep Date: 4/13/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1452 0.018 0.1465 0.009726 92.5 75-125 0

MSD		Sample ID: 1204204-04AMSD				Units: mg/Kg		Analysis Date: 4/13/2012 04:26 PM		
Client ID:		Run ID: HG1_120413B				SeqNo: 1947554		Prep Date: 4/13/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1531 0.017 0.1444 0.009726 99.3 75-125 0.1452 5.33 35

The following samples were analyzed in this batch:

1204202-01B

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40407** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-40407-40407				Units: mg/Kg		Analysis Date: 4/11/2012 02:13 PM		
Client ID:		Run ID: ICPMS1_120411A				SeqNo: 1945503		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0622	0.25								J
Barium	ND	0.25								
Cadmium	0.003048	0.10								J
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	0.001734	0.25								J
Nickel	0.005265	0.25								J
Selenium	ND	0.25								
Silver	0.002682	0.25								J
Zinc	0.0614	0.50								J

LCS		Sample ID: LCS-40407-40407				Units: mg/Kg		Analysis Date: 4/11/2012 02:19 PM		
Client ID:		Run ID: ICPMS1_120411A				SeqNo: 1945504		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.45	0.25	5	0	89	80-120	0			
Barium	5.075	0.25	5	0	102	80-120	0			
Cadmium	5.135	0.10	5	0	103	80-120	0			
Chromium	4.874	0.25	5	0	97.5	80-120	0			
Copper	4.85	0.25	5	0	97	80-120	0			
Lead	5.145	0.25	5	0	103	80-120	0			
Nickel	4.824	0.25	5	0	96.5	80-120	0			
Selenium	4.454	0.25	5	0	89.1	80-120	0			
Silver	4.519	0.25	5	0	90.4	80-120	0			
Zinc	4.426	0.50	5	0	88.5	80-120	0			

LCSD		Sample ID: LCSD-40407-40407				Units: mg/Kg		Analysis Date: 4/11/2012 02:28 PM		
Client ID:		Run ID: ICPMS1_120411A				SeqNo: 1945505		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.645	0.25	5	0	92.9	80-120	4.45	4.28	20	
Barium	5.095	0.25	5	0	102	80-120	5.075	0.393	20	
Cadmium	5.165	0.10	5	0	103	80-120	5.135	0.583	20	
Chromium	4.936	0.25	5	0	98.7	80-120	4.874	1.26	20	
Copper	4.888	0.25	5	0	97.8	80-120	4.85	0.791	20	
Lead	5.15	0.25	5	0	103	80-120	5.145	0.0971	20	
Nickel	4.832	0.25	5	0	96.6	80-120	4.824	0.166	20	
Selenium	4.504	0.25	5	0	90.1	80-120	4.454	1.11	20	
Silver	4.578	0.25	5	0	91.6	80-120	4.519	1.29	20	
Zinc	4.33	0.50	5	0	86.6	80-120	4.426	2.22	20	

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40407** Instrument ID **ICPMS1** Method: **SW6020A**

MS				Sample ID: 1204137-04AMS			Units: mg/Kg		Analysis Date: 4/11/2012 04:14 PM		
Client ID:			Run ID: ICPMS1_120411A			SeqNo: 1945706		Prep Date: 4/10/2012		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	10.19	0.85	8.475	2.878	86.3	80-120	0				
Barium	98.93	0.85	8.475	88.5	123	80-120	0			SO	
Cadmium	8.819	0.34	8.475	0.3075	100	80-120	0				
Chromium	14.82	0.85	8.475	6.517	97.9	80-120	0				
Copper	16.54	0.85	8.475	9.236	86.2	80-120	0				
Lead	20.95	0.85	8.475	12.39	101	80-120	0				
Nickel	16.2	0.85	8.475	9.138	83.3	80-120	0				
Selenium	7.334	0.85	8.475	0.321	82.8	80-120	0				
Silver	6.958	0.85	8.475	0.07129	81.3	80-120	0				
Zinc	49.44	1.7	8.475	40.79	102	80-120	0			O	

MSD				Sample ID: 1204137-04AMSD			Units: mg/Kg		Analysis Date: 4/11/2012 04:20 PM		
Client ID:			Run ID: ICPMS1_120411A			SeqNo: 1945707		Prep Date: 4/10/2012		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	10.52	0.83	8.306	2.878	92.1	80-120	10.19	3.24	25		
Barium	104.4	0.83	8.306	88.5	191	80-120	98.93	5.35	25	SO	
Cadmium	8.736	0.33	8.306	0.3075	101	80-120	8.819	0.943	25		
Chromium	15.27	0.83	8.306	6.517	105	80-120	14.82	3.04	25		
Copper	16.79	0.83	8.306	9.236	91	80-120	16.54	1.5	25		
Lead	21.98	0.83	8.306	12.39	115	80-120	20.95	4.79	25		
Nickel	16.61	0.83	8.306	9.138	89.9	80-120	16.2	2.5	25		
Selenium	7.43	0.83	8.306	0.321	85.6	80-120	7.334	1.3	25		
Silver	6.847	0.83	8.306	0.07129	81.6	80-120	6.958	1.6	25		
Zinc	48.19	1.7	8.306	40.79	89.1	80-120	49.44	2.56	25	O	

The following samples were analyzed in this batch:

1204202-01B

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40398** Instrument ID **SVMS4** Method: **SW8270**

MBLK		Sample ID: SBLKS1-40398-40398				Units: µg/Kg		Analysis Date: 4/11/2012 08:40 AM		
Client ID:		Run ID: SVMS4_120411A				SeqNo: 1945383		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Pyrene	ND	30								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1424</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>85.4</i>	<i>34-140</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>1195</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>71.7</i>	<i>12-100</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>1409</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>84.6</i>	<i>33-117</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>1331</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>79.8</i>	<i>25-137</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>1239</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>74.3</i>	<i>37-107</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>1382</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>82.9</i>	<i>40-106</i>	<i>0</i>			

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40398** Instrument ID **SVMS4** Method: **SW8270**

LCS		Sample ID: SLCSS1-40398-40398				Units: µg/Kg		Analysis Date: 4/11/2012 07:35 AM		
Client ID:		Run ID: SVMS4_120411A				SeqNo: 1945381		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	575	30	666.7	0	86.2	45-110	0			
Anthracene	583.3	30	666.7	0	87.5	55-105	0			
Benzo(a)anthracene	558.7	30	666.7	0	83.8	50-110	0			
Benzo(a)pyrene	598.7	30	666.7	0	89.8	50-110	0			
Benzo(b)fluoranthene	544.7	30	666.7	0	81.7	45-115	0			
Benzo(g,h,i)perylene	646.3	30	666.7	0	96.9	40-125	0			
Benzo(k)fluoranthene	677.3	30	666.7	0	102	45-115	0			
Chrysene	581.7	30	666.7	0	87.2	55-110	0			
Dibenzo(a,h)anthracene	625	30	666.7	0	93.7	40-125	0			
Fluoranthene	594.7	30	666.7	0	89.2	55-115	0			
Fluorene	563	30	666.7	0	84.4	50-110	0			
Indeno(1,2,3-cd)pyrene	628	30	666.7	0	94.2	40-120	0			
Naphthalene	554.3	30	666.7	0	83.1	40-105	0			
Pyrene	578.7	30	666.7	0	86.8	45-125	0			
Surr: 2,4,6-Tribromophenol	1584	0	1667	0	95	34-140	0			
Surr: 2-Fluorobiphenyl	1283	0	1667	0	77	12-100	0			
Surr: 2-Fluorophenol	1507	0	1667	0	90.4	33-117	0			
Surr: 4-Terphenyl-d14	1320	0	1667	0	79.2	25-137	0			
Surr: Nitrobenzene-d5	1343	0	1667	0	80.6	37-107	0			
Surr: Phenol-d6	1454	0	1667	0	87.2	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40398** Instrument ID **SVMS4** Method: **SW8270**

LCSD		Sample ID: SLCSDS1-40398-40398				Units: µg/Kg		Analysis Date: 4/11/2012 08:08 AM		
Client ID:		Run ID: SVMS4_120411A				SeqNo: 1945382		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	547	30	666.7	0	82	45-110	575	4.99	25	
Anthracene	580	30	666.7	0	87	55-105	583.3	0.573	25	
Benzo(a)anthracene	557.7	30	666.7	0	83.6	50-110	558.7	0.179	25	
Benzo(a)pyrene	591.7	30	666.7	0	88.7	50-110	598.7	1.18	25	
Benzo(b)fluoranthene	561	30	666.7	0	84.1	45-115	544.7	2.95	25	
Benzo(g,h,i)perylene	623	30	666.7	0	93.4	40-125	646.3	3.68	25	
Benzo(k)fluoranthene	640	30	666.7	0	96	45-115	677.3	5.67	25	
Chrysene	581	30	666.7	0	87.1	55-110	581.7	0.115	25	
Dibenzo(a,h)anthracene	618.3	30	666.7	0	92.7	40-125	625	1.07	25	
Fluoranthene	597	30	666.7	0	89.5	55-115	594.7	0.392	25	
Fluorene	551	30	666.7	0	82.6	50-110	563	2.15	25	
Indeno(1,2,3-cd)pyrene	618	30	666.7	0	92.7	40-120	628	1.61	25	
Naphthalene	537.3	30	666.7	0	80.6	40-105	554.3	3.11	25	
Pyrene	586	30	666.7	0	87.9	45-125	578.7	1.26	25	
<i>Surr: 2,4,6-Tribromophenol</i>	1526	0	1667	0	91.6	34-140	1584	3.73	40	
<i>Surr: 2-Fluorobiphenyl</i>	1221	0	1667	0	73.3	12-100	1283	4.9	40	
<i>Surr: 2-Fluorophenol</i>	1396	0	1667	0	83.8	33-117	1507	7.67	40	
<i>Surr: 4-Terphenyl-d14</i>	1307	0	1667	0	78.4	25-137	1320	0.964	40	
<i>Surr: Nitrobenzene-d5</i>	1270	0	1667	0	76.2	37-107	1343	5.59	40	
<i>Surr: Phenol-d6</i>	1362	0	1667	0	81.7	40-106	1454	6.56	40	

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40398** Instrument ID **SVMS4** Method: **SW8270**

MS				Sample ID: 1204203-03A MS			Units: µg/Kg		Analysis Date: 4/11/2012 09:59 AM	
Client ID:				Run ID: SVMS4_120411A			SeqNo: 1946193		Prep Date: 4/10/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	654.5	58	1282	0	51	45-110	0			
Anthracene	698.7	58	1282	0	54.5	55-105	0			S
Benzo(a)anthracene	688.5	58	1282	0	53.7	50-110	0			
Benzo(a)pyrene	715.4	58	1282	0	55.8	50-110	0			
Benzo(b)fluoranthene	723.7	58	1282	0	56.4	45-115	0			
Benzo(g,h,i)perylene	803.2	58	1282	0	62.6	40-125	0			
Benzo(k)fluoranthene	700	58	1282	0	54.6	45-115	0			
Chrysene	699.4	58	1282	0	54.5	55-110	0			S
Dibenzo(a,h)anthracene	754.5	58	1282	0	58.8	40-125	0			
Fluoranthene	744.2	58	1282	15.11	56.9	55-115	0			
Fluorene	666	58	1282	0	51.9	50-110	0			
Indeno(1,2,3-cd)pyrene	775	58	1282	0	60.4	40-120	0			
Naphthalene	653.8	58	1282	0	51	40-105	0			
Pyrene	723.1	58	1282	13.8	55.3	45-125	0			
Surr: 2,4,6-Tribromophenol	1773	0	3205	0	55.3	34-140	0			
Surr: 2-Fluorobiphenyl	1524	0	3205	0	47.6	12-100	0			
Surr: 2-Fluorophenol	1744	0	3205	0	54.4	33-117	0			
Surr: 4-Terphenyl-d14	1569	0	3205	0	48.9	25-137	0			
Surr: Nitrobenzene-d5	1622	0	3205	0	50.6	37-107	0			
Surr: Phenol-d6	1657	0	3205	0	51.7	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40398** Instrument ID **SVMS4** Method: **SW8270**

MSD				Sample ID: 1204203-03A MSD			Units: µg/Kg		Analysis Date: 4/11/2012 10:32 AM		
Client ID:				Run ID: SVMS4_120411A			SeqNo: 1946194		Prep Date: 4/10/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1022	56	1255	0	81.4	45-110	654.5	43.8	30	R	
Anthracene	1096	56	1255	0	87.3	55-105	698.7	44.3	30	R	
Benzo(a)anthracene	1099	56	1255	0	87.5	50-110	688.5	45.9	30	R	
Benzo(a)pyrene	1126	56	1255	0	89.7	50-110	715.4	44.6	30	R	
Benzo(b)fluoranthene	1078	56	1255	0	85.9	45-115	723.7	39.4	30	R	
Benzo(g,h,i)perylene	1198	56	1255	0	95.4	40-125	803.2	39.5	30	R	
Benzo(k)fluoranthene	1179	56	1255	0	93.9	45-115	700	51	30	R	
Chrysene	1093	56	1255	0	87	55-110	699.4	43.9	30	R	
Dibenzo(a,h)anthracene	1164	56	1255	0	92.7	40-125	754.5	42.7	30	R	
Fluoranthene	1154	56	1255	15.11	90.7	55-115	744.2	43.2	30	R	
Fluorene	1039	56	1255	0	82.7	50-110	666	43.7	30	R	
Indeno(1,2,3-cd)pyrene	1169	56	1255	0	93.1	40-120	775	40.5	30	R	
Naphthalene	933.3	56	1255	0	74.3	40-105	653.8	35.2	30	R	
Pyrene	1113	56	1255	13.8	87.5	45-125	723.1	42.5	30	R	
Surr: 2,4,6-Tribromophenol	2895	0	3138	0	92.3	34-140	1773	48.1	40	R	
Surr: 2-Fluorobiphenyl	2251	0	3138	0	71.7	12-100	1524	38.5	40		
Surr: 2-Fluorophenol	2507	0	3138	0	79.9	33-117	1744	35.9	40		
Surr: 4-Terphenyl-d14	2420	0	3138	0	77.1	25-137	1569	42.7	40	R	
Surr: Nitrobenzene-d5	2243	0	3138	0	71.5	37-107	1622	32.1	40		
Surr: Phenol-d6	2463	0	3138	0	78.5	40-106	1657	39.1	40		

The following samples were analyzed in this batch: | 1204202-01B |

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **R103369** Instrument ID **VMS5** Method: **SW8260**

MBLK Sample ID: VBLKW2-120409-R103369				Units: µg/L			Analysis Date: 4/10/2012 01:23 AM			
Client ID:		Run ID: VMS5_120409B		SeqNo: 1944459		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	98.55	0	100	0	98.6	70-120	0			
Surr: 4-Bromofluorobenzene	95.44	0	100	0	95.4	75-120	0			
Surr: Dibromofluoromethane	99.73	0	100	0	99.7	85-115	0			
Surr: Toluene-d8	99.13	0	100	0	99.1	85-120	0			

LCS Sample ID: VLCSW2-120409-R103369				Units: µg/L			Analysis Date: 4/10/2012 12:08 PM			
Client ID:		Run ID: VMS5_120409B		SeqNo: 1944460		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.66	1.0	20	0	88.3	80-120	0			
Ethylbenzene	18.04	1.0	20	0	90.2	75-125	0			
m,p-Xylene	35.63	2.0	40	0	89.1	75-130	0			
o-Xylene	17.83	1.0	20	0	89.2	80-120	0			
Toluene	18.01	1.0	20	0	90	75-120	0			
Xylenes, Total	53.46	3.0	60	0	89.1	75-130	0			
Surr: 1,2-Dichloroethane-d4	97.69	0	100	0	97.7	70-120	0			
Surr: 4-Bromofluorobenzene	98.21	0	100	0	98.2	75-120	0			
Surr: Dibromofluoromethane	101.5	0	100	0	101	85-115	0			
Surr: Toluene-d8	97.68	0	100	0	97.7	85-120	0			

LCSD Sample ID: VLCSW2-120409-R103369				Units: µg/L			Analysis Date: 4/10/2012 12:33 PM			
Client ID:		Run ID: VMS5_120409B		SeqNo: 1944461		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.23	1.0	20	0	86.2	80-120	17.66	2.46	30	
Ethylbenzene	17.26	1.0	20	0	86.3	75-125	18.04	4.42	30	
m,p-Xylene	34.11	2.0	40	0	85.3	75-130	35.63	4.36	30	
o-Xylene	17.11	1.0	20	0	85.6	80-120	17.83	4.12	30	
Toluene	17.18	1.0	20	0	85.9	75-120	18.01	4.72	30	
Xylenes, Total	51.22	3.0	60	0	85.4	75-130	53.46	4.28	30	
Surr: 1,2-Dichloroethane-d4	97.49	0	100	0	97.5	70-120	97.69	0.205	30	
Surr: 4-Bromofluorobenzene	97.5	0	100	0	97.5	75-120	98.21	0.726	30	
Surr: Dibromofluoromethane	101.2	0	100	0	101	85-115	101.5	0.266	30	
Surr: Toluene-d8	97.66	0	100	0	97.7	85-120	97.68	0.0205	30	

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

Client: HRL Compliance Solutions
 Work Order: 1204202
 Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **R103369** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: 1204199-03A MS				Units: µg/L		Analysis Date: 4/10/2012 08:55 AM				
Client ID:		Run ID: VMS5_120409B		SeqNo: 1944584		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.85	1.0	20	0	89.2	80-120	0			
Ethylbenzene	17.91	1.0	20	0	89.6	75-125	0			
m,p-Xylene	34.89	2.0	40	0	87.2	75-130	0			
o-Xylene	17.35	1.0	20	0	86.8	80-120	0			
Toluene	17.76	1.0	20	0	88.8	75-120	0			
Xylenes, Total	52.24	3.0	60	0	87.1	75-130	0			
Surr: 1,2-Dichloroethane-d4	97.68	0	100	0	97.7	70-120	0			
Surr: 4-Bromofluorobenzene	94.74	0	100	0	94.7	75-120	0			
Surr: Dibromofluoromethane	100.5	0	100	0	101	85-115	0			
Surr: Toluene-d8	97.17	0	100	0	97.2	85-120	0			

MSD Sample ID: 1204199-03A MSD				Units: µg/L		Analysis Date: 4/10/2012 09:20 AM				
Client ID:		Run ID: VMS5_120409B		SeqNo: 1944586		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.42	1.0	20	0	87.1	80-120	17.85	2.44	30	
Ethylbenzene	17.69	1.0	20	0	88.4	75-125	17.91	1.24	30	
m,p-Xylene	34.88	2.0	40	0	87.2	75-130	34.89	0.0287	30	
o-Xylene	17.23	1.0	20	0	86.2	80-120	17.35	0.694	30	
Toluene	17.63	1.0	20	0	88.2	75-120	17.76	0.735	30	
Xylenes, Total	52.11	3.0	60	0	86.8	75-130	52.24	0.249	30	
Surr: 1,2-Dichloroethane-d4	96.84	0	100	0	96.8	70-120	97.68	0.864	30	
Surr: 4-Bromofluorobenzene	97.53	0	100	0	97.5	75-120	94.74	2.9	30	
Surr: Dibromofluoromethane	101	0	100	0	101	85-115	100.5	0.457	30	
Surr: Toluene-d8	98.79	0	100	0	98.8	85-120	97.17	1.65	30	

The following samples were analyzed in this batch:

1204202-01A

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **40424** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-40424-40424					Units: mg/Kg		Analysis Date: 4/11/2012 02:00 PM		
Client ID:	Run ID: WETCHEM_120411J				SeqNo: 1945519		Prep Date: 4/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS	Sample ID: LCS-40424-40424					Units: mg/Kg		Analysis Date: 4/11/2012 02:00 PM		
Client ID:	Run ID: WETCHEM_120411J				SeqNo: 1945517		Prep Date: 4/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.088 0.50 2 0 104 75-110 0

LCSD	Sample ID: LCSD-40424-40424					Units: mg/Kg		Analysis Date: 4/11/2012 02:00 PM		
Client ID:	Run ID: WETCHEM_120411J				SeqNo: 1945518		Prep Date: 4/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2.308 0.50 2 0 115 75-110 2.088 10 20 S

MS	Sample ID: 1204200-01B MS					Units: mg/Kg		Analysis Date: 4/11/2012 02:00 PM		
Client ID:	Run ID: WETCHEM_120411J				SeqNo: 1945513		Prep Date: 4/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.98 0.50 2 0.3187 83.1 60-130 0

MSD	Sample ID: 1204200-01B MSD					Units: mg/Kg		Analysis Date: 4/11/2012 02:00 PM		
Client ID:	Run ID: WETCHEM_120411J				SeqNo: 1945514		Prep Date: 4/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.524 0.50 1.984 0.3187 60.7 60-130 1.98 26 30

The following samples were analyzed in this batch:

1204202-01B

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

Client: HRL Compliance Solutions
Work Order: 1204202
Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **R103344** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-R103344-R103344					Units: s.u.			Analysis Date: 4/8/2012 05:45 PM			
Client ID:					Run ID: WETCHEM_120408D					SeqNo: 1943814			Prep Date:		DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH					4.27		0	4.4	0	97	90-110	0				

DUP					Sample ID: 1204202-01B DUP					Units: s.u.			Analysis Date: 4/8/2012 05:45 PM		
Client ID: RMV 53-17 Treatment cell					Run ID: WETCHEM_120408D					SeqNo: 1943818		Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH		9.08	0	0	0	0	0-0	9.08	0	20	H				

The following samples were analyzed in this batch:

1204202-01B

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

Client: HRL Compliance Solutions
 Work Order: 1204202
 Project: WPX RMV 53-17 Treatment Cell 3/30/12

QC BATCH REPORT

Batch ID: **R103351** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R103351					Units: % of sample		Analysis Date: 4/9/2012 03:20 PM		
Client ID:	Run ID: MOIST_120409A				SeqNo: 1943956		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-R103351					Units: % of sample		Analysis Date: 4/9/2012 03:20 PM		
Client ID:	Run ID: MOIST_120409A				SeqNo: 1943954		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: 1204200-01BDUP					Units: % of sample		Analysis Date: 4/9/2012 03:20 PM		
Client ID:	Run ID: MOIST_120409A				SeqNo: 1943919		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 9.7 0.050 0 0 0 0-0 8.96 7.93 20

DUP	Sample ID: 1204204-04CDUP1					Units: % of sample		Analysis Date: 4/9/2012 03:20 PM		
Client ID:	Run ID: MOIST_120409A				SeqNo: 1943945		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.89 0.050 0 0 0 0-0 5.96 1.18 20

DUP	Sample ID: 1204204-04CDUP2					Units: % of sample		Analysis Date: 4/9/2012 03:20 PM		
Client ID:	Run ID: MOIST_120409A				SeqNo: 1943947		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 6.05 0.050 0 0 0 0-0 5.96 1.5 20

The following samples were analyzed in this batch:

1204202-01B

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





1204202

Form 202r8

*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.

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Ree J. W. W.	4/5/12	5:00
RECEIVED BY		Diane F. Shu	4/7/12	11:15
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



Environmental

Subcontractor:

A & L Great Lakes Agricultural La

3505 Conestoga Dr

TEL: (260) 483-4759

FAX: (260) 483-5274

Ft. Wayne, IN 46808

Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: **09-Apr-12**

COC ID: **3556**


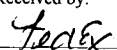

Due D **13-Apr-12**

Salesperson **Debbie Fazio**

Customer Information		Project Information		Parameter/Method Request for Analysis										
Purchase Order		Project Name	1204202	A	Subcontracted Analyses (SUBCONTRACT) SAR-EC									
Work Order		Project Number		B										
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C										
Send Report To	Ann Preston	Inv Attn	Accounts Payable	D										
Address	3352 128th Avenue	Address	3352 128th Avenue	E										
				F										
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	G										
Phone	(616) 399-6070	Phone	(616) 399-6070	H										
Fax	(616) 399-6185	Fax	(616) 399-6185	I										
eMail Address	ann.preston@alsglobal.com	eMail CC		J										
ALS Sample ID	Client Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J
1204202-01C	RMV 53-17 Treatment cell	Soil	30/Mar/2012 15:20	(1) MISC	X									

Comments:

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

Relinquished by: 	Date/Time: 4/9/12	Received by: 	Date/Time:	Cooler IDs:	Report/QC Level
Relinquished by:	Date/Time:	Received by:	Date/Time:		Std 

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 07-Apr-12 11:15

Work Order: 1204202

Received by: DS

Checklist completed by Diane Shaw 07-Apr-12
eSignature Date

Reviewed by: Ann Preston 09-Apr-12
eSignature Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.6 c</u>		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

FedEx NEW Package
Express US Airbill

FedEx
Tracking
Number

8987 5943 7710

0200

Form
ID No.

FedEx Retrieval Copy

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

1 From

Date 4/16/12

Sender's
Name Rock Wolf

Phone 970 843 3271

Company HCSI

Address 744 Madison Ct Ste 140

City Grand Junction

State CO

ZIP 81506

2 Your Internal Billing Reference

3 To
Recipient's
Name Sample Receiving

Phone 616 359 6070

Company NLS Group

Address 3252 128th Ave

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address Holland

Use this line for the HOLD location address or for continuation of your shipping address.

City Holland

State MI

ZIP 49424

01

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

31

HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

4 Express Package Service

NOTE: Service order has changed. Please select carefully.

06

FedEx First Overnight
Earliest next business morning delivery to select
locations. Friday shipments will be delivered on
Monday unless SATURDAY Delivery is selected.

01

FedEx Priority Overnight
Next business morning. Friday shipments will be
delivered on Monday unless SATURDAY Delivery
is selected.

05

FedEx Standard Overnight
Next business afternoon.
Saturday Delivery NOT available.

5 Packaging

*Declared value limit \$500.

06

FedEx Envelope*

02

FedEx Pak*

03

**FedEx
Box***

04

**FedEx
Tube**

01

Other

6 Special Handling and Delivery Signature Options

03 SATURDAY DELIVERY

☐ **No Signature Required**
Package may be left without
obtaining a signature for delivery.

10

Direct Signature
Someone at recipient's address
may sign for delivery. Fee applies.

34

Indirect Signature
If no one is available at recipient's
address, someone at a neighboring
address may sign for delivery. For
residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?
One box must be checked.

☒ **No**

☐ **Yes**

As per attached
Shipper's Declaration.

☐ **Yes**

Shipper's Declaration
not required.

06

Dry Ice
Dry Ice, 5, UN 1845

☐ **Cargo Aircraft Only**

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging
or placed in a FedEx Express Drop Box.

7 Payment Bill to:

1 ☐ **Sender**
Acct. No. in Section
will be billed.

2 ☒ **Recipient**

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

3 ☐ **Third Party**

4 ☐ **Credit Card**

5 ☐ **Cash/Check**

Obtain recip.
Acct. No. ☐

Total Packages

Total Weight

lbs.

Credit Card Auth.

612

Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.
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8987 5943 7710



04-Jun-2012

Mark Mumby
HRL Compliance Solutions
744 Horizon Ct. Suite 140
Grand Junction, CO 81506

Re: **WPX RMV 53-17 Landfarm 5/25/12**

Work Order: **1205864**

Dear Mark,

ALS Environmental received 1 sample on 30-May-2012 10:00 AM for the analyses presented in the following report.

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

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 9.

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: Alex Csaszar

Ann Preston
Project Manager



Certificate No: MN331938

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

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Environmental The ALS logo, a stylized blue triangle with a yellow flame-like shape inside.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Landfarm 5/25/12
Work Order: 1205864

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>
1205864-01	RMV 53-17 Landfarm	Soil		5/25/2012 12:00	5/30/2012 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Landfarm 5/25/12
WorkOrder: 1205864

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight

ALS Group USA, Corp**Date:** 04-Jun-12

Client: HRL Compliance Solutions
Project: WPX RMV 53-17 Landfarm 5/25/12
Sample ID: RMV 53-17 Landfarm
Collection Date: 5/25/2012 12:00 PM

Work Order: 1205864
Lab ID: 1205864-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 6/1/2012	Analyst: HL
Benzo(a)pyrene	ND		20	µg/Kg-dry	1	6/1/2012 08:07 PM
Surr: 2-Fluorobiphenyl	70.9		12-100	%REC	1	6/1/2012 08:07 PM
Surr: 4-Terphenyl-d14	68.8		25-137	%REC	1	6/1/2012 08:07 PM
Surr: Nitrobenzene-d5	56.7		37-107	%REC	1	6/1/2012 08:07 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	1.6		0.050	% of sample	1	5/30/2012 01:10 PM

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

ALS Group USA, Corp

Date: 04-Jun-12

Client: HRL Compliance Solutions

Work Order: 1205864

Project: WPX RMV 53-17 Landfarm 5/25/12

QC BATCH REPORT

Batch ID: **41392**

Instrument ID **SVMS5**

Method: **SW8270**

MBLK		Sample ID: SBLKS1-41392-41392				Units: µg/Kg		Analysis Date: 6/1/2012 04:10 PM		
Client ID:		Run ID: SVMS5_120601A				SeqNo: 1990167		Prep Date: 6/1/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	ND	30								
Surr: 2-Fluorobiphenyl	1474	0	1667	0	88.4	12-100	0			
Surr: 4-Terphenyl-d14	1607	0	1667	0	96.4	25-137	0			
Surr: Nitrobenzene-d5	1332	0	1667	0	79.9	37-107	0			

LCS		Sample ID: SLCSS1-41392-41392				Units: µg/Kg		Analysis Date: 6/1/2012 04:44 PM		
Client ID:		Run ID: SVMS5_120601A				SeqNo: 1990168		Prep Date: 6/1/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	570.7	30	666.7	0	85.6	50-110	0			
Surr: 2-Fluorobiphenyl	1539	0	1667	0	92.3	12-100	0			
Surr: 4-Terphenyl-d14	1551	0	1667	0	93	25-137	0			
Surr: Nitrobenzene-d5	1373	0	1667	0	82.4	37-107	0			

MS		Sample ID: 1205863-01B MS				Units: µg/Kg		Analysis Date: 6/1/2012 08:12 PM		
Client ID:		Run ID: SVMS5_120601A				SeqNo: 1990169		Prep Date: 6/1/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1024	59	1304	0	78.5	50-110	0			
Surr: 2-Fluorobiphenyl	2752	0	3261	0	84.4	12-100	0			
Surr: 4-Terphenyl-d14	2918	0	3261	0	89.5	25-137	0			
Surr: Nitrobenzene-d5	2367	0	3261	0	72.6	37-107	0			

MSD		Sample ID: 1205863-01B MSD				Units: µg/Kg		Analysis Date: 6/1/2012 08:47 PM		
Client ID:		Run ID: SVMS5_120601A				SeqNo: 1990170		Prep Date: 6/1/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzo(a)pyrene	1030	58	1294	0	79.6	50-110	1024	0.612	30	
Surr: 2-Fluorobiphenyl	2819	0	3235	0	87.1	12-100	2752	2.39	40	
Surr: 4-Terphenyl-d14	2949	0	3235	0	91.1	25-137	2918	1.04	40	
Surr: Nitrobenzene-d5	2478	0	3235	0	76.6	37-107	2367	4.58	40	

The following samples were analyzed in this batch:

1205864-01A

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

Client: HRL Compliance Solutions
Work Order: 1205864
Project: WPX RMV 53-17 Landfarm 5/25/12

QC BATCH REPORT

Batch ID: **R105418** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS1-R105418				Units: % of sample			Analysis Date: 5/30/2012 01:10 PM		
Client ID:		Run ID: MOIST_120530B				SeqNo: 1988478			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-R105418				Units: % of sample			Analysis Date: 5/30/2012 01:10 PM		
Client ID:		Run ID: MOIST_120530B				SeqNo: 1988477			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: 1205845-02ADUP				Units: % of sample			Analysis Date: 5/30/2012 01:10 PM		
Client ID:		Run ID: MOIST_120530B				SeqNo: 1988467			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 2.49 0.050 0 0 0 -0 0 2.53 1.59 20

The following samples were analyzed in this batch:

1205864-01A

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

Chain-of-Custody

Form 202r8

WORKORDER
#

1205864

PAGE

1 of 1


DISPOSAL




By Lab or Return to Client

[illegible]

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

For metals or anions, please detail analytes below.

Comments: <div style="text-align: center;">  </div>	QC PACKAGE (check below)								
	<input checked="" type="checkbox"/>	LEVEL II (Standard QC)							
	<input type="checkbox"/>	LEVEL III (Std QC + forms)							
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)							
	<input type="checkbox"/>								
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-NaHSO ₄ 7-Other 8-4 degrees C 9-5035									

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY			5/29/12	5:00
RECEIVED BY		Diane F Shan	5/30/12	1:00
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

fedex.com 1.800.GoFedEx 1.800.463.3339

CUSTODY SEAL

DATE 6/12/12
SIGNATURE [Signature]

QEC

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

fedex retrieval Copy

0200

Form 10 No.

FedEx

US Airbill

FedEx Tracking Number

8008 9259 9048

1 From

Date 5/29/12

Sender's Name

Red WLD

Phone

970 243-3271

Company

HCST

Address

744 Holzer Ct S10 140

Dept./Floor/Suite/Room

City

Grand Junction

State

CO

ZIP

81506

2 Your Internal Billing Reference

3 To

Recipient's Name

Sam's Recycling

Phone

970 399-6670

Company

PLS Group

Address

3350 125th Ave

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City

Holland

State

MI

ZIP

47424



8008 9259 9048

4 Express Package Service

* To most locations.

NOTE: Service order has changed. Please select carefully.

Next Business Day

06

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01

☒ FedEx Priority Overnight
Next business morning. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

05

☐ FedEx Standard Overnight
Next business afternoon. Saturday Delivery NOT available.

5 Packaging

* Declared value limit \$500.

06 ☒ FedEx Envelope*

02 ☐ FedEx Pak*

03 ☐ FedEx Box

04 ☐ FedEx Tube

01 ☐ Other

6 Special Handling and Delivery Signature Options

03 ☐ **SATURDAY DELIVERY**

☒ No Signature Required
Package may be left without obtaining a signature for delivery.

10 ☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

34 ☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No

04 ☐ Yes
As per attached Shipper's Declaration.

☐ Yes
Shipper's Declaration not required.

06 ☐ Dry Ice
Dry Ice, 9 UN 1815

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to:

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

Obtain recip. Acct. No.

1 ☐ Sender
Acct. No. in Section 1 will be billed.

2 ☒ Recipient

3 ☐ Third Party

4 ☐ Credit Card

5 ☐ Cash/Check

Total Packages

Total Weight

1 61 lbs.

Credit Card Auth.

612

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

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Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **30-May-12 10:00**

Work Order: **1205864**

Received by: **KRW**

Checklist completed by Keith Wurenga 30-May-12
eSignature Date

Reviewed by: Ann Preston 30-May-12
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☒ No ☐ Not Present ☐

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Temperature(s)/Thermometer(s): 5.2 C

Cooler(s)/Kit(s):

Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

Water - pH acceptable upon receipt? Yes ☐ No ☐ N/A ☒

pH adjusted? Yes ☐ No ☐ N/A ☒

pH adjusted by: -

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: