



July 18, 2015

Stan Spencer
NW Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
796 Megan Ave, Suite 201,
Rifle, CO 81650

Re: Riley Tank Farm Produced Water Spill Closure Request

Dear Mr. Spencer,

Attached are the laboratory reports and the sample location map for soil samples collected from the impacted area and nearby non-impacted native soil in order to close the produced water spill that occurred at the Riley Tank Farm and was discovered on December 8, 2014.

One grab sample was collected from the impacted area and was analyzed for the constituents listed in Table 910-1. Three grab samples were collected from nearby non-impacted, native soil to establish the background concentrations for arsenic. In accordance with the COGCC Rule 910.b.(3)E. one grab sample was analyzed for inorganics to establish background soil conditions.

As the attached lab reports indicate, all constituents of concern listed in the COGCC Table 910-1 tested below the cleanup requirements or below the background concentrations with the exception of the inorganics. Therefore, in accordance with COGCC guideline Q32 regarding inorganics, the impacted area will be covered with 3' of clean soil during the final reclamation of this location.

Based on these results, WPX respectfully requests closure of this incident.

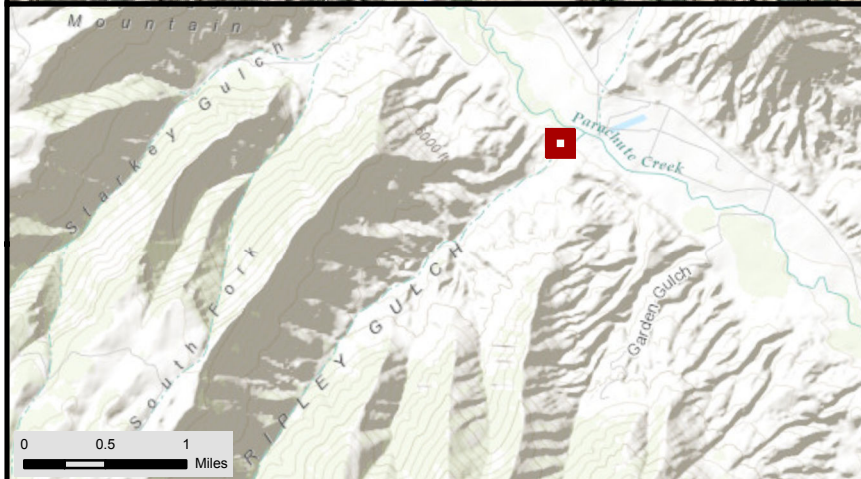
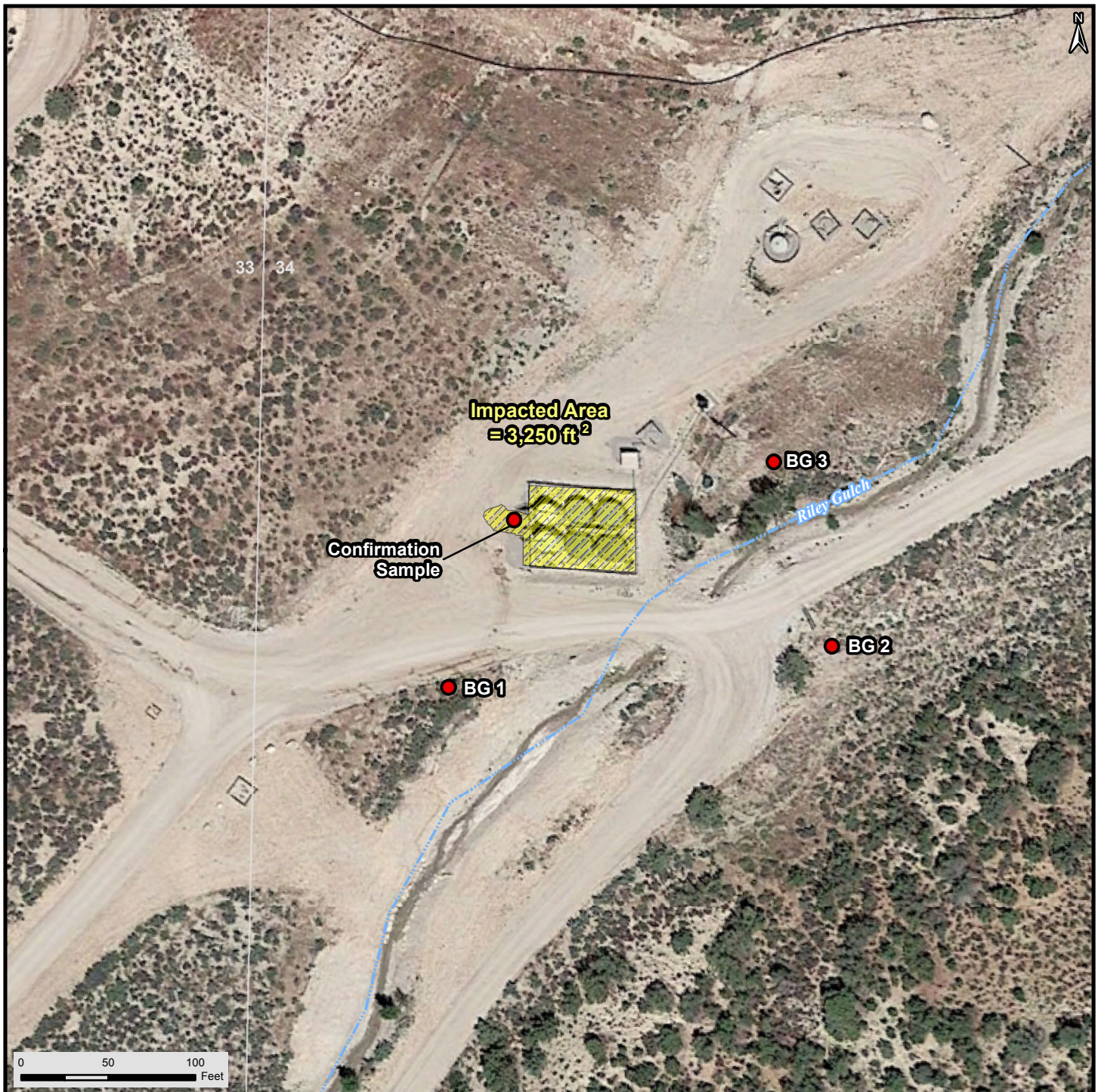
Please do not hesitate to contact me at (970) 683-2295 should you have any questions or concerns regarding this information.

Sincerely,

Karolina Blaney
Environmental Specialist

Attachments (2)

- Sampling Location Map
- Laboratory Reports



WPXENERGY Form 19 Map

Riley Tank Farm

39.475432 -108.103334
Section 34, Township 6 South, Range 96 West

<ul style="list-style-type: none"> Sample Locations Impacted Area 	Transportation	Hydrography
	<ul style="list-style-type: none"> CO Highways County Roads Local Streets WPX Access 	<ul style="list-style-type: none"> Ditch Intermittent Stream Perennial Stream Waterbody Watershed



HRI COMPLIANCE SOLUTIONS, INC.
Environmental Consultants

Author: E. Fought

Revision: 0

Date: 6/29/2015

Analytical Results

Contaminant of Concern ↓	COGCC standards	Location →	Point of Origin	Bar Ditch	Drainage	North Wall	Bottom 25'	West Wall
		Date Sampled	8/18/2014	8/18/2014	8/18/2014	8/21/2014	8/21/2014	8/21/2014
Organic Compounds in Soil								
TPH	500	mg/kg	210	32	16	21	15	ND
DRO		mg/kg	210	32	16	21	15	ND
GRO		mg/kg	ND	ND	ND	ND	ND	ND
Benzene	0.17	mg/kg	0.27	ND	ND	ND	ND	ND
Toluene	85	mg/kg	0.83	0.055	ND	0.063	ND	ND
Ethylbenzene	100	mg/kg	0.096	ND	ND	0.084	ND	ND
Xylenes (Total)	175	mg/kg	0.86	ND	ND	1.2	ND	ND
Acenaphthene	1,000	mg/kg	ND	ND	ND	ND	ND	ND
Anthracene	1,000	mg/kg	0.017	ND	ND	ND	ND	ND
Benzo(A)anthracene	0.22	mg/kg	ND	ND	ND	ND	ND	ND
Benzo(B)fluoranthene	0.22	mg/kg	ND	ND	ND	ND	ND	ND
Benzo(K)fluoranthene	2.2	mg/kg	ND	ND	ND	ND	ND	ND
Benzo(A)pyrene	0.022	mg/kg	ND	ND	ND	ND	ND	ND
Chrysene	22	mg/kg	ND	ND	ND	ND	ND	ND
Dibenzo(A,H)anthracene	0.022	mg/kg	ND	ND	ND	ND	ND	ND
Fluoranthene	1,000	mg/kg	ND	ND	ND	ND	ND	ND
Fluorene	1,000	mg/kg	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND	ND	ND	ND	ND	ND
Naphthalene	23	mg/kg	ND	ND	ND	ND	ND	ND
Pyrene	1,000	mg/kg	ND	ND	ND	ND	ND	ND
Inorganics in Soil								
EC	<4 or 2 x background	mmhos/cm	50	13	9.8	11	5.9	6.5
SAR	<12		36	35	19	10	72	12
pH	6-9		7.9	8.2	8.4	8	9.6	8.7
Metals in Soil								
Arsenic	0.39	mg/kg	ND	ND	ND	5.8	5.9	8
Barium total	15,000	mg/kg	77	150	10	340	24	180
Cadmium	70	mg/kg	ND	ND	ND	0.91	ND	1.7
Chromium (III)	120,000	mg/kg	ND	ND	ND	9.6	15	5.7
Chromium (VI)	23	mg/kg	ND	ND	ND	ND	ND	ND
Copper	3,100	mg/kg	ND	ND	ND	12	16	9.7
Lead	400	mg/kg	ND	1.8	ND	15	16	12
Mercury	23	mg/kg	0.03	0.019	0.036	0.028	0.046	0.07
Nickel	1,600	mg/kg	ND	ND	ND	16	27	11
Selenium	390	mg/kg	ND	ND	ND	2.1	3.2	2.2
Silver	390	mg/kg	ND	ND	ND	ND	ND	ND
Zinc	23,000	mg/kg	ND	ND	ND	57	90	40

Analytical Results

Contaminant of Concern ↓	COGCC standards	Location →	East Wall 8'	East Wall 20'	South Wall	East Ex. Bottom 30'	East Ex. East Wall	West Ex. South Wall
		Date Sampled	8/21/2014	8/21/2014	8/21/2014	9/25/2014	9/25/2014	9/25/2014
Organic Compounds in Soil								
TPH	500	mg/kg	3,020	2,200	920	13	13	ND
DRO		mg/kg	2,300	500	220	13	13	ND
GRO		mg/kg	720	1,700	700	ND	ND	ND
Benzene	0.17	mg/kg	1.2	ND	ND	ND	ND	ND
Toluene	85	mg/kg	11	ND	ND	ND	ND	ND
Ethylbenzene	100	mg/kg	18	2,700	ND	ND	ND	ND
Xylenes (Total)	175	mg/kg	120	51,000	0.260	ND	ND	0.15
Acenaphthene	1,000	mg/kg	ND	ND	0.016	ND	ND	ND
Anthracene	1,000	mg/kg	0.4	0.069	0.080	ND	ND	ND
Benzo(A)anthracene	0.22	mg/kg	0.050	ND	0.033	ND	ND	ND
Benzo(B)fluoranthene	0.22	mg/kg	ND	ND	ND	ND	ND	ND
Benzo(K)fluoranthene	2.2	mg/kg	ND	ND	ND	ND	ND	ND
Benzo(A)pyrene	0.022	mg/kg	ND	ND	ND	ND	ND	ND
Chrysene	22	mg/kg	0.053	ND	ND	ND	ND	ND
Dibenzo(A,H)anthracene	0.022	mg/kg	ND	ND	ND	ND	ND	ND
Fluoranthene	1,000	mg/kg	0.038	ND	ND	ND	ND	ND
Fluorene	1,000	mg/kg	0.1	0.18	0.084	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND	ND	ND	ND	ND	ND
Naphthalene	23	mg/kg	2.2	0.47	ND	ND	ND	ND
Pyrene	1,000	mg/kg	0.068	ND	ND	ND	ND	ND
Inorganics in Soil								
EC	<4 or 2 x background	mmhos/cm	3	8.4	8	3.8	1.7	7.1
SAR	<12		24	49	58	45	9.1	54
pH	6-9		9	9.3	9	9.4	8.7	9.2
Metals in Soil								
Arsenic	0.39	mg/kg	9.4	9.8	12	4.8	9.3	14
Barium total	15,000	mg/kg	500	480	380	24	210	730
Cadmium	70	mg/kg	2.7	3.7	1.7	ND	2.9	4.3
Chromium (III)	120,000	mg/kg	13	5.1	6.1	11	6.2	7.3
Chromium (VI)	23	mg/kg	ND	ND	ND	ND	ND	ND
Copper	3,100	mg/kg	18	8.1	9.1	13	11	13
Lead	400	mg/kg	22	14	12	12	15	19
Mercury	23	mg/kg	0.049	0.071	0.075	ND	0.043	0.047
Nickel	1,600	mg/kg	25	10	11	19	12	13
Selenium	390	mg/kg	3.2	2	2.4	ND	2.4	2.5
Silver	390	mg/kg	ND	ND	ND	ND	ND	ND
Zinc	23,000	mg/kg	80	40	39	66	40	54

Analytical Results

Contaminant of Concern ↓	COGCC standards	Location →	West Ex. Bottom 30'	East Ex. South Wall	West Ex. North Wall
		Date Sampled	9/25/2014	9/25/2014	9/26//14
Organic Compounds in Soil					
TPH	500	mg/kg	56	ND	8.9
DRO		mg/kg	35	ND	8.9
GRO		mg/kg	21	ND	ND
Benzene	0.17	mg/kg	ND	ND	ND
Toluene	85	mg/kg	ND	ND	ND
Ethylbenzene	100	mg/kg	ND	ND	ND
Xylenes (Total)	175	mg/kg	0.15	ND	ND
Acenaphthene	1,000	mg/kg	ND	ND	ND
Anthracene	1,000	mg/kg	ND	ND	ND
Benzo(A)anthracene	0.22	mg/kg	ND	ND	ND
Benzo(B)fluoranthene	0.22	mg/kg	ND	ND	ND
Benzo(K)fluoranthene	2.2	mg/kg	ND	ND	ND
Benzo(A)pyrene	0.022	mg/kg	ND	ND	ND
Chrysene	22	mg/kg	ND	ND	ND
Dibenzo(A,H)anthracene	0.022	mg/kg	ND	ND	ND
Fluoranthene	1,000	mg/kg	ND	ND	ND
Fluorene	1,000	mg/kg	0.089	ND	ND
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND	ND	ND
Naphthalene	23	mg/kg	ND	ND	ND
Pyrene	1,000	mg/kg	ND	ND	ND
Inorganics in Soil					
EC	<4 or 2 x background	mmhos/cm	5.2	1.5	6.6
SAR	<12		33	43	16
pH	6-9		9.4	8.8	8.8
Metals in Soil					
Arsenic	0.39	mg/kg	3.1	8	8
Barium total	15,000	mg/kg	290	130	370
Cadmium	70	mg/kg	ND	1.1	2.6
Chromium (III)	120,000	mg/kg	6.2	5.8	6.7
Chromium (VI)	23	mg/kg	ND	ND	ND
Copper	3,100	mg/kg	6.3	9	9.3
Lead	400	mg/kg	8.1	11	12
Mercury	23	mg/kg	0.028	0.033	0.04
Nickel	1,600	mg/kg	14	11	11
Selenium	390	mg/kg	ND	ND	2.6
Silver	390	mg/kg	ND	ND	ND
Zinc	23,000	mg/kg	42	41	42

Analytical Results

Contaminant of Concern ↓	COGCC standards	Location →	East Ex. North Wall	Clough 18 Batch 1	Riley Spill Soil Sample	Riley Spill Soil Sample	BG Sample 1	BG Sample 2	BG Sample 3
		Date Sampled	9/26//14	10/28/2014	12/19/2014	6/17/2015	12/19/2014	12/19/2014	12/19/2014
Organic Compounds in Soil									
TPH	500	mg/kg	ND	494	2,888	25			
DRO		mg/kg	ND	420	88	25			
GRO		mg/kg	ND	74	2,800	ND			
Benzene	0.17	mg/kg	ND	ND	0.24	ND			
Toluene	85	mg/kg	ND	ND	19	ND			
Ethylbenzene	100	mg/kg	ND	ND	7.2	ND			
Xylenes (Total)	175	mg/kg	ND	ND	130	ND			
Acenaphthene	1,000	mg/kg	ND	ND	ND				
Anthracene	1,000	mg/kg	ND	0.055	ND				
Benzo(A)anthracene	0.22	mg/kg	ND	ND	ND				
Benzo(B)fluoranthene	0.22	mg/kg	ND	ND	ND				
Benzo(K)fluoranthene	2.2	mg/kg	ND	ND	ND				
Benzo(A)pyrene	0.022	mg/kg	ND	ND	ND				
Chrysene	22	mg/kg	ND	ND	ND				
Dibenzo(A,H)anthracene	0.022	mg/kg	ND	ND	ND				
Fluoranthene	1,000	mg/kg	ND	0.011	ND				
Fluorene	1,000	mg/kg	ND	0.093	0.02				
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND	ND	ND				
Naphthalene	23	mg/kg	ND	0.021	0.28				
Pyrene	1,000	mg/kg	ND	0.021	ND				
Inorganics in Soil									
EC	<4 or 2 x background	mmhos/cm	5.7	8.5	18		1.4		
SAR	<12		9.4	19	19		1.1		
pH	6-9		8.7	8.7	8.1				
Metals in Soil									
Arsenic	0.39	mg/kg	28	7.9	7.6		11	8.7	10
Barium total	15,000	mg/kg	380	550	480				
Cadmium	70	mg/kg	5.1	12	0.6				
Chromium (III)	120,000	mg/kg	5.5	6.6	12				
Chromium (VI)	23	mg/kg	ND	ND	ND				
Copper	3,100	mg/kg	9	8.8	20				
Lead	400	mg/kg	15	19	14				
Mercury	23	mg/kg	0.067	0.033	0.035				
Nickel	1,600	mg/kg	9.6	9.3	18				
Selenium	390	mg/kg	3	ND	0.87				
Silver	390	mg/kg	ND	ND	ND				
Zinc	23,000	mg/kg	39	49	74				



02-Jan-2015

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

Re: **WPX Riley Tank Farm Spill 12.19.14**

Work Order: **14121113**

Dear Mark,

ALS Environmental received 1 sample on 20-Dec-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 24.

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

Sincerely,

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

Electronically approved by: Les Arnold

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Work Order: 14121113

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>
14121113-01	Riley Spill Soil Sample	Soil		12/19/2014 10:00	12/20/2014 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Work Order: 14121113

Case Narrative

Batch 66282 MS/MSD data for metals is not related to this project's samples. No data requires qualification.

Batch 66317 Sample 14121113-01 One PAH surrogate recovery was below control limits due to matrix interference.

Batch 66394 MS/MSD data for Hexavalent Chromium is not related to this project's samples. No data requires qualification.

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

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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 02-Jan-15

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Sample ID: Riley Spill Soil Sample
Collection Date: 12/19/2014 10:00 AM

Work Order: 14121113
Lab ID: 14121113-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 12/29/2014	Analyst: IT
DRO (C10-C28)	88		4.8	mg/Kg-dry	1	12/29/2014 03:02 PM
Surr: 4-Terphenyl-d14	74.5		39-133	%REC	1	12/29/2014 03:02 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep Date: 12/22/2014	Analyst: IT
GRO (C6-C10)	2,800		2.9	mg/Kg-dry	1	12/22/2014 04:27 PM
Surr: Toluene-d8	128		50-150	%REC	1	12/22/2014 04:27 PM
MERCURY BY CVAA						
			SW7471		Prep Date: 12/22/2014	Analyst: LR
Mercury	0.035		0.016	mg/Kg-dry	1	12/22/2014 01:14 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep Date: 12/23/2014	Analyst: JEC
Arsenic	7.6		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Barium	480		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Cadmium	0.60		0.38	mg/Kg-dry	1	12/29/2014 05:05 PM
Chromium	12		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Copper	20		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Lead	14		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Nickel	18		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Selenium	0.87		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Silver	ND		0.48	mg/Kg-dry	1	12/29/2014 05:05 PM
Zinc	74		0.96	mg/Kg-dry	1	12/29/2014 05:05 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep Date: 12/23/2014	Analyst: JEC
Calcium	500		5.0	mg/L	10	12/23/2014 12:38 PM
Magnesium	280		2.0	mg/L	10	12/23/2014 12:38 PM
Sodium	2,200		2.0	mg/L	10	12/23/2014 12:38 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep Date: 12/23/2014	Analyst: JEC
Sodium Adsorption Ratio	19		0.010	none	1	12/23/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep Date: 12/26/2014	Analyst: RM
Acenaphthene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Acenaphthylene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Anthracene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Benzo(a)anthracene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Benzo(a)pyrene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Benzo(b)fluoranthene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Benzo(g,h,i)perylene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Benzo(k)fluoranthene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Chrysene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Dibenzo(a,h)anthracene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Fluoranthene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM

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

ALS Group USA, Corp

Date: 02-Jan-15

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Sample ID: Riley Spill Soil Sample
Collection Date: 12/19/2014 10:00 AM

Work Order: 14121113
Lab ID: 14121113-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	20		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Indeno(1,2,3-cd)pyrene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Naphthalene	280		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Pyrene	ND		7.7	µg/Kg-dry	1	12/30/2014 02:40 AM
Surr: 2-Fluorobiphenyl	42.9		12-100	%REC	1	12/30/2014 02:40 AM
Surr: 4-Terphenyl-d14	48.6		25-137	%REC	1	12/30/2014 02:40 AM
Surr: Nitrobenzene-d5	36.2	S	37-107	%REC	1	12/30/2014 02:40 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep Date: 12/22/2014 Analyst: AK		
Benzene	240		170	µg/Kg-dry	5	1/2/2015 02:53 AM
Ethylbenzene	7,200		170	µg/Kg-dry	5	1/2/2015 02:53 AM
m,p-Xylene	110,000		1,400	µg/Kg-dry	20	1/2/2015 01:12 AM
o-Xylene	18,000		690	µg/Kg-dry	20	1/2/2015 01:12 AM
Toluene	19,000		170	µg/Kg-dry	5	1/2/2015 02:53 AM
Xylenes, Total	130,000		2,100	µg/Kg-dry	20	1/2/2015 01:12 AM
Surr: 1,2-Dichloroethane-d4	93.5		70-130	%REC	5	1/2/2015 02:53 AM
Surr: 1,2-Dichloroethane-d4	97.2		70-130	%REC	20	1/2/2015 01:12 AM
Surr: 4-Bromofluorobenzene	96.2		70-130	%REC	5	1/2/2015 02:53 AM
Surr: 4-Bromofluorobenzene	96.7		70-130	%REC	20	1/2/2015 01:12 AM
Surr: Dibromofluoromethane	95.7		70-130	%REC	20	1/2/2015 01:12 AM
Surr: Dibromofluoromethane	93.0		70-130	%REC	5	1/2/2015 02:53 AM
Surr: Toluene-d8	102		70-130	%REC	20	1/2/2015 01:12 AM
Surr: Toluene-d8	121		70-130	%REC	5	1/2/2015 02:53 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep Date: 12/23/2014 Analyst: JB		
Electrical Conductivity @ Saturation	18		0.25	mmhos/cm @2	50	12/26/2014 12:00 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: MB		
Chromium, Trivalent	12		0.58	mg/Kg-dry	1	12/30/2014 10:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep Date: 12/26/2014 Analyst: DAH		
Chromium, Hexavalent	ND		0.57	mg/Kg-dry	1	12/29/2014 03:00 PM
MOISTURE			E160.3M	Analyst: LR		
Moisture	13		0.050	% of sample	1	12/21/2014 09:15 PM
PH			SW9045D	Prep Date: 12/22/2014 Analyst: AXL		
pH	8.1		s.u.	1		12/22/2014 03:00 PM

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

ALS Group USA, Corp

Date: 02-Jan-15

Client: HRL Compliance Solutions, Inc

Work Order: 14121113

Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66362**

Instrument ID **GC8**

Method: **SW8015M**

MBLK		Sample ID: DBLKS1-66362-66362				Units: mg/Kg		Analysis Date: 12/29/2014 12:45 PM		
Client ID:		Run ID: GC8_141229A				SeqNo: 3093903		Prep Date: 12/29/2014		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	1.516	0	2	0	75.8	39-133		0		

LCS		Sample ID: DLCSS1-66362-66362				Units: mg/Kg		Analysis Date: 12/29/2014 01:12 PM		
Client ID:		Run ID: GC8_141229A				SeqNo: 3093904		Prep Date: 12/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	149.2	5.0	200	0	74.6	61-109		0		
Surr: 4-Terphenyl-d14	1.159	0	2	0	58	39-133		0		

MS		Sample ID: 14121125-03B MS				Units: mg/Kg		Analysis Date: 12/29/2014 01:40 PM		
Client ID:		Run ID: GC8_141229A				SeqNo: 3093905		Prep Date: 12/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	252.2	8.1	324.8	11.11	74.2	48-110		0		
Surr: 4-Terphenyl-d14	2.154	0	3.248	0	66.3	39-133		0		

MSD		Sample ID: 14121125-03B MSD				Units: mg/Kg		Analysis Date: 12/29/2014 02:07 PM		
Client ID:		Run ID: GC8_141229A				SeqNo: 3093906		Prep Date: 12/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	262.7	8.2	329.4	11.11	76.4	48-110	252.2	4.09	30	
Surr: 4-Terphenyl-d14	2.064	0	3.294	0	62.7	39-133	2.154	4.27	30	

The following samples were analyzed in this batch:

14121113-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66239** Instrument ID **GC9** Method: **SW8015**

MBLK		Sample ID: MBLK-66239-66239				Units: µg/Kg		Analysis Date: 12/22/2014 02:23 PM		
Client ID:		Run ID: GC9_141222A				SeqNo: 3087949		Prep Date: 12/22/2014		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>	4978	0	5000	0	99.6	50-150	0			

LCS		Sample ID: LCS-66239-66239				Units: µg/Kg		Analysis Date: 12/22/2014 01:33 PM		
Client ID:		Run ID: GC9_141222A				SeqNo: 3087947		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	490300	2,500	500000	0	98.1	70-130	0			
<i>Surr: Toluene-d8</i>	4937	0	5000	0	98.7	50-150	0			

MS		Sample ID: 14121116-01A MS				Units: µg/Kg		Analysis Date: 12/22/2014 05:41 PM		
Client ID:		Run ID: GC9_141222A				SeqNo: 3087953		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	495700	2,500	500000	0	99.1	70-130	0			
<i>Surr: Toluene-d8</i>	4565	0	5000	0	91.3	50-150	0			

MSD		Sample ID: 14121116-01A MSD				Units: µg/Kg		Analysis Date: 12/22/2014 06:06 PM		
Client ID:		Run ID: GC9_141222A				SeqNo: 3087954		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	485600	2,500	500000	0	97.1	70-130	495700	2.05	30	
<i>Surr: Toluene-d8</i>	4792	0	5000	0	95.8	50-150	4565	4.84	30	

The following samples were analyzed in this batch:

14121113-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66193** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-66193-66193				Units: mg/Kg		Analysis Date: 12/22/2014 01:09 PM		
Client ID:		Run ID: HG1_141222A				SeqNo: 3087060		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-66193-66193				Units: mg/Kg		Analysis Date: 12/22/2014 01:11 PM		
Client ID:		Run ID: HG1_141222A				SeqNo: 3087061		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1738 0.020 0.1665 0 104 80-120 0

MS		Sample ID: 1412936-04BMS				Units: mg/Kg		Analysis Date: 12/22/2014 01:41 PM		
Client ID:		Run ID: HG1_141222A				SeqNo: 3087078		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1267 0.012 0.1003 0.008509 118 75-125 0

MSD		Sample ID: 1412936-04BMSD				Units: mg/Kg		Analysis Date: 12/22/2014 01:43 PM		
Client ID:		Run ID: HG1_141222A				SeqNo: 3087079		Prep Date: 12/22/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1303 0.012 0.1016 0.008509 120 75-125 0.1267 2.85 35

The following samples were analyzed in this batch:

14121113-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66201** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 14121037-01CDUP				Units: mg/L		Analysis Date: 12/23/2014 11:53 A		
Client ID:		Run ID: ICP2_141223A				SeqNo: 3088529		Prep Date: 12/23/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	137.6	5.0	0	0	0	0-0	0	0	0	
Magnesium	44.08	2.0	0	0	0	0-0	0	0	0	
Sodium	149.4	2.0	0	0	0	0-0	0	0	0	

DUP		Sample ID: 14121037-01CDUP				Units: none		Analysis Date: 12/23/2014		
Client ID:		Run ID: SAR_141223A				SeqNo: 3088602		Prep Date: 12/23/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	2.837	0.010	0	0	0		2.764	2.59	50	

The following samples were analyzed in this batch:

14121113-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66282** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK				Sample ID: MBLK-66282-66282			Units: mg/Kg		Analysis Date: 12/29/2014 04:20 PM		
Client ID:			Run ID: ICP2_141229A			SeqNo: 3093744		Prep Date: 12/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	ND	0.25									
Barium	ND	0.25									
Cadmium	0.04643	0.50								J	
Chromium	ND	0.25									
Copper	ND	0.50									
Lead	ND	0.25									
Nickel	ND	0.25									
Selenium	0.1706	0.50								J	
Silver	ND	0.25									
Zinc	ND	0.50									

LCS				Sample ID: LCS-66282-66282				Units: mg/Kg			Analysis Date: 12/29/2014 04:25 PM			
Client ID:				Run ID: ICP2_141229A				SeqNo: 3093745			Prep Date: 12/23/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Arsenic	4.372	0.25	5	0	87.4	80-120	0							
Barium	4.757	0.25	5	0	95.1	80-120	0							
Cadmium	4.924	0.50	5	0	98.5	80-120	0							
Chromium	4.921	0.25	5	0	98.4	80-120	0							
Copper	4.947	0.50	5	0	98.9	80-120	0							
Lead	5.425	0.25	5	0	109	80-120	0							
Nickel	4.858	0.25	5	0	97.2	80-120	0							
Selenium	4.46	0.50	5	0	89.2	80-120	0							
Silver	5.138	0.25	5	0	103	80-120	0							
Zinc	4.379	0.50	5	0	87.6	80-120	0							

MS				Sample ID: 14121112-02AMS			Units: mg/Kg		Analysis Date: 12/29/2014 04:42 PM		
Client ID:			Run ID: ICP2_141229A		SeqNo: 3093748		Prep Date: 12/23/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	17.49	0.36	7.289	7.459	138	75-125	0			S	
Barium	267.4	0.36	7.289	238.1	401	75-125	0			SO	
Cadmium	7.841	0.73	7.289	0.6289	99	75-125	0				
Chromium	19.56	0.36	7.289	10.04	131	75-125	0			S	
Copper	23.13	0.73	7.289	13.55	131	75-125	0			S	
Lead	20.79	0.36	7.289	11.97	121	75-125	0				
Nickel	21.69	0.36	7.289	13.58	111	75-125	0				
Selenium	7.004	0.73	7.289	0.4766	89.6	75-125	0				
Silver	8.516	0.36	7.289	-0.1225	119	75-125	0				
Zinc	62.92	0.73	7.289	46.57	224	75-125	0			SO	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66282** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 14121112-02AMSD				Units: mg/Kg		Analysis Date: 12/29/2014 04:48 PM		
Client ID:		Run ID: ICP2_141229A				SeqNo: 3093749		Prep Date: 12/23/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.42	0.37	7.342	7.459	122	75-125	17.49	6.27	20	
Barium	320.2	0.37	7.342	238.1	1120	75-125	267.4	18	20	SO
Cadmium	8.202	0.73	7.342	0.6289	103	75-125	7.841	4.5	20	
Chromium	19.75	0.37	7.342	10.04	132	75-125	19.56	0.965	20	S
Copper	22.77	0.73	7.342	13.55	126	75-125	23.13	1.55	20	S
Lead	19.97	0.37	7.342	11.97	109	75-125	20.79	4.02	20	
Nickel	21.7	0.37	7.342	13.58	111	75-125	21.69	0.058	20	
Selenium	7.242	0.73	7.342	0.4766	92.1	75-125	7.004	3.34	20	
Silver	8.557	0.37	7.342	-0.1225	118	75-125	8.516	0.48	20	
Zinc	60.76	0.73	7.342	46.57	193	75-125	62.92	3.5	20	SO

The following samples were analyzed in this batch:

14121113-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66317** Instrument ID **SVMS4** Method: **SW846 8270D**

MBLK				Sample ID: SBLKS1-66317-66317			Units: µg/Kg		Analysis Date: 12/28/2014 05:29 PM	
Client ID:				Run ID: SVMS4_141228A			SeqNo: 3093436		Prep Date: 12/26/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
<i>Surr: 2-Fluorobiphenyl</i>	1379	0	1667	0	82.7	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1805	0	1667	0	108	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1180	0	1667	0	70.8	37-107	0			

LCS				Sample ID: SLCSS1-66317-66317			Units: µg/Kg		Analysis Date: 12/28/2014 05:55 PM	
Client ID:				Run ID: SVMS4_141228A			SeqNo: 3093437		Prep Date: 12/26/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	582	6.7	666.7	0	87.3	45-110	0			
Acenaphthylene	601	6.7	666.7	0	90.1	45-105	0			
Anthracene	669.3	6.7	666.7	0	100	55-105	0			
Benzo(a)anthracene	620.7	6.7	666.7	0	93.1	50-110	0			
Benzo(a)pyrene	607.7	6.7	666.7	0	91.1	50-110	0			
Benzo(b)fluoranthene	634.3	6.7	666.7	0	95.1	45-115	0			
Benzo(g,h,i)perylene	679.7	6.7	666.7	0	102	40-125	0			
Benzo(k)fluoranthene	594	6.7	666.7	0	89.1	45-115	0			
Chrysene	670	6.7	666.7	0	100	55-110	0			
Dibenzo(a,h)anthracene	613	6.7	666.7	0	91.9	40-125	0			
Fluoranthene	701.3	6.7	666.7	0	105	55-115	0			
Fluorene	614.7	6.7	666.7	0	92.2	50-110	0			
Indeno(1,2,3-cd)pyrene	615.3	6.7	666.7	0	92.3	40-120	0			
Naphthalene	557	6.7	666.7	0	83.5	40-105	0			
Pyrene	693	6.7	666.7	0	104	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	1395	0	1667	0	83.7	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	1732	0	1667	0	104	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	1312	0	1667	0	78.7	37-107	0			

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66317** Instrument ID **SVMS4** Method: **SW846 8270D**

MS				Sample ID: 1412924-15B MS			Units: µg/Kg		Analysis Date: 12/28/2014 08:40 PM	
Client ID:				Run ID: SVMS4_141228A			SeqNo: 3093438		Prep Date: 12/26/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1214	13	1322	0	91.8	45-110	0			
Acenaphthylene	1248	13	1322	0	94.3	45-105	0			
Anthracene	1356	13	1322	9.045	102	55-105	0			
Benzo(a)anthracene	1298	13	1322	0	98.2	50-110	0			
Benzo(a)pyrene	1259	13	1322	0	95.2	50-110	0			
Benzo(b)fluoranthene	1296	13	1322	0	98	45-115	0			
Benzo(g,h,i)perylene	1251	13	1322	0	94.6	40-125	0			
Benzo(k)fluoranthene	1166	13	1322	0	88.2	45-115	0			
Chrysene	1303	13	1322	0	98.5	55-110	0			
Dibenzo(a,h)anthracene	1109	13	1322	0	83.9	40-125	0			
Fluoranthene	1445	13	1322	20.35	108	55-115	0			
Fluorene	1289	13	1322	0	97.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1260	13	1322	0	95.3	40-120	0			
Naphthalene	1082	13	1322	27.46	79.7	40-105	0			
Pyrene	1263	13	1322	22.61	93.8	45-125	0			
Surr: 2-Fluorobiphenyl	2812	0	3306	0	85.1	12-100	0			
Surr: 4-Terphenyl-d14	3152	0	3306	0	95.4	25-137	0			
Surr: Nitrobenzene-d5	2453	0	3306	0	74.2	37-107	0			

MSD				Sample ID: 1412924-15B MSD			Units: µg/Kg		Analysis Date: 12/28/2014 09:05 PM	
Client ID:				Run ID: SVMS4_141228A			SeqNo: 3093439		Prep Date: 12/26/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1220	13	1287	0	94.7	45-110	1214	0.476	30	
Acenaphthylene	1252	13	1287	0	97.2	45-105	1248	0.34	30	
Anthracene	1326	13	1287	9.045	102	55-105	1356	2.25	30	
Benzo(a)anthracene	1279	13	1287	0	99.3	50-110	1298	1.52	30	
Benzo(a)pyrene	1256	13	1287	0	97.6	50-110	1259	0.25	30	
Benzo(b)fluoranthene	1269	13	1287	0	98.5	45-115	1296	2.18	30	
Benzo(g,h,i)perylene	1258	13	1287	0	97.7	40-125	1251	0.535	30	
Benzo(k)fluoranthene	1175	13	1287	0	91.2	45-115	1166	0.712	30	
Chrysene	1279	13	1287	0	99.3	55-110	1303	1.88	30	
Dibenzo(a,h)anthracene	1122	13	1287	0	87.2	40-125	1109	1.17	30	
Fluoranthene	1415	13	1287	20.35	108	55-115	1445	2.09	30	
Fluorene	1278	13	1287	0	99.2	50-110	1289	0.908	30	
Indeno(1,2,3-cd)pyrene	1305	13	1287	0	101	40-120	1260	3.47	30	
Naphthalene	1110	13	1287	27.46	84.1	40-105	1082	2.61	30	
Pyrene	1272	13	1287	22.61	97	45-125	1263	0.71	30	
Surr: 2-Fluorobiphenyl	2845	0	3218	0	88.4	12-100	2812	1.16	40	
Surr: 4-Terphenyl-d14	3016	0	3218	0	93.7	25-137	3152	4.4	40	
Surr: Nitrobenzene-d5	2517	0	3218	0	78.2	37-107	2453	2.59	40	

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66317** Instrument ID **SVMS4** Method: **SW846 8270D**

The following samples were analyzed in this batch:

14121113- 01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66230** Instrument ID **VMS6** Method: **SW8260B**

MBLK				Sample ID: MBLK-66230-66230				Units: µg/Kg			Analysis Date: 12/22/2014 11:54 A			
Client ID:				Run ID: VMS6_141222A				SeqNo: 3087156			Prep Date: 12/22/2014		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	981.5	0	1000	0	98.2	70-130		0						
Surr: 4-Bromofluorobenzene	1004	0	1000	0	100	70-130		0						
Surr: Dibromofluoromethane	929.5	0	1000	0	93	70-130		0						
Surr: Toluene-d8	991.5	0	1000	0	99.2	70-130		0						

LCS				Sample ID: LCS-66230-66230			Units: µg/Kg		Analysis Date: 12/22/2014 10:36 A		
Client ID:			Run ID: VMS6_141222A			SeqNo: 3087155		Prep Date: 12/22/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	931.5	30	1000	0	93.2	75-125	0				
Ethylbenzene	981	30	1000	0	98.1	75-125	0				
m,p-Xylene	1957	60	2000	0	97.8	80-125	0				
o-Xylene	958	30	1000	0	95.8	75-125	0				
Toluene	961	30	1000	0	96.1	70-125	0				
Xylenes, Total	2915	90	3000	0	97.2	75-125	0				
Surr: 1,2-Dichloroethane-d4	962	0	1000	0	96.2	70-130	0				
Surr: 4-Bromofluorobenzene	1002	0	1000	0	100	70-130	0				
Surr: Dibromofluoromethane	989	0	1000	0	98.9	70-130	0				
Surr: Toluene-d8	993.5	0	1000	0	99.4	70-130	0				

MS				Sample ID: 14121127-07A MS			Units: µg/Kg		Analysis Date: 12/30/2014 09:51 A		
Client ID:			Run ID: VMS6_141229B			SeqNo: 3094356		Prep Date: 12/22/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1128	30	1000	0	113	75-125	0				
Ethylbenzene	1090	30	1000	0	109	75-125	0				
m,p-Xylene	2186	60	2000	0	109	80-125	0				
o-Xylene	1082	30	1000	0	108	75-125	0				
Toluene	1048	30	1000	0	105	70-125	0				
Xylenes, Total	3269	90	3000	0	109	75-125	0				
Surr: 1,2-Dichloroethane-d4	922	0	1000	0	92.2	70-130	0				
Surr: 4-Bromofluorobenzene	994	0	1000	0	99.4	70-130	0				
Surr: Dibromofluoromethane	1007	0	1000	0	101	70-130	0				
Surr: Toluene-d8	926	0	1000	0	92.6	70-130	0				

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66230** Instrument ID **VMS6** Method: **SW8260B**

MSD				Sample ID: 14121127-07A MSD			Units: µg/Kg		Analysis Date: 12/30/2014 10:17 A		
Client ID:			Run ID: VMS6_141229B			SeqNo: 3094357		Prep Date: 12/22/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1111	30	1000	0	111	75-125	1128	1.56	30		
Ethylbenzene	1062	30	1000	0	106	75-125	1090	2.51	30		
m,p-Xylene	2149	60	2000	0	107	80-125	2186	1.73	30		
o-Xylene	1043	30	1000	0	104	75-125	1082	3.72	30		
Toluene	1048	30	1000	0	105	70-125	1048	0.0477	30		
Xylenes, Total	3192	90	3000	0	106	75-125	3269	2.38	30		
Surr: 1,2-Dichloroethane-d4	971.5	0	1000	0	97.2	70-130	922	5.23	30		
Surr: 4-Bromofluorobenzene	1005	0	1000	0	100	70-130	994	1.1	30		
Surr: Dibromofluoromethane	949	0	1000	0	94.9	70-130	1007	5.93	30		
Surr: Toluene-d8	934	0	1000	0	93.4	70-130	926	0.86	30		

The following samples were analyzed in this batch:

14121113-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66201** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 14121037-01C DUP				Units: mmhos/cm @25°		Analysis Date: 12/26/2014 12:00 PM		
Client ID:		Run ID: WETCHEM_141226A			SeqNo: 3090639		Prep Date: 12/23/2014		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	2.03	0.050	0	0	0		2.02	0.494	50	

The following samples were analyzed in this batch:

14121113-01C

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66251** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-66251-66251				Units: s.u.			Analysis Date: 12/22/2014 03:00 PM			
Client ID:				Run ID: WETCHEM_141222H				SeqNo: 3087066			Prep Date: 12/22/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		3.98	0	4	0	99.5	90-110	0						

DUP				Sample ID: 14121113-01B DUP				Units: s.u.			Analysis Date: 12/22/2014 03:00 PM			
Client ID: Riley Spill Soil Sample				Run ID: WETCHEM_141222H				SeqNo: 3087069			Prep Date: 12/22/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH	8.48	0	0	0	0	0-0	8.09	4.71	20					

The following samples were analyzed in this batch:

14121113-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66394** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-66394-66394				Units: mg/Kg		Analysis Date: 12/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141229F		SeqNo: 3093453		Prep Date: 12/26/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS		Sample ID: LCS-66394-66394				Units: mg/Kg		Analysis Date: 12/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141229F		SeqNo: 3093452		Prep Date: 12/26/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.872 0.50 2 0 93.6 80-120 0

MS		Sample ID: 14121250-01B MS				Units: mg/Kg		Analysis Date: 12/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141229F		SeqNo: 3093443		Prep Date: 12/26/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.51 2.033 0 0 75-125 0 S

MS		Sample ID: 14121250-01B MSI				Units: mg/Kg		Analysis Date: 12/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141229F		SeqNo: 3093445		Prep Date: 12/26/2014		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1858 51 837.2 0 222 75-125 0 S

MSD		Sample ID: 14121250-01B MSD				Units: mg/Kg		Analysis Date: 12/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141229F		SeqNo: 3093444		Prep Date: 12/26/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50 2.008 0 0 75-125 0 0 20 S

The following samples were analyzed in this batch:

14121113-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121113
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **R154787** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R154787				Units: % of sample		Analysis Date: 12/21/2014 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087122		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-R154787				Units: % of sample		Analysis Date: 12/21/2014 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087121		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: 14121025-01A DUP				Units: % of sample		Analysis Date: 12/21/2014 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087095		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.72 0.050 0 0 0 5.16 10.3 20

DUP		Sample ID: 14121037-01B DUP				Units: % of sample		Analysis Date: 12/21/2014 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087099		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.9 0.050 0 0 0 15.09 1.27 20

The following samples were analyzed in this batch:

14121113-01B

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



WORKORDER

1412113

Form 2020

*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:





Please include all (cc) in analytical email.

Complete organics and inorganics from COGCC table 910.1.

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

QC PACKAGE (check below)	
<input checked="" type="checkbox"/>	LEVEL II (Standard QC)
<input type="checkbox"/>	LEVEL III (Std QC + forms)
<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
<input type="checkbox"/>	

Order 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Matthew Fought	12/19/14	11:00
RECEIVED BY		Matthew Fought	12/19/14	11:00
RELINQUISHED BY		Matthew Fought	12/19/14	11:00
RECEIVED BY		Matthew Fought	12/20/14	1000
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 20-Dec-14 10:00

Work Order: 14121113

Received by: KRW

Checklist completed by Keith Wurenga
eSignature

20-Dec-14
Date

Reviewed by: Ann Preston
eSignature

21-Dec-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>4.0 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>12/20/2014 10:38:41 AM</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:

FedEx Bill to: #149 399 6978 sample receiving ALS Laboratory Group 3352 128TH AVE HOLLAND, MI 49424	Ship Date: 10DEC14 Address: 0281LS CAC: 23040000073959 Dimensions: 24 X 15 X 15 IN
Origin ID: HLMA FedEx Express E	Ship Date: 10DEC14 Address: 0281LS CAC: 23040000073959
Bill to: #149 399 6978 sample receiving ALS Laboratory Group 3352 128TH AVE HOLLAND, MI 49424	Ship Date: 10DEC14 Address: 0281LS CAC: 23040000073959
Bill to: #149 399 6978 sample receiving ALS Laboratory Group 3352 128TH AVE HOLLAND, MI 49424	Ship Date: 10DEC14 Address: 0281LS CAC: 23040000073959
Bill to: #149 399 6978 sample receiving ALS Laboratory Group 3352 128TH AVE HOLLAND, MI 49424	Ship Date: 10DEC14 Address: 0281LS CAC: 23040000073959
Bill to: #149 399 6978 sample receiving ALS Laboratory Group 3352 128TH AVE HOLLAND, MI 49424	Ship Date: 10DEC14 Address: 0281LS CAC: 23040000073959

After printing this label:


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

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S1

FedEx Saturday Delivery



ALS Environmental 3352 128th Avenue Holland, Michigan 49424 Tel: +1 616 399 6070 Fax: +1 616 399 6185	
Name: Company:	Date: 12/14/14 Time: 12:00 PM



24-Jun-2015

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

Re: **WPX Riley Tank Farm**

Work Order: **15061112**

Dear Mark,

ALS Environmental received 1 sample on 18-Jun-2015 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 11.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

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

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm
Work Order: 15061112

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>
15061112-01	WPX Riley Tank Farm Confirmation	Soil		6/17/2015 10:00	6/18/2015 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm
WorkOrder: 15061112

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
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<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: 24-Jun-15

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm
Sample ID: WPX Riley Tank Farm Confirmation
Collection Date: 6/17/2015 10:00 AM

Work Order: 15061112
Lab ID: 15061112-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 6/19/2015	Analyst: IT
DRO (C10-C28)	25		4.6	mg/Kg-dry	1	6/19/2015 08:03 PM
Surr: 4-Terphenyl-d14	64.3		39-133	%REC	1	6/19/2015 08:03 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep Date: 6/19/2015	Analyst: IT
GRO (C6-C10)	ND		2.8	mg/Kg-dry	1	6/19/2015 06:50 PM
Surr: Toluene-d8	104		50-150	%REC	1	6/19/2015 06:50 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep Date: 6/19/2015	Analyst: LSY
Benzene	ND		34	µg/Kg-dry	1	6/24/2015 06:18 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	6/24/2015 06:18 AM
m,p-Xylene	ND		67	µg/Kg-dry	1	6/24/2015 06:18 AM
o-Xylene	ND		34	µg/Kg-dry	1	6/24/2015 06:18 AM
Toluene	ND		34	µg/Kg-dry	1	6/24/2015 06:18 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	6/24/2015 06:18 AM
Surr: 1,2-Dichloroethane-d4	94.7		70-130	%REC	1	6/24/2015 06:18 AM
Surr: 4-Bromofluorobenzene	107		70-130	%REC	1	6/24/2015 06:18 AM
Surr: Dibromofluoromethane	101		70-130	%REC	1	6/24/2015 06:18 AM
Surr: Toluene-d8	99.4		70-130	%REC	1	6/24/2015 06:18 AM
MOISTURE						
			E160.3M			Analyst: PT
Moisture	11		0.050	% of sample	1	6/19/2015 03:10 PM

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

Client: HRL Compliance Solutions, Inc
Work Order: 15061112
Project: WPX Riley Tank Farm

QC BATCH REPORT

Batch ID: **72487** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-72487-72487				Units: mg/Kg		Analysis Date: 6/19/2015 06:03 PM		
Client ID:		Run ID: GC8_150619A				SeqNo: 3333905		Prep Date: 6/19/2015		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								
<i>Surr: 4-Terphenyl-d14</i>	1.429	0	2	0	71.5	39-133	0			

LCS		Sample ID: DLCSS1-72487-72487				Units: mg/Kg		Analysis Date: 6/19/2015 06:33 PM		
Client ID:		Run ID: GC8_150619A				SeqNo: 3333906		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	169	5.0	200	0	84.5	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	1.296	0	2	0	64.8	39-133	0			

MS		Sample ID: 15061112-01A MS				Units: mg/Kg		Analysis Date: 6/19/2015 07:03 PM		
Client ID: WPX Riley Tank Farm Confirmation		Run ID: GC8_150619A				SeqNo: 3333907		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	255.6	8.0	320.8	22.21	72.8	48-110	0			
<i>Surr: 4-Terphenyl-d14</i>	2.089	0	3.208	0	65.1	39-133	0			

MSD		Sample ID: 15061112-01A MSD				Units: mg/Kg		Analysis Date: 6/19/2015 07:33 PM		
Client ID: WPX Riley Tank Farm Confirmation		Run ID: GC8_150619A				SeqNo: 3333908		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	268.6	8.1	324.7	22.21	75.9	48-110	255.6	4.93	30	
<i>Surr: 4-Terphenyl-d14</i>	2.291	0	3.247	0	70.6	39-133	2.089	9.2	30	

The following samples were analyzed in this batch:

15061112-01A

Client: HRL Compliance Solutions, Inc
Work Order: 15061112
Project: WPX Riley Tank Farm

QC BATCH REPORT

Batch ID: **72539** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-72539-72539				Units: µg/Kg		Analysis Date: 6/19/2015 02:43 PM		
Client ID:		Run ID: GC9_150619A				SeqNo: 3333814		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	5188	0	5000	0	104	50-150	0			

LCS		Sample ID: LCS-72539-72539				Units: µg/Kg		Analysis Date: 6/19/2015 02:18 PM		
Client ID:		Run ID: GC9_150619A				SeqNo: 3333812		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	444700	2,500	500000	0	88.9	70-130	0			
Surr: Toluene-d8	4958	0	5000	0	99.2	50-150	0			

MS		Sample ID: 15061110-01A MS				Units: µg/Kg		Analysis Date: 6/19/2015 09:19 PM		
Client ID:		Run ID: GC9_150619A				SeqNo: 3333830		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	439800	2,500	500000	0	88	70-130	0			
Surr: Toluene-d8	5590	0	5000	0	112	50-150	0			

MSD		Sample ID: 15061110-01A MSD				Units: µg/Kg		Analysis Date: 6/19/2015 09:43 PM		
Client ID:		Run ID: GC9_150619A				SeqNo: 3333832		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	437600	2,500	500000	0	87.5	70-130	439800	0.5	30	
Surr: Toluene-d8	4831	0	5000	0	96.6	50-150	5590	14.6	30	

The following samples were analyzed in this batch:

15061112-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15061112
Project: WPX Riley Tank Farm

QC BATCH REPORT

Batch ID: **72512** Instrument ID **VMS8** Method: **SW8260B**

MBLK		Sample ID: MBLK-72512-72512				Units: µg/Kg		Analysis Date: 6/19/2015 01:59 PM		
Client ID:		Run ID: VMS8_150619A				SeqNo: 3332481		Prep Date: 6/19/2015		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	963	0	1000	0	96.3	70-130	0			
Surr: 4-Bromofluorobenzene	995	0	1000	0	99.5	70-130	0			
Surr: Dibromofluoromethane	939.5	0	1000	0	94	70-130	0			
Surr: Toluene-d8	982.5	0	1000	0	98.2	70-130	0			

LCS		Sample ID: LCS-72512-72512				Units: µg/Kg		Analysis Date: 6/19/2015 12:22 PM		
Client ID:		Run ID: VMS8_150619A				SeqNo: 3332480		Prep Date: 6/19/2015		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1034	30	1000	0	103	75-125	0			
Ethylbenzene	946.5	30	1000	0	94.6	75-125	0			
m,p-Xylene	2002	60	2000	0	100	80-125	0			
o-Xylene	917	30	1000	0	91.7	75-125	0			
Toluene	942.5	30	1000	0	94.2	70-125	0			
Xylenes, Total	2918	90	3000	0	97.3	75-125	0			
Surr: 1,2-Dichloroethane-d4	989.5	0	1000	0	99	70-130	0			
Surr: 4-Bromofluorobenzene	978.5	0	1000	0	97.8	70-130	0			
Surr: Dibromofluoromethane	960.5	0	1000	0	96	70-130	0			
Surr: Toluene-d8	972	0	1000	0	97.2	70-130	0			

The following samples were analyzed in this batch:

15061112-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 15061112
Project: WPX Riley Tank Farm

QC BATCH REPORT

Batch ID: **R165961** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R165961				Units: % of sample		Analysis Date: 6/19/2015 03:10 PM		
Client ID:		Run ID: MOIST_150619B				SeqNo: 3334054		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-R165961				Units: % of sample		Analysis Date: 6/19/2015 03:10 PM		
Client ID:		Run ID: MOIST_150619B				SeqNo: 3334053		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: 15061150-02B DUP				Units: % of sample		Analysis Date: 6/19/2015 03:10 PM		
Client ID:		Run ID: MOIST_150619B				SeqNo: 3334047		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 17.36 0.050 0 0 0 17.2 0.926 20

DUP		Sample ID: 1506646-01A DUP				Units: % of sample		Analysis Date: 6/19/2015 03:10 PM		
Client ID:		Run ID: MOIST_150619B				SeqNo: 3334052		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.31 0.050 0 0 0 14.75 3.73 20

The following samples were analyzed in this batch:

15061112-01A

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

Chain-of-Custody

Form 202r8

WORKORDER

15061112

PAGE

1 of 1


DISPOSAL

By Lab or Return to Client

(ALS)		SAMPLER		DATE		PAGE	
PROJECT NAME		SITE ID		TURNAROUND		DISPOSAL	
WPX Riley Tank Farm		Riley Tank Farm		6/17/13		1 of 1	
PROJECT NO.		EDD FORMAT		5 day		By Lab or Return to Client	
COMPANY NAME		PURCHASE ORDER					
HRL Compliance		BILL TO COMPANY					
SEND REPORT TO		INVOICE ATTN TO					
Mark Mumby		Karolina Blaney					
ADDRESS		ADDRESS					
2385 F 1/2 Rd		1068 Co Rd 215					
CITY / STATE / ZIP		CITY / STATE / ZIP					
Grand Junction, CO 81506		Parachute CO 81635					
PHONE		PHONE					
970-243-3271		970-683-2295					
FAX		FAX					
E-MAIL		E-MAIL					
mmumby@hrlcomp.com		Karolina.blaney@wpxenergy.com					
rwold@hrlcomp.com							
Lab ID	Field ID	Matrix	Sample Date	Sample Time	Bottles	Pres.	QC
1	Riley Tank Farm Confirmation	SO	10:00	6/17/13	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: <div style="text-align: center;">  </div>	QC PACKAGE (check below)	
	<input checked="" type="checkbox"/> X	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-NaHSO ₄ 7-Other 8-4 degrees C 9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	<i>Reed Wold</i>	Reed Wold	6/17/15	3:00
RECEIVED BY	<i>M</i>	<i>M</i>	6-17-15	3:00
RELINQUISHED BY	<i>M</i>	<i>M</i>	6-17-15	9:00
RECEIVED BY	<i>Swenson</i>		6/18/15	10:00
RELINQUISHED BY				
RECEIVED BY				

UPS Internet Shipping: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
3. **GETTING YOUR SHIPMENT TO UPS**
UPS locations include the UPS Store®, UPS drop boxes, UPS customer centers, authorized retail outlets and UPS drivers.
 Schedule a same day or future day Pickup to have a UPS driver pickup all of your Internet Shipping packages.
 Hand the package to any UPS driver in your area.
 Take your package to any location of The UPS Store®, UPS Drop Box, UPS Customer Center, UPS Alliances (Office Depot® or Staples®) or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the 'Find Locations' Quick link at ups.com.

Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

FOLD HERE

NICK MARTINEZ 6162981033 ALS ENVIRONMENTAL 127 E 1ST STREET PARACHUTE CO 81635		50 LBS DWT: 24,15,15	1 OF 1
SHIP TO: ALS ENVIRONMENTAL 6163996070 3352 128TH AVE. HOLLAND MI 49424-9263			
	MI 495 9-04 		
UPS NEXT DAY AIR TRACKING #: 1Z 811 545 01 9504 8133		1	
			
BILLING: P/P UPS CARBON NEUTRAL SHIPMENT			
Invoice Number: Parachute			
<small>UPS 17.2.07. WNTINV50 63.0A 04/2015</small>			

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **18-Jun-15 10:00**

Work Order: **15061112**

Received by: **SAW**

Checklist completed by Diane Shaw 18-Jun-15
eSignature Date

Reviewed by: Chad Whelton 18-Jun-15
eSignature Date

Matrices: **Soil**

Carrier name: **UPS**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.2 c</u> <u>SR2</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>6/18/2015 2:10:07 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:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



30-Dec-2014

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

Re: **WPX Riley Tank Farm Spill 12.19.14**

Work Order: **14121112**

Dear Mark,

ALS Environmental received 3 samples on 20-Dec-2014 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 15.

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: Tom Beamish

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Work Order: 14121112

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>
14121112-01	BG Sample 1	Soil		12/19/14 10:10	12/20/14 10:00	<input type="checkbox"/>
14121112-01	BG Sample 1	Soil		12/19/14 10:10	12/20/14 10:00	<input type="checkbox"/>
14121112-02	BG Sample 2	Soil		12/19/14 10:15	12/20/14 10:00	<input type="checkbox"/>
14121112-03	BG Sample 3	Soil		12/19/14 10:19	12/20/14 10:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
WorkOrder: 14121112

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
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Work Order: 14121112

Case Narrative**QC Comments:**

Batch 66282, Method ICP_6010_S, Sample 14121112-02AMS: The matrix spike recovery was outside of the control limit. However, the matrix spike duplicate recovery and the RPD between the MS and MSD were in control. No qualification is required for Arsenic.

ALS Group USA, Corp

Date: 30-Dec-14

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Sample ID: BG Sample 1
Collection Date: 12/19/14 10:10 AM

Work Order: 14121112
Lab ID: 14121112-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	11		SW846 6010C 0.46	mg/Kg-dry	Prep: SW3050B / 12/23/14 1	Analyst: JEC 12/29/14 04:31 PM
SOLUBLE CATIONS FOR SAR						
Calcium	140		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 12/23/14 10	Analyst: JEC 12/23/14 12:32 PM
Magnesium	42		2.0	mg/L	10	12/23/14 12:32 PM
Sodium	58		2.0	mg/L	10	12/23/14 12:32 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	1.1		USDA H60 METHO 0.010	none	Prep: USDA Method 20B / 12/23/14 1	Analyst: JEC 12/23/14
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.4		USDA H60 METHO 0.050	mmhos/cm @25	Prep: USDA Method 20B / 12/23/14 10	Analyst: JB 12/26/14 12:00 PM
MOISTURE						
Moisture	17		E160.3M 0.050	% of sample	1	Analyst: LR 12/21/14 09:15 PM

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

ALS Group USA, Corp

Date: 30-Dec-14

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Sample ID: BG Sample 2
Collection Date: 12/19/14 10:15 AM

Work Order: 14121112
Lab ID: 14121112-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	8.7		SW846 6010C 0.42	mg/Kg-dry	1	Prep: SW3050B / 12/23/14 Analyst: JEC 12/29/14 04:37 PM
MOISTURE						
Moisture	14		E160.3M 0.050	% of sample	1	Analyst: EVB 12/26/14 06:30 PM

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

ALS Group USA, Corp

Date: 30-Dec-14

Client: HRL Compliance Solutions, Inc
Project: WPX Riley Tank Farm Spill 12.19.14
Sample ID: BG Sample 3
Collection Date: 12/19/14 10:19 AM

Work Order: 14121112
Lab ID: 14121112-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	10		SW846 6010C 0.49	mg/Kg-dry	1	Prep: SW3050B / 12/23/14 Analyst: JEC 12/29/14 04:59 PM
MOISTURE						
Moisture	16		E160.3M 0.050	% of sample	1	Analyst: EVB 12/26/14 06:30 PM

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

ALS Group USA, Corp

Date: 30-Dec-14

Client: HRL Compliance Solutions, Inc
Work Order: 14121112
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66201** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 14121037-01CDUP				Units: mg/L		Analysis Date: 12/23/14 11:53 AM		
Client ID:		Run ID: ICP2_141223A				SeqNo: 3088529		Prep Date: 12/23/14		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	137.6	5.0	0	0	0	0-0	0	0		
Magnesium	44.08	2.0	0	0	0	0-0	0	0		
Sodium	149.4	2.0	0	0	0	0-0	0	0		

DUP		Sample ID: 14121037-01CDUP				Units: none		Analysis Date: 12/23/14		
Client ID:		Run ID: SAR_141223A				SeqNo: 3088602		Prep Date: 12/23/14		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	2.837	0.010	0	0	0		2.764	2.59	50	

The following samples were analyzed in this batch:

14121112-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121112
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66282** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-66282-66282				Units: mg/Kg		Analysis Date: 12/29/14 04:20 PM		
Client ID:		Run ID: ICP2_141229A				SeqNo: 3093744		Prep Date: 12/23/14		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								

LCS		Sample ID: LCS-66282-66282				Units: mg/Kg		Analysis Date: 12/29/14 04:25 PM		
Client ID:		Run ID: ICP2_141229A				SeqNo: 3093745		Prep Date: 12/23/14		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.372	0.25	5	0	87.4	80-120	0			

MS		Sample ID: 14121112-02AMS				Units: mg/Kg		Analysis Date: 12/29/14 04:42 PM		
Client ID: BG Sample 2		Run ID: ICP2_141229A				SeqNo: 3093748		Prep Date: 12/23/14		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	17.49	0.36	7.289	7.459	138	75-125	0			S

MSD		Sample ID: 14121112-02AMSD				Units: mg/Kg		Analysis Date: 12/29/14 04:48 PM		
Client ID: BG Sample 2		Run ID: ICP2_141229A				SeqNo: 3093749		Prep Date: 12/23/14		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.42	0.37	7.342	7.459	122	75-125	17.49	6.27	20	

The following samples were analyzed in this batch:

14121112-01A	14121112-02A	14121112-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14121112
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **66201** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14121037-01C DUP				Units: mmhos/cm @25°C		Analysis Date: 12/26/14 12:00 PM		
Client ID:		Run ID: WETCHEM_141226A				SeqNo: 3090639		Prep Date: 12/23/14		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	2.03	0.050	0	0	0		2.02	0.494	50	

The following samples were analyzed in this batch:

14121112-01B

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121112
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **R154787** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R154787				Units: % of sample		Analysis Date: 12/21/14 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087122		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-R154787				Units: % of sample		Analysis Date: 12/21/14 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087121		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: 14121025-01A DUP				Units: % of sample		Analysis Date: 12/21/14 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087095		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.72 0.050 0 0 0 5.16 10.3 20

DUP		Sample ID: 14121037-01B DUP				Units: % of sample		Analysis Date: 12/21/14 09:15 PM		
Client ID:		Run ID: MOIST_141221A				SeqNo: 3087099		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.9 0.050 0 0 0 15.09 1.27 20

The following samples were analyzed in this batch:

14121112-01A

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

Client: HRL Compliance Solutions, Inc
Work Order: 14121112
Project: WPX Riley Tank Farm Spill 12.19.14

QC BATCH REPORT

Batch ID: **R155018** Instrument ID **MOIST** Method: **E160.3M**

MBLK		Sample ID: WBLKS-R155018				Units: % of sample		Analysis Date: 12/26/14 06:30 PM		
Client ID:		Run ID: MOIST_141226C				SeqNo: 3092779		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-R155018				Units: % of sample		Analysis Date: 12/26/14 06:30 PM		
Client ID:		Run ID: MOIST_141226C				SeqNo: 3092778		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: 14121104-01B DUP				Units: % of sample		Analysis Date: 12/26/14 06:30 PM		
Client ID:		Run ID: MOIST_141226C				SeqNo: 3092757		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 17.76 0.050 0 0 0 17.68 0.451 20

DUP		Sample ID: 14121130-18B DUP				Units: % of sample		Analysis Date: 12/26/14 06:30 PM		
Client ID:		Run ID: MOIST_141226C				SeqNo: 3092770		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 16.02 0.050 0 0 0 15.45 3.62 20

The following samples were analyzed in this batch:

14121112-02A	14121112-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.





**WORKORDER**
#

14121112

Form 2023-11

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

For metals or anions, please detail analytes below.

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Matthew Fought	12/19/14	11:00
RECEIVED BY		N.M.	12-19-14	11:00
RELINQUISHED BY		K. Williams	12-19-14	11:00
RECEIVED BY		K. Williams	12/20/14	1000
RELINQUISHED BY				
RECEIVED BY				

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

From: (816) 399-9070
 Nick Martinez
 ALS Environmental
 127 E. 1st Street

PARACHUTE, MI 49424

Origin ID: HLMA



Ship Date: 18DEC14
 Net Wt: 52.8 LB
 CAD: 22846424NET355

Dim: 24 X 15 X 15 IN

Delivery Address Bar Code



Ref # 1210144
 Invoice #
 PO # Parachute
 Dept #

SHIP TO: (816) 399-9070
 sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

BILL RENDER

SATURDAY 12:00P
 PRIORITY OVERNIGHT

TRK: 7723 3205 8628
 6291

49424
 IN US
 GRR

68 HLMA



020240758403

After printing this label:

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

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

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



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 20-Dec-14 10:00

Work Order: 14121112

Received by: KRW

Checklist completed by Keith Wurenga
eSignature

20-Dec-14
Date

Reviewed by: Ann Preston
eSignature

21-Dec-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>4.0 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>12/20/2014 10:36:00 AM</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: