

WPX ENERGY Sample Location Map: PA 311-4

39.470901 -108.011449
Section 4, Township 7 South, Range 95 West

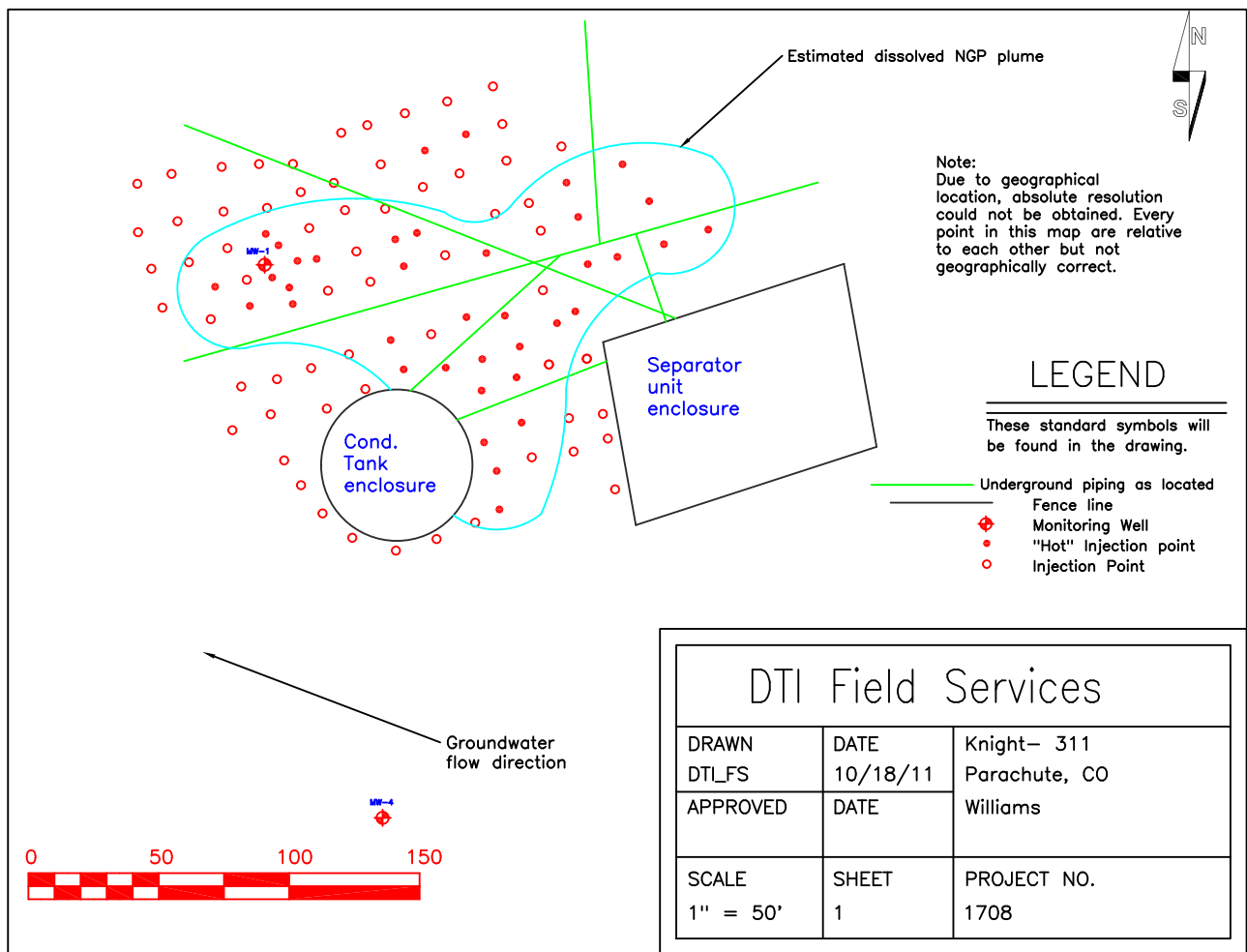
	Monitoring Well	Transportation	Hydrography
	Sample Location	CO Highways	Ditch
	Proposed Excavation	County Roads	Intermittent Stream
PLSS		Local Streets	Perennial Stream
Township		WPX Access	Waterbody
Section			Watershed



Author: B. Hall

Revision: 2

Date: 8/20/2014





31-Jul-2014

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

Re: **WPX PA 311-4 Potholes 7.21.14**

Work Order: **14071150**

Dear Mark,

ALS Environmental received 13 samples on 23-Jul-2014 10:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 29.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Work Order: 14071150

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>
14071150-01	PH 1	Soil		7/21/2014 09:30	7/23/2014 10:00	<input type="checkbox"/>
14071150-02	PH 2	Soil		7/21/2014 09:45	7/23/2014 10:00	<input type="checkbox"/>
14071150-03	PH 3	Soil		7/21/2014 10:00	7/23/2014 10:00	<input type="checkbox"/>
14071150-04	PH 4	Soil		7/21/2014 10:20	7/23/2014 10:00	<input type="checkbox"/>
14071150-05	PH 5	Soil		7/21/2014 10:30	7/23/2014 10:00	<input type="checkbox"/>
14071150-06	PH 6	Soil		7/21/2014 10:50	7/23/2014 10:00	<input type="checkbox"/>
14071150-07	PH 7	Soil		7/21/2014 11:10	7/23/2014 10:00	<input type="checkbox"/>
14071150-08	PH 8	Soil		7/21/2014 11:30	7/23/2014 10:00	<input type="checkbox"/>
14071150-09	PH 9	Soil		7/21/2014 11:45	7/23/2014 10:00	<input type="checkbox"/>
14071150-10	PH 10	Soil		7/21/2014 12:00	7/23/2014 10:00	<input type="checkbox"/>
14071150-11	PH 11	Soil		7/21/2014 12:10	7/23/2014 10:00	<input type="checkbox"/>
14071150-12	PH 12	Soil		7/21/2014 12:20	7/23/2014 10:00	<input type="checkbox"/>
14071150-13	PH 13	Soil		7/21/2014 12:30	7/23/2014 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
WorkOrder: 14071150

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 is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 1
Collection Date: 7/21/2014 09:30 AM

Work Order: 14071150
Lab ID: 14071150-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	54		4.7	mg/Kg-dry	1	7/24/2014 07:10 PM
Surr: 4-Terphenyl-d14	86.2		39-133	%REC	1	7/24/2014 07:10 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	360		2.9	mg/Kg-dry	1	7/25/2014 01:22 PM
Surr: Toluene-d8	120		50-150	%REC	1	7/25/2014 01:22 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Acenaphthylene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Anthracene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Benzo(a)anthracene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Benzo(a)pyrene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Benzo(b)fluoranthene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Benzo(g,h,i)perylene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Benzo(k)fluoranthene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Chrysene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Dibenzo(a,h)anthracene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Fluoranthene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Fluorene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Naphthalene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Pyrene	ND		7.5	µg/Kg-dry	1	7/26/2014 01:34 AM
Surr: 2-Fluorobiphenyl	76.5		12-100	%REC	1	7/26/2014 01:34 AM
Surr: 4-Terphenyl-d14	81.4		25-137	%REC	1	7/26/2014 01:34 AM
Surr: Nitrobenzene-d5	54.6		37-107	%REC	1	7/26/2014 01:34 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: RS
Benzene	ND		34	µg/Kg-dry	1	7/30/2014 09:33 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/30/2014 09:33 AM
m,p-Xylene	ND		68	µg/Kg-dry	1	7/30/2014 09:33 AM
o-Xylene	ND		34	µg/Kg-dry	1	7/30/2014 09:33 AM
Toluene	ND		34	µg/Kg-dry	1	7/30/2014 09:33 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	7/30/2014 09:33 AM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	7/30/2014 09:33 AM
Surr: 4-Bromofluorobenzene	96.2		70-130	%REC	1	7/30/2014 09:33 AM
Surr: Dibromofluoromethane	96.5		70-130	%REC	1	7/30/2014 09:33 AM
Surr: Toluene-d8	104		70-130	%REC	1	7/30/2014 09:33 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	12		0.050	% of sample	1	7/23/2014 02:46 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 2
Collection Date: 7/21/2014 09:45 AM

Work Order: 14071150
Lab ID: 14071150-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	65		4.6	mg/Kg-dry	1	7/24/2014 07:41 PM
Surr: 4-Terphenyl-d14	86.5		39-133	%REC	1	7/24/2014 07:41 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	260		2.8	mg/Kg-dry	1	7/25/2014 01:47 PM
Surr: Toluene-d8	133		50-150	%REC	1	7/25/2014 01:47 PM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Acenaphthylene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Benzo(a)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Benzo(a)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Benzo(b)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Benzo(g,h,i)perylene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Chrysene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Fluorene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Naphthalene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 01:55 AM
Surr: 2-Fluorobiphenyl	82.7		12-100	%REC	1	7/26/2014 01:55 AM
Surr: 4-Terphenyl-d14	88.5		25-137	%REC	1	7/26/2014 01:55 AM
Surr: Nitrobenzene-d5	63.7		37-107	%REC	1	7/26/2014 01:55 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		34	µg/Kg-dry	1	7/26/2014 05:28 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/26/2014 05:28 AM
m,p-Xylene	2,400		68	µg/Kg-dry	1	7/26/2014 05:28 AM
o-Xylene	ND		34	µg/Kg-dry	1	7/26/2014 05:28 AM
Toluene	ND		34	µg/Kg-dry	1	7/26/2014 05:28 AM
Xylenes, Total	2,400		100	µg/Kg-dry	1	7/26/2014 05:28 AM
Surr: 1,2-Dichloroethane-d4	87.4		70-130	%REC	1	7/26/2014 05:28 AM
Surr: 4-Bromofluorobenzene	100		70-130	%REC	1	7/26/2014 05:28 AM
Surr: Dibromofluoromethane	91.7		70-130	%REC	1	7/26/2014 05:28 AM
Surr: Toluene-d8	104		70-130	%REC	1	7/26/2014 05:28 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	12		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 3
Collection Date: 7/21/2014 10:00 AM

Work Order: 14071150
Lab ID: 14071150-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	46		SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
Surr: 4-Terphenyl-d14	74.1		4.6	mg/Kg-dry	1	7/24/2014 08:41 PM
			39-133	%REC	1	7/24/2014 08:41 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
Surr: Toluene-d8	113		2.8	mg/Kg-dry	1	7/26/2014 01:11 AM
			50-150	%REC	1	7/26/2014 01:11 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
SW846 8270D					Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Acenaphthylene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Benzo(a)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Benzo(a)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Benzo(b)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Benzo(g,h,i)perylene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Chrysene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Fluorene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Naphthalene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 02:15 AM
Surr: 2-Fluorobiphenyl	66.2		12-100	%REC	1	7/26/2014 02:15 AM
Surr: 4-Terphenyl-d14	68.5		25-137	%REC	1	7/26/2014 02:15 AM
Surr: Nitrobenzene-d5	46.0		37-107	%REC	1	7/26/2014 02:15 AM
VOLATILE ORGANIC COMPOUNDS						
SW8260B					Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		34	µg/Kg-dry	1	7/26/2014 05:53 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/26/2014 05:53 AM
m,p-Xylene	ND		68	µg/Kg-dry	1	7/26/2014 05:53 AM
o-Xylene	ND		34	µg/Kg-dry	1	7/26/2014 05:53 AM
Toluene	ND		34	µg/Kg-dry	1	7/26/2014 05:53 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	7/26/2014 05:53 AM
Surr: 1,2-Dichloroethane-d4	84.2		70-130	%REC	1	7/26/2014 05:53 AM
Surr: 4-Bromofluorobenzene	99.5		70-130	%REC	1	7/26/2014 05:53 AM
Surr: Dibromofluoromethane	92.2		70-130	%REC	1	7/26/2014 05:53 AM
Surr: Toluene-d8	95.2		70-130	%REC	1	7/26/2014 05:53 AM
MOISTURE						
A2540 G						Analyst: TM
Moisture	11		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 4
Collection Date: 7/21/2014 10:20 AM

Work Order: 14071150
Lab ID: 14071150-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	110		4.4	mg/Kg-dry	1	7/24/2014 09:11 PM
Surr: 4-Terphenyl-d14	89.2		39-133	%REC	1	7/24/2014 09:11 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	ND		2.7	mg/Kg-dry	1	7/26/2014 01:36 AM
Surr: Toluene-d8	107		50-150	%REC	1	7/26/2014 01:36 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Acenaphthylene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Anthracene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Benzo(a)anthracene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Benzo(a)pyrene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Benzo(b)fluoranthene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Benzo(g,h,i)perylene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Benzo(k)fluoranthene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Chrysene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Dibenzo(a,h)anthracene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Fluoranthene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Fluorene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Indeno(1,2,3-cd)pyrene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Naphthalene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Pyrene	ND		7.1	µg/Kg-dry	1	7/26/2014 02:35 AM
Surr: 2-Fluorobiphenyl	74.6		12-100	%REC	1	7/26/2014 02:35 AM
Surr: 4-Terphenyl-d14	74.9		25-137	%REC	1	7/26/2014 02:35 AM
Surr: Nitrobenzene-d5	66.3		37-107	%REC	1	7/26/2014 02:35 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 06:18 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	7/26/2014 06:18 AM
m,p-Xylene	ND		66	µg/Kg-dry	1	7/26/2014 06:18 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 06:18 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 06:18 AM
Xylenes, Total	ND		98	µg/Kg-dry	1	7/26/2014 06:18 AM
Surr: 1,2-Dichloroethane-d4	87.7		70-130	%REC	1	7/26/2014 06:18 AM
Surr: 4-Bromofluorobenzene	97.3		70-130	%REC	1	7/26/2014 06:18 AM
Surr: Dibromofluoromethane	92.4		70-130	%REC	1	7/26/2014 06:18 AM
Surr: Toluene-d8	93.4		70-130	%REC	1	7/26/2014 06:18 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	8.4		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 5
Collection Date: 7/21/2014 10:30 AM

Work Order: 14071150
Lab ID: 14071150-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	230		4.5	mg/Kg-dry	1	7/24/2014 09:41 PM
Surr: 4-Terphenyl-d14	102		39-133	%REC	1	7/24/2014 09:41 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	ND		2.7	mg/Kg-dry	1	7/26/2014 02:02 AM
Surr: Toluene-d8	116		50-150	%REC	1	7/26/2014 02:02 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Acenaphthylene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Anthracene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Benzo(a)anthracene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Benzo(a)pyrene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Benzo(b)fluoranthene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Benzo(g,h,i)perylene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Benzo(k)fluoranthene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Chrysene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Dibenzo(a,h)anthracene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Fluoranthene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Fluorene	16		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Indeno(1,2,3-cd)pyrene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Naphthalene	110		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Pyrene	ND		7.2	µg/Kg-dry	1	7/26/2014 02:56 AM
Surr: 2-Fluorobiphenyl	66.8		12-100	%REC	1	7/26/2014 02:56 AM
Surr: 4-Terphenyl-d14	73.7		25-137	%REC	1	7/26/2014 02:56 AM
Surr: Nitrobenzene-d5	59.0		37-107	%REC	1	7/26/2014 02:56 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 06:43 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	7/26/2014 06:43 AM
m,p-Xylene	99		66	µg/Kg-dry	1	7/26/2014 06:43 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 06:43 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 06:43 AM
Xylenes, Total	130		99	µg/Kg-dry	1	7/26/2014 06:43 AM
Surr: 1,2-Dichloroethane-d4	86.1		70-130	%REC	1	7/26/2014 06:43 AM
Surr: 4-Bromofluorobenzene	98.6		70-130	%REC	1	7/26/2014 06:43 AM
Surr: Dibromofluoromethane	91.8		70-130	%REC	1	7/26/2014 06:43 AM
Surr: Toluene-d8	95.6		70-130	%REC	1	7/26/2014 06:43 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	9.0		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 6
Collection Date: 7/21/2014 10:50 AM

Work Order: 14071150
Lab ID: 14071150-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	200		4.5	mg/Kg-dry	1	7/24/2014 10:11 PM
Surr: 4-Terphenyl-d14	105		39-133	%REC	1	7/24/2014 10:11 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	120		2.8	mg/Kg-dry	1	7/26/2014 02:27 AM
Surr: Toluene-d8	126		50-150	%REC	1	7/26/2014 02:27 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Acenaphthylene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Anthracene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Benzo(a)anthracene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Benzo(a)pyrene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Benzo(b)fluoranthene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Benzo(g,h,i)perylene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Benzo(k)fluoranthene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Chrysene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Dibenzo(a,h)anthracene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Fluoranthene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Fluorene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Indeno(1,2,3-cd)pyrene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Naphthalene	12		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Pyrene	ND		7.1	µg/Kg-dry	1	7/26/2014 03:16 AM
Surr: 2-Fluorobiphenyl	80.4		12-100	%REC	1	7/26/2014 03:16 AM
Surr: 4-Terphenyl-d14	81.3		25-137	%REC	1	7/26/2014 03:16 AM
Surr: Nitrobenzene-d5	64.5		37-107	%REC	1	7/26/2014 03:16 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 07:08 AM
Ethylbenzene	60		33	µg/Kg-dry	1	7/26/2014 07:08 AM
m,p-Xylene	3,000		66	µg/Kg-dry	1	7/26/2014 07:08 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 07:08 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 07:08 AM
Xylenes, Total	3,000		99	µg/Kg-dry	1	7/26/2014 07:08 AM
Surr: 1,2-Dichloroethane-d4	88.6		70-130	%REC	1	7/26/2014 07:08 AM
Surr: 4-Bromofluorobenzene	93.5		70-130	%REC	1	7/26/2014 07:08 AM
Surr: Dibromofluoromethane	92.7		70-130	%REC	1	7/26/2014 07:08 AM
Surr: Toluene-d8	100		70-130	%REC	1	7/26/2014 07:08 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	9.4		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 7
Collection Date: 7/21/2014 11:10 AM

Work Order: 14071150
Lab ID: 14071150-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	72		4.7	mg/Kg-dry	1	7/24/2014 10:41 PM
Surr: 4-Terphenyl-d14	91.7		39-133	%REC	1	7/24/2014 10:41 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	36		2.9	mg/Kg-dry	1	7/26/2014 02:53 AM
Surr: Toluene-d8	109		50-150	%REC	1	7/26/2014 02:53 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Acenaphthylene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Anthracene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Benzo(a)anthracene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Benzo(a)pyrene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Benzo(b)fluoranthene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Benzo(g,h,i)perylene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Benzo(k)fluoranthene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Chrysene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Dibenzo(a,h)anthracene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Fluoranthene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Fluorene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Indeno(1,2,3-cd)pyrene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Naphthalene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Pyrene	ND		7.5	µg/Kg-dry	1	7/26/2014 03:37 AM
Surr: 2-Fluorobiphenyl	86.9		12-100	%REC	1	7/26/2014 03:37 AM
Surr: 4-Terphenyl-d14	86.5		25-137	%REC	1	7/26/2014 03:37 AM
Surr: Nitrobenzene-d5	50.7		37-107	%REC	1	7/26/2014 03:37 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		34	µg/Kg-dry	1	7/26/2014 07:33 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/26/2014 07:33 AM
m,p-Xylene	140		69	µg/Kg-dry	1	7/26/2014 07:33 AM
o-Xylene	ND		34	µg/Kg-dry	1	7/26/2014 07:33 AM
Toluene	ND		34	µg/Kg-dry	1	7/26/2014 07:33 AM
Xylenes, Total	140		100	µg/Kg-dry	1	7/26/2014 07:33 AM
Surr: 1,2-Dichloroethane-d4	87.0		70-130	%REC	1	7/26/2014 07:33 AM
Surr: 4-Bromofluorobenzene	98.7		70-130	%REC	1	7/26/2014 07:33 AM
Surr: Dibromofluoromethane	91.1		70-130	%REC	1	7/26/2014 07:33 AM
Surr: Toluene-d8	94.6		70-130	%REC	1	7/26/2014 07:33 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	12		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 8
Collection Date: 7/21/2014 11:30 AM

Work Order: 14071150
Lab ID: 14071150-08
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	84		SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
Surr: 4-Terphenyl-d14	91.0		4.6	mg/Kg-dry	1	7/24/2014 11:11 PM
			39-133	%REC	1	7/24/2014 11:11 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
Surr: Toluene-d8	100		2.8	mg/Kg-dry	1	7/26/2014 03:44 AM
			50-150	%REC	1	7/26/2014 03:44 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
SW846 8270D					Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Acenaphthylene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Benzo(a)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Benzo(a)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Benzo(b)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Benzo(g,h,i)perylene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Chrysene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Fluorene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Naphthalene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 03:57 AM
Surr: 2-Fluorobiphenyl	87.6		12-100	%REC	1	7/26/2014 03:57 AM
Surr: 4-Terphenyl-d14	81.6		25-137	%REC	1	7/26/2014 03:57 AM
Surr: Nitrobenzene-d5	62.4		37-107	%REC	1	7/26/2014 03:57 AM
VOLATILE ORGANIC COMPOUNDS						
SW8260B					Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		34	µg/Kg-dry	1	7/26/2014 07:58 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/26/2014 07:58 AM
m,p-Xylene	ND		67	µg/Kg-dry	1	7/26/2014 07:58 AM
o-Xylene	ND		34	µg/Kg-dry	1	7/26/2014 07:58 AM
Toluene	ND		34	µg/Kg-dry	1	7/26/2014 07:58 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	7/26/2014 07:58 AM
Surr: 1,2-Dichloroethane-d4	84.9		70-130	%REC	1	7/26/2014 07:58 AM
Surr: 4-Bromofluorobenzene	98.0		70-130	%REC	1	7/26/2014 07:58 AM
Surr: Dibromofluoromethane	91.5		70-130	%REC	1	7/26/2014 07:58 AM
Surr: Toluene-d8	94.4		70-130	%REC	1	7/26/2014 07:58 AM
MOISTURE						
A2540 G						Analyst: TM
Moisture	11		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 9
Collection Date: 7/21/2014 11:45 AM

Work Order: 14071150
Lab ID: 14071150-09
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	580		4.6	mg/Kg-dry	1	7/24/2014 11:41 PM
Surr: 4-Terphenyl-d14	108		39-133	%REC	1	7/24/2014 11:41 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	ND		2.8	mg/Kg-dry	1	7/26/2014 04:09 AM
Surr: Toluene-d8	119		50-150	%REC	1	7/26/2014 04:09 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Acenaphthylene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Benzo(a)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Benzo(a)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Benzo(b)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Benzo(g,h,i)perylene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Chrysene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Fluorene	32		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Naphthalene	260		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 04:18 AM
Surr: 2-Fluorobiphenyl	80.9		12-100	%REC	1	7/26/2014 04:18 AM
Surr: 4-Terphenyl-d14	79.0		25-137	%REC	1	7/26/2014 04:18 AM
Surr: Nitrobenzene-d5	74.9		37-107	%REC	1	7/26/2014 04:18 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		34	µg/Kg-dry	1	7/26/2014 08:22 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	7/26/2014 08:22 AM
m,p-Xylene	ND		68	µg/Kg-dry	1	7/26/2014 08:22 AM
o-Xylene	ND		34	µg/Kg-dry	1	7/26/2014 08:22 AM
Toluene	ND		34	µg/Kg-dry	1	7/26/2014 08:22 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	7/26/2014 08:22 AM
Surr: 1,2-Dichloroethane-d4	87.2		70-130	%REC	1	7/26/2014 08:22 AM
Surr: 4-Bromofluorobenzene	98.0		70-130	%REC	1	7/26/2014 08:22 AM
Surr: Dibromofluoromethane	91.8		70-130	%REC	1	7/26/2014 08:22 AM
Surr: Toluene-d8	95.3		70-130	%REC	1	7/26/2014 08:22 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	11		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 10
Collection Date: 7/21/2014 12:00 PM

Work Order: 14071150
Lab ID: 14071150-10
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	490		8.9	mg/Kg-dry	2	7/25/2014 12:11 PM
Surr: 4-Terphenyl-d14	106		39-133	%REC	2	7/25/2014 12:11 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	ND		2.7	mg/Kg-dry	1	7/26/2014 04:35 AM
Surr: Toluene-d8	108		50-150	%REC	1	7/26/2014 04:35 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Acenaphthylene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Anthracene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Benzo(a)anthracene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Benzo(a)pyrene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Benzo(b)fluoranthene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Benzo(g,h,i)perylene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Benzo(k)fluoranthene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Chrysene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Dibenzo(a,h)anthracene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Fluoranthene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Fluorene	59		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Indeno(1,2,3-cd)pyrene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Naphthalene	1,500		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Pyrene	ND		7.2	µg/Kg-dry	1	7/26/2014 04:38 AM
Surr: 2-Fluorobiphenyl	86.4		12-100	%REC	1	7/26/2014 04:38 AM
Surr: 4-Terphenyl-d14	89.2		25-137	%REC	1	7/26/2014 04:38 AM
Surr: Nitrobenzene-d5	70.2		37-107	%REC	1	7/26/2014 04:38 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 08:47 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	7/26/2014 08:47 AM
m,p-Xylene	ND		65	µg/Kg-dry	1	7/26/2014 08:47 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 08:47 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 08:47 AM
Xylenes, Total	ND		98	µg/Kg-dry	1	7/26/2014 08:47 AM
Surr: 1,2-Dichloroethane-d4	85.8		70-130	%REC	1	7/26/2014 08:47 AM
Surr: 4-Bromofluorobenzene	98.6		70-130	%REC	1	7/26/2014 08:47 AM
Surr: Dibromofluoromethane	91.5		70-130	%REC	1	7/26/2014 08:47 AM
Surr: Toluene-d8	95.8		70-130	%REC	1	7/26/2014 08:47 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	8.2		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 11
Collection Date: 7/21/2014 12:10 PM

Work Order: 14071150
Lab ID: 14071150-11
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	230		4.5	mg/Kg-dry	1	7/25/2014 12:41 PM
Surr: 4-Terphenyl-d14	99.1		39-133	%REC	1	7/25/2014 12:41 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	33		2.8	mg/Kg-dry	1	7/26/2014 05:00 AM
Surr: Toluene-d8	123		50-150	%REC	1	7/26/2014 05:00 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Acenaphthylene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Anthracene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Benzo(a)anthracene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Benzo(a)pyrene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Benzo(b)fluoranthene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Benzo(g,h,i)perylene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Benzo(k)fluoranthene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Chrysene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Dibenzo(a,h)anthracene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Fluoranthene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Fluorene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Indeno(1,2,3-cd)pyrene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Naphthalene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Pyrene	ND		7.3	µg/Kg-dry	1	7/26/2014 04:59 AM
Surr: 2-Fluorobiphenyl	77.6		12-100	%REC	1	7/26/2014 04:59 AM
Surr: 4-Terphenyl-d14	79.6		25-137	%REC	1	7/26/2014 04:59 AM
Surr: Nitrobenzene-d5	50.5		37-107	%REC	1	7/26/2014 04:59 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 09:13 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	7/26/2014 09:13 AM
m,p-Xylene	ND		66	µg/Kg-dry	1	7/26/2014 09:13 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 09:13 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 09:13 AM
Xylenes, Total	ND		99	µg/Kg-dry	1	7/26/2014 09:13 AM
Surr: 1,2-Dichloroethane-d4	86.5		70-130	%REC	1	7/26/2014 09:13 AM
Surr: 4-Bromofluorobenzene	98.4		70-130	%REC	1	7/26/2014 09:13 AM
Surr: Dibromofluoromethane	91.4		70-130	%REC	1	7/26/2014 09:13 AM
Surr: Toluene-d8	95.2		70-130	%REC	1	7/26/2014 09:13 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	9.4		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 12
Collection Date: 7/21/2014 12:20 PM

Work Order: 14071150
Lab ID: 14071150-12
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	410		8.8	mg/Kg-dry	2	7/24/2014 05:10 PM
Surr: 4-Terphenyl-d14	109		39-133	%REC	2	7/24/2014 05:10 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	35		2.7	mg/Kg-dry	1	7/26/2014 05:25 AM
Surr: Toluene-d8	108		50-150	%REC	1	7/26/2014 05:25 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: RM
Acenaphthene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Acenaphthylene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Anthracene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Benzo(a)anthracene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Benzo(a)pyrene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Benzo(b)fluoranthene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Benzo(g,h,i)perylene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Benzo(k)fluoranthene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Chrysene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Dibenzo(a,h)anthracene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Fluoranthene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Fluorene	11		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Indeno(1,2,3-cd)pyrene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Naphthalene	41		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Pyrene	ND		7.1	µg/Kg-dry	1	7/25/2014 12:52 PM
Surr: 2-Fluorobiphenyl	70.5		12-100	%REC	1	7/25/2014 12:52 PM
Surr: 4-Terphenyl-d14	83.3		25-137	%REC	1	7/25/2014 12:52 PM
Surr: Nitrobenzene-d5	56.1		37-107	%REC	1	7/25/2014 12:52 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 09:38 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	7/26/2014 09:38 AM
m,p-Xylene	87		65	µg/Kg-dry	1	7/26/2014 09:38 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 09:38 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 09:38 AM
Xylenes, Total	ND		98	µg/Kg-dry	1	7/26/2014 09:38 AM
Surr: 1,2-Dichloroethane-d4	86.3		70-130	%REC	1	7/26/2014 09:38 AM
Surr: 4-Bromofluorobenzene	100		70-130	%REC	1	7/26/2014 09:38 AM
Surr: Dibromofluoromethane	91.0		70-130	%REC	1	7/26/2014 09:38 AM
Surr: Toluene-d8	96.2		70-130	%REC	1	7/26/2014 09:38 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	7.9		0.050	% of sample	1	7/23/2014 04:36 PM

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

ALS Group USA, Corp

Date: 31-Jul-14

Client: HRL Compliance Solutions, Inc
Project: WPX PA 311-4 Potholes 7.21.14
Sample ID: PH 13
Collection Date: 7/21/2014 12:30 PM

Work Order: 14071150
Lab ID: 14071150-13
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 7/24/14	Analyst: IT
DRO (C10-C28)	15		4.6	mg/Kg-dry	1	7/25/2014 01:11 AM
Surr: 4-Terphenyl-d14	76.2		39-133	%REC	1	7/25/2014 01:11 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 7/24/14	Analyst: IT
GRO (C6-C10)	ND		2.8	mg/Kg-dry	1	7/26/2014 05:51 AM
Surr: Toluene-d8	113		50-150	%REC	1	7/26/2014 05:51 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 7/24/14	Analyst: MK
Acenaphthene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Acenaphthylene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Benzo(a)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Benzo(a)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Benzo(b)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Benzo(g,h,i)perylene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Chrysene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Fluoranthene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Fluorene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Naphthalene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Pyrene	ND		7.4	µg/Kg-dry	1	7/26/2014 05:19 AM
Surr: 2-Fluorobiphenyl	73.6		12-100	%REC	1	7/26/2014 05:19 AM
Surr: 4-Terphenyl-d14	77.8		25-137	%REC	1	7/26/2014 05:19 AM
Surr: Nitrobenzene-d5	48.7		37-107	%REC	1	7/26/2014 05:19 AM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 7/24/14	Analyst: AK
Benzene	ND		33	µg/Kg-dry	1	7/26/2014 10:03 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	7/26/2014 10:03 AM
m,p-Xylene	ND		67	µg/Kg-dry	1	7/26/2014 10:03 AM
o-Xylene	ND		33	µg/Kg-dry	1	7/26/2014 10:03 AM
Toluene	ND		33	µg/Kg-dry	1	7/26/2014 10:03 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	7/26/2014 10:03 AM
Surr: 1,2-Dichloroethane-d4	87.0		70-130	%REC	1	7/26/2014 10:03 AM
Surr: 4-Bromofluorobenzene	99.2		70-130	%REC	1	7/26/2014 10:03 AM
Surr: Dibromofluoromethane	92.2		70-130	%REC	1	7/26/2014 10:03 AM
Surr: Toluene-d8	95.8		70-130	%REC	1	7/26/2014 10:03 AM
MOISTURE						
			A2540 G			Analyst: TM
Moisture	10		0.050	% of sample	1	7/23/2014 04:36 PM

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

Client: HRL Compliance Solutions, Inc
 Work Order: 14071150
 Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60907** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-60907-60907				Units:mg/Kg		Analysis Date: 7/24/2014 03:10 PM		
Client ID:			Run ID: GC8_140724A		SeqNo:2862339		Prep Date: 7/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	1.488	0	2	0	74.4	39-133	0			

LCS				Sample ID: DLCSS1-60907-60907				Units: mg/Kg			Analysis Date: 7/24/2014 03:40 PM			
Client ID:				Run ID: GC8_140724A				SeqNo: 2862340			Prep Date: 7/24/2014		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)				153.6	5.0	200	0	76.8	61-109	0				
Surr: 4-Terphenyl-d14				1.44	0	2	0	72	39-133	0				

MS				Sample ID: 14071150-12A MS			Units:mg/Kg		Analysis Date: 7/24/2014 04:10 PM		
Client ID: PH 12			Run ID: GC8_140724A			SeqNo:2862341		Prep Date: 7/24/2014		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	582.5	16	317.1	379.9	63.9	48-110	0				
Surr: 4-Terphenyl-d14	2.944	0	3.171	0	92.8	39-133	0				

MSD				Sample ID: 14071150-12A MSD				Units:mg/Kg			Analysis Date: 7/24/2014 04:40 PM		
Client ID: PH 12				Run ID: GC8_140724A				SeqNo:2862342		Prep Date: 7/24/2014		DF: 2	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
DRO (C10-C28)		563.6	16	326.7	379.9	56.2	48-110	582.5	3.3	30			
Surr: 4-Terphenyl-d14		3.446	0	3.267	0	105	39-133	2.944	15.7	30			

The following samples were analyzed in this batch:

14071150-01A	14071150-02A	14071150-03A
14071150-04A	14071150-05A	14071150-06A
14071150-07A	14071150-08A	14071150-09A
14071150-10A	14071150-11A	14071150-12A
14071150-13A		

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60919** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-60919-60919				Units: µg/Kg		Analysis Date: 7/24/2014 12:37 PM		
Client ID:		Run ID: GC9_140724A				SeqNo: 2861752		Prep Date: 7/24/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
<i>Surr: Toluene-d8</i>	5364	0	5000	0	107	50-150	0			

LCS		Sample ID: LCS-60919-60919				Units: µg/Kg		Analysis Date: 7/24/2014 12:12 PM		
Client ID:		Run ID: GC9_140724A				SeqNo: 2861751		Prep Date: 7/24/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	536300	2,500	500000	0	107	70-130	0			
<i>Surr: Toluene-d8</i>	4578	0	5000	0	91.6	50-150	0			

MS		Sample ID: 14071147-01A MS				Units: µg/Kg		Analysis Date: 7/24/2014 05:28 PM		
Client ID:		Run ID: GC9_140724A				SeqNo: 2862638		Prep Date: 7/24/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	485800	2,500	500000	0	97.2	70-130	0			
<i>Surr: Toluene-d8</i>	4562	0	5000	0	91.2	50-150	0			

MSD		Sample ID: 14071147-01A MSD				Units: µg/Kg		Analysis Date: 7/24/2014 05:54 PM		
Client ID:		Run ID: GC9_140724A				SeqNo: 2862639		Prep Date: 7/24/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	469600	2,500	500000	0	93.9	70-130	485800	3.38	30	
<i>Surr: Toluene-d8</i>	4513	0	5000	0	90.3	50-150	4562	1.07	30	

The following samples were analyzed in this batch:

14071150-01A	14071150-02A	14071150-03A
14071150-04A	14071150-05A	14071150-06A
14071150-07A	14071150-08A	14071150-09A
14071150-10A	14071150-11A	14071150-12A
14071150-13A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60906** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-60906-60906				Units: µg/Kg		Analysis Date: 7/25/2014 09:24 AM		
Client ID:		Run ID: SVMS8_140725A				SeqNo: 2865522		Prep Date: 7/24/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	1114	0	1667	0	66.8	12-100	0			
Surr: 4-Terphenyl-d14	1694	0	1667	0	102	25-137	0			
Surr: Nitrobenzene-d5	1222	0	1667	0	73.3	37-107	0			

LCS		Sample ID: SLCSS1-60906-60906				Units: µg/Kg		Analysis Date: 7/25/2014 09:44 AM		
Client ID:		Run ID: SVMS8_140725A				SeqNo: 2865535		Prep Date: 7/24/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	444.3	6.7	666.7	0	66.6	45-110	0			
Acenaphthylene	457.3	6.7	666.7	0	68.6	45-105	0			
Anthracene	537.3	6.7	666.7	0	80.6	55-105	0			
Benzo(a)anthracene	579.3	6.7	666.7	0	86.9	50-110	0			
Benzo(a)pyrene	623.3	6.7	666.7	0	93.5	50-110	0			
Benzo(b)fluoranthene	637	6.7	666.7	0	95.5	45-115	0			
Benzo(g,h,i)perylene	539	6.7	666.7	0	80.8	40-125	0			
Benzo(k)fluoranthene	653.3	6.7	666.7	0	98	45-115	0			
Chrysene	538.3	6.7	666.7	0	80.7	55-110	0			
Dibenzo(a,h)anthracene	603.7	6.7	666.7	0	90.5	40-125	0			
Fluoranthene	589	6.7	666.7	0	88.3	55-115	0			
Fluorene	480.7	6.7	666.7	0	72.1	50-110	0			
Indeno(1,2,3-cd)pyrene	576.3	6.7	666.7	0	86.4	40-120	0			
Naphthalene	418	6.7	666.7	0	62.7	40-105	0			
Pyrene	572.3	6.7	666.7	0	85.8	45-125	0			
Surr: 2-Fluorobiphenyl	1029	0	1667	0	61.8	12-100	0			
Surr: 4-Terphenyl-d14	1593	0	1667	0	95.6	25-137	0			
Surr: Nitrobenzene-d5	1175	0	1667	0	70.5	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60906** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 14071150-12A MS			Units: µg/Kg		Analysis Date: 7/25/2014 12:12 PM	
Client ID: PH 12				Run ID: SVMS8_140725A			SeqNo: 2865537		Prep Date: 7/24/2014	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	926.5	13	1283	0	72.2	45-110	0			
Acenaphthylene	988.1	13	1283	0	77	45-105	0			
Anthracene	1077	13	1283	4.548	83.5	55-105	0			
Benzo(a)anthracene	1115	13	1283	0	86.9	50-110	0			
Benzo(a)pyrene	1185	13	1283	0	92.3	50-110	0			
Benzo(b)fluoranthene	1191	13	1283	0	92.8	45-115	0			
Benzo(g,h,i)perylene	1088	13	1283	0	84.7	40-125	0			
Benzo(k)fluoranthene	1191	13	1283	0	92.8	45-115	0			
Chrysene	1047	13	1283	0	81.6	55-110	0			
Dibenzo(a,h)anthracene	1212	13	1283	0	94.4	40-125	0			
Fluoranthene	1130	13	1283	0	88	55-115	0			
Fluorene	1025	13	1283	10.4	79	50-110	0			
Indeno(1,2,3-cd)pyrene	1152	13	1283	0	89.8	40-120	0			
Naphthalene	1034	13	1283	38.01	77.6	40-105	0			
Pyrene	987.4	13	1283	0	76.9	45-125	0			
Surr: 2-Fluorobiphenyl	2294	0	3208	0	71.5	12-100	0			
Surr: 4-Terphenyl-d14	2766	0	3208	0	86.2	25-137	0			
Surr: Nitrobenzene-d5	2042	0	3208	0	63.6	37-107	0			

MSD				Sample ID: 14071150-12A MSD			Units: µg/Kg		Analysis Date: 7/25/2014 12:32 PM	
Client ID: PH 12				Run ID: SVMS8_140725A			SeqNo: 2865540		Prep Date: 7/24/2014	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1015	13	1302	0	78	45-110	926.5	9.14	30	
Acenaphthylene	1076	13	1302	0	82.7	45-105	988.1	8.55	30	
Anthracene	1173	13	1302	4.548	89.8	55-105	1077	8.59	30	
Benzo(a)anthracene	1214	13	1302	0	93.2	50-110	1115	8.46	30	
Benzo(a)pyrene	1278	13	1302	0	98.2	50-110	1185	7.55	30	
Benzo(b)fluoranthene	1298	13	1302	0	99.7	45-115	1191	8.53	30	
Benzo(g,h,i)perylene	1165	13	1302	0	89.5	40-125	1088	6.87	30	
Benzo(k)fluoranthene	1307	13	1302	0	100	45-115	1191	9.33	30	
Chrysene	1132	13	1302	0	87	55-110	1047	7.82	30	
Dibenzo(a,h)anthracene	1317	13	1302	0	101	40-125	1212	8.31	30	
Fluoranthene	1258	13	1302	0	96.6	55-115	1130	10.7	30	
Fluorene	1098	13	1302	10.4	83.5	50-110	1025	6.89	30	
Indeno(1,2,3-cd)pyrene	1248	13	1302	0	95.9	40-120	1152	7.98	30	
Naphthalene	966.4	13	1302	38.01	71.3	40-105	1034	6.79	30	
Pyrene	1044	13	1302	0	80.2	45-125	987.4	5.55	30	
Surr: 2-Fluorobiphenyl	2542	0	3254	0	78.1	12-100	2294	10.3	40	
Surr: 4-Terphenyl-d14	2881	0	3254	0	88.6	25-137	2766	4.09	40	
Surr: Nitrobenzene-d5	2332	0	3254	0	71.7	37-107	2042	13.3	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60906**

Instrument ID **SVMS8**

Method: **SW846 8270D**

The following samples were analyzed in this batch:

14071150-01A	14071150-02A	14071150-03A
14071150-04A	14071150-05A	14071150-06A
14071150-07A	14071150-08A	14071150-09A
14071150-10A	14071150-11A	14071150-12A
14071150-13A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60917** Instrument ID **VMS5** Method: **SW8260B**

MBLK				Sample ID: MBLK-60917-60917				Units: µg/Kg			Analysis Date: 7/24/2014 05:02 PM		
Client ID:			Run ID: VMS5_140724A				SeqNo:2862515			Prep Date: 7/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	30											
Ethylbenzene	ND	30											
m,p-Xylene	ND	60											
o-Xylene	ND	30											
Toluene	ND	30											
Xylenes, Total	ND	90											
Surr: 1,2-Dichloroethane-d4	1012	0	1000	0	101	70-130		0					
Surr: 4-Bromofluorobenzene	991.5	0	1000	0	99.2	70-130		0					
Surr: Dibromofluoromethane	1012	0	1000	0	101	70-130		0					
Surr: Toluene-d8	975	0	1000	0	97.5	70-130		0					

LCS				Sample ID: LCS-60917-60917			Units: µg/Kg		Analysis Date: 7/24/2014 03:18 PM		
Client ID:		Run ID: VMS5_140724A			SeqNo:2862514		Prep Date: 7/24/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	950.5	30	1000	0	95	75-125	0				
Ethylbenzene	1005	30	1000	0	100	75-125	0				
m,p-Xylene	2024	60	2000	0	101	80-125	0				
o-Xylene	998	30	1000	0	99.8	75-125	0				
Toluene	953	30	1000	0	95.3	70-125	0				
Xylenes, Total	3022	90	3000	0	101	75-125	0				
Surr: 1,2-Dichloroethane-d4	984	0	1000	0	98.4	70-130	0				
Surr: 4-Bromofluorobenzene	1030	0	1000	0	103	70-130	0				
Surr: Dibromofluoromethane	1014	0	1000	0	101	70-130	0				
Surr: Toluene-d8	998	0	1000	0	99.8	70-130	0				

MS				Sample ID: 14071150-01A MS			Units: µg/Kg		Analysis Date: 7/26/2014 12:28 PM		
Client ID: PH 1			Run ID: VMS5_140725A			SeqNo:2864776		Prep Date: 7/24/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	905.5	30	1000	0	90.6	75-125	0				
Ethylbenzene	915.5	30	1000	0	91.6	75-125	0				
m,p-Xylene	1910	60	2000	0	95.5	80-125	0				
o-Xylene	911	30	1000	0	91.1	75-125	0				
Toluene	885	30	1000	0	88.5	70-125	0				
Xylenes, Total	2820	90	3000	0	94	75-125	0				
Surr: 1,2-Dichloroethane-d4	928	0	1000	0	92.8	70-130	0				
Surr: 4-Bromofluorobenzene	1015	0	1000	0	102	70-130	0				
Surr: Dibromofluoromethane	975	0	1000	0	97.5	70-130	0				
Surr: Toluene-d8	978	0	1000	0	97.8	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **60917** Instrument ID **VMS5** Method: **SW8260B**

MSD				Sample ID: 14071150-01A MSD			Units: µg/Kg		Analysis Date: 7/26/2014 12:53 PM	
Client ID: PH 1				Run ID: VMS5_140725A			SeqNo: 2864777		Prep Date: 7/24/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	852	30	1000	0	85.2	75-125	905.5	6.09	30	
Ethylbenzene	897.5	30	1000	0	89.8	75-125	915.5	1.99	30	
m,p-Xylene	1829	60	2000	0	91.4	80-125	1910	4.31	30	
o-Xylene	881	30	1000	0	88.1	75-125	911	3.35	30	
Toluene	841.5	30	1000	0	84.2	70-125	885	5.04	30	
Xylenes, Total	2710	90	3000	0	90.3	75-125	2820	4	30	
Surr: 1,2-Dichloroethane-d4	919.5	0	1000	0	92	70-130	928	0.92	30	
Surr: 4-Bromofluorobenzene	1015	0	1000	0	102	70-130	1015	0	30	
Surr: Dibromofluoromethane	959	0	1000	0	95.9	70-130	975	1.65	30	
Surr: Toluene-d8	987.5	0	1000	0	98.8	70-130	978	0.967	30	

The following samples were analyzed in this batch:

14071150-01A	14071150-02A	14071150-03A
14071150-04A	14071150-05A	14071150-06A
14071150-07A	14071150-08A	14071150-09A
14071150-10A	14071150-11A	14071150-12A
14071150-13A		

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **R145036** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R145036				Units: % of sample		Analysis Date: 7/23/2014 02:46 PM		
Client ID:		Run ID: MOIST_140723C				SeqNo: 2861207		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-R145036				Units: % of sample		Analysis Date: 7/23/2014 02:46 PM		
Client ID:		Run ID: MOIST_140723C				SeqNo: 2861205		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: 14071135-01B DUP				Units: % of sample		Analysis Date: 7/23/2014 02:46 PM		
Client ID:		Run ID: MOIST_140723C				SeqNo: 2861174		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.61 0.050 0 0 0 0-0 5.94 5.71 20

DUP		Sample ID: 14071156-03A DUP				Units: % of sample		Analysis Date: 7/23/2014 02:46 PM		
Client ID:		Run ID: MOIST_140723C				SeqNo: 2861189		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.26 0.050 0 0 0 0-0 5.31 0.946 20

The following samples were analyzed in this batch:

14071150-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14071150
Project: WPX PA 311-4 Potholes 7.21.14

QC BATCH REPORT

Batch ID: **R145037** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R145037				Units: % of sample			Analysis Date: 7/23/2014 04:36 PM		
Client ID:		Run ID: MOIST_140723D				SeqNo: 2861235			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-R145037				Units: % of sample			Analysis Date: 7/23/2014 04:36 PM		
Client ID:		Run ID: MOIST_140723D				SeqNo: 2861234			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: 14071140-01B DUP				Units: % of sample			Analysis Date: 7/23/2014 04:36 PM		
Client ID:		Run ID: MOIST_140723D				SeqNo: 2861213			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 8.37 0.050 0 0 0 0-0 7.9 5.78 20

DUP		Sample ID: 14071142-01B DUP				Units: % of sample			Analysis Date: 7/23/2014 04:36 PM		
Client ID:		Run ID: MOIST_140723D				SeqNo: 2861215			Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 10.87 0.050 0 0 0 0-0 11.01 1.28 20

The following samples were analyzed in this batch:

14071150-02A	14071150-03A	14071150-04A
14071150-05A	14071150-06A	14071150-07A
14071150-08A	14071150-09A	14071150-10A
14071150-11A	14071150-12A	14071150-13A

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 #

14071150

PAGE

1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME WPX PA311-4

SAMPLER Reed Wold

DATE

7/21/14

PROJECT No.

Pot Holes

EDD FORMAT

SITE ID PA311-4

TURNAROUND

5 Day

PURCHASE ORDER

COMPANY NAME HRL Compliance

BILL TO COMPANY WPX

SEND REPORT TO Mark Mumby

INVOICE ATTN TO Karolina Blaney

ADDRESS 2385 F 1/2 Rd

ADDRESS 1058 Co Rd 215

CITY / STATE / ZIP Grand Junction, CO 81506

CITY / STATE / ZIP Parachute CO 81635

PHONE 970-243-3271

PHONE 970-683-2295

FAX 970-243-3280

FAX

E-MAIL mmumby@hrlcomp.com
rwold@hrlcomp.com

E-MAIL Karolina.blaney@wpxenergy.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

PH 1

SO

7/21/14

9:30

1

8

OK

2

PH 2

9:45

3

PH 3

10:00

4

PH 4

10:20

5

PH 5

10:30

6

PH 6

10:50

7

PH 7

11:10

8

PH 8

11:30

9

PH 9

11:45

10

PH 10

12:00

*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

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

7/21/14

3:00

7-21

9:00

7-21

4:00

7/23/14

1000



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 202r6

WORKORDER
#

14071150

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

WPX PA311-4

SAMPLER

Reed Wold

DATE

7/21/14

PROJECT No.

Port Holes

EDD FORMAT

PA311-4

TURNAROUND

5 Day

COMPANY NAME

HRL Compliance

BILL TO COMPANY

WPX

SEND REPORT TO

Mark Mumby

INVOICE ATTN TO

Karolina Blaney

ADDRESS

2385 F 1/2 Rd

ADDRESS

1058 Co Rd 215

CITY / STATE / ZIP

Grand Junction, CO 81506

CITY / STATE / ZIP

Parachute CO 81635

PHONE

970-243-3271

PHONE

970-683-2295

FAX

970-243-3280

FAX

E-MAIL

mmumby@hrlcomp.com
rwold@hrlcomp.com

E-MAIL

Karolina.blaney@wpenergy.com

Lab ID

Field ID

Matrix

Sample
Date

Sample
Time

Bottles

Pres.

QC

11

PH 11

So

7/21/14

12:10

1

8

X X

12

PH 12

↓

↓

12:20

1

8

X X

13

PH 13

↓

↓

12:30

1

8

X X

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

For metals or anions, please detail analytes below.

Comments:

QC PACKAGE (check below)

X

LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms
+ raw data)

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

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

7/21/14

3:00

7/21/14

4:00

7/21/14

4:00

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **23-Jul-14 10:00**

Work Order: **14071150**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

23-Jul-14
Date

Reviewed by: Ann Preston
eSignature

27-Jul-14
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.8-3.4 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>7/23/2014 1:05:36 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Fax: (877) 285-5783
 Mark Martinez
 ALS Environmental
 127 E. 1st Street

PARACHUTE, CO 81635

Origin ID: RLA

FedEx
 Express



114214100030

BILL NUMBER

SHIP TO: (816) 390-0870
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

Ship Date: 7/23/14
 Airway: 550115
 CAD: 2284949-NET3550

Dim: 24 X 15 X 15 IN

Delivery Address Bar Code



Ref # 072214-1
 Invoice #
 PO # Parachute
 Dept #

1 of 2

WED - 23 JUL 10:30A
 PRIORITY OVERNIGHT

TRK# 7706 6437 1585

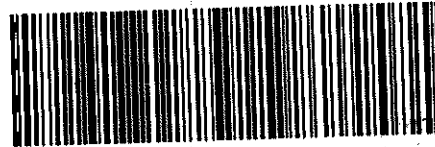
MASTER #

49424

MI-US

GRR

XX GRRRA



20200603-414003

After printing this label:

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

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ALS Parachute Custody Seal

DATE 7-23-14 Time 1740

Name W. Martinez

ALS Parachute Custody Seal

DATE 7-23-14 Time 1730

Name W. Martinez

ALS Parachute Custody Seal

DATE 7-23-14 Time 1700

Name W. Martinez

ALS Parachute Custody Seal

DATE 7-23-14 Time 1750

Name W. Martinez

ALS Parachute Custody Seal

DATE 7-23-14 Time 1734

Name W. Martinez

ALS Parachute Custody Seal

DATE 7-23-14 Time 1722

Name W. Martinez