

State of Colorado
Oil and Gas Conservation Commission

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



DOCUMENT
#2224384

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
4/6/2012

1. OGCC Operator Number: 96850	4. Contact Name Karolina Blaney	Complete the Attachment Checklist OP OGCC
2. Name of Operator: WPX Energy Rocky Mountain LLC	Phone: 970 683 2295	
3. Address: 1058 County Road 215 City: Parachute State: CO Zip: 81635	Fax: 970 285 9573	
5. API Number 05-045-08124	OGCC Facility ID Number 335355	Survey Plat
6. Well/Facility Name:	7. Well/Facility Number Federal PA 33-28	Directional Survey
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWSE S28 T6S R95W 6pm		Surface Eqpm Diagram
9. County: Garfield	10. Field Name: Parachute	Technical Info Page
11. Federal, Indian or State Lease Number:		Other

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"/> FNL/FSL <input type="checkbox"/> FEL/FWL 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"/> attach directional survey Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer <input type="checkbox"/> Latitude <input type="checkbox"/> Distance to nearest property line <input type="checkbox"/> Distance to nearest bldg, public rd, utility or RR <input type="checkbox"/> Longitude <input type="checkbox"/> Distance to nearest lease line <input type="checkbox"/> Is location in a High Density Area (rule 603b)? Yes/No <input type="checkbox"/> Ground Elevation <input type="checkbox"/> Distance to nearest well same formation <input type="checkbox"/> Surface owner consultation date: <input type="checkbox"/>	
GPS DATA: Date of Measurement <input type="checkbox"/> PDOP Reading <input type="checkbox"/> Instrument Operator's Name <input type="checkbox"/>	
<input type="checkbox"/> CHANGE SPACING UNIT Formation <input type="checkbox"/> Formation Code <input type="checkbox"/> Spacing order number <input type="checkbox"/> Unit Acreage <input type="checkbox"/> Unit configuration <input type="checkbox"/>	<input type="checkbox"/> Remove from surface bond Signed surface use agreement attached <input type="checkbox"/>
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: <input type="checkbox"/> Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input type="checkbox"/> CHANGE WELL NAME NUMBER From: <input type="checkbox"/> To: <input type="checkbox"/> Effective Date: <input type="checkbox"/>
<input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for Inspection: <input type="checkbox"/>	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: <input type="checkbox"/> Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT <input type="checkbox"/>
<input type="checkbox"/> SPUD DATE: <input type="checkbox"/>	<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 Method used <input type="checkbox"/> Cementing tool setting/perf depth <input type="checkbox"/> Cement volume <input type="checkbox"/> Cement top <input type="checkbox"/> Cement bottom <input type="checkbox"/> Date <input type="checkbox"/> *submit cbl and cement job summaries	
<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 Approximate Start Date: <input type="checkbox"/>	<input type="checkbox"/> Report of Work Done Date Work Completed: <input type="checkbox"/>
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"/> Change Drilling Plans <input type="checkbox"/> Gross Interval Changed? <input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Request to Vent or Flare <input type="checkbox"/> Repair Well <input type="checkbox"/> Rule 502 variance requested <input type="checkbox"/> Other: <input type="checkbox"/>
<input type="checkbox"/> E&P Waste Disposal <input type="checkbox"/> Beneficial Reuse of E&P Waste <input checked="" type="checkbox"/> Status Update/Change of Remediation Plans 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 Date: 4/9/2012 Email: Karolina.Blaney@wpxenergy.com
 Print Name: Karolina Blaney Title: Environmental Specialist

COGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: _____ API Number: _____

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

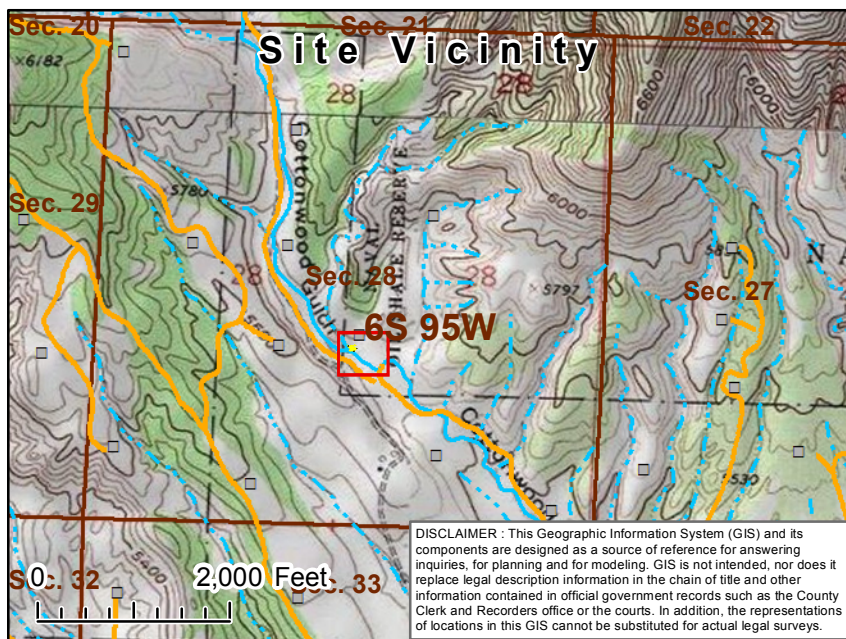
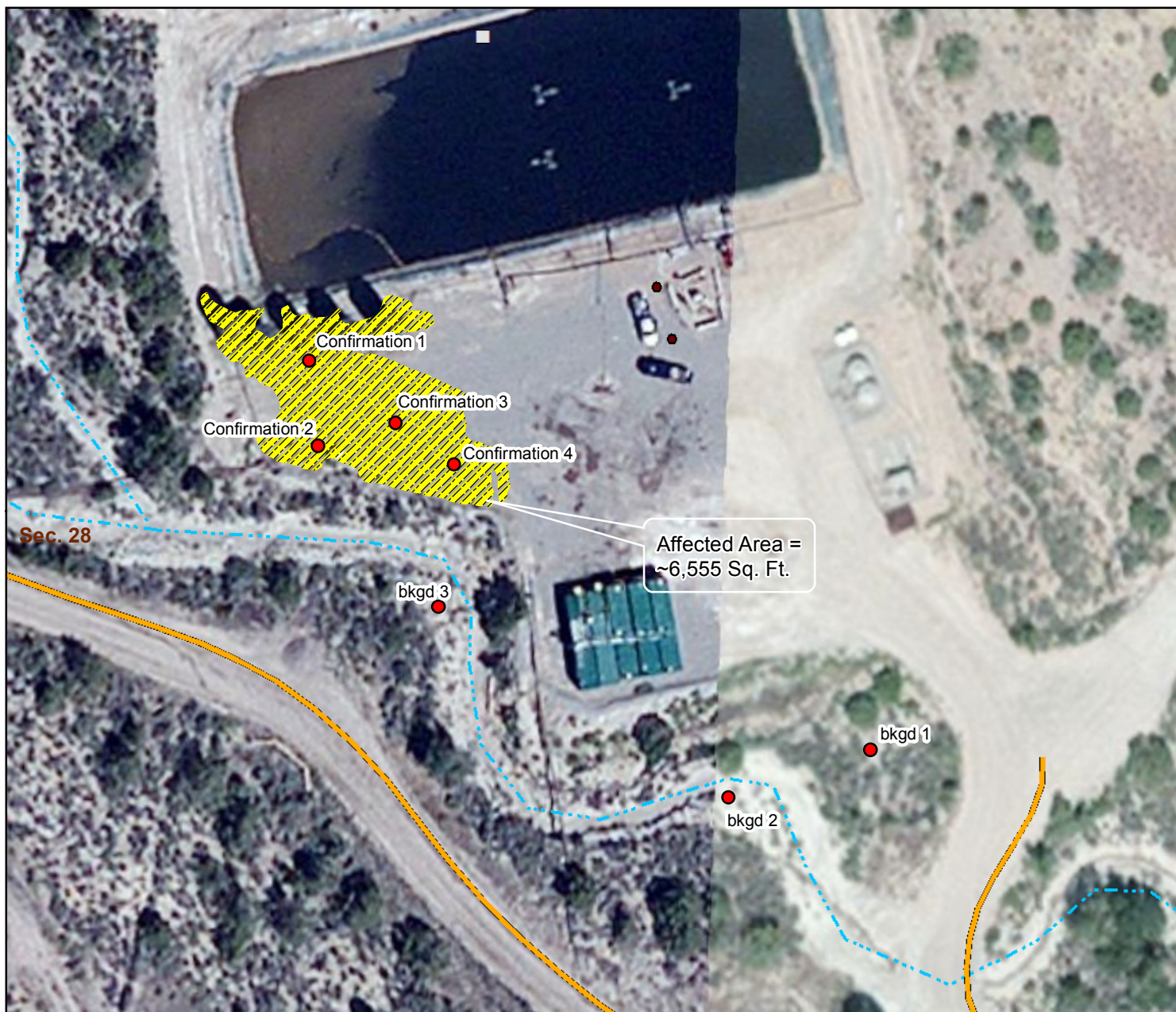
3. Well/Facility Name: _____ Well/Facility Number: _____

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: Cottonwood Frac Pad

WPX Energy Rocky Mountain, LLC

Legend

● Sample Location WPX Access Roads

PLSS

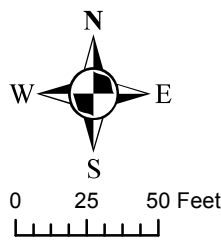
▭ Township

▭ Section

Hydrographic Features

— Perennial Stream

- - - Intermittent Stream





26-Jan-2012

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

Re: **WPX Cottonwood Frac Pad 1/20/12**

Work Order: **1201494**

Dear Mark,

ALS Environmental received 6 samples on 21-Jan-2012 01:00 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 36.

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 Cottonwood Frac Pad 1/20/12
Work Order: 1201494

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>
1201494-01	BKGD 1	Soil		1/20/2012 12:55	1/21/2012 13:00	<input type="checkbox"/>
1201494-02	BKGD 2	Soil		1/20/2012 13:00	1/21/2012 13:00	<input type="checkbox"/>
1201494-03	BKGD 3	Soil		1/20/2012 13:05	1/21/2012 13:00	<input type="checkbox"/>
1201494-04	Confirmation Sample 1	Soil		1/20/2012 13:20	1/21/2012 13:00	<input type="checkbox"/>
1201494-05	Confirmation Sample 2	Soil		1/20/2012 13:30	1/21/2012 13:00	<input type="checkbox"/>
1201494-06	Confirmation Sample 3	Soil		1/20/2012 13:40	1/21/2012 13:00	<input type="checkbox"/>

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Work Order: 1201494

Case Narrative

Batch 38811 MS/MSD data for Metals is not related to this project's samples.

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
WorkOrder: 1201494

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:** 26-Jan-12**Client:** HRL Compliance Solutions**Project:** WPX Cottonwood Frac Pad 1/20/12**Work Order:** 1201494**Sample ID:** BKGD 1**Lab ID:** 1201494-01**Collection Date:** 1/20/2012 12:55 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 1/23/2012	Analyst: CES
Arsenic	5.8		0.77	mg/Kg-dry	2	1/23/2012 02:40 PM
SUBCONTRACTED ANALYSES			SUBCONTRACT			Analyst: A&LGL
Subcontracted Analyses	Rcvd 1/26/12		as noted		1	1/26/2012
MOISTURE			A2540 G			Analyst: CG
Moisture	14		0.050	% of sample	1	1/23/2012 12:38 PM
PH			SW9045D			Analyst: KV
pH	8.46			s.u.	1	1/23/2012 12:25 PM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions

Project: WPX Cottonwood Frac Pad 1/20/12

Work Order: 1201494

Sample ID: BKGD 2

Lab ID: 1201494-02

Collection Date: 1/20/2012 01:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 1/23/2012	Analyst: CES
Arsenic	7.6		0.72	mg/Kg-dry	2	1/23/2012 02:45 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	11		0.050	% of sample	1	1/23/2012 12:38 PM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions

Project: WPX Cottonwood Frac Pad 1/20/12

Sample ID: BKGD 3

Collection Date: 1/20/2012 01:05 PM

Work Order: 1201494

Lab ID: 1201494-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 1/23/2012	Analyst: CES
Arsenic	6.7		0.82	mg/Kg-dry	2	1/23/2012 02:50 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	12		0.050	% of sample	1	1/23/2012 12:38 PM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Sample ID: Confirmation Sample 1
Collection Date: 1/20/2012 01:20 PM

Work Order: 1201494
Lab ID: 1201494-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 1/23/2012	Analyst: RM
DRO (C10-C28)	110		4.4	mg/Kg-dry	1	1/24/2012 12:10 PM
Surr: 4-Terphenyl-d14	82.2		39-115	%REC	1	1/24/2012 12:10 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: RM
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	1/24/2012 11:50 AM
Surr: Toluene-d8	102		50-150	%REC	50	1/24/2012 11:50 AM
MERCURY BY CVAA						
			SW7471		Prep Date: 1/23/2012	Analyst: LR
Mercury	ND		0.019	mg/Kg-dry	1	1/24/2012 12:47 PM
METALS BY ICP-MS						
			SW6020A		Prep Date: 1/23/2012	Analyst: CES
Arsenic	4.3		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Barium	190		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Cadmium	ND		0.30	mg/Kg-dry	2	1/23/2012 02:55 PM
Chromium	10		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Copper	7.5		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Lead	6.9		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Nickel	8.6		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Selenium	ND		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Silver	ND		0.76	mg/Kg-dry	2	1/23/2012 02:55 PM
Zinc	26		1.5	mg/Kg-dry	2	1/23/2012 02:55 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep Date: 1/23/2012	Analyst: CW
Acenaphthene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Anthracene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Chrysene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Fluoranthene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Fluorene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Naphthalene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Pyrene	ND		32	µg/Kg-dry	1	1/24/2012 02:15 AM
Surr: 2,4,6-Tribromophenol	93.9		34-140	%REC	1	1/24/2012 02:15 AM
Surr: 2-Fluorobiphenyl	91.2		12-100	%REC	1	1/24/2012 02:15 AM
Surr: 2-Fluorophenol	92.5		33-117	%REC	1	1/24/2012 02:15 AM
Surr: 4-Terphenyl-d14	96.2		25-137	%REC	1	1/24/2012 02:15 AM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Sample ID: Confirmation Sample 1
Collection Date: 1/20/2012 01:20 PM

Work Order: 1201494
Lab ID: 1201494-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	76.4		37-107	%REC	1	1/24/2012 02:15 AM
Surr: Phenol-d6	95.7		40-106	%REC	1	1/24/2012 02:15 AM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: MK
Benzene	ND		55	µg/Kg-dry	50	1/23/2012 01:51 PM
Ethylbenzene	ND		110	µg/Kg-dry	50	1/23/2012 01:51 PM
m,p-Xylene	180		110	µg/Kg-dry	50	1/23/2012 01:51 PM
o-Xylene	ND		55	µg/Kg-dry	50	1/23/2012 01:51 PM
Toluene	ND		82	µg/Kg-dry	50	1/23/2012 01:51 PM
Xylenes, Total	230		160	µg/Kg-dry	50	1/23/2012 01:51 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	50	1/23/2012 01:51 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	50	1/23/2012 01:51 PM
Surr: Dibromofluoromethane	97.7		85-115	%REC	50	1/23/2012 01:51 PM
Surr: Toluene-d8	98.7		85-115	%REC	50	1/23/2012 01:51 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	10		0.55	mg/Kg-dry	1	1/24/2012 03:30 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 1/23/2012	Analyst: MB
Chromium, Hexavalent	ND		0.53	mg/Kg-dry	1	1/24/2012 02:30 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	8.9		0.050	% of sample	1	1/23/2012 12:38 PM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Sample ID: Confirmation Sample 2
Collection Date: 1/20/2012 01:30 PM

Work Order: 1201494
Lab ID: 1201494-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 1/23/2012	Analyst: RM
DRO (C10-C28)	11		4.7	mg/Kg-dry	1	1/24/2012 12:10 PM
Surr: 4-Terphenyl-d14	96.7		39-115	%REC	1	1/24/2012 12:10 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: RM
GRO (C6-C10)	7.8		2.9	mg/Kg-dry	50	1/24/2012 12:15 PM
Surr: Toluene-d8	103		50-150	%REC	50	1/24/2012 12:15 PM
MERCURY BY CVAA						
			SW7471		Prep Date: 1/23/2012	Analyst: LR
Mercury	ND		0.021	mg/Kg-dry	1	1/24/2012 12:49 PM
METALS BY ICP-MS						
			SW6020A		Prep Date: 1/23/2012	Analyst: CES
Arsenic	4.5		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Barium	150		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Cadmium	0.31	J	0.31	mg/Kg-dry	2	1/23/2012 03:01 PM
Chromium	8.8		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Copper	9.1		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Lead	8.9		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Nickel	9.9		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Selenium	1.0		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Silver	ND		0.78	mg/Kg-dry	2	1/23/2012 03:01 PM
Zinc	46		1.6	mg/Kg-dry	2	1/23/2012 03:01 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep Date: 1/23/2012	Analyst: CW
Acenaphthene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Anthracene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Benzo(a)anthracene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Benzo(a)pyrene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Benzo(b)fluoranthene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Benzo(g,h,i)perylene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Benzo(k)fluoranthene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Chrysene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Dibenzo(a,h)anthracene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Fluoranthene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Fluorene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Indeno(1,2,3-cd)pyrene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Naphthalene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Pyrene	ND		34	µg/Kg-dry	1	1/24/2012 01:06 AM
Surr: 2,4,6-Tribromophenol	88.8		34-140	%REC	1	1/24/2012 01:06 AM
Surr: 2-Fluorobiphenyl	91.1		12-100	%REC	1	1/24/2012 01:06 AM
Surr: 2-Fluorophenol	92.8		33-117	%REC	1	1/24/2012 01:06 AM
Surr: 4-Terphenyl-d14	104		25-137	%REC	1	1/24/2012 01:06 AM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Sample ID: Confirmation Sample 2
Collection Date: 1/20/2012 01:30 PM

Work Order: 1201494
Lab ID: 1201494-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Nitrobenzene-d5	76.2		37-107	%REC	1	1/24/2012 01:06 AM
Surr: Phenol-d6	92.3		40-106	%REC	1	1/24/2012 01:06 AM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: MK
Benzene	ND		58	µg/Kg-dry	50	1/23/2012 02:17 PM
Ethylbenzene	ND		120	µg/Kg-dry	50	1/23/2012 02:17 PM
m,p-Xylene	1,700		120	µg/Kg-dry	50	1/23/2012 02:17 PM
o-Xylene	290		58	µg/Kg-dry	50	1/23/2012 02:17 PM
Toluene	360		87	µg/Kg-dry	50	1/23/2012 02:17 PM
Xylenes, Total	2,000		170	µg/Kg-dry	50	1/23/2012 02:17 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	50	1/23/2012 02:17 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	50	1/23/2012 02:17 PM
Surr: Dibromofluoromethane	95.8		85-115	%REC	50	1/23/2012 02:17 PM
Surr: Toluene-d8	99.1		85-115	%REC	50	1/23/2012 02:17 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	8.8		0.58	mg/Kg-dry	1	1/24/2012 03:30 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 1/23/2012	Analyst: MB
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	1/24/2012 02:30 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	14		0.050	% of sample	1	1/23/2012 12:38 PM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Sample ID: Confirmation Sample 3
Collection Date: 1/20/2012 01:40 PM

Work Order: 1201494
Lab ID: 1201494-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	47		SW8015M		Prep Date: 1/23/2012	Analyst: RM
			4.5	mg/Kg-dry	1	1/24/2012 12:32 PM
Surr: 4-Terphenyl-d14	81.1		39-115	%REC	1	1/24/2012 12:32 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			2.8	mg/Kg-dry	50	1/24/2012 12:40 PM
Surr: Toluene-d8	93.3		50-150	%REC	50	1/24/2012 12:40 PM
MERCURY BY CVAA						
Mercury	0.037		SW7471		Prep Date: 1/23/2012	Analyst: LR
			0.020	mg/Kg-dry	1	1/24/2012 12:51 PM
METALS BY ICP-MS						
Arsenic	6.1		SW6020A		Prep Date: 1/23/2012	Analyst: CES
			0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Barium	200		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Cadmium	0.52		0.33	mg/Kg-dry	2	1/23/2012 03:06 PM
Chromium	8.4		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Copper	9.3		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Lead	9.7		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Nickel	12		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Selenium	0.89		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Silver	ND		0.82	mg/Kg-dry	2	1/23/2012 03:06 PM
Zinc	41		1.6	mg/Kg-dry	2	1/23/2012 03:06 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses		Rcvd 1/26/12	SUBCONTRACT			Analyst: A&LGL
			as noted		1	1/26/2012
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270		Prep Date: 1/23/2012	Analyst: CW
			32	µg/Kg-dry	1	1/24/2012 01:40 AM
Anthracene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Benzo(a)anthracene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Benzo(a)pyrene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Benzo(b)fluoranthene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Benzo(g,h,i)perylene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Benzo(k)fluoranthene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Chrysene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Dibenzo(a,h)anthracene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Fluoranthene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Fluorene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Indeno(1,2,3-cd)pyrene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Naphthalene	120		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Pyrene	ND		32	µg/Kg-dry	1	1/24/2012 01:40 AM
Surr: 2,4,6-Tribromophenol	86.9		34-140	%REC	1	1/24/2012 01:40 AM

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

ALS Group USA, Corp

Date: 26-Jan-12

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/20/12
Sample ID: Confirmation Sample 3
Collection Date: 1/20/2012 01:40 PM

Work Order: 1201494
Lab ID: 1201494-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	75.0		12-100	%REC	1	1/24/2012 01:40 AM
<i>Surr: 2-Fluorophenol</i>	69.5		33-117	%REC	1	1/24/2012 01:40 AM
<i>Surr: 4-Terphenyl-d14</i>	103		25-137	%REC	1	1/24/2012 01:40 AM
<i>Surr: Nitrobenzene-d5</i>	60.6		37-107	%REC	1	1/24/2012 01:40 AM
<i>Surr: Phenol-d6</i>	71.4		40-106	%REC	1	1/24/2012 01:40 AM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: MK
Benzene	ND		55	µg/Kg-dry	50	1/23/2012 02:42 PM
Ethylbenzene	ND		110	µg/Kg-dry	50	1/23/2012 02:42 PM
m,p-Xylene	ND		110	µg/Kg-dry	50	1/23/2012 02:42 PM
o-Xylene	ND		55	µg/Kg-dry	50	1/23/2012 02:42 PM
Toluene	ND		83	µg/Kg-dry	50	1/23/2012 02:42 PM
Xylenes, Total	ND		170	µg/Kg-dry	50	1/23/2012 02:42 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	99.6		70-120	%REC	50	1/23/2012 02:42 PM
<i>Surr: 4-Bromofluorobenzene</i>	102		75-120	%REC	50	1/23/2012 02:42 PM
<i>Surr: Dibromofluoromethane</i>	95.3		85-115	%REC	50	1/23/2012 02:42 PM
<i>Surr: Toluene-d8</i>	96.8		85-115	%REC	50	1/23/2012 02:42 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	8.4		0.55	mg/Kg-dry	1	1/24/2012 03:30 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 1/23/2012	Analyst: MB
Chromium, Hexavalent	ND		0.53	mg/Kg-dry	1	1/24/2012 02:30 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	9.4		0.050	% of sample	1	1/23/2012 12:38 PM
PH			SW9045D			Analyst: KV
pH	8.74			s.u.	1	1/23/2012 12:25 PM

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

Report Number: F12024-0074
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: 1201494

DATE RECEIVED: 01/24/2012
DATE REPORTED: 01/26/2012
PAGE: 1
P.O. NUMBER: 20-1201494

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
19932	01B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	0.33	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	51	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	8	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	36	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	1.2	-	USDA Handbook 60
19933	06B	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	5.30	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	106	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	62	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	4007	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	76.2	-	USDA Handbook 60

Client: HRL Compliance Solutions

Work Order: 1201494

Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: 38806

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-38806-38806				Units: mg/Kg		Analysis Date: 1/24/2012 11:48 AM		
Client ID:		Run ID: GC8_120124A				SeqNo: 1881496		Prep Date: 1/23/2012		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	1.384	0	1.667	0	83.1	39-115	0			

LCS		Sample ID: DLCSS1-38806-38806				Units: mg/Kg		Analysis Date: 1/24/2012 10:42 AM		
Client ID:		Run ID: GC8_120124A				SeqNo: 1881494		Prep Date: 1/23/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	140.3	4.2	166.7	0	84.2	60-130	0			
Surr: 4-Terphenyl-d14	1.388	0	1.667	0	83.3	39-115	0			

LCSD		Sample ID: DLCSDS1-38806-38806				Units: mg/Kg		Analysis Date: 1/24/2012 10:42 AM		
Client ID:		Run ID: GC8_120124A				SeqNo: 1881499		Prep Date: 1/23/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	136.7	4.2	166.7	0	82	60-130	140.3	2.58	30	
Surr: 4-Terphenyl-d14	1.443	0	1.667	0	86.6	39-115	1.388	3.91	30	

MS		Sample ID: 1201472-09A MS				Units: mg/Kg		Analysis Date: 1/24/2012 11:04 AM		
Client ID:		Run ID: GC8_120124A				SeqNo: 1881495		Prep Date: 1/23/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	397.5	12	486.1	5.964	80.5	60-130	0			
Surr: 4-Terphenyl-d14	3.509	0	4.861	0	72.2	39-115	0			

MSD		Sample ID: 1201472-09A MSD				Units: mg/Kg		Analysis Date: 1/24/2012 11:04 AM		
Client ID:		Run ID: GC8_120124A				SeqNo: 1881500		Prep Date: 1/23/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	462.6	12	499.8	5.964	91.4	60-130	397.5	15.1	30	
Surr: 4-Terphenyl-d14	4.094	0	4.998	0	81.9	39-115	3.509	15.4	30	

The following samples were analyzed in this batch:

1201494-04A 1201494-05A 1201494-06A

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **R100383** Instrument ID **GC9** Method: **SW8015**

MBLK	Sample ID: MBLK-R100383-R100383					Units: µg/L		Analysis Date: 1/24/2012 11:25 AM		
Client ID:	Run ID: GC9_120124A				SeqNo: 1881311		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>105.6</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>106</i>	<i>70-130</i>	<i>0</i>			

LCS	Sample ID: LCS-R100383-R100383					Units: µg/L		Analysis Date: 1/24/2012 10:11 AM		
Client ID:	Run ID: GC9_120124A				SeqNo: 1881308		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)	25600	200	25000	0	102	70-130	0			
<i>Surr: Toluene-d8</i>	<i>104.9</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>105</i>	<i>70-130</i>	<i>0</i>			

LCSD	Sample ID: LCSD-R100383-R100383					Units: µg/L		Analysis Date: 1/24/2012 10:35 AM		
Client ID:	Run ID: GC9_120124A				SeqNo: 1881309		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)	24750	200	25000	0	99	70-130	25600	3.39	30	
<i>Surr: Toluene-d8</i>	<i>103.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>104.9</i>	<i>1.81</i>	<i>30</i>	

MS	Sample ID: 1201472-09B MS					Units: µg/Kg		Analysis Date: 1/24/2012 06:30 PM		
Client ID:	Run ID: GC9_120124A				SeqNo: 1881817		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1157000	2,500	1250000	0	92.6	70-130	0			
<i>Surr: Toluene-d8</i>	<i>4352</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>87</i>	<i>50-150</i>	<i>0</i>			

MSD	Sample ID: 1201472-09B MSD					Units: µg/Kg		Analysis Date: 1/24/2012 06:55 PM		
Client ID:	Run ID: GC9_120124A				SeqNo: 1881818		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	1139000	2,500	1250000	0	91.2	70-130	1157000	1.55	30	
<i>Surr: Toluene-d8</i>	<i>4313</i>	<i>0</i>	<i>5000</i>	<i>0</i>	<i>86.3</i>	<i>50-150</i>	<i>4352</i>	<i>0.912</i>	<i>30</i>	

The following samples were analyzed in this batch: 1201494-04A 1201494-05A 1201494-06A

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38820** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-38820-38820					Units: mg/Kg		Analysis Date: 1/24/2012 11:24 AM		
Client ID:	Run ID: HG1_120124A				SeqNo: 1881104		Prep Date: 1/23/2012		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-38820-38820					Units: mg/Kg		Analysis Date: 1/24/2012 11:26 AM		
Client ID:	Run ID: HG1_120124A				SeqNo: 1881105		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1699 0.020 0.1665 0 102 80-120 0

LCSD	Sample ID: LCSD-38820-38820					Units: mg/Kg		Analysis Date: 1/24/2012 11:28 AM		
Client ID:	Run ID: HG1_120124A				SeqNo: 1881108		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1707 0.020 0.1665 0 103 80-120 0.1699 0.44 20

MS	Sample ID: 1201498-01AMS					Units: mg/Kg		Analysis Date: 1/24/2012 12:58 PM		
Client ID:	Run ID: HG1_120124B				SeqNo: 1881133		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1588 0.018 0.1523 0.009152 98.3 75-125 0

MSD	Sample ID: 1201498-01AMSD					Units: mg/Kg		Analysis Date: 1/24/2012 01:00 PM		
Client ID:	Run ID: HG1_120124B				SeqNo: 1881134		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1628 0.018 0.1516 0.009152 101 75-125 0.1588 2.48 35

The following samples were analyzed in this batch:

1201494-04A	1201494-05A	1201494-06A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38811** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-38811-38811				Units: mg/Kg		Analysis Date: 1/23/2012 02:24 PM		
Client ID:		Run ID: ICPMS1_120123A				SeqNo: 1880587		Prep Date: 1/23/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	0.007025	0.25								J
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	0.1882	0.50								J

LCS		Sample ID: LCS-38811-38811				Units: mg/Kg		Analysis Date: 1/23/2012 02:29 PM		
Client ID:		Run ID: ICPMS1_120123A				SeqNo: 1880588		Prep Date: 1/23/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.107	0.50	5	0	82.1	80-120	0			
Barium	4.011	0.50	5	0	80.2	80-120	0			
Cadmium	4.068	0.20	5	0	81.4	80-120	0			
Chromium	4.157	0.50	5	0	83.1	80-120	0			
Copper	4.229	0.50	5	0	84.6	80-120	0			
Lead	4.155	0.50	5	0	83.1	80-120	0			
Nickel	4.216	0.50	5	0	84.3	80-120	0			
Silver	4.005	0.50	5	0	80.1	80-120	0			

LCS		Sample ID: LCS-38811-38811				Units: mg/Kg		Analysis Date: 1/24/2012 10:41 AM		
Client ID:		Run ID: ICPMS2_120124A				SeqNo: 1881017		Prep Date: 1/23/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	4.801	0.50	5	0	96	80-120	0			
Zinc	4.729	1.0	5	0	94.6	80-120	0			

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38811** Instrument ID **ICPMS1** Method: **SW6020A**

LCSD		Sample ID: LCSD-38811-38811				Units: mg/Kg		Analysis Date: 1/23/2012 02:35 PM		
Client ID:		Run ID: ICPMS1_120123A				SeqNo: 1880589		Prep Date: 1/23/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.21	0.50	5	0	84.2	80-120	4.107	2.48	20	
Barium	4.071	0.50	5	0	81.4	80-120	4.011	1.48	20	
Cadmium	4.184	0.20	5	0	83.7	80-120	4.068	2.81	20	
Chromium	4.271	0.50	5	0	85.4	80-120	4.157	2.71	20	
Copper	4.365	0.50	5	0	87.3	80-120	4.229	3.16	20	
Lead	4.247	0.50	5	0	84.9	80-120	4.155	2.19	20	
Nickel	4.307	0.50	5	0	86.1	80-120	4.216	2.14	20	
Selenium	4.154	0.50	5	0	83.1	80-120	3.897	6.38	20	
Silver	4.118	0.50	5	0	82.4	80-120	4.005	2.78	20	
Zinc	4.248	1.0	5	0	85	80-120	3.997	6.09	20	

MS		Sample ID: 1201472-09AMS				Units: mg/Kg		Analysis Date: 1/23/2012 03:43 PM		
Client ID:		Run ID: ICPMS1_120123A				SeqNo: 1880798		Prep Date: 1/23/2012		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	20.23	1.5	7.331	13.9	86.3	80-120	0			
Barium	67.45	1.5	7.331	58.42	123	80-120	0			SO
Cadmium	6.293	0.59	7.331	0.08683	84.7	80-120	0			
Chromium	9.117	1.5	7.331	4.585	61.8	80-120	0			S
Copper	8.34	1.5	7.331	2.423	80.7	80-120	0			
Lead	8.249	1.5	7.331	1.832	87.5	80-120	0			
Nickel	9.416	1.5	7.331	4.325	69.4	80-120	0			S
Selenium	6.425	1.5	7.331	0.4246	81.8	80-120	0			
Silver	5.619	1.5	7.331	0.007802	76.5	80-120	0			S
Zinc	19.61	2.9	7.331	13.21	87.3	80-120	0			

MSD		Sample ID: 1201472-09AMSD				Units: mg/Kg		Analysis Date: 1/23/2012 03:48 PM		
Client ID:		Run ID: ICPMS1_120123A				SeqNo: 1880799		Prep Date: 1/23/2012		DF: 4
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	19.69	1.5	7.496	13.9	77.2	80-120	20.23	2.72	25	S
Barium	64.32	1.5	7.496	58.42	78.6	80-120	67.45	4.75	25	SO
Cadmium	6.237	0.60	7.496	0.08683	82	80-120	6.293	0.9	25	
Chromium	8.567	1.5	7.496	4.585	53.1	80-120	9.117	6.23	25	S
Copper	8.225	1.5	7.496	2.423	77.4	80-120	8.34	1.39	25	S
Lead	7.913	1.5	7.496	1.832	81.1	80-120	8.249	4.16	25	
Nickel	8.999	1.5	7.496	4.325	62.3	80-120	9.416	4.54	25	S
Selenium	6.849	1.5	7.496	0.4246	85.7	80-120	6.425	6.38	25	
Silver	5.718	1.5	7.496	0.007802	76.2	80-120	5.619	1.75	25	S
Zinc	17.81	3.0	7.496	13.21	61.4	80-120	19.61	9.61	25	S

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38811** Instrument ID **ICPMS1** Method: **SW6020A**

The following samples were analyzed in this batch:

1201494-01A	1201494-02A	1201494-03A
1201494-04A	1201494-05A	1201494-06A

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKS1-38805-38805				Units: µg/Kg		Analysis Date: 1/24/2012 10:16 AM		
Client ID:		Run ID: SVMS7_120124A				SeqNo: 1881196		Prep Date: 1/23/2012		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>	973.7	0	1667	0	58.4	34-140	0			
<i>Surr: 2-Fluorobiphenyl</i>	1205	0	1667	0	72.3	12-100	0			
<i>Surr: 2-Fluorophenol</i>	1231	0	1667	0	73.9	33-117	0			
<i>Surr: 4-Terphenyl-d14</i>	1653	0	1667	0	99.2	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1323	0	1667	0	79.4	37-107	0			
<i>Surr: Phenol-d6</i>	1334	0	1667	0	80	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

LCS Sample ID: SLCSS1-38805-38805				Units: µg/Kg		Analysis Date: 1/24/2012 10:44 AM				
Client ID:		Run ID: SVMS7_120124A		SeqNo: 1881197		Prep Date: 1/23/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1146	30	1333	0	86	45-110	0			
Anthracene	1265	30	1333	0	94.9	55-105	0			
Benzo(a)anthracene	1194	30	1333	0	89.6	50-110	0			
Benzo(a)pyrene	1306	30	1333	0	98	50-110	0			
Benzo(b)fluoranthene	1231	30	1333	0	92.4	45-115	0			
Benzo(g,h,i)perylene	1252	30	1333	0	93.9	40-125	0			
Benzo(k)fluoranthene	1316	30	1333	0	98.7	45-115	0			
Chrysene	1221	30	1333	0	91.6	55-110	0			
Dibenzo(a,h)anthracene	1311	30	1333	0	98.4	40-125	0			
Fluoranthene	1304	30	1333	0	97.8	55-115	0			
Fluorene	1229	30	1333	0	92.2	50-110	0			
Indeno(1,2,3-cd)pyrene	1278	30	1333	0	95.9	40-120	0			
Naphthalene	1104	30	1333	0	82.8	40-105	0			
Pyrene	1260	30	1333	0	94.5	45-125	0			
Surr: 2,4,6-Tribromophenol	1472	0	1667	0	88.3	34-140	0			
Surr: 2-Fluorobiphenyl	1318	0	1667	0	79.1	12-100	0			
Surr: 2-Fluorophenol	1326	0	1667	0	79.6	33-117	0			
Surr: 4-Terphenyl-d14	1638	0	1667	0	98.3	25-137	0			
Surr: Nitrobenzene-d5	1408	0	1667	0	84.5	37-107	0			
Surr: Phenol-d6	1356	0	1667	0	81.3	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

LCSD				Sample ID: SLCSDS1-38805-38805			Units: µg/Kg		Analysis Date: 1/24/2012 11:12 AM		
Client ID:			Run ID: SVMS7_120124A			SeqNo: 1881198		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1115	30	1333	0	83.7	45-110	1146	2.74	25		
Anthracene	1236	30	1333	0	92.7	55-105	1265	2.32	25		
Benzo(a)anthracene	1188	30	1333	0	89.1	50-110	1194	0.56	25		
Benzo(a)pyrene	1308	30	1333	0	98.1	50-110	1306	0.128	25		
Benzo(b)fluoranthene	1243	30	1333	0	93.2	45-115	1231	0.916	25		
Benzo(g,h,i)perylene	1242	30	1333	0	93.1	40-125	1252	0.855	25		
Benzo(k)fluoranthene	1267	30	1333	0	95	45-115	1316	3.85	25		
Chrysene	1197	30	1333	0	89.8	55-110	1221	1.98	25		
Dibenzo(a,h)anthracene	1299	30	1333	0	97.4	40-125	1311	0.945	25		
Fluoranthene	1269	30	1333	0	95.2	55-115	1304	2.69	25		
Fluorene	1184	30	1333	0	88.8	50-110	1229	3.7	25		
Indeno(1,2,3-cd)pyrene	1270	30	1333	0	95.2	40-120	1278	0.654	25		
Naphthalene	1090	30	1333	0	81.8	40-105	1104	1.28	25		
Pyrene	1234	30	1333	0	92.5	45-125	1260	2.14	25		
Surr: 2,4,6-Tribromophenol	1462	0	1667	0	87.7	34-140	1472	0.727	40		
Surr: 2-Fluorobiphenyl	1290	0	1667	0	77.4	12-100	1318	2.17	40		
Surr: 2-Fluorophenol	1328	0	1667	0	79.7	33-117	1326	0.1	40		
Surr: 4-Terphenyl-d14	1603	0	1667	0	96.2	25-137	1638	2.12	40		
Surr: Nitrobenzene-d5	1396	0	1667	0	83.8	37-107	1408	0.808	40		
Surr: Phenol-d6	1342	0	1667	0	80.5	40-106	1356	1.01	40		

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

MS				Sample ID: 1201472-09A MS			Units: µg/Kg		Analysis Date: 1/24/2012 11:41 AM	
Client ID:				Run ID: SVMS7_120124A			SeqNo: 1882458		Prep Date: 1/23/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	3207	85	3784	0	84.8	45-110	0			
Anthracene	3524	85	3784	0	93.1	55-105	0			
Benzo(a)anthracene	3277	85	3784	0	86.6	50-110	0			
Benzo(a)pyrene	3521	85	3784	0	93.1	50-110	0			
Benzo(b)fluoranthene	3381	85	3784	0	89.4	45-115	0			
Benzo(g,h,i)perylene	3521	85	3784	0	93.1	40-125	0			
Benzo(k)fluoranthene	3543	85	3784	0	93.6	45-115	0			
Chrysene	3313	85	3784	0	87.6	55-110	0			
Dibenzo(a,h)anthracene	3568	85	3784	0	94.3	40-125	0			
Fluoranthene	3638	85	3784	0	96.2	55-115	0			
Fluorene	3469	85	3784	0	91.7	50-110	0			
Indeno(1,2,3-cd)pyrene	3517	85	3784	0	93	40-120	0			
Naphthalene	3095	85	3784	0	81.8	40-105	0			
Pyrene	3576	85	3784	0	94.5	45-125	0			
Surr: 2,4,6-Tribromophenol	4023	0	4730	0	85.1	34-140	0			
Surr: 2-Fluorobiphenyl	3714	0	4730	0	78.5	12-100	0			
Surr: 2-Fluorophenol	3829	0	4730	0	81	33-117	0			
Surr: 4-Terphenyl-d14	4623	0	4730	0	97.7	25-137	0			
Surr: Nitrobenzene-d5	4031	0	4730	0	85.2	37-107	0			
Surr: Phenol-d6	3827	0	4730	0	80.9	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

MS				Sample ID: 1201493-06A MS			Units: µg/Kg		Analysis Date: 1/24/2012 01:07 PM	
Client ID:				Run ID: SVMS7_120124A			SeqNo: 1882715		Prep Date: 1/23/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2074	57	2544	0	81.5	45-110	0			
Anthracene	2329	57	2544	0	91.5	55-105	0			
Benzo(a)anthracene	2201	57	2544	0	86.5	50-110	0			
Benzo(a)pyrene	2386	57	2544	0	93.8	50-110	0			
Benzo(b)fluoranthene	2285	57	2544	0	89.8	45-115	0			
Benzo(g,h,i)perylene	2314	57	2544	0	91	40-125	0			
Benzo(k)fluoranthene	2415	57	2544	0	94.9	45-115	0			
Chrysene	2215	57	2544	0	87.1	55-110	0			
Dibenzo(a,h)anthracene	2356	57	2544	0	92.6	40-125	0			
Fluoranthene	2434	57	2544	0	95.7	55-115	0			
Fluorene	2212	57	2544	0	86.9	50-110	0			
Indeno(1,2,3-cd)pyrene	2338	57	2544	0	91.9	40-120	0			
Naphthalene	2016	57	2544	0	79.2	40-105	0			
Pyrene	2322	57	2544	0	91.3	45-125	0			
Surr: 2,4,6-Tribromophenol	2569	0	3181	0	80.8	34-140	0			
Surr: 2-Fluorobiphenyl	2461	0	3181	0	77.4	12-100	0			
Surr: 2-Fluorophenol	2448	0	3181	0	77	33-117	0			
Surr: 4-Terphenyl-d14	3066	0	3181	0	96.4	25-137	0			
Surr: Nitrobenzene-d5	2668	0	3181	0	83.9	37-107	0			
Surr: Phenol-d6	2459	0	3181	0	77.3	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

MSD				Sample ID: 1201472-09A MSD			Units: µg/Kg		Analysis Date: 1/24/2012 12:10 PM		
Client ID:			Run ID: SVMS7_120124A			SeqNo: 1882459		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	3452	90	3992	0	86.5	45-110	3207	7.36	30		
Anthracene	3777	90	3992	0	94.6	55-105	3524	6.95	30		
Benzo(a)anthracene	3562	90	3992	0	89.2	50-110	3277	8.33	30		
Benzo(a)pyrene	3778	90	3992	0	94.7	50-110	3521	7.06	30		
Benzo(b)fluoranthene	3666	90	3992	0	91.8	45-115	3381	8.08	30		
Benzo(g,h,i)perylene	4148	90	3992	0	104	40-125	3521	16.3	30		
Benzo(k)fluoranthene	3748	90	3992	0	93.9	45-115	3543	5.62	30		
Chrysene	3564	90	3992	0	89.3	55-110	3313	7.3	30		
Dibenzo(a,h)anthracene	4078	90	3992	0	102	40-125	3568	13.3	30		
Fluoranthene	4006	90	3992	0	100	55-115	3638	9.62	30		
Fluorene	3732	90	3992	0	93.5	50-110	3469	7.29	30		
Indeno(1,2,3-cd)pyrene	4017	90	3992	0	101	40-120	3517	13.3	30		
Naphthalene	3242	90	3992	0	81.2	40-105	3095	4.62	30		
Pyrene	3958	90	3992	0	99.2	45-125	3576	10.1	30		
Surr: 2,4,6-Tribromophenol	4221	0	4990	0	84.6	34-140	4023	4.79	40		
Surr: 2-Fluorobiphenyl	3987	0	4990	0	79.9	12-100	3714	7.09	40		
Surr: 2-Fluorophenol	3934	0	4990	0	78.8	33-117	3829	2.7	40		
Surr: 4-Terphenyl-d14	5233	0	4990	0	105	25-137	4623	12.4	40		
Surr: Nitrobenzene-d5	4292	0	4990	0	86	37-107	4031	6.29	40		
Surr: Phenol-d6	3971	0	4990	0	79.6	40-106	3827	3.71	40		

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38805** Instrument ID **SVMS7** Method: **SW8270**

MSD				Sample ID: 1201493-06A MSD			Units: µg/Kg		Analysis Date: 1/24/2012 01:36 PM		
Client ID:			Run ID: SVMS7_120124A			SeqNo: 1882716		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	2090	57	2539	0	82.3	45-110	2074	0.767	30		
Anthracene	2240	57	2539	0	88.2	55-105	2329	3.88	30		
Benzo(a)anthracene	2113	57	2539	0	83.2	50-110	2201	4.1	30		
Benzo(a)pyrene	2307	57	2539	0	90.9	50-110	2386	3.35	30		
Benzo(b)fluoranthene	2237	57	2539	0	88.1	45-115	2285	2.12	30		
Benzo(g,h,i)perylene	2266	57	2539	0	89.3	40-125	2314	2.1	30		
Benzo(k)fluoranthene	2324	57	2539	0	91.5	45-115	2415	3.86	30		
Chrysene	2117	57	2539	0	83.4	55-110	2215	4.52	30		
Dibenzo(a,h)anthracene	2292	57	2539	0	90.3	40-125	2356	2.75	30		
Fluoranthene	2313	57	2539	0	91.1	55-115	2434	5.14	30		
Fluorene	2222	57	2539	0	87.5	50-110	2212	0.45	30		
Indeno(1,2,3-cd)pyrene	2258	57	2539	0	88.9	40-120	2338	3.47	30		
Naphthalene	2047	57	2539	0	80.6	40-105	2016	1.51	30		
Pyrene	2300	57	2539	0	90.6	45-125	2322	0.952	30		
Surr: 2,4,6-Tribromophenol	2446	0	3174	0	77.1	34-140	2569	4.92	40		
Surr: 2-Fluorobiphenyl	2446	0	3174	0	77.1	12-100	2461	0.624	40		
Surr: 2-Fluorophenol	2490	0	3174	0	78.5	33-117	2448	1.69	40		
Surr: 4-Terphenyl-d14	3037	0	3174	0	95.7	25-137	3066	0.959	40		
Surr: Nitrobenzene-d5	2681	0	3174	0	84.5	37-107	2668	0.479	40		
Surr: Phenol-d6	2510	0	3174	0	79.1	40-106	2459	2.04	40		

The following samples were analyzed in this batch: 1201494-04A 1201494-05A 1201494-06A

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **R100315A** Instrument ID **VMS7** Method: **SW8260**

MBLK		Sample ID: VBLKW1-120123-R100315A				Units: µg/L		Analysis Date: 1/23/2012 11:20 AM		
Client ID:		Run ID: VMS7_120123A				SeqNo: 1880288		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	101.4	0	100	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	101.1	0	100	0	101	75-120	0			
Surr: Dibromofluoromethane	101.2	0	100	0	101	85-115	0			
Surr: Toluene-d8	98.79	0	100	0	98.8	85-120	0			

LCS		Sample ID: VLCSW1-120123-R100315A				Units: µg/L		Analysis Date: 1/23/2012 10:02 AM		
Client ID:		Run ID: VMS7_120123A				SeqNo: 1880164		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.55	1.0	20	0	103	80-120	0			
Ethylbenzene	20.8	1.0	20	0	104	75-125	0			
m,p-Xylene	41.37	2.0	40	0	103	75-130	0			
o-Xylene	20.25	1.0	20	0	101	80-120	0			
Toluene	20.81	1.0	20	0	104	75-120	0			
Xylenes, Total	61.62	3.0	60	0	103	75-130	0			
Surr: 1,2-Dichloroethane-d4	99.84	0	100	0	99.8	70-120	0			
Surr: 4-Bromofluorobenzene	98.3	0	100	0	98.3	75-120	0			
Surr: Dibromofluoromethane	101.2	0	100	0	101	85-115	0			
Surr: Toluene-d8	99.63	0	100	0	99.6	85-120	0			

LCSD		Sample ID: VLCSDW1-120123-R100315A				Units: µg/L		Analysis Date: 1/23/2012 10:29 AM		
Client ID:		Run ID: VMS7_120123A				SeqNo: 1880207		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20	1.0	20	0	100	80-120	20.55	2.71	30	
Ethylbenzene	20.15	1.0	20	0	101	75-125	20.8	3.17	30	
m,p-Xylene	40.45	2.0	40	0	101	75-130	41.37	2.25	30	
o-Xylene	20.07	1.0	20	0	100	80-120	20.25	0.893	30	
Toluene	20.38	1.0	20	0	102	75-120	20.81	2.09	30	
Xylenes, Total	60.52	3.0	60	0	101	75-130	61.62	1.8	30	
Surr: 1,2-Dichloroethane-d4	98.85	0	100	0	98.8	70-120	99.84	0.997	30	
Surr: 4-Bromofluorobenzene	101.1	0	100	0	101	75-120	98.3	2.85	30	
Surr: Dibromofluoromethane	101.7	0	100	0	102	85-115	101.2	0.513	30	
Surr: Toluene-d8	98.73	0	100	0	98.7	85-120	99.63	0.907	30	

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

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **R100315A** Instrument ID **VMS7** Method: **SW8260**

The following samples were analyzed in this batch:

1201494-04A	1201494-05A	1201494-06A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **38841** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-38841-38841					Units: mg/Kg		Analysis Date: 1/24/2012 02:30 PM		
Client ID:	Run ID: WETCHEM_120124G				SeqNo: 1881487		Prep Date: 1/23/2012		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-38841-38841					Units: mg/Kg		Analysis Date: 1/24/2012 02:30 PM		
Client ID:	Run ID: WETCHEM_120124G				SeqNo: 1881485		Prep Date: 1/23/2012		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 0

LCSD	Sample ID: LCSD-38841-38841					Units: mg/Kg		Analysis Date: 1/24/2012 02:30 PM		
Client ID:	Run ID: WETCHEM_120124G				SeqNo: 1881486		Prep Date: 1/23/2012		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 99 75-110 1.876 5.39 20

MS	Sample ID: 1201494-04A MS					Units: mg/Kg		Analysis Date: 1/24/2012 02:30 PM		
Client ID: Confirmation Sample 1	Run ID: WETCHEM_120124G				SeqNo: 1881475		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.535 0.49 1.969 0.1385 71 60-130 0

MSD	Sample ID: 1201494-04A MSD					Units: mg/Kg		Analysis Date: 1/24/2012 02:30 PM		
Client ID: Confirmation Sample 1	Run ID: WETCHEM_120124G				SeqNo: 1881476		Prep Date: 1/23/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.724 0.49 1.946 0.1385 81.5 60-130 1.535 11.6 30

The following samples were analyzed in this batch:

1201494-04A	1201494-05A	1201494-06A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **R100326** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-R100326-R100326					Units: s.u.		Analysis Date: 1/23/2012 12:25 PM		
Client ID:			Run ID: WETCHEM_120123D			SeqNo: 1880297		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: 1201494-01A DUP				Units: s.u.			Analysis Date: 1/23/2012 12:25 PM			
Client ID: BKGD 1				Run ID: WETCHEM_120123D				SeqNo: 1880299			Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		8.46	0	0	0	0	0-0	8.46	0	20				

The following samples were analyzed in this batch:

1201494-01A	1201494-06A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1201494
Project: WPX Cottonwood Frac Pad 1/20/12

QC BATCH REPORT

Batch ID: **R100363** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R100363					Units: % of sample		Analysis Date: 1/23/2012 12:38 PM		
Client ID:	Run ID: MOIST_120123A				SeqNo: 1880948		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-R100363					Units: % of sample		Analysis Date: 1/23/2012 12:38 PM		
Client ID:	Run ID: MOIST_120123A				SeqNo: 1880947		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 99.98 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1201493-02ADUP					Units: % of sample		Analysis Date: 1/23/2012 12:38 PM		
Client ID:	Run ID: MOIST_120123A				SeqNo: 1880927		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 4.87 0.050 0 0 0 0-0 5.01 2.83 20

DUP	Sample ID: 1201495-01ADUP					Units: % of sample		Analysis Date: 1/23/2012 12:38 PM		
Client ID:	Run ID: MOIST_120123A				SeqNo: 1880941		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 9.72 0.050 0 0 0 0-0 10.02 3.04 20

The following samples were analyzed in this batch:

1201494-01A	1201494-02A	1201494-03A
1201494-04A	1201494-05A	1201494-06A

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



ALS Laboratory Group

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

Chain-of-Custody

WORKORDER #	1201494
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PROJECT NAME		Cottonwood Frac Pad WPX		SAMPLER		Reed Wold		DATE		1/20/2012		Form 202r8		PAGE		1 of 1	
PROJECT No.				SITE ID		Cottonwood Frac Pad		TURNAROUND		24 hr		DISPOSAL		By Lab or Return to Client			
COMPANY NAME		HRL Compliance		BILL TO COMPANY		WPX Energy		BTEX/GRO									
SEND REPORT TO		Mark Mumby		INVOICE ATTN TO		Karolina Blaney		DRO/PAH/Metals (table 910-1)									
ADDRESS		744 Horizon Ct Ste. 140		ADDRESS		1058 Co. Rd. 215		SAR/EC/pH									
CITY / STATE / ZIP		Grand Junction, CO 81506		CITY / STATE / ZIP		Parachute, CO 81635		Arsenic									
PHONE		970-243-3271		PHONE		970-683-2295											
FAX		970-243-3280		FAX													
E-MAIL		mmumby@hrlcomp.com		E-MAIL		Karolina.blaney@wpxenergy.com											
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC										
1	BKGD 1	SO	1/20/2012	12:55	2	8				X	X						
2	BKGD 2	SO	1/20/2012	1:00	1	8					X						
3	BKGD 3	SO	1/20/2012	1:05	1	8					X						
4	Conformation Sample 1	SO	1/20/2012	1:20	1	8		X	X								
5	Conformation Sample 2	SO	1/20/2012	1:30	1	8		X	X								
6	Conformation Sample 3	SO	1/20/2012	1:40	3	8		X	X	X							

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

For metals or anions, please detail analytes below.

Comments:	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: <i>Reed Wold</i>	RECEIVED BY: <i>Reed Wold</i>	1/20/12	5:00
RELINQUISHED BY: <i>Jessie Bacon</i>	RECEIVED BY: <i>S. Bacon</i>	1/20/12	1300
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: 23-Jan-12

COC ID: 3425

Due Da 24-Jan-12

Salesperson

Debbie Fazio

Customer Information		Project Information		Parameter/Method Request for Analysis													
Purchase Order	20-1201494	Project Name	1201494	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													
Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J				
1201494-01B	Soil	20/Jan/2012 12:55	(1) MISC	X													
1201494-06B	Soil	20/Jan/2012 13:40	(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

Relinquished by:

Date/Time

Received by:

Date/Time

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 21-Jan-12 13:00

Work Order: 1201494

Received by: JB

Checklist completed by Jessica Bacon
eSignature

21-Jan-12
Date

Reviewed by: Alex Csaszar
eSignature

23-Jan-12
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>4.4 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:

0088-0081000 • 0088-0081000
Qualify Environmental Containe

FedEx NEW Package
Express US Airbill

FedEx
Tracking
Number

8087 5910 788

1 From

Date 1/20/12

Sender's
Name

Rico W. D.

Phone

970 241 1171

Company

HLSI

Address

744 Holzer St Ste 140

City

Grand Junction

State

CO

ZIP

81506

2 Your Internal Billing Reference

3 To

Recipient's
Name

Sample Receiving

Phone

616 399 6070

Company

3352 128th Ave S

Address

ALS Group

Address

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

City

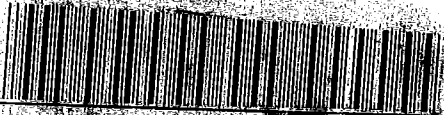
Holland

State

MI

ZIP

49424



0088-0081000 • 0088-0081000
Qualify Environmental Containe

OEC

EXPRESS DELIVERY SERVICE
NOTE: Saturday delivery is available only for FedEx Express Saver and FedEx 2Day. Please call 1-800-4FEDX for details.

Next Business Day

06

FedEx First Overnight
Earliest next business day 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
Signature at recipient's address may sign for delivery. Fee applies.

34

Indirect Signature
If you are not available at recipient's address, a signature is not required. Signature may be left for delivery for residential delivery only. Fee applies.

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

☒

No

04

Yes

or per attached
Shipper's Declaration.

☐

Yes

Shipper's Declaration
not required.

06

Dry Ice

Dry Ice, 5 UN 1845

kg

☐

Cargo Aircraft Only

7

Payment Bill to:

1

Sender
Acct. No. in Section
Two below.

2

Recipient

3

Third Party

4

Credit Card

5

Check/Check

Total Packages

Total Weight

Grand Total

612

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339



02-Feb-2012

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

Re: **WPX Cottonwood Frac Pad 1/27/12**

Work Order: **1201654**

Dear Mark,

ALS Environmental received 2 samples on 28-Jan-2012 11:00 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 29.

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

Sincerely,

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

Electronically approved by: Alex Cszasz

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 A small icon of the ALS Environmental logo, featuring a blue triangle with a yellow flame.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/27/12
Work Order: 1201654

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>
1201654-01	Cottonwood Frac Pad Confirmation Sample Pt4	Soil		1/27/2012 10:45	1/28/2012 11:00	<input type="checkbox"/>
1201654-02	Cottonwood Cuttings Sample	Soil		1/27/2012 12:30	1/28/2012 11:00	<input type="checkbox"/>

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/27/12
Work Order: 1201654

Case Narrative

Batch 38930, MS/MSD data for Metals is not related to this project's samples.

Batch 38928, Method SVO_8270_S, Sample SLCSDS1-38928: "R" flags due to lower recoveries compared to LCS; all recoveries are within control limits in LCSD.

Batch 38928, Method SVO_8270_S, Sample SLCSS1-38928: High recoveries due to displacement from sodium sulfate in final extract.

Batch 38928, Method BA_3541_S, Sample SLCSS1-38928: Sodium sulfate leaked into thimble on soxtec.

Batch 38983, MS/MSD data for CR6 is not related to this project's samples.

Client: HRL Compliance Solutions
Project: WPX Cottonwood Frac Pad 1/27/12
WorkOrder: 1201654

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: 02-Feb-12

Client: HRL Compliance Solutions

Project: WPX Cottonwood Frac Pad 1/27/12

Work Order: 1201654

Sample ID: Cottonwood Frac Pad Confirmation Sample Pt4

Lab ID: 1201654-01

Collection Date: 1/27/2012 10:45 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	13		SW8015M		Prep Date: 1/30/2012	Analyst: RM
			4.6	mg/Kg-dry	1	1/31/2012 01:24 PM
Surr: 4-Terphenyl-d14	88.4		39-115	%REC	1	1/31/2012 01:24 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015			Analyst: RM
			2.8	mg/Kg-dry	50	1/30/2012 07:19 PM
Surr: Toluene-d8	103		50-150	%REC	50	1/30/2012 07:19 PM
MERCURY BY CVAA						
Mercury	0.029		SW7471		Prep Date: 1/31/2012	Analyst: LR
			0.017	mg/Kg-dry	1	1/31/2012 12:04 PM
METALS BY ICP-MS						
Arsenic	9.4		SW6020A		Prep Date: 1/28/2012	Analyst: RH
			0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Barium	210		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Cadmium	0.81		0.32	mg/Kg-dry	2	1/30/2012 04:45 PM
Chromium	12		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Copper	14		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Lead	13		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Nickel	15		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Selenium	ND		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Silver	ND		0.79	mg/Kg-dry	2	1/30/2012 04:45 PM
Zinc	54		1.6	mg/Kg-dry	2	1/30/2012 04:45 PM
SUBCONTRACTED ANALYSES						
Subcontracted Analyses	See report		SUBCONTRACT			Analyst: A&LGL
			as noted		1	2/2/2012
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW8270		Prep Date: 1/30/2012	Analyst: CW
			33	µg/Kg-dry	1	1/31/2012 01:56 AM
Anthracene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Benzo(a)anthracene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Benzo(a)pyrene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Benzo(b)fluoranthene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Benzo(g,h,i)perylene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Benzo(k)fluoranthene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Chrysene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Dibenzo(a,h)anthracene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Fluoranthene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Fluorene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Indeno(1,2,3-cd)pyrene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Naphthalene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Pyrene	ND		33	µg/Kg-dry	1	1/31/2012 01:56 AM
Surr: 2,4,6-Tribromophenol	93.7		34-140	%REC	1	1/31/2012 01:56 AM

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

ALS Group USA, Corp

Date: 02-Feb-12

Client: HRL Compliance Solutions

Project: WPX Cottonwood Frac Pad 1/27/12

Work Order: 1201654

Sample ID: Cottonwood Frac Pad Confirmation Sample Pt4

Lab ID: 1201654-01

Collection Date: 1/27/2012 10:45 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: 2-Fluorobiphenyl</i>	83.1		12-100	%REC	1	1/31/2012 01:56 AM
<i>Surr: 2-Fluorophenol</i>	75.6		33-117	%REC	1	1/31/2012 01:56 AM
<i>Surr: 4-Terphenyl-d14</i>	98.7		25-137	%REC	1	1/31/2012 01:56 AM
<i>Surr: Nitrobenzene-d5</i>	85.2		37-107	%REC	1	1/31/2012 01:56 AM
<i>Surr: Phenol-d6</i>	88.4		40-106	%REC	1	1/31/2012 01:56 AM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: AK
Benzene	ND		56	µg/Kg-dry	50	1/30/2012 01:37 PM
Ethylbenzene	ND		110	µg/Kg-dry	50	1/30/2012 01:37 PM
m,p-Xylene	ND		110	µg/Kg-dry	50	1/30/2012 01:37 PM
o-Xylene	ND		56	µg/Kg-dry	50	1/30/2012 01:37 PM
Toluene	ND		84	µg/Kg-dry	50	1/30/2012 01:37 PM
Xylenes, Total	ND		170	µg/Kg-dry	50	1/30/2012 01:37 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	95.8		70-120	%REC	50	1/30/2012 01:37 PM
<i>Surr: 4-Bromofluorobenzene</i>	93.0		75-120	%REC	50	1/30/2012 01:37 PM
<i>Surr: Dibromofluoromethane</i>	97.9		85-115	%REC	50	1/30/2012 01:37 PM
<i>Surr: Toluene-d8</i>	102		85-115	%REC	50	1/30/2012 01:37 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	12		0.56	mg/Kg-dry	1	1/31/2012 04:14 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 1/31/2012	Analyst: EE
Chromium, Hexavalent	ND		0.54	mg/Kg-dry	1	1/31/2012 01:00 PM
MOISTURE			A2540 G			Analyst: CG
Moisture	10		0.050	% of sample	1	1/30/2012 02:19 PM
PH			SW9045D			Analyst: KV
pH	8.71			s.u.	1	1/30/2012 12:00 PM

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

Report Number: F12031-0055

Account Number: 91000

A & L GREAT LAKES LABORATORIES, INC.

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QUALITY ANALYSES FOR INFORMED DECISIONS

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

RE: 1201654

DATE RECEIVED: 01/31/2012

DATE REPORTED: 02/02/2012

PAGE: 1

P.O. NUMBER: 20-1201654

ATTN: ANN PRESTON

REPORT OF ANALYSIS

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
22976	01C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	6.68	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	128	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	28	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	6642	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	138.2	-	USDA Handbook 60
22977	02C	Sat'd Paste Extraction with DIW	1		USDA Handbook 60
		Conductivity (ECe)	4.57	mmho/cm	USDA Handbook 60
		Calcium (Sat'd Paste)	80	ppm	USDA Handbook 60
		Magnesium (Sat'd Paste)	59	ppm	USDA Handbook 60
		Sodium (Sat'd Paste)	3690	ppm	USDA Handbook 60
		Sodium Adsorption Ratio (SAR)	76.0	-	USDA Handbook 60

Client: HRL Compliance Solutions

Work Order: 1201654

Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: 38929

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-38929-38929				Units: mg/Kg		Analysis Date: 1/31/2012 01:24 PM		
Client ID:		Run ID: GC8_120131A				SeqNo: 1887273		Prep Date: 1/30/2012		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	1.499	0	1.667	0	90	39-115	0			

LCS		Sample ID: DLCSS1-38929-38929				Units: mg/Kg		Analysis Date: 1/31/2012 12:17 PM		
Client ID:		Run ID: GC8_120131A				SeqNo: 1887271		Prep Date: 1/30/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	157.3	4.2	166.7	0	94.4	60-130	0			
Surr: 4-Terphenyl-d14	1.303	0	1.667	0	78.2	39-115	0			

LCSD		Sample ID: DLCSDS1-38929-38929				Units: mg/Kg		Analysis Date: 1/31/2012 12:17 PM		
Client ID:		Run ID: GC8_120131A				SeqNo: 1887281		Prep Date: 1/30/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	149.3	4.2	166.7	0	89.6	60-130	157.3	5.21	30	
Surr: 4-Terphenyl-d14	1.34	0	1.667	0	80.4	39-115	1.303	2.8	30	

MS		Sample ID: 1201591-11A MS				Units: mg/Kg		Analysis Date: 1/31/2012 12:39 PM		
Client ID:		Run ID: GC8_120131A				SeqNo: 1887272		Prep Date: 1/30/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	206.1	8.1	323.5	0	63.7	60-130	0			
Surr: 4-Terphenyl-d14	1.77	0	3.235	0	54.7	39-115	0			

MSD		Sample ID: 1201591-11A MSD				Units: mg/Kg		Analysis Date: 1/31/2012 12:39 PM		
Client ID:		Run ID: GC8_120131A				SeqNo: 1887282		Prep Date: 1/30/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	213.9	7.9	317.4	0	67.4	60-130	206.1	3.68	30	
Surr: 4-Terphenyl-d14	1.89	0	3.174	0	59.6	39-115	1.77	6.58	30	

The following samples were analyzed in this batch:

1201654-01B 1201654-02B

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **R100622** Instrument ID: **GC9** Method: **SW8015**

MBLK	Sample ID: MBLK-R100622-R100622					Units: µg/L		Analysis Date: 1/30/2012 11:24 AM		
Client ID:	Run ID: GC9_120130A				SeqNo: 1885804		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>	112.7	0	100	0	113	70-130	0			

LCS	Sample ID: LCS-R100622-R100622					Units: µg/L		Analysis Date: 1/30/2012 10:09 AM		
Client ID:	Run ID: GC9_120130A				SeqNo: 1885801		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)	27070	200	25000	0	108	70-130	0			
<i>Surr: Toluene-d8</i>	110.2	0	100	0	110	70-130	0			

LCSD	Sample ID: LCSD-R100622-R100622					Units: µg/L		Analysis Date: 1/30/2012 10:34 AM		
Client ID:	Run ID: GC9_120130A				SeqNo: 1885803		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)	26930	200	25000	0	108	70-130	27070	0.53	30	
<i>Surr: Toluene-d8</i>	109	0	100	0	109	70-130	110.2	1.15	30	

MS	Sample ID: 1201493-06A MS					Units: µg/Kg		Analysis Date: 1/30/2012 08:09 PM		
Client ID:	Run ID: GC9_120130A				SeqNo: 1885827		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	1382000	2,500	1250000	0	111	70-130	0			
<i>Surr: Toluene-d8</i>	5205	0	5000	0	104	50-150	0			

MSD	Sample ID: 1201493-06A MSD					Units: µg/Kg		Analysis Date: 1/30/2012 08:35 PM		
Client ID:	Run ID: GC9_120130A				SeqNo: 1885829		Prep Date:		DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	1327000	2,500	1250000	0	106	70-130	1382000	4.09	30	
<i>Surr: Toluene-d8</i>	5028	0	5000	0	101	50-150	5205	3.45	30	

The following samples were analyzed in this batch: 1201654-01A 1201654-02A

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38959** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-38959-38959					Units: mg/Kg		Analysis Date: 1/31/2012 11:57 AM		
Client ID:	Run ID: HG1_120131A				SeqNo: 1885837		Prep Date: 1/31/2012		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-38959-38959					Units: mg/Kg		Analysis Date: 1/31/2012 11:59 AM		
Client ID:	Run ID: HG1_120131A				SeqNo: 1885838		Prep Date: 1/31/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1678 0.020 0.1665 0 101 80-120 0

LCSD	Sample ID: LCSD-38959-38959					Units: mg/Kg		Analysis Date: 1/31/2012 12:02 PM		
Client ID:	Run ID: HG1_120131A				SeqNo: 1885839		Prep Date: 1/31/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1664 0.020 0.1665 0 99.9 80-120 0.1678 0.848 20

MS	Sample ID: 1201629-05AMS					Units: mg/Kg		Analysis Date: 1/31/2012 12:15 PM		
Client ID:	Run ID: HG1_120131A				SeqNo: 1885845		Prep Date: 1/31/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1674 0.018 0.15 0.0009893 111 75-125 0

MSD	Sample ID: 1201629-05AMSD					Units: mg/Kg		Analysis Date: 1/31/2012 12:18 PM		
Client ID:	Run ID: HG1_120131A				SeqNo: 1885846		Prep Date: 1/31/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1739 0.019 0.1542 0.0009893 112 75-125 0.1674 3.81 35

The following samples were analyzed in this batch:

1201654-01B 1201654-02B

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38930** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK		Sample ID: MBLK-38930-38930				Units: mg/Kg		Analysis Date: 1/30/2012 04:16 PM		
Client ID:		Run ID: ICPMS2_120130A				SeqNo: 1885390		Prep Date: 1/28/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	0.008505	0.25								J
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	0.01322	0.25								J
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-38930-38930				Units: mg/Kg		Analysis Date: 1/30/2012 04:20 PM		
Client ID:		Run ID: ICPMS2_120130A				SeqNo: 1885391		Prep Date: 1/28/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.498	0.50	5	0	90	80-120	0			
Barium	4.557	0.50	5	0	91.1	80-120	0			
Cadmium	4.653	0.20	5	0	93.1	80-120	0			
Chromium	4.387	0.50	5	0	87.7	80-120	0			
Copper	4.66	0.50	5	0	93.2	80-120	0			
Lead	4.442	0.50	5	0	88.8	80-120	0			
Nickel	4.488	0.50	5	0	89.8	80-120	0			
Selenium	4.574	0.50	5	0	91.5	80-120	0			
Silver	4.451	0.50	5	0	89	80-120	0			
Zinc	4.67	1.0	5	0	93.4	80-120	0			

LCSD		Sample ID: LCSD-38930-38930				Units: mg/Kg		Analysis Date: 1/30/2012 04:40 PM		
Client ID:		Run ID: ICPMS2_120130A				SeqNo: 1885394		Prep Date: 1/28/2012		DF: 2
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.546	0.50	5	0	90.9	80-120	4.498	1.06	20	
Barium	4.556	0.50	5	0	91.1	80-120	4.557	0.0219	20	
Cadmium	4.725	0.20	5	0	94.5	80-120	4.653	1.54	20	
Chromium	4.468	0.50	5	0	89.4	80-120	4.387	1.83	20	
Copper	4.702	0.50	5	0	94	80-120	4.66	0.897	20	
Lead	4.529	0.50	5	0	90.6	80-120	4.442	1.94	20	
Nickel	4.499	0.50	5	0	90	80-120	4.488	0.245	20	
Selenium	4.484	0.50	5	0	89.7	80-120	4.574	1.99	20	
Silver	4.52	0.50	5	0	90.4	80-120	4.451	1.54	20	
Zinc	4.363	1.0	5	0	87.3	80-120	4.67	6.8	20	

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38930** Instrument ID **ICPMS2** Method: **SW6020A**

MS				Sample ID: 1201595-04AMS			Units:mg/Kg		Analysis Date: 1/30/2012 05:05 PM		
Client ID:			Run ID: ICPMS2_120130A			SeqNo:1885399		Prep Date: 1/28/2012		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	14.14	1.3	6.684	7.887	93.6	80-120	0				
Barium	102.4	1.3	6.684	96.65	86.1	80-120	0			O	
Cadmium	7.861	0.53	6.684	1.334	97.6	80-120	0				
Chromium	14.9	1.3	6.684	7.97	104	80-120	0				
Copper	16.23	1.3	6.684	8.888	110	80-120	0				
Lead	36.63	1.3	6.684	26.34	154	80-120	0			S	
Nickel	15.83	1.3	6.684	9.579	93.5	80-120	0				
Selenium	6.783	1.3	6.684	0.726	90.6	80-120	0				
Silver	5.864	1.3	6.684	0.1029	86.2	80-120	0				
Zinc	82.51	2.7	6.684	67.1	231	80-120	0			SO	

MSD				Sample ID: 1201595-04AMSD			Units:mg/Kg		Analysis Date: 1/30/2012 05:09 PM		
Client ID:			Run ID: ICPMS2_120130A			SeqNo:1885400		Prep Date: 1/28/2012		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	19.24	1.3	6.64	7.887	171	80-120	14.14	30.5	25	SR	
Barium	112.7	1.3	6.64	96.65	242	80-120	102.4	9.59	25	SO	
Cadmium	7.846	0.53	6.64	1.334	98.1	80-120	7.861	0.191	25		
Chromium	14.53	1.3	6.64	7.97	98.8	80-120	14.9	2.5	25		
Copper	14.54	1.3	6.64	8.888	85.1	80-120	16.23	11	25		
Lead	32.46	1.3	6.64	26.34	92.1	80-120	36.63	12.1	25		
Nickel	16.75	1.3	6.64	9.579	108	80-120	15.83	5.62	25		
Selenium	6.807	1.3	6.64	0.726	91.6	80-120	6.783	0.353	25		
Silver	5.756	1.3	6.64	0.1029	85.1	80-120	5.864	1.86	25		
Zinc	73.01	2.7	6.64	67.1	89.1	80-120	82.51	12.2	25	O	

The following samples were analyzed in this batch:

1201654-01B 1201654-02B

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38928** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKS1-38928-38928				Units: µg/Kg		Analysis Date: 1/30/2012 05:13 PM		
Client ID:		Run ID: SVMS7_120130A				SeqNo: 1885597		Prep Date: 1/30/2012		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>	1119	0	1667	0	67.2	34-140	0			
<i>Surr: 2-Fluorobiphenyl</i>	1160	0	1667	0	69.6	12-100	0			
<i>Surr: 2-Fluorophenol</i>	1326	0	1667	0	79.5	33-117	0			
<i>Surr: 4-Terphenyl-d14</i>	1605	0	1667	0	96.3	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1300	0	1667	0	78	37-107	0			
<i>Surr: Phenol-d6</i>	1373	0	1667	0	82.4	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38928** Instrument ID **SVMS7** Method: **SW8270**

LCS Sample ID: SLCSS1-38928-38928				Units: µg/Kg			Analysis Date: 1/30/2012 05:42 PM			
Client ID:		Run ID: SVMS7_120130A		SeqNo: 1885599		Prep Date: 1/30/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1459	30	1333	0	109	45-110	0			
Anthracene	1365	30	1333	0	102	55-105	0			
Benzo(a)anthracene	1182	30	1333	0	88.7	50-110	0			
Benzo(a)pyrene	1288	30	1333	0	96.6	50-110	0			
Benzo(b)fluoranthene	1257	30	1333	0	94.3	45-115	0			
Benzo(g,h,i)perylene	1348	30	1333	0	101	40-125	0			
Benzo(k)fluoranthene	1201	30	1333	0	90.1	45-115	0			
Chrysene	1192	30	1333	0	89.4	55-110	0			
Dibenzo(a,h)anthracene	1316	30	1333	0	98.7	40-125	0			
Fluoranthene	1347	30	1333	0	101	55-115	0			
Fluorene	1530	30	1333	0	115	50-110	0			S
Indeno(1,2,3-cd)pyrene	1308	30	1333	0	98.1	40-120	0			
Naphthalene	1539	30	1333	0	115	40-105	0			S
Pyrene	1272	30	1333	0	95.4	45-125	0			
<i>Surr: 2,4,6-Tribromophenol</i>	1593	0	1667	0	95.6	34-140	0			
<i>Surr: 2-Fluorobiphenyl</i>	1681	0	1667	0	101	12-100	0			S
<i>Surr: 2-Fluorophenol</i>	1723	0	1667	0	103	33-117	0			
<i>Surr: 4-Terphenyl-d14</i>	1672	0	1667	0	100	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1995	0	1667	0	120	37-107	0			S
<i>Surr: Phenol-d6</i>	1912	0	1667	0	115	40-106	0			S

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38928** Instrument ID **SVMS7** Method: **SW8270**

LCSD		Sample ID: SLCSDS1-38928-38928				Units: µg/Kg		Analysis Date: 1/30/2012 06:11 PM		
Client ID:		Run ID: SVMS7_120130A				SeqNo: 1885600		Prep Date: 1/30/2012		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	1459	23.1	25	
Anthracene	1272	30	1333	0	95.4	55-105	1365	7.1	25	
Benzo(a)anthracene	1209	30	1333	0	90.7	50-110	1182	2.26	25	
Benzo(a)pyrene	1338	30	1333	0	100	50-110	1288	3.81	25	
Benzo(b)fluoranthene	1272	30	1333	0	95.4	45-115	1257	1.13	25	
Benzo(g,h,i)perylene	1410	30	1333	0	106	40-125	1348	4.52	25	
Benzo(k)fluoranthene	1270	30	1333	0	95.3	45-115	1201	5.61	25	
Chrysene	1208	30	1333	0	90.6	55-110	1192	1.33	25	
Dibenzo(a,h)anthracene	1373	30	1333	0	103	40-125	1316	4.24	25	
Fluoranthene	1338	30	1333	0	100	55-115	1347	0.671	25	
Fluorene	1274	30	1333	0	95.6	50-110	1530	18.3	25	
Indeno(1,2,3-cd)pyrene	1360	30	1333	0	102	40-120	1308	3.92	25	
Naphthalene	1101	30	1333	0	82.6	40-105	1539	33.2	25	R
Pyrene	1288	30	1333	0	96.6	45-125	1272	1.28	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>1412</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>84.7</i>	<i>34-140</i>	<i>1593</i>	<i>12</i>	<i>40</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>1277</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>76.6</i>	<i>12-100</i>	<i>1681</i>	<i>27.4</i>	<i>40</i>	
<i>Surr: 2-Fluorophenol</i>	<i>1293</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>77.6</i>	<i>33-117</i>	<i>1723</i>	<i>28.5</i>	<i>40</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1708</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>102</i>	<i>25-137</i>	<i>1672</i>	<i>2.15</i>	<i>40</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>1414</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>84.8</i>	<i>37-107</i>	<i>1995</i>	<i>34.1</i>	<i>40</i>	
<i>Surr: Phenol-d6</i>	<i>1350</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>81</i>	<i>40-106</i>	<i>1912</i>	<i>34.5</i>	<i>40</i>	

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38928** Instrument ID **SVMS7** Method: **SW8270**

MS				Sample ID: 1201591-11A MS			Units: µg/Kg		Analysis Date: 1/30/2012 06:40 PM	
Client ID:				Run ID: SVMS7_120130A			SeqNo: 1885602		Prep Date: 1/30/2012	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	2195	59	2624	0	83.7	45-110	0			
Anthracene	2445	59	2624	0	93.2	55-105	0			
Benzo(a)anthracene	2298	59	2624	0	87.6	50-110	0			
Benzo(a)pyrene	2482	59	2624	0	94.6	50-110	0			
Benzo(b)fluoranthene	2437	59	2624	0	92.9	45-115	0			
Benzo(g,h,i)perylene	2605	59	2624	0	99.3	40-125	0			
Benzo(k)fluoranthene	2292	59	2624	0	87.4	45-115	0			
Chrysene	2263	59	2624	0	86.3	55-110	0			
Dibenzo(a,h)anthracene	2533	59	2624	0	96.6	40-125	0			
Fluoranthene	2506	59	2624	0	95.5	55-115	0			
Fluorene	2418	59	2624	0	92.2	50-110	0			
Indeno(1,2,3-cd)pyrene	2529	59	2624	0	96.4	40-120	0			
Naphthalene	1988	59	2624	24.43	74.8	40-105	0			
Pyrene	2389	59	2624	0	91.1	45-125	0			
Surr: 2,4,6-Tribromophenol	2738	0	3280	0	83.5	34-140	0			
Surr: 2-Fluorobiphenyl	2405	0	3280	0	73.3	12-100	0			
Surr: 2-Fluorophenol	2418	0	3280	0	73.7	33-117	0			
Surr: 4-Terphenyl-d14	3075	0	3280	0	93.8	25-137	0			
Surr: Nitrobenzene-d5	2534	0	3280	0	77.3	37-107	0			
Surr: Phenol-d6	2519	0	3280	0	76.8	40-106	0			

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38928** Instrument ID **SVMS7** Method: **SW8270**

MSD				Sample ID: 1201591-11A MSD			Units: µg/Kg		Analysis Date: 1/30/2012 07:10 PM		
Client ID:			Run ID: SVMS7_120130A			SeqNo: 1885603		Prep Date: 1/30/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	2138	58	2557	0	83.6	45-110	2195	2.62	30		
Anthracene	2396	58	2557	0	93.7	55-105	2445	2.03	30		
Benzo(a)anthracene	2287	58	2557	0	89.4	50-110	2298	0.502	30		
Benzo(a)pyrene	2481	58	2557	0	97	50-110	2482	0.0331	30		
Benzo(b)fluoranthene	2424	58	2557	0	94.8	45-115	2437	0.513	30		
Benzo(g,h,i)perylene	2653	58	2557	0	104	40-125	2605	1.82	30		
Benzo(k)fluoranthene	2360	58	2557	0	92.3	45-115	2292	2.95	30		
Chrysene	2284	58	2557	0	89.3	55-110	2263	0.939	30		
Dibenzo(a,h)anthracene	2551	58	2557	0	99.8	40-125	2533	0.721	30		
Fluoranthene	2563	58	2557	0	100	55-115	2506	2.26	30		
Fluorene	2415	58	2557	0	94.4	50-110	2418	0.153	30		
Indeno(1,2,3-cd)pyrene	2553	58	2557	0	99.9	40-120	2529	0.952	30		
Naphthalene	1980	58	2557	24.43	76.5	40-105	1988	0.41	30		
Pyrene	2404	58	2557	0	94	45-125	2389	0.597	30		
Surr: 2,4,6-Tribromophenol	2792	0	3197	0	87.4	34-140	2738	1.98	40		
Surr: 2-Fluorobiphenyl	2330	0	3197	0	72.9	12-100	2405	3.17	40		
Surr: 2-Fluorophenol	2416	0	3197	0	75.6	33-117	2418	0.0996	40		
Surr: 4-Terphenyl-d14	3193	0	3197	0	99.9	25-137	3075	3.78	40		
Surr: Nitrobenzene-d5	2541	0	3197	0	79.5	37-107	2534	0.269	40		
Surr: Phenol-d6	2480	0	3197	0	77.6	40-106	2519	1.55	40		

The following samples were analyzed in this batch: 1201654-01B 1201654-02B

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **R100567** Instrument ID **VMS9** Method: **SW8260**

MBLK Sample ID: VBLKW1-120130-R100567				Units: µg/L		Analysis Date: 1/30/2012 12:25 PM				
Client ID:		Run ID: VMS9_120130A		SeqNo: 1885448		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	97.23	0	100	0	97.2	70-120	0			
Surr: 4-Bromofluorobenzene	97.46	0	100	0	97.5	75-120	0			
Surr: Dibromofluoromethane	101.4	0	100	0	101	85-115	0			
Surr: Toluene-d8	97.35	0	100	0	97.4	85-120	0			

LCS Sample ID: VLCSW1-120130-R100567				Units: µg/L		Analysis Date: 1/30/2012 11:14 AM				
Client ID:		Run ID: VMS9_120130A		SeqNo: 1884797		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.88	1.0	20	0	94.4	80-120	0			
Ethylbenzene	18.22	1.0	20	0	91.1	75-125	0			
m,p-Xylene	38.05	2.0	40	0	95.1	75-130	0			
o-Xylene	19.69	1.0	20	0	98.4	80-120	0			
Toluene	18.78	1.0	20	0	93.9	75-120	0			
Xylenes, Total	57.74	3.0	60	0	96.2	75-130	0			
Surr: 1,2-Dichloroethane-d4	97.14	0	100	0	97.1	70-120	0			
Surr: 4-Bromofluorobenzene	102.2	0	100	0	102	75-120	0			
Surr: Dibromofluoromethane	100.7	0	100	0	101	85-115	0			
Surr: Toluene-d8	99.2	0	100	0	99.2	85-120	0			

LCSD Sample ID: VLCSDW1-120130-R100567				Units: µg/L		Analysis Date: 1/30/2012 11:38 AM				
Client ID:		Run ID: VMS9_120130A		SeqNo: 1884855		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.03	1.0	20	0	105	80-120	18.88	10.8	30	
Ethylbenzene	20.09	1.0	20	0	100	75-125	18.22	9.76	30	
m,p-Xylene	41.88	2.0	40	0	105	75-130	38.05	9.58	30	
o-Xylene	21.65	1.0	20	0	108	80-120	19.69	9.48	30	
Toluene	20.6	1.0	20	0	103	75-120	18.78	9.24	30	
Xylenes, Total	63.53	3.0	60	0	106	75-130	57.74	9.55	30	
Surr: 1,2-Dichloroethane-d4	95.85	0	100	0	95.8	70-120	97.14	1.34	30	
Surr: 4-Bromofluorobenzene	100.5	0	100	0	100	75-120	102.2	1.72	30	
Surr: Dibromofluoromethane	99.28	0	100	0	99.3	85-115	100.7	1.44	30	
Surr: Toluene-d8	97.36	0	100	0	97.4	85-120	99.2	1.87	30	

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **R100567** Instrument ID **VMS9** Method: **SW8260**

The following samples were analyzed in this batch:

1201654-01A	1201654-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **38983** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-38983-38983				Units: mg/Kg		Analysis Date: 1/31/2012 01:00 PM		
Client ID:		Run ID: WETCHEM_120131E				SeqNo: 1885938		Prep Date: 1/31/2012		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-38983-38983				Units: mg/Kg		Analysis Date: 1/31/2012 01:00 PM		
Client ID:		Run ID: WETCHEM_120131E				SeqNo: 1885939		Prep Date: 1/31/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.984 0.50 2 0 99.2 75-110 0

LCSD		Sample ID: LCSD-38983-38983				Units: mg/Kg		Analysis Date: 1/31/2012 01:00 PM		
Client ID:		Run ID: WETCHEM_120131E				SeqNo: 1885948		Prep Date: 1/31/2012		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 1.984 8.4 20

MS		Sample ID: 1201615-02B MS				Units: mg/Kg		Analysis Date: 1/31/2012 01:00 PM		
Client ID:		Run ID: WETCHEM_120131E				SeqNo: 1885943		Prep Date: 1/31/2012		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 2 0 0 60-130 0 S

MSD		Sample ID: 1201615-02B MSD				Units: mg/Kg		Analysis Date: 1/31/2012 01:00 PM		
Client ID:		Run ID: WETCHEM_120131E				SeqNo: 1885944		Prep Date: 1/31/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.3004 0.49 1.976 0 15.2 60-130 0.252 0 30 JS

The following samples were analyzed in this batch:

1201654-01B 1201654-02B

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **R100601** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-R100601-R100601				Units: s.u.		Analysis Date: 1/30/2012 12:00 PM		
Client ID:		Run ID: WETCHEM_120130I		SeqNo: 1885316		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.37	0	4.4	0	99.3	90-110	0			

DUP		Sample ID: 1201654-01B DUP				Units: s.u.		Analysis Date: 1/30/2012 12:00 PM		
Client ID: Cottonwood Frac Pad Confirmation Sample Pt4		Run ID: WETCHEM_120130I		SeqNo: 1885319		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.71	0	0	0	0	0-0	8.71	0	20	

The following samples were analyzed in this batch:

1201654-01B 1201654-02B

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

Client: HRL Compliance Solutions
Work Order: 1201654
Project: WPX Cottonwood Frac Pad 1/27/12

QC BATCH REPORT

Batch ID: **R100618** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R100618					Units: % of sample		Analysis Date: 1/30/2012 02:19 PM		
Client ID:	Run ID: MOIST_120130B				SeqNo: 1885685		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-R100618					Units: % of sample		Analysis Date: 1/30/2012 02:19 PM		
Client ID:	Run ID: MOIST_120130B				SeqNo: 1885684		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: 1201644-02ADUP					Units: % of sample		Analysis Date: 1/30/2012 02:19 PM		
Client ID:	Run ID: MOIST_120130B				SeqNo: 1885669		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 77.83 0.050 0 0 0 0-0 78.92 1.39 20

DUP	Sample ID: 1201644-05ADUP					Units: % of sample		Analysis Date: 1/30/2012 02:19 PM		
Client ID:	Run ID: MOIST_120130B				SeqNo: 1885673		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 76.77 0.050 0 0 0 0-0 75.96 1.06 20

The following samples were analyzed in this batch:

1201654-01B 1201654-02B

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
#

1201654

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

Cottonwood Frac Pad WPX

SITE ID

Cottonwood Frac Pad

TURNAROUND

24 Hr

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME

HRL Compliance

BILL TO COMPANY

WPX

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

Parachure CO 81635

PHONE

970-243-3271

PHONE

970-683-2295

FAX

970-243-3280

FAX

E-MAIL

mmumby@hrlcomp.com

E-MAIL

Karolina.blaney@wpenergy.com

Lab ID

Field ID

Matrix

Sample
Date

Sample
Time

Bottles

Pres.

QC

1

Cottonwood Frac Pad Conformation
sample Pt 4

SO

1/27/2012

10:45

3

8

2

Cottonwood cuttings sample

SO

1/27/2012

12:30

3

8

BTEX/ GRO
DRO/ PAH/ Metals (table 910-1)
SAR/ EC /pH

*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	<i>[Signature]</i>	Reed Wold	1/27/12	16:00
RECEIVED BY	<i>[Signature]</i>	Keith Wierencia	1/28/12	1100
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



Environmental

Subcontractor:

A & L Great Lakes Agricultural Lab
3505 Conestoga Dr

Ft. Wayne, IN 46808

TEL: (260) 483-4759

FAX: (260) 483-5274

Acct #: 91000

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: 30-Jan-12

COC ID: 3440

Due D 31-Jan-12

Salesperson **Debbie Fazio**

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	<u>20-1201654</u>	Project Name	1201654	A	Subcontracted Analyses (SUBCONTRACT) <u>SAR-EC</u>											
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	<i>Please Rush</i>											
				F												
				G												
City/State/Zip	Holland, Michigan 49424-9263	City/State/Zip	Holland, Michigan 49424-9263	H												
Phone	(616) 399-6070	Phone	(616) 399-6070	I												
Fax	(616) 399-6185	Fax	(616) 399-6185	J												
eMail Address	ann.preston@alsglobal.com	eMail CC														
Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J			
1201654-01C	Soil	27/Jan/2012 10:45	(1) MISC	X												
1201654-02C	Soil	27/Jan/2012 12:30	(1) MISC	X												

Comments:

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

Relinquished by:

[Signature]

Date/Time

1/30/12

Received by:

[Signature]

Date/Time

Cooler IDs

Report/QC Level

Std 100-1000

Relinquished by:

Date/Time

Received by:

Date/Time

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **28-Jan-12 11:00**

Work Order: **1201654**

Received by: **KRW**

Checklist completed by Keith Wurenga 28-Jan-12
eSignature Date

Reviewed by: Ann Preston 30-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>1.8 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:

FedEx **NEW Package**
Express **US Airbill**
FedEx
Tracking
Number

8987 5943 7103

0200 Form
ID No.

FedEx Retrieval Copy

1 From

Date 1-77-12

Sender's Name RLED HOLD

Phone 770 222-2271

Company HCSZ

Address 744 HORIZON ST STE 140

Dept./Floor/Suite/Room

City GRAND JUNCTION

State CO

ZIP 80506

2 Your Internal Billing Reference

3 To

Recipient's
Name RECEIVING

Phone 314 551-6270

Company ACO GROUP LAB

Address 3250 12TH 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 48124



8987 5943 7103

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.

2 or 3 Business Days

49 ☐ NEW FedEx 2Day A.M.
Second business morning. Saturday Delivery NOT available.03 ☐ FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.20 ☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging

*Declared value limit \$500.

06 ☐ FedEx Envelope*02 ☐ FedEx Pak*03 ☐ FedEx Box04 ☐ FedEx Tube01 ☒ 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, 3, UN 1845 x kg☐ 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 ☒ Recipient3 ☐ Third Party4 ☐ Credit Card5 ☐ Cash/Check

Total Packages 1

Total Weight 30

lbs.

Credit Card Auth.

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

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Terms And Conditions Summary

For the current FedEx Service Guide, which contains the complete Terms and Conditions, go to fedex.com.

Definitions On this Airbill, "we," "our," "us," and "FedEx" refer to Federal Express Corporation, its employees, and agents. "You" and "your" refer to the sender, its employees, and agents.

Agreement To Terms By giving us your package to deliver, you agree to all the terms on this Airbill and in the current FedEx Service Guide, which is available at fedex.com or at a FedEx location. You also agree to those terms on behalf of any third party with an interest in the package. If there is a conflict between the current FedEx Service Guide and this Airbill, the current FedEx Service Guide will control. No one is authorized to change the terms of our Agreement.

Responsibility For Filling Out This Airbill

You are responsible for a properly filling out this Airbill, including the number of packages and/or weight on our best estimate and/or an estimate determined by us.

Responsibility payment instruct all delivery costs your package to

Limitations Not Assumed

- Unless a higher value is declared for each package is limited to the declared value. The declared value does not include liability insurance.
- In any event, we will not be liable for any damage, whether direct, incidental, special, or consequential, in excess of the declared value of a shipment, whether or not FedEx had knowledge that such damages might be incurred, including but not limited to loss of income or profits.

We won't be liable:

- for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking, or addressing, or those of the recipient or anyone else with an interest in the package.
- if you or the recipient violates any of the terms of our Agreement.
- for loss of or damage to shipments of prohibited items.
- for loss, damage, or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, war, strikes, civil commotions, or acts of public authorities with actual or apparent authority.

Completing Airbill

ing your goods and the number of

SEAL

QEC

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

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such items as artwork, jewelry, furs, precious metals, negotiable instruments, and other items listed in the current FedEx Service Guide.

- You may send more than one package on this Airbill and fill in the total declared value for all packages, not to exceed the US\$500, US\$1,000, or US\$50,000 per package limit described above. (Example: 5 packages can have a total declared value of up to US\$250,000.) In that case, our liability is limited to the actual value of the package(s) lost or damaged, but may not exceed the maximum allowable declared value(s) or the total declared value, whichever is less. You are responsible for proving the actual loss or damage.

Filing A Claim YOU MUST MAKE ALL CLAIMS IN WRITING or online at fedex.com and notify us of your claim within strict time limits set out in the current FedEx Service Guide.

You may call our Customer Service department at 1.800.GoFedEx 1.800.463.3339 to report a claim; however, you must still file a timely written claim. We aren't obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume the package was delivered in good condition. For us to process your claim, you must make the original shipping cartons and packing

FedEx Service Guide.

C.O.D. Services C.O.D. SERVICE IS NOT AVAILABLE WITH THIS AIRBILL. If C.O.D. Service is required, please use a FedEx C.O.D. Airbill.

Air Transportation Tax Included A federal excise tax when required by the Internal Revenue Code on the air transportation portion of this service, if any, is paid by us.

Money-Back Guarantee In the event of untimely delivery, FedEx will, at your request and with some limitations, refund or credit all transportation charges. See the current FedEx Service Guide for more information.