

# **Surface Water Sampling Summary**

PA 31-36 Well Pad



**WPX Energy Rocky Mountain, LLC**  
1058 County Road 215  
Parachute, Colorado 81635

May 2014

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## **1. Introduction**

WPX Energy Rocky Mountain, LLC (WPX) retained HRL Compliance Solutions, Inc. (HCSI) to conduct surface water quality sampling at selected locations downgradient of the WPX PA 31-36 well pad. The surface water sampling commenced on February 25, 2014 and was completed, per the COGCC approved Sampling and Analysis Plan (COGCC Document # 400568758). The purpose of the water quality sampling was to confirm that groundwater and surface water has not been impacted by the condensate release that was discovered on February 19, 2014 at the WPX PA 31-36 location (COGCC Spill Tracking # 2147837).

## **2. Background**

The following sections report information regarding the site location and release summary for the PA 31-36 well pad.

### ***2.1 Site Location***

The WPX PA 31-36 well pad is located in the South Parachute Field located in Garfield County, Colorado. Specifically, the well pad is located in the NWNE of Section 28, Township 6 South Range 95 West of the 6<sup>th</sup> Primary Meridian. Topographically the well pad is situated in thick Quaternary age colluvial deposits consisting of loam with interbedded clay loam at the surface to approximately 20 feet and large basalt cobbles and boulders below 20 feet. Site location map is included in Attachment A.

### ***2.2 Release Summary***

The release was caused by corrosion of a buried condensate dump line. The leak was discovered during a quarterly pressure integrity test of the dump line. The leaking line, buried approximately six (6) feet below the pad surface, allowed the condensate to be released into subsurface soils. The impacted area has currently been excavated to a depth of twenty (20) to twenty-two (22) feet. Very large basaltic boulders (3' to 4' diameter) and wet soils were encountered at approximately 20 feet. The large boulders in the bottom of the excavation, and moist, unstable soils on the side walls prevented further excavation.

A site visit with the COGCC was held on February 26, 2014. Issues with further excavation of the east wall and bottom were discussed and it was decided to backfill the excavation, characterize the remaining impacts, and sample the above noted sampling locations to ensure there were no impacts to ground/surface water as a result of the release.

## **3. Surface Water Sampling Summary**

Surface water sampling was conducted three times a week from February 25, 2014 to April 18, 2014. One additional sampling event was conducted on May 8, 2014. Surface water samples were collected from seven (7) locations, six (6) downgradient and one (1) upgradient of the site to establish background concentrations. In addition to the sample collection, water quality field parameters were collected at each sample location utilizing a YSI 556 MPS water quality meter.

A sample location map depicting the sampling locations is included in Attachment B. All samples were submitted to ALS laboratory in Holland, MI and were analyzed for the entire COGCC Table 910-1 analytical suite. Analytical results from all sampling events were non-detect for the organic constituents and within acceptable ranges for inorganics as outlined in Table 910-1. Sample results for all compounds and field parameters are depicted in the attached spreadsheet. Laboratory reports are included in Attachment C.

#### **4. Conclusion**

22 sampling events were completed from February 25, 2014 to April 18, 2014. One additional sampling event was conducted on May 5, 2014. Analytical results from all sampling events were non-detect for the organic constituents and within acceptable ranges for inorganics as outlined in Table 910-1. These sampling results confirm that groundwater and surface water has not been impacted by the condensate release that was discovered on February 19, 2014 at the WPX PA 31-36 location



Table 1 WPX PA 31-36: Surface Water Analytical Results

Sample Location	Sampling Date	Benzene	Toluene	Ethylbenzene	m, p-Xylene	o-Xylene	Total Xylenes	Chlorides	Sulfates	Total Dissolved Solids
	COGCC Allowable Concentrations in Water →→	5 µg/L	560 to 1000 µg/L	700 µg/L	n/a	n/a	Total Xylenes 1,400 - 10,000 µg/L	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)
CO River UG	2/25/2014	ND	ND	ND	ND	ND	ND	160	110	520
CO River UG	2/28/2014	ND	ND	ND	ND	ND	ND	140	100	520
CO River UG	3/3/2014	ND	ND	ND	ND	ND	ND	140	100	490
CO River UG	3/5/2014	ND	ND	ND	ND	ND	ND	140	100	510
CO River UG	3/7/2014	ND	ND	ND	ND	ND	ND	130	98	510
CO River UG	3/10/2014	ND	ND	ND	ND	ND	ND	140	99	500
CO River UG	3/12/2014	ND	ND	ND	ND	ND	ND	130	100	500
CO River UG	3/14/2014	ND	ND	ND	ND	ND	ND	140	100	510
CO River UG	3/17/2014	ND	ND	ND	ND	ND	ND	140	100	500
CO River UG	3/21/2014	ND	ND	ND	ND	ND	ND	160	100	480
CO River UG	3/24/2014	ND	ND	ND	ND	ND	ND	170	100	470
CO River UG	3/26/2014	ND	ND	ND	ND	ND	ND	130	100	390
CO River UG	3/28/2014	ND	ND	ND	ND	ND	ND	140	100	510
CO River UG	3/31/2014	ND	ND	ND	ND	ND	ND	140	110	510
CO River UG	4/2/2014	ND	ND	ND	ND	ND	ND	130	99	480
CO River UG	4/4/2014	ND	ND	ND	ND	ND	ND	140	100	500
CO River UG	4/7/2014	ND	ND	ND	ND	ND	ND	120	96	480
CO River UG	4/9/2014	ND	ND	ND	ND	ND	ND	120	100	440
CO River UG	4/11/2014	ND	ND	ND	ND	ND	ND	52	91	380
CO River UG	4/14/2014	ND	ND	ND	ND	ND	ND	60	61	240
CO River UG	4/16/2014	ND	ND	ND	ND	ND	ND	77	70	340
CO River UG	4/18/2014	ND	ND	ND	ND	ND	ND	75	73	340
CO River UG	5/5/2014	ND	ND	ND	ND	ND	ND	45	52	280
CO River DG	2/25/2014	ND	ND	ND	ND	ND	ND	170	110	530
CO River DG	2/28/2014	ND	ND	ND	ND	ND	ND	160	110	500
CO River DG	3/3/2014	ND	ND	ND	ND	ND	ND	150	110	520
CO River DG	3/5/2014	ND	ND	ND	ND	ND	ND	160	100	520
CO River DG	3/7/2014	ND	ND	ND	ND	ND	ND	150	110	500
CO River DG	3/10/2014	ND	ND	ND	ND	ND	ND	160	110	520
CO River DG	3/12/2014	ND	ND	ND	ND	ND	ND	120	110	500
CO River DG	3/14/2014	ND	ND	ND	ND	ND	ND	150	110	500
CO River DG	3/17/2014	ND	ND	ND	ND	ND	ND	130	100	490
CO River DG	3/21/2014	ND	ND	ND	ND	ND	ND	140	100	450
CO River DG	3/24/2014	ND	ND	ND	ND	ND	ND	130	110	460
CO River DG	3/26/2014	ND	ND	ND	ND	ND	ND	150	110	490
CO River DG	3/28/2014	ND	ND	ND	ND	ND	ND	140	110	510
CO River DG	3/31/2014	ND	ND	ND	ND	ND	ND	160	110	520
CO River DG	4/2/2014	ND	ND	ND	ND	ND	ND	130	94	500
CO River DG	4/4/2014	ND	ND	ND	ND	ND	ND	130	110	490
CO River DG	4/7/2014	ND	ND	ND	ND	ND	ND	140	96	450
CO River DG	4/9/2014	ND	ND	ND	ND	ND	ND	130	100	440
CO River DG	4/11/2014	ND	ND	ND	ND	ND	ND	100	89	370

Table 1 WPX PA 31-36: Surface Water Analytical Results

Sample Location	Sampling Date	Benzene	Toluene	Ethylbenzene	m, p-Xylene	o-Xylene	Total Xylenes	Chlorides	Sulfates	Total Dissolved Solids
	COGCC Allowable Concentrations in Water →→	5 µg/L	560 to 1000 µg/L	700 µg/L	n/a	n/a	Total Xylenes 1,400 - 10,000 µg/L	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)
CO River DG	4/14/2014	ND	ND	ND	ND	ND	ND	60	64	250
CO River DG	4/16/2014	ND	ND	ND	ND	ND	ND	95	71	360
CO River DG	4/18/2014	ND	ND	ND	ND	ND	ND	80	72	350
CO River DG	5/5/2014	ND	ND	ND	ND	ND	ND	950	51	250
Culvert 01	4/4/2014	ND	ND	ND	ND	ND	ND	10	54	400
Culvert 01	4/7/2014	ND	ND	ND	ND	ND	ND	9	52	400
Culvert 01	4/9/2014	ND	ND	ND	ND	ND	ND	11	51	400
Culvert 01	4/11/2014	ND	ND	ND	ND	ND	ND	10	52	390
Culvert 01	4/14/2014	ND	ND	ND	ND	ND	ND	14	56	420
Culvert 01	4/16/2014	ND	ND	ND	ND	ND	ND	10	55	450
Culvert 01	4/18/2014	ND	ND	ND	ND	ND	ND	15	54	380
Culvert 01	5/5/2014	ND	ND	ND	ND	ND	ND	14	55	410
Spring 01	2/25/2014	ND	ND	ND	ND	ND	ND	12	41	370
Spring 01	2/28/2014	ND	ND	ND	ND	ND	ND	10	39	410
Spring 01	3/3/2014	ND	ND	ND	ND	ND	ND	10	36	380
Spring 01	3/5/2014	ND	ND	ND	ND	ND	ND	10	35	420
Spring 01	3/7/2014	ND	ND	ND	ND	ND	ND	8	34	400
Spring 01	3/10/2014	ND	ND	ND	ND	ND	ND	8	36	410
Spring 01	3/12/2014	ND	ND	ND	ND	ND	ND	8	35	410
Spring 01	3/14/2014	ND	ND	ND	ND	ND	ND	9	36	410
Spring 01	3/17/2014	ND	ND	ND	ND	ND	ND	45	37	420
Spring 01	3/21/2014	ND	ND	ND	ND	ND	ND	14	35	420
Spring 01	3/24/2014	ND	ND	ND	ND	ND	ND	30	33	380
Spring 01	3/26/2014	ND	ND	ND	ND	ND	ND	25	35	410
Spring 01	3/28/2014	ND	ND	ND	ND	ND	ND	10	34	400
Spring 01	3/31/2014	ND	ND	ND	ND	ND	ND	10	35	400
Spring 01	4/2/2014	ND	ND	ND	ND	ND	ND	12	36	380
Spring 01	4/4/2014	ND	ND	ND	ND	ND	ND	12	33	400
Spring 01	4/7/2014	ND	ND	ND	ND	ND	ND	9	33	380
Spring 01	4/9/2014	ND	ND	ND	ND	ND	ND	11	33	390
Spring 01	4/11/2014	ND	ND	ND	ND	ND	ND	12	32	390
Spring 01	4/14/2014	ND	ND	ND	ND	ND	ND	8	30	370
Spring 01	4/16/2014	ND	ND	ND	ND	ND	ND	10	34	410
Spring 01	4/18/2014	ND	ND	ND	ND	ND	ND	12	33	390
Spring 01	5/5/2014	ND	ND	ND	ND	ND	ND	14	33	390
Spring 02	4/4/2014	ND	ND	ND	ND	ND	ND	15.0	35	440
Spring 02	4/7/2014	ND	ND	ND	ND	ND	ND	7.5	34	410
Spring 02	4/9/2014	ND	ND	ND	ND	ND	ND	9	34	420
Spring 02	4/11/2014	ND	ND	ND	ND	ND	ND	8	34	420
Spring 02	4/14/2014	ND	ND	ND	ND	ND	ND	15	36	520

Table 1 WPX PA 31-36: Surface Water Analytical Results

Sample Location	Sampling Date	Benzene	Toluene	Ethylbenzene	m, p-Xylene	o-Xylene	Total Xylenes	Chlorides	Sulfates	Total Dissolved Solids
	COGCC Allowable Concentrations in Water →→	5 µg/L	560 to 1000 µg/L	700 µg/L	n/a	n/a	Total Xylenes 1,400 - 10,000 µg/L	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)
Spring 02	4/16/2014	ND	ND	ND	ND	ND	ND	16	34	470
Spring 02	4/18/2014	ND	ND	ND	ND	ND	ND	12	35	420
Spring 02	5/5/2014	ND	ND	ND	ND	ND	ND	13	35	450
Pond 01	2/25/2014	ND	ND	ND	ND	ND	ND	22	34	400
Pond 01	2/28/2014	ND	ND	ND	ND	ND	ND	25	40	390
Pond 01	3/3/2014	ND	ND	ND	ND	ND	ND	25	34	400
Pond 01	3/5/2014	ND	ND	ND	ND	ND	ND	25	36	410
Pond 01	3/7/2014	ND	ND	ND	ND	ND	ND	20	33	380
Pond 01	3/10/2014	ND	ND	ND	ND	ND	ND	22	36	400
Pond 01	3/12/2014	ND	ND	ND	ND	ND	ND	17	36	390
Pond 01	3/14/2014	ND	ND	ND	ND	ND	ND	22	37	400
Pond 01	3/17/2014	ND	ND	ND	ND	ND	ND	20	40	390
Pond 01	3/21/2014	ND	ND	ND	ND	ND	ND	38	36	420
Pond 01	3/24/2014	ND	ND	ND	ND	ND	ND	28	36	340
Pond 01	3/26/2014	ND	ND	ND	ND	ND	ND	35	37	380
Pond 01	3/28/2014	ND	ND	ND	ND	ND	ND	18	37	390
Pond 01	3/31/2014	ND	ND	ND	ND	ND	ND	16	40	380
Pond 01	4/2/2014	ND	ND	ND	ND	ND	ND	15	39	360
Pond 01	4/4/2014	ND	ND	ND	ND	ND	ND	17	37	360
Pond 01	4/7/2014	ND	ND	ND	ND	ND	ND	14	38	360
Pond 01	4/9/2014	ND	ND	ND	ND	ND	ND	17	38	370
Pond 01	4/11/2014	ND	ND	ND	ND	ND	ND	22	36	340
Pond 01	4/14/2014	ND	ND	ND	ND	ND	ND	14	37	360
Pond 01	4/16/2014	ND	ND	ND	ND	ND	ND	15	37	370
Pond 01	4/18/2014	ND	ND	ND	ND	ND	ND	13	38	320
Pond 01	5/5/2014	ND	ND	ND	ND	ND	ND	10	36	350
Spring UG	2/25/2014	ND	ND	ND	ND	ND	ND	35	45	470
Spring UG	2/28/2014	ND	ND	ND	ND	ND	ND	27	37	470
Spring UG	3/3/2014	ND	ND	ND	ND	ND	ND	27	38	450
Spring UG	3/5/2014	ND	ND	ND	ND	ND	ND	25	37	450
Spring UG	3/7/2014	ND	ND	ND	ND	ND	ND	19	36	420
Spring UG	3/10/2014	ND	ND	ND	ND	ND	ND	12	38	450
Spring UG	3/12/2014	ND	ND	ND	ND	ND	ND	17	35	470
Spring UG	3/14/2014	ND	ND	ND	ND	ND	ND	18	36	460
Spring UG	3/17/2014	ND	ND	ND	ND	ND	ND	37	38	460
Spring UG	3/21/2014	ND	ND	ND	ND	ND	ND	25	34	480
Spring UG	3/24/2014	ND	ND	ND	ND	ND	ND	23	35	430
Spring UG	3/26/2014	ND	ND	ND	ND	ND	ND	37	35	420
Spring UG	3/28/2014	ND	ND	ND	ND	ND	ND	12	33	510
Spring UG	3/31/2014	ND	ND	ND	ND	ND	ND	11	36	450
Spring UG	4/2/2014	ND	ND	ND	ND	ND	ND	47	33	440

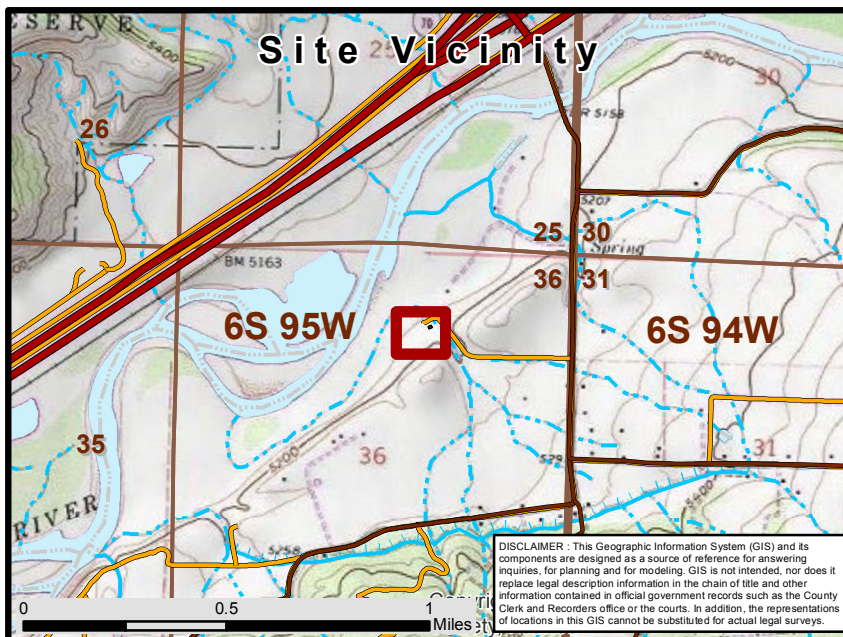
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Sample Location	Sampling Date	Benzene	Toluene	Ethylbenzene	m, p-Xylene	o-Xylene	Total Xylenes	Chlorides	Sulfates	Total Dissolved Solids
	COGCC Allowable Concentrations in Water →→	5 µg/L	560 to 1000 µg/L	700 µg/L	n/a	n/a	Total Xylenes 1,400 - 10,000 µg/L	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)	<1.25 X Background (mg/L)
Spring UG	4/4/2014	ND	ND	ND	ND	ND	ND	17	33	440
Spring UG	4/7/2014	ND	ND	ND	ND	ND	ND	10	34	420
Spring UG	4/9/2014	ND	ND	ND	ND	ND	ND	13	34	420
Spring UG	4/11/2014	ND	ND	ND	ND	ND	ND	10	32	420
Spring UG	4/14/2014	ND	ND	ND	ND	ND	ND	13	34	430
Spring UG	4/16/2014	ND	ND	ND	ND	ND	ND	11	13	460
Spring UG	4/18/2014	ND	ND	ND	ND	ND	ND	15	33	330
Spring UG	5/5/2014	ND	ND	ND	ND	ND	ND	12	32	440

\*\*highlight indicates readings above COGCC Table 910-1 standards for water

Attachment A  
Site Location Map





**Figure 1**  
**Site Location Map**  
**Location: PA 31-36**  
 39.485792 -107.944906  
 WPX Energy

**PLSS**

Township

Section

**Transportation Features**

Public Roads

Access Roads

**Hydrographic Features**

Perennial Stream

Intermittent Stream



Attachment B  
Sample Location Map



**Figure 2**  
**Sample Location Map**  
PA 31-36

- Point of Origin
- Sample Location
- Excavated Area



0 50 100  
Feet





Attachment C  
Laboratory Reports



28-Feb-2014

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

Re: **WPX PA 31-36 SW 2.25.14**

Work Order: **14021147**

Dear Mark,

ALS Environmental received 5 samples on 26-Feb-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 20.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Work Order:** 14021147

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**Work Order Sample Summary**

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<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>
14021147-01	Pond	Surface Water		2/25/2014 10:00	2/26/2014 09:30	<input type="checkbox"/>
14021147-02	Co River UG	Surface Water		2/25/2014 10:30	2/26/2014 09:30	<input type="checkbox"/>
14021147-03	Co River DG	Surface Water		2/25/2014 10:40	2/26/2014 09:30	<input type="checkbox"/>
14021147-04	Spring	Surface Water		2/25/2014 10:50	2/26/2014 09:30	<input type="checkbox"/>
14021147-05	Spring UG	Surface Water		2/25/2014 11:25	2/26/2014 09:30	<input type="checkbox"/>

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## ALS Group USA, Corp

*Date: 28-Feb-14*

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**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Work Order:** 14021147

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### Case Narrative

Batch R136249A MS/MSD data for BTEX is not related to this project's samples. No data requires qualification.

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**WorkOrder:** 14021147

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 28-Feb-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Sample ID:** Pond  
**Collection Date:** 2/25/2014 10:00 AM

**Work Order:** 14021147  
**Lab ID:** 14021147-01  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 2/26/14	Analyst: <b>IT</b>
<b>DRO (C10-C28)</b>	<b>0.42</b>		<b>0.10</b>	<b>mg/L</b>	1	2/26/2014 08:24 PM
Surr: 4-Terphenyl-d14	126		22-172	%REC	1	2/26/2014 08:24 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
<b>GRO (C6-C10)</b>	<b>1.0</b>		<b>0.20</b>	<b>mg/L</b>	1	2/26/2014 06:23 PM
Surr: Toluene-d8	95.8		70-130	%REC	1	2/26/2014 06:23 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	2/26/2014 09:35 PM
Ethylbenzene	ND		1.0	µg/L	1	2/26/2014 09:35 PM
m,p-Xylene	ND		2.0	µg/L	1	2/26/2014 09:35 PM
o-Xylene	ND		1.0	µg/L	1	2/26/2014 09:35 PM
Toluene	ND		1.0	µg/L	1	2/26/2014 09:35 PM
Xylenes, Total	ND		3.0	µg/L	1	2/26/2014 09:35 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	2/26/2014 09:35 PM
Surr: 4-Bromofluorobenzene	98.0		75-120	%REC	1	2/26/2014 09:35 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	2/26/2014 09:35 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	2/26/2014 09:35 PM
<b>CHLORIDE</b>						
			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	22		3.0	mg/L	1	2/27/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>						
			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	2/27/2014 01:47 PM
<b>TOTAL DISSOLVED SOLIDS</b>						
			<b>A2540 C-97</b>		Prep: Water Ext. / 2/27/14	Analyst: <b>AT</b>
Total Dissolved Solids	400		10	mg/L	1	2/27/2014 04:24 PM

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

# ALS Group USA, Corp

Date: 28-Feb-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Sample ID:** Co River UG  
**Collection Date:** 2/25/2014 10:30 AM

**Work Order:** 14021147  
**Lab ID:** 14021147-02  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 2/26/14	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	2/26/2014 08:54 PM
Surr: 4-Terphenyl-d14	119		22-172	%REC	1	2/26/2014 08:54 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
GRO (C6-C10)	0.34		0.20	mg/L	1	2/26/2014 06:48 PM
Surr: Toluene-d8	113		70-130	%REC	1	2/26/2014 06:48 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	2/26/2014 09:10 PM
Ethylbenzene	ND		1.0	µg/L	1	2/26/2014 09:10 PM
m,p-Xylene	ND		2.0	µg/L	1	2/26/2014 09:10 PM
o-Xylene	ND		1.0	µg/L	1	2/26/2014 09:10 PM
Toluene	ND		1.0	µg/L	1	2/26/2014 09:10 PM
Xylenes, Total	ND		3.0	µg/L	1	2/26/2014 09:10 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	2/26/2014 09:10 PM
Surr: 4-Bromofluorobenzene	97.7		75-120	%REC	1	2/26/2014 09:10 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	2/26/2014 09:10 PM
Surr: Toluene-d8	99.4		85-120	%REC	1	2/26/2014 09:10 PM
<b>CHLORIDE</b>						
			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	160		3.0	mg/L	1	2/27/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>						
			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		40	mg/L	40	2/27/2014 06:02 AM
<b>TOTAL DISSOLVED SOLIDS</b>						
			<b>A2540 C-97</b>		Prep: Water Ext. / 2/27/14	Analyst: <b>AT</b>
Total Dissolved Solids	520		10	mg/L	1	2/27/2014 04:24 PM

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

# ALS Group USA, Corp

Date: 28-Feb-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Sample ID:** Co River DG  
**Collection Date:** 2/25/2014 10:40 AM

**Work Order:** 14021147  
**Lab ID:** 14021147-03  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 2/26/14	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	2/26/2014 09:24 PM
Surr: 4-Terphenyl-d14	120		22-172	%REC	1	2/26/2014 09:24 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	2/26/2014 07:14 PM
Surr: Toluene-d8	98.9		70-130	%REC	1	2/26/2014 07:14 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	2/26/2014 07:56 PM
Ethylbenzene	ND		1.0	µg/L	1	2/26/2014 07:56 PM
m,p-Xylene	ND		2.0	µg/L	1	2/26/2014 07:56 PM
o-Xylene	ND		1.0	µg/L	1	2/26/2014 07:56 PM
Toluene	ND		1.0	µg/L	1	2/26/2014 07:56 PM
Xylenes, Total	ND		3.0	µg/L	1	2/26/2014 07:56 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	2/26/2014 07:56 PM
Surr: 4-Bromofluorobenzene	97.2		75-120	%REC	1	2/26/2014 07:56 PM
Surr: Dibromofluoromethane	97.7		85-115	%REC	1	2/26/2014 07:56 PM
Surr: Toluene-d8	97.6		85-120	%REC	1	2/26/2014 07:56 PM
<b>CHLORIDE</b>						
			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	170		3.0	mg/L	1	2/27/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>						
			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		40	mg/L	40	2/27/2014 06:22 AM
<b>TOTAL DISSOLVED SOLIDS</b>						
			<b>A2540 C-97</b>		Prep: Water Ext. / 2/27/14	Analyst: <b>AT</b>
Total Dissolved Solids	530		10	mg/L	1	2/27/2014 04:24 PM

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



# ALS Group USA, Corp

Date: 28-Feb-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Sample ID:** Spring  
**Collection Date:** 2/25/2014 10:50 AM

**Work Order:** 14021147  
**Lab ID:** 14021147-04  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 2/26/14	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	2/26/2014 10:24 PM
Surr: 4-Terphenyl-d14	118		22-172	%REC	1	2/26/2014 10:24 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	2/26/2014 07:40 PM
Surr: Toluene-d8	98.5		70-130	%REC	1	2/26/2014 07:40 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	2/26/2014 08:21 PM
Ethylbenzene	ND		1.0	µg/L	1	2/26/2014 08:21 PM
m,p-Xylene	ND		2.0	µg/L	1	2/26/2014 08:21 PM
o-Xylene	ND		1.0	µg/L	1	2/26/2014 08:21 PM
Toluene	ND		1.0	µg/L	1	2/26/2014 08:21 PM
Xylenes, Total	ND		3.0	µg/L	1	2/26/2014 08:21 PM
Surr: 1,2-Dichloroethane-d4	99.1		70-120	%REC	1	2/26/2014 08:21 PM
Surr: 4-Bromofluorobenzene	97.8		75-120	%REC	1	2/26/2014 08:21 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	2/26/2014 08:21 PM
Surr: Toluene-d8	99.2		85-120	%REC	1	2/26/2014 08:21 PM
<b>CHLORIDE</b>						
			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	2/27/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>						
			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	41		40	mg/L	40	2/27/2014 06:42 AM
<b>TOTAL DISSOLVED SOLIDS</b>						
			<b>A2540 C-97</b>		Prep: Water Ext. / 2/27/14	Analyst: <b>AT</b>
Total Dissolved Solids	370		10	mg/L	1	2/27/2014 04:24 PM

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

# ALS Group USA, Corp

Date: 28-Feb-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.25.14  
**Sample ID:** Spring UG  
**Collection Date:** 2/25/2014 11:25 AM

**Work Order:** 14021147  
**Lab ID:** 14021147-05  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015M</b>		Prep: SW3511 / 2/26/14	Analyst: <b>IT</b>
DRO (C10-C28)	ND		0.10	mg/L	1	2/26/2014 10:54 PM
Surr: 4-Terphenyl-d14	118		22-172	%REC	1	2/26/2014 10:54 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
			<b>SW8015</b>			Analyst: <b>IT</b>
GRO (C6-C10)	ND		0.20	mg/L	1	2/26/2014 08:06 PM
Surr: Toluene-d8	98.9		70-130	%REC	1	2/26/2014 08:06 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	2/26/2014 08:46 PM
Ethylbenzene	ND		1.0	µg/L	1	2/26/2014 08:46 PM
m,p-Xylene	ND		2.0	µg/L	1	2/26/2014 08:46 PM
o-Xylene	ND		1.0	µg/L	1	2/26/2014 08:46 PM
Toluene	ND		1.0	µg/L	1	2/26/2014 08:46 PM
Xylenes, Total	ND		3.0	µg/L	1	2/26/2014 08:46 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	2/26/2014 08:46 PM
Surr: 4-Bromofluorobenzene	99.8		75-120	%REC	1	2/26/2014 08:46 PM
Surr: Dibromofluoromethane	96.6		85-115	%REC	1	2/26/2014 08:46 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	2/26/2014 08:46 PM
<b>CHLORIDE</b>						
			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	35		3.0	mg/L	1	2/27/2014 09:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>						
			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	45		40	mg/L	40	2/27/2014 07:43 AM
<b>TOTAL DISSOLVED SOLIDS</b>						
			<b>A2540 C-97</b>		Prep: Water Ext. / 2/27/14	Analyst: <b>AT</b>
Total Dissolved Solids	470		10	mg/L	1	2/27/2014 04:24 PM

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

**Client:** HRL Compliance Solutions  
**Work Order:** 14021147  
**Project:** WPX PA 31-36 SW 2.25.14

# QC BATCH REPORT

Batch ID: **56133** Instrument ID **GC8** Method: **SW8015M**

<b>MBLK</b>		Sample ID: <b>DBLKW1-56133-56133</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/26/2014 04:54 PM</b>		
Client ID:		Run ID: <b>GC8_140226B</b>				SeqNo: <b>2656794</b>		Prep Date: <b>2/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	0.10								
Surr: 4-Terphenyl-d14	0.1278	0	0.1143	0	112	22-172	0			

<b>LCS</b>		Sample ID: <b>DLCSW1-56133-56133</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/26/2014 05:24 PM</b>		
Client ID:		Run ID: <b>GC8_140226B</b>				SeqNo: <b>2656796</b>		Prep Date: <b>2/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	7.823	0.10	11.43	0	68.5	44-116	0			
Surr: 4-Terphenyl-d14	0.1255	0	0.1143	0	110	22-172	0			

<b>MS</b>		Sample ID: <b>14021138-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/26/2014 05:54 PM</b>		
Client ID:		Run ID: <b>GC8_140226B</b>				SeqNo: <b>2656799</b>		Prep Date: <b>2/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	29.35	0.35	40	0	73.4	44-116	0			
Surr: 4-Terphenyl-d14	0.4457	0	0.4	0	111	22-172	0			

<b>MSD</b>		Sample ID: <b>14021138-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/26/2014 06:24 PM</b>		
Client ID:		Run ID: <b>GC8_140226B</b>				SeqNo: <b>2656802</b>		Prep Date: <b>2/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	26.27	0.35	40	0	65.7	44-116	29.35	11.1	30	
Surr: 4-Terphenyl-d14	0.456	0	0.4	0	114	22-172	0.4457	2.29	30	

The following samples were analyzed in this batch:

14021147-01B	14021147-02B	14021147-03B
14021147-04B	14021147-05B	

Client: HRL Compliance Solutions  
 Work Order: 14021147  
 Project: WPX PA 31-36 SW 2.25.14

## QC BATCH REPORT

Batch ID: **R136297** Instrument ID **GC9** Method: **SW8015**

<b>MBLK</b>		Sample ID: <b>GBLKW1-140226-R136297</b>				Units: <b>µg/L</b>		Analysis Date: <b>2/26/2014 02:06 PM</b>		
Client ID:		Run ID: <b>GC9_140226A</b>				SeqNo: <b>2656613</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
Surr: Toluene-d8	102	0	100	0	102	70-130	0			

<b>LCS</b>		Sample ID: <b>GLCSW1-140226-R136297</b>				Units: <b>µg/L</b>		Analysis Date: <b>2/26/2014 01:41 PM</b>		
Client ID:		Run ID: <b>GC9_140226A</b>				SeqNo: <b>2656611</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9311	200	10000	0	93.1	70-130	0			
Surr: Toluene-d8	91.87	0	100	0	91.9	70-130	0			

<b>MS</b>		Sample ID: <b>1402983-17A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>2/26/2014 11:06 PM</b>		
Client ID:		Run ID: <b>GC9_140226A</b>				SeqNo: <b>2656643</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9236	200	10000	0	92.4	70-130	0			
Surr: Toluene-d8	89.35	0	100	0	89.4	70-130	0			

<b>MSD</b>		Sample ID: <b>1402983-17A MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>2/26/2014 11:32 PM</b>		
Client ID:		Run ID: <b>GC9_140226A</b>				SeqNo: <b>2656644</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9054	200	10000	0	90.5	70-130	9236	1.99	30	
Surr: Toluene-d8	94.94	0	100	0	94.9	70-130	89.35	6.07	30	

The following samples were analyzed in this batch:

14021147-01A	14021147-02A	14021147-03A
14021147-04A	14021147-05A	

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

Client: HRL Compliance Solutions  
 Work Order: 14021147  
 Project: WPX PA 31-36 SW 2.25.14

## QC BATCH REPORT

Batch ID: **R136249A** Instrument ID **VMS8** Method: **SW8260**

MBLK				Sample ID: VBLKW1-140226-R136249A				Units: µg/L			Analysis Date: 2/26/2014 02:59 PM		
Client ID:			Run ID: VMS8_140226A				SeqNo: 2656838			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	1.0											
Ethylbenzene	ND	1.0											
m,p-Xylene	ND	2.0											
o-Xylene	ND	1.0											
Toluene	ND	1.0											
Xylenes, Total	ND	3.0											
Surr: 1,2-Dichloroethane-d4	20.39	0	20	0	102	70-120		0					
Surr: 4-Bromofluorobenzene	19.85	0	20	0	99.2	75-120		0					
Surr: Dibromofluoromethane	19.83	0	20	0	99.2	85-115		0					
Surr: Toluene-d8	19.59	0	20	0	98	85-120		0					

LCS				Sample ID: VLCSW1-14026-R136249A				Units: µg/L		Analysis Date: 2/26/2014 01:45 PM	
Client ID:		Run ID: VMS8_140226A			SeqNo: 2656835		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.45	1.0	20	0	97.2	80-120	0				
Ethylbenzene	20.49	1.0	20	0	102	75-125	0				
m,p-Xylene	40.69	2.0	40	0	102	75-130	0				
o-Xylene	20.67	1.0	20	0	103	80-120	0				
Toluene	19.66	1.0	20	0	98.3	75-120	0				
Xylenes, Total	61.36	3.0	60	0	102	75-130	0				
Surr: 1,2-Dichloroethane-d4	20.47	0	20	0	102	70-120	0				
Surr: 4-Bromofluorobenzene	20.72	0	20	0	104	75-120	0				
Surr: Dibromofluoromethane	20.31	0	20	0	102	85-115	0				
Surr: Toluene-d8	19.97	0	20	0	99.8	85-120	0				

MS				Sample ID: 1402910-01B MS			Units: µg/L		Analysis Date: 2/26/2014 11:37 PM		
Client ID:		Run ID: VMS8_140226A			SeqNo: 2656883		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.67	1.0	20	0	98.4	80-120	0				
Ethylbenzene	ND	1.0	20	0	0	75-125	0			S	
m,p-Xylene	ND	2.0	40	0	0	75-130	0			S	
o-Xylene	ND	1.0	20	0	0	80-120	0			S	
Toluene	0.54	1.0	20	0	2.7	75-120	0			JS	
Surr: 1,2-Dichloroethane-d4	20.06	0	20	0	100	70-120	0				
Surr: 4-Bromofluorobenzene	20.58	0	20	0	103	75-120	0				
Surr: Dibromofluoromethane	20.3	0	20	0	102	85-115	0				
Surr: Toluene-d8	19.82	0	20	0	99.1	85-120	0				

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

**Client:** HRL Compliance Solutions  
**Work Order:** 14021147  
**Project:** WPX PA 31-36 SW 2.25.14

## QC BATCH REPORT

Batch ID: **R136249A**      Instrument ID **VMS8**      Method: **SW8260**

MSD		Sample ID: <b>1402910-01B MSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>2/27/2014 12:01 PM</b>		
Client ID:		Run ID: <b>VMS8_140226A</b>				SeqNo: <b>2656884</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.38	1.0	20	0	96.9	80-120	19.67	1.49	30	
Ethylbenzene	ND	1.0	20	0	0	75-125	0	0	30	S
m,p-Xylene	ND	2.0	40	0	0	75-130	0	0	30	S
o-Xylene	ND	1.0	20	0	0	80-120	0	0	30	S
Toluene	ND	1.0	20	0	0	75-120	0.54	0	30	S
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.43</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>70-120</i>	<i>20.06</i>	<i>1.83</i>	<i>30</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.1</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>20.58</i>	<i>2.36</i>	<i>30</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.79</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>85-115</i>	<i>20.3</i>	<i>2.54</i>	<i>30</i>	
<i>Surr: Toluene-d8</i>	<i>19.55</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.8</i>	<i>85-120</i>	<i>19.82</i>	<i>1.37</i>	<i>30</i>	

The following samples were analyzed in this batch:

14021147-01A	14021147-02A	14021147-03A
14021147-04A	14021147-05A	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 14021147  
**Project:** WPX PA 31-36 SW 2.25.14

## QC BATCH REPORT

Batch ID: **56168**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56168-56168</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 04:24 PM</b>		
Client ID:		Run ID: <b>TDS_140227B</b>				SeqNo: <b>2657128</b>		Prep Date: <b>2/27/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56168-56168</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 04:24 PM</b>		
Client ID:		Run ID: <b>TDS_140227B</b>				SeqNo: <b>2657126</b>		Prep Date: <b>2/27/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      469      10      495      0      94.7      80-120      0

<b>DUP</b>		Sample ID: <b>14021101-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 04:24 PM</b>		
Client ID:		Run ID: <b>TDS_140227B</b>				SeqNo: <b>2657085</b>		Prep Date: <b>2/27/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      852      10      0      0      0      0-0      881      3.35      20

<b>DUP</b>		Sample ID: <b>1402939-03C DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 04:24 PM</b>		
Client ID:		Run ID: <b>TDS_140227B</b>				SeqNo: <b>2657114</b>		Prep Date: <b>2/27/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      1398      10      0      0      0      0-0      1402      0.286      20

The following samples were analyzed in this batch:

14021147-01C	14021147-02C	14021147-03C
14021147-04C	14021147-05C	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 14021147  
**Project:** WPX PA 31-36 SW 2.25.14

## QC BATCH REPORT

Batch ID: **R136308**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140227-R136308</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 09:30 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140227B</b>				SeqNo: <b>2657189</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140227-R136308</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 09:30 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140227B</b>				SeqNo: <b>2657190</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.98      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>14021147-01C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 09:30 AM</b>		
Client ID: <b>Pond</b>		Run ID: <b>WETCHEM_140227B</b>				SeqNo: <b>2657197</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      77.48      3.0      50      22.49      110      75-125      0

<b>MSD</b>		Sample ID: <b>14021147-01C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 09:30 AM</b>		
Client ID: <b>Pond</b>		Run ID: <b>WETCHEM_140227B</b>				SeqNo: <b>2657198</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      72.48      3.0      50      22.49      100      75-125      77.48      6.67      20

The following samples were analyzed in this batch:

14021147-01C	14021147-02C	14021147-03C
14021147-04C	14021147-05C	

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



**Client:** HRL Compliance Solutions  
**Work Order:** 14021147  
**Project:** WPX PA 31-36 SW 2.25.14

## QC BATCH REPORT

Batch ID: **R136352**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R136352</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 03:40 AM</b>		
Client ID:		Run ID: <b>IC4_140227A</b>				SeqNo: <b>2658199</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R136352</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 04:01 AM</b>		
Client ID:		Run ID: <b>IC4_140227A</b>				SeqNo: <b>2658202</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.44      1.0      10      0      104      85-110      0

<b>MS</b>		Sample ID: <b>1402939-03C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 11:26 AM</b>		
Client ID:		Run ID: <b>IC4_140227A</b>				SeqNo: <b>2658241</b>		Prep Date:		DF: <b>50</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      856.9      50      250      595.8      104      75-125      0

<b>MSD</b>		Sample ID: <b>1402939-03C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/27/2014 11:46 AM</b>		
Client ID:		Run ID: <b>IC4_140227A</b>				SeqNo: <b>2658242</b>		Prep Date:		DF: <b>50</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      851.3      50      250      595.8      102      75-125      856.9      0.662      20

The following samples were analyzed in this batch:

14021147-01C	14021147-02C	14021147-03C
14021147-04C	14021147-05C	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

14021147

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME	WPX PA 31-36 RELEASE	SAMPLER	CASEY RICHARDSON / MARK	DATE	2-25-14	TURNAROUND	24 HR						
PROJECT No.		SITE ID	PA 31-36										
COMPANY NAME	HCSI	EDD FORMAT											
SEND REPORT TO	MARK MUMBY	PURCHASE ORDER											
ADDRESS	2385 F 1/2 Road	BILL TO COMPANY	WPX Energy										
CITY / STATE / ZIP	Grand Junction, CO. 81505	INVOICE ATTN TO	KAROLINA BLANEY										
PHONE	970-243-3271	ADDRESS	1058 County Road 215										
FAX	970-243-3280	CITY / STATE / ZIP	Parachute, CO 81635										
E-MAIL	mmumby@hcsi.com	PHONE	970-683-2295										
		FAX	970-285-9573										
		E-MAIL											
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	DRO	GRD	TDS	CI-	SULFATE
1	POND	SW	2-25-14	1000	8	1,8		X	X	X	X	X	X
2	CO RIVER UG			1030				X	X	X	X	X	X
3	CO RIVER OG			1040				X	X	X	X	X	X
4	SPRING			1050				X	X	X	X	X	X
5	SPRING UG			1125				X	X	X	X	X	X
6	TRIP BLANK												

\*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)
	<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)

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
CASEY RICHARDSON	CASEY RICHARDSON	2-25-14	1505
RECEIVED BY		2-25-14	1507
RECEIVED BY		2-25-14	1530
RECEIVED BY	Diane F. Shea	2/26/14	0930

**Ann Preston**

**From:** Blaney, Karolina [Karolina.Blaney@wpxenergy.com]  
**Sent:** Thursday, February 27, 2014 11:00 AM  
**To:** Ann Preston  
**Cc:** 'Mark Mumby'; Casey Richardson  
**Subject:** RE: 14021142 WPX PA 31-36 Prod. Water Spill 2.24.14 WOA

Ann,

I would like to change the project names for the samples collected from the PA 31-36 location. There will be a total of 4 COCs for this project.. for now:

Current name:	please change to:
14021142 WPX PA 31-36 Prod. Water Spill 2.24.14	WPX PA 31-36 excavation 2.24.14
14021156 WPX PA 31-36 2.25.14	WPX PA 31-36 excavation 2.25.14
14021147 WPX PA 31-36 Release SW 2.25.14	WPX PA 31-36 SW 2.25.14
???????? WPX PA 31-36 2.25.14	WPX PA 31-36 excavation 2.25.14 (you will receive this
sample today for a 24hrs rush)	

Please let me know if you have any questions.

Thank you,

*Karolina Blaney*

Environmental Specialist

WPX Energy

Office: (970) 683-2295

Cell: (970) 589-0743

Fax: (970) 285-9573

[karolina.blaney@wpxenergy.com](mailto:karolina.blaney@wpxenergy.com)

**From:** Ann Preston [mailto:Ann.Preston@ALSGlobal.com]  
**Sent:** Wednesday, February 26, 2014 10:32 AM  
**To:** mmumby@hrlcomp.com  
**Cc:** Blaney, Karolina; mlobato@hrlcomp.com  
**Subject:** 14021142 WPX PA 31-36 Prod. Water Spill 2.24.14 WOA

Please see the attached file that contains the sample IDs, test assignment, and costs associated with the recent samples you submitted. Please let me know if you have any changes, otherwise we will proceed as shown. Modifications to the final report, after issue, may incur additional cost.

I can get you everything BUT the SARs in a 24 hr TAT. I will send a prelim report with at least all the organics, tomorrow.

Regards,

Ann

Take our short online customer [survey](#) for a chance to win a FREE iPad!

**Ann L. Preston**

2/27/2014

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 26-Feb-14 09:30

Work Order: 14021147

Received by: DS

Checklist completed by Diane Shaw  
eSignature

26-Feb-14  
Date

Reviewed by: Ann Preston  
eSignature

26-Feb-14  
Date

Matrices: Surface Water

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>3.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>2/26/2014 11:09:09 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes: No Trip Blank Rcvd

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 25FEB14  
ActWgt: 67.0 LB  
CAD: 103923490/NET3490

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

BILL RECIPIENT

Ref # 1001-022514-1  
Invoice #  
PO #  
Dept #

HOLLAND, MI 49424

WED - 26 FEB 10:30A  
PRIORITY OVERNIGHT

TRK# 7980 3371 9821  
0201

49424  
MI-US  
GRR

**XX GRRRA**

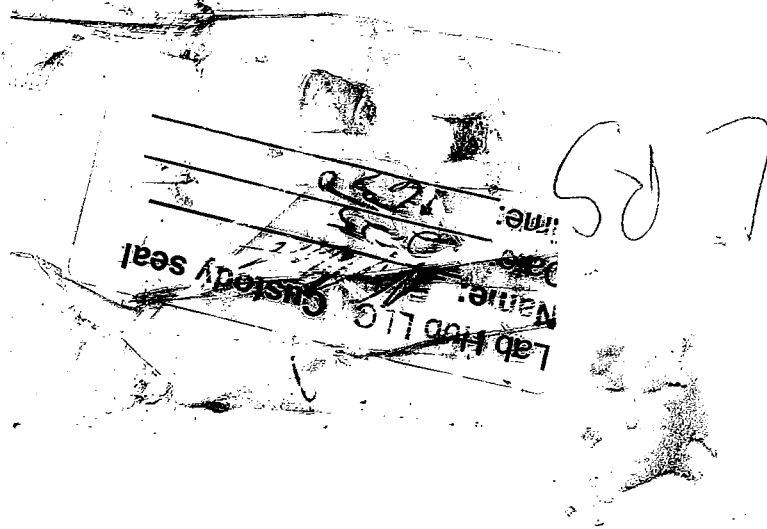
52261562F#220

## 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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04-Mar-2014

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

Re: **WPX PA 31-36 SW 2.28.14**

Work Order: **1403003**

Dear Mark,

ALS Environmental received 6 samples on 01-Mar-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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Work Order:** 1403003

## 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>
1403003-01	CO RIVER UG	Surface Water		2/28/2014 10:06	3/1/2014 10:00	<input type="checkbox"/>
1403003-02	CO RIVER DG	Surface Water		2/28/2014 10:20	3/1/2014 10:00	<input type="checkbox"/>
1403003-03	SPRING 01	Surface Water		2/28/2014 10:34	3/1/2014 10:00	<input type="checkbox"/>
1403003-04	POND 01	Surface Water		2/28/2014 10:55	3/1/2014 10:00	<input type="checkbox"/>
1403003-05	SPRING UG	Surface Water		2/28/2014 11:14	3/1/2014 10:00	<input type="checkbox"/>
1403003-06	Trip Blank	Water		2/28/2014	3/1/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**WorkOrder:** 1403003

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter



# ALS Group USA, Corp

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Sample ID:** CO RIVER UG  
**Collection Date:** 2/28/2014 10:06 AM

**Work Order:** 1403003  
**Lab ID:** 1403003-01  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		1.0	µg/L	1	3/2/2014 08:10 AM
Ethylbenzene	ND		1.0	µg/L	1	3/2/2014 08:10 AM
m,p-Xylene	ND		2.0	µg/L	1	3/2/2014 08:10 AM
o-Xylene	ND		1.0	µg/L	1	3/2/2014 08:10 AM
Toluene	ND		1.0	µg/L	1	3/2/2014 08:10 AM
Xylenes, Total	ND		3.0	µg/L	1	3/2/2014 08:10 AM
Surr: 1,2-Dichloroethane-d4	93.2		70-120	%REC	1	3/2/2014 08:10 AM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/2/2014 08:10 AM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	3/2/2014 08:10 AM
Surr: Toluene-d8	96.6		85-120	%REC	1	3/2/2014 08:10 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	3/3/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		20	mg/L	20	3/4/2014 07:33 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	520		10	mg/L	1	3/4/2014 09:05 AM

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

# ALS Group USA, Corp

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Sample ID:** CO RIVER DG  
**Collection Date:** 2/28/2014 10:20 AM

**Work Order:** 1403003  
**Lab ID:** 1403003-02  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		1.0	µg/L	1	3/2/2014 08:35 AM
Ethylbenzene	ND		1.0	µg/L	1	3/2/2014 08:35 AM
m,p-Xylene	ND		2.0	µg/L	1	3/2/2014 08:35 AM
o-Xylene	ND		1.0	µg/L	1	3/2/2014 08:35 AM
Toluene	ND		1.0	µg/L	1	3/2/2014 08:35 AM
Xylenes, Total	ND		3.0	µg/L	1	3/2/2014 08:35 AM
Surr: 1,2-Dichloroethane-d4	92.2		70-120	%REC	1	3/2/2014 08:35 AM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/2/2014 08:35 AM
Surr: Dibromofluoromethane	96.3		85-115	%REC	1	3/2/2014 08:35 AM
Surr: Toluene-d8	95.6		85-120	%REC	1	3/2/2014 08:35 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	160		3.0	mg/L	1	3/3/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		20	mg/L	20	3/4/2014 07:53 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	3/4/2014 09:05 AM

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

# ALS Group USA, Corp

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Sample ID:** SPRING 01  
**Collection Date:** 2/28/2014 10:34 AM

**Work Order:** 1403003  
**Lab ID:** 1403003-03  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		1.0	µg/L	1	3/2/2014 08:59 AM
Ethylbenzene	ND		1.0	µg/L	1	3/2/2014 08:59 AM
m,p-Xylene	ND		2.0	µg/L	1	3/2/2014 08:59 AM
o-Xylene	ND		1.0	µg/L	1	3/2/2014 08:59 AM
Toluene	ND		1.0	µg/L	1	3/2/2014 08:59 AM
Xylenes, Total	ND		3.0	µg/L	1	3/2/2014 08:59 AM
Surr: 1,2-Dichloroethane-d4	92.1		70-120	%REC	1	3/2/2014 08:59 AM
Surr: 4-Bromofluorobenzene	104		75-120	%REC	1	3/2/2014 08:59 AM
Surr: Dibromofluoromethane	94.8		85-115	%REC	1	3/2/2014 08:59 AM
Surr: Toluene-d8	96.2		85-120	%REC	1	3/2/2014 08:59 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	3/3/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	39		20	mg/L	20	3/4/2014 08:13 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		10	mg/L	1	3/4/2014 09:05 AM

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

# ALS Group USA, Corp

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Sample ID:** POND 01  
**Collection Date:** 2/28/2014 10:55 AM

**Work Order:** 1403003  
**Lab ID:** 1403003-04  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		1.0	µg/L	1	3/2/2014 09:24 AM
Ethylbenzene	ND		1.0	µg/L	1	3/2/2014 09:24 AM
m,p-Xylene	ND		2.0	µg/L	1	3/2/2014 09:24 AM
o-Xylene	ND		1.0	µg/L	1	3/2/2014 09:24 AM
Toluene	ND		1.0	µg/L	1	3/2/2014 09:24 AM
Xylenes, Total	ND		3.0	µg/L	1	3/2/2014 09:24 AM
Surr: 1,2-Dichloroethane-d4	92.6		70-120	%REC	1	3/2/2014 09:24 AM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	3/2/2014 09:24 AM
Surr: Dibromofluoromethane	96.5		85-115	%REC	1	3/2/2014 09:24 AM
Surr: Toluene-d8	96.2		85-120	%REC	1	3/2/2014 09:24 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	25		3.0	mg/L	1	3/3/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	40		20	mg/L	20	3/4/2014 08:34 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		10	mg/L	1	3/4/2014 09:05 AM

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

# ALS Group USA, Corp

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Sample ID:** SPRING UG  
**Collection Date:** 2/28/2014 11:14 AM

**Work Order:** 1403003  
**Lab ID:** 1403003-05  
**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		1.0	µg/L	1	3/2/2014 09:48 AM
Ethylbenzene	ND		1.0	µg/L	1	3/2/2014 09:48 AM
m,p-Xylene	ND		2.0	µg/L	1	3/2/2014 09:48 AM
o-Xylene	ND		1.0	µg/L	1	3/2/2014 09:48 AM
Toluene	ND		1.0	µg/L	1	3/2/2014 09:48 AM
Xylenes, Total	ND		3.0	µg/L	1	3/2/2014 09:48 AM
Surr: 1,2-Dichloroethane-d4	92.1		70-120	%REC	1	3/2/2014 09:48 AM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/2/2014 09:48 AM
Surr: Dibromofluoromethane	94.8		85-115	%REC	1	3/2/2014 09:48 AM
Surr: Toluene-d8	95.6		85-120	%REC	1	3/2/2014 09:48 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	27		3.0	mg/L	1	3/3/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		20	mg/L	20	3/4/2014 08:54 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	470		10	mg/L	1	3/4/2014 09:05 AM

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

**ALS Group USA, Corp**

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 2.28.14  
**Sample ID:** Trip Blank  
**Collection Date:** 2/28/2014

**Work Order:** 1403003  
**Lab ID:** 1403003-06  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>CW</b>
Benzene	ND		1.0	µg/L	1	3/2/2014 07:46 AM
Ethylbenzene	ND		1.0	µg/L	1	3/2/2014 07:46 AM
m,p-Xylene	ND		2.0	µg/L	1	3/2/2014 07:46 AM
o-Xylene	ND		1.0	µg/L	1	3/2/2014 07:46 AM
Toluene	ND		1.0	µg/L	1	3/2/2014 07:46 AM
Xylenes, Total	ND		3.0	µg/L	1	3/2/2014 07:46 AM
Surr: 1,2-Dichloroethane-d4	95.9		70-120	%REC	1	3/2/2014 07:46 AM
Surr: 4-Bromofluorobenzene	105		75-120	%REC	1	3/2/2014 07:46 AM
Surr: Dibromofluoromethane	95.6		85-115	%REC	1	3/2/2014 07:46 AM
Surr: Toluene-d8	95.5		85-120	%REC	1	3/2/2014 07:46 AM

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

# ALS Group USA, Corp

Date: 04-Mar-14

**Client:** HRL Compliance Solutions  
**Work Order:** 1403003  
**Project:** WPX PA 31-36 SW 2.28.14

## QC BATCH REPORT

Batch ID: **R136487** Instrument ID **VMS8** Method: **SW8260**

MBLK				Sample ID: VBLKW2-140301-R136487				Units: µg/L			Analysis Date: 3/2/2014 06:57 AM		
Client ID:			Run ID: VMS8_140301B				SeqNo: 2660956		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	1.0											
Ethylbenzene	ND	1.0											
m,p-Xylene	ND	2.0											
o-Xylene	ND	1.0											
Toluene	ND	1.0											
Xylenes, Total	ND	3.0											
Surr: 1,2-Dichloroethane-d4	18.8	0	20	0	94	70-120		0					
Surr: 4-Bromofluorobenzene	21.32	0	20	0	107	75-120		0					
Surr: Dibromofluoromethane	18.91	0	20	0	94.6	85-115		0					
Surr: Toluene-d8	19.17	0	20	0	95.8	85-120		0					

LCS				Sample ID: VLCSW2-140301-R136487				Units: µg/L			Analysis Date: 3/2/2014 05:44 AM		
Client ID:			Run ID: VMS8_140301B			SeqNo: 2660955			Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	21.12	1.0	20	0	106	80-120		0					
Ethylbenzene	21.21	1.0	20	0	106	75-125		0					
m,p-Xylene	41.64	2.0	40	0	104	75-130		0					
o-Xylene	21.49	1.0	20	0	107	80-120		0					
Toluene	20.24	1.0	20	0	101	75-120		0					
Xylenes, Total	63.13	3.0	60	0	105	75-130		0					
Surr: 1,2-Dichloroethane-d4	18.64	0	20	0	93.2	70-120		0					
Surr: 4-Bromofluorobenzene	21.22	0	20	0	106	75-120		0					
Surr: Dibromofluoromethane	19.3	0	20	0	96.5	85-115		0					
Surr: Toluene-d8	19.06	0	20	0	95.3	85-120		0					

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

Client: HRL Compliance Solutions  
 Work Order: 1403003  
 Project: WPX PA 31-36 SW 2.28.14

## QC BATCH REPORT

Batch ID: **R136487** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 1403003-03A MS			Units: µg/L		Analysis Date: 3/2/2014 03:30 PM		
Client ID: SPRING 01			Run ID: VMS8_140301B			SeqNo: 2660976		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	20.97	1.0	20	0	105	80-120		0				
Ethylbenzene	20.44	1.0	20	0	102	75-125		0				
m,p-Xylene	40.06	2.0	40	0	100	75-130		0				
o-Xylene	20.35	1.0	20	0	102	80-120		0				
Toluene	19.58	1.0	20	0	97.9	75-120		0				
Xylenes, Total	60.41	3.0	60	0	101	75-130		0				
Surr: 1,2-Dichloroethane-d4	18.74	0	20	0	93.7	70-120		0				
Surr: 4-Bromofluorobenzene	21.34	0	20	0	107	75-120		0				
Surr: Dibromofluoromethane	19.24	0	20	0	96.2	85-115		0				
Surr: Toluene-d8	18.83	0	20	0	94.2	85-120		0				

MSD				Sample ID: 1403003-03A MSD			Units: µg/L		Analysis Date: 3/2/2014 03:55 PM		
Client ID: SPRING 01			Run ID: VMS8_140301B			SeqNo: 2660977		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.32	1.0	20	0	107	80-120	20.97	1.66	30		
Ethylbenzene	20.83	1.0	20	0	104	75-125	20.44	1.89	30		
m,p-Xylene	40.92	2.0	40	0	102	75-130	40.06	2.12	30		
o-Xylene	20.83	1.0	20	0	104	80-120	20.35	2.33	30		
Toluene	20.03	1.0	20	0	100	75-120	19.58	2.27	30		
Xylenes, Total	61.75	3.0	60	0	103	75-130	60.41	2.19	30		
Surr: 1,2-Dichloroethane-d4	18.54	0	20	0	92.7	70-120	18.74	1.07	30		
Surr: 4-Bromofluorobenzene	21.19	0	20	0	106	75-120	21.34	0.705	30		
Surr: Dibromofluoromethane	19.07	0	20	0	95.4	85-115	19.24	0.887	30		
Surr: Toluene-d8	19.04	0	20	0	95.2	85-120	18.83	1.11	30		

The following samples were analyzed in this batch:

1403003-01A	1403003-02A	1403003-03A
1403003-04A	1403003-05A	1403003-06A

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



**Client:** HRL Compliance Solutions  
**Work Order:** 1403003  
**Project:** WPX PA 31-36 SW 2.28.14

## QC BATCH REPORT

Batch ID: **56286**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56286-56286</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 09:05 AM</b>		
Client ID:		Run ID: <b>TDS_140304A</b>				SeqNo: <b>2662819</b>		Prep Date: <b>3/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56286-56286</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 09:05 AM</b>		
Client ID:		Run ID: <b>TDS_140304A</b>				SeqNo: <b>2662818</b>		Prep Date: <b>3/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      472      10      495      0      95.4      80-120      0

<b>DUP</b>		Sample ID: <b>14021145-01C DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 09:05 AM</b>		
Client ID:		Run ID: <b>TDS_140304A</b>				SeqNo: <b>2662799</b>		Prep Date: <b>3/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      1012      20      0      0      0      0-0      1024      1.18      20

<b>DUP</b>		Sample ID: <b>1403003-02B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 09:05 AM</b>		
Client ID: <b>CO RIVER DG</b>		Run ID: <b>TDS_140304A</b>				SeqNo: <b>2662813</b>		Prep Date: <b>3/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      512      10      0      0      0      0-0      503      1.77      20

The following samples were analyzed in this batch:

1403003-01B	1403003-02B	1403003-03B
1403003-04B	1403003-05B	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1403003  
**Project:** WPX PA 31-36 SW 2.28.14

## QC BATCH REPORT

Batch ID: **R136512** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140303-R136512</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/3/2014 12:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140303E</b>				SeqNo: <b>2661422</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140303-R136512</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/3/2014 12:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140303E</b>				SeqNo: <b>2661423</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 49.98 3.0 50 0 100 80-120 0

<b>MS</b>		Sample ID: <b>1403003-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/3/2014 12:15 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140303E</b>				SeqNo: <b>2661429</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 192.4 3.0 50 145 95 75-125 0

<b>MSD</b>		Sample ID: <b>1403003-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/3/2014 12:15 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140303E</b>				SeqNo: <b>2661430</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 197.4 3.0 50 145 105 75-125 192.4 2.56 20

The following samples were analyzed in this batch:

1403003-01B	1403003-02B	1403003-03B
1403003-04B	1403003-05B	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1403003  
**Project:** WPX PA 31-36 SW 2.28.14

## QC BATCH REPORT

Batch ID: **R136597**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R136597</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 03:10 AM</b>		
Client ID:		Run ID: <b>IC3_140304A</b>				SeqNo: <b>2663351</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R136597</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 03:30 AM</b>		
Client ID:		Run ID: <b>IC3_140304A</b>				SeqNo: <b>2663352</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      9.94      1.0      10      0      99.4      85-110      0

<b>MS</b>		Sample ID: <b>14021145-05C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 10:54 AM</b>		
Client ID:		Run ID: <b>IC3_140304A</b>				SeqNo: <b>2663373</b>		Prep Date:		DF: <b>40</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      651.8      40      200      448.3      102      75-125      0

<b>MSD</b>		Sample ID: <b>14021145-05C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 11:15 AM</b>		
Client ID:		Run ID: <b>IC3_140304A</b>				SeqNo: <b>2663375</b>		Prep Date:		DF: <b>40</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      632.1      40      200      448.3      91.9      75-125      651.8      3.07      20

The following samples were analyzed in this batch:

1403003-01B	1403003-02B	1403003-03B
1403003-04B	1403003-05B	

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



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 01-Mar-14 00:00

Work Order: 1403003

Received by: DS

Checklist completed by Diane Shaw  
eSignature

01-Mar-14

Date

Reviewed by: Ann Preston  
eSignature

03-Mar-14

Date

Matrices: Surface Water

Carrier name: FedEx

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

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

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

Chain of custody present? Yes ☒ No ☐

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

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

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

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

Sample(s) received on ice? Yes ☒ No ☐

Temperature(s)/Thermometer(s): 3.2 c

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 3/1/2014 11:06:39 AM

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

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

pH adjusted? Yes ☐ No ☒ N/A ☐

pH adjusted by:

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749

Lab Hub, LLC

Origin ID: RILA



127 E First Street

PARACHUTE, CO 81635

Ship Date: 28FEB14  
ActWgt: 44.0 LB  
CAD: 103923490/NET3490

Dim: 25 X 14 X 15 IN



BILL RECIPIENT

SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

HOLLAND, MI 49424

Delivery Address Bar Code



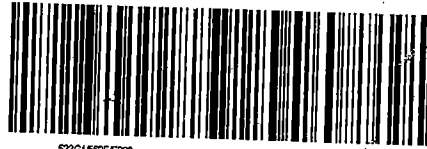
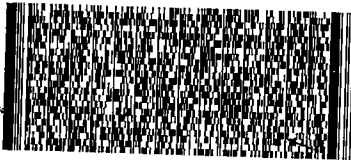
Ref # 1001-022814-1  
Invoice #  
PO #  
Dept #

SATURDAY 12:00P  
PRIORITY OVERNIGHT

TRK# 7980 7687 0365  
0204

**X0 GRRR**

49424  
MI-US  
GRR



522G1562F7220

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Lab Hub LLC. Custody seal  
Name: [Signature]  
Date: 2/28/14  
Time: 1:00



05-Mar-2014

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

Re: **WPX PA 31-36 SW 3.3.14**

Work Order: **1403074**

Dear Mark,

ALS Environmental received 6 samples on 04-Mar-2014 12:00 PM for the analyses presented in the following report.

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

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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 3.3.14  
**Work Order:** 1403074

## 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>
1403074-01	CO RIVER UG	Surface Water		3/3/2014 12:20	3/4/2014 12:00	<input type="checkbox"/>
1403074-02	CO RIVER DG	Surface Water		3/3/2014 12:33	3/4/2014 12:00	<input type="checkbox"/>
1403074-03	SPRING 01	Surface Water		3/3/2014 12:47	3/4/2014 12:00	<input type="checkbox"/>
1403074-04	POND	Surface Water		3/3/2014 13:07	3/4/2014 12:00	<input type="checkbox"/>
1403074-05	SPRING UG	Surface Water		3/3/2014 13:25	3/4/2014 12:00	<input type="checkbox"/>
1403074-06	Trip Blank	Water		3/3/2014	3/4/2014 12:00	<input type="checkbox"/>



**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 3.3.14  
**WorkOrder:** 1403074

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 05-Mar-14

Client: HRL Compliance Solutions

Project: WPX PA 31-36 SW 3.3.14

Sample ID: CO RIVER UG

Collection Date: 3/3/2014 12:20 PM

Work Order: 1403074

Lab ID: 1403074-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/4/2014 09:40 PM
Ethylbenzene	ND		1.0	µg/L	1	3/4/2014 09:40 PM
m,p-Xylene	ND		2.0	µg/L	1	3/4/2014 09:40 PM
o-Xylene	ND		1.0	µg/L	1	3/4/2014 09:40 PM
Toluene	ND		1.0	µg/L	1	3/4/2014 09:40 PM
Xylenes, Total	ND		3.0	µg/L	1	3/4/2014 09:40 PM
Surr: 1,2-Dichloroethane-d4	91.9		70-120	%REC	1	3/4/2014 09:40 PM
Surr: 4-Bromofluorobenzene	103		75-120	%REC	1	3/4/2014 09:40 PM
Surr: Dibromofluoromethane	97.1		85-115	%REC	1	3/4/2014 09:40 PM
Surr: Toluene-d8	93.0		85-120	%REC	1	3/4/2014 09:40 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	3/5/2014 10:00 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/4/2014 03:33 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/5/14	Analyst: <b>YM</b>
Total Dissolved Solids	490		10	mg/L	1	3/5/2014 08:50 AM

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

# ALS Group USA, Corp

Date: 05-Mar-14

Client: HRL Compliance Solutions

Project: WPX PA 31-36 SW 3.3.14

Sample ID: CO RIVER DG

Collection Date: 3/3/2014 12:33 PM

Work Order: 1403074

Lab ID: 1403074-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/4/2014 09:14 PM
Ethylbenzene	ND		1.0	µg/L	1	3/4/2014 09:14 PM
m,p-Xylene	ND		2.0	µg/L	1	3/4/2014 09:14 PM
o-Xylene	ND		1.0	µg/L	1	3/4/2014 09:14 PM
Toluene	ND		1.0	µg/L	1	3/4/2014 09:14 PM
Xylenes, Total	ND		3.0	µg/L	1	3/4/2014 09:14 PM
Surr: 1,2-Dichloroethane-d4	91.1		70-120	%REC	1	3/4/2014 09:14 PM
Surr: 4-Bromofluorobenzene	105		75-120	%REC	1	3/4/2014 09:14 PM
Surr: Dibromofluoromethane	97.2		85-115	%REC	1	3/4/2014 09:14 PM
Surr: Toluene-d8	91.2		85-120	%REC	1	3/4/2014 09:14 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	150		3.0	mg/L	1	3/5/2014 10:00 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/4/2014 03:54 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/5/14	Analyst: <b>YM</b>
Total Dissolved Solids	520		10	mg/L	1	3/5/2014 08:50 AM

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

# ALS Group USA, Corp

Date: 05-Mar-14

Client: HRL Compliance Solutions

Project: WPX PA 31-36 SW 3.3.14

Sample ID: SPRING 01

Collection Date: 3/3/2014 12:47 PM

Work Order: 1403074

Lab ID: 1403074-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/4/2014 08:48 PM
Ethylbenzene	ND		1.0	µg/L	1	3/4/2014 08:48 PM
m,p-Xylene	ND		2.0	µg/L	1	3/4/2014 08:48 PM
o-Xylene	ND		1.0	µg/L	1	3/4/2014 08:48 PM
Toluene	ND		1.0	µg/L	1	3/4/2014 08:48 PM
Xylenes, Total	ND		3.0	µg/L	1	3/4/2014 08:48 PM
Surr: 1,2-Dichloroethane-d4	93.9		70-120	%REC	1	3/4/2014 08:48 PM
Surr: 4-Bromofluorobenzene	103		75-120	%REC	1	3/4/2014 08:48 PM
Surr: Dibromofluoromethane	96.9		85-115	%REC	1	3/4/2014 08:48 PM
Surr: Toluene-d8	93.3		85-120	%REC	1	3/4/2014 08:48 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	3/5/2014 10:00 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/4/2014 04:54 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/5/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		10	mg/L	1	3/5/2014 08:50 AM

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

**ALS Group USA, Corp**

Date: 05-Mar-14

Client: HRL Compliance Solutions

Project: WPX PA 31-36 SW 3.3.14

Sample ID: POND

Collection Date: 3/3/2014 01:07 PM

Work Order: 1403074

Lab ID: 1403074-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/4/2014 08:21 PM
Ethylbenzene	ND		1.0	µg/L	1	3/4/2014 08:21 PM
m,p-Xylene	ND		2.0	µg/L	1	3/4/2014 08:21 PM
o-Xylene	ND		1.0	µg/L	1	3/4/2014 08:21 PM
Toluene	ND		1.0	µg/L	1	3/4/2014 08:21 PM
Xylenes, Total	ND		3.0	µg/L	1	3/4/2014 08:21 PM
Surr: 1,2-Dichloroethane-d4	92.8		70-120	%REC	1	3/4/2014 08:21 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/4/2014 08:21 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	1	3/4/2014 08:21 PM
Surr: Toluene-d8	90.6		85-120	%REC	1	3/4/2014 08:21 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	25		3.0	mg/L	1	3/5/2014 10:00 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		10	mg/L	10	3/4/2014 05:55 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/5/14	Analyst: <b>YM</b>
Total Dissolved Solids	400		10	mg/L	1	3/5/2014 08:50 AM

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

# ALS Group USA, Corp

Date: 05-Mar-14

Client: HRL Compliance Solutions

Project: WPX PA 31-36 SW 3.3.14

Sample ID: SPRING UG

Collection Date: 3/3/2014 01:25 PM

Work Order: 1403074

Lab ID: 1403074-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/4/2014 07:55 PM
Ethylbenzene	ND		1.0	µg/L	1	3/4/2014 07:55 PM
m,p-Xylene	ND		2.0	µg/L	1	3/4/2014 07:55 PM
o-Xylene	ND		1.0	µg/L	1	3/4/2014 07:55 PM
Toluene	ND		1.0	µg/L	1	3/4/2014 07:55 PM
Xylenes, Total	ND		3.0	µg/L	1	3/4/2014 07:55 PM
Surr: 1,2-Dichloroethane-d4	90.4		70-120	%REC	1	3/4/2014 07:55 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	3/4/2014 07:55 PM
Surr: Dibromofluoromethane	96.9		85-115	%REC	1	3/4/2014 07:55 PM
Surr: Toluene-d8	91.5		85-120	%REC	1	3/4/2014 07:55 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	27		3.0	mg/L	1	3/5/2014 10:00 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	38		10	mg/L	10	3/4/2014 06:15 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/5/14	Analyst: <b>YM</b>
Total Dissolved Solids	450		10	mg/L	1	3/5/2014 08:50 AM

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

**ALS Group USA, Corp**

Date: 05-Mar-14

**Client:** HRL Compliance Solutions  
**Project:** WPX PA 31-36 SW 3.3.14  
**Sample ID:** Trip Blank  
**Collection Date:** 3/3/2014

**Work Order:** 1403074  
**Lab ID:** 1403074-06  
**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/4/2014 07:03 PM
Ethylbenzene	ND		1.0	µg/L	1	3/4/2014 07:03 PM
m,p-Xylene	ND		2.0	µg/L	1	3/4/2014 07:03 PM
o-Xylene	ND		1.0	µg/L	1	3/4/2014 07:03 PM
Toluene	ND		1.0	µg/L	1	3/4/2014 07:03 PM
Xylenes, Total	ND		3.0	µg/L	1	3/4/2014 07:03 PM
Surr: 1,2-Dichloroethane-d4	90.9		70-120	%REC	1	3/4/2014 07:03 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	3/4/2014 07:03 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	1	3/4/2014 07:03 PM
Surr: Toluene-d8	92.0		85-120	%REC	1	3/4/2014 07:03 PM

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

# ALS Group USA, Corp

Date: 05-Mar-14

**Client:** HRL Compliance Solutions  
**Work Order:** 1403074  
**Project:** WPX PA 31-36 SW 3.3.14

## QC BATCH REPORT

Batch ID: **R136622** Instrument ID **VMS5** Method: **SW8260**

MBLK				Sample ID: VBLKW1-140304-R136622				Units: µg/L			Analysis Date: 3/4/2014 06:37 PM		
Client ID:			Run ID: VMS5_140304A				SeqNo: 2664026		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	1.0											
Ethylbenzene	ND	1.0											
m,p-Xylene	ND	2.0											
o-Xylene	ND	1.0											
Toluene	ND	1.0											
Xylenes, Total	ND	3.0											
Surr: 1,2-Dichloroethane-d4	18.17	0	20	0	90.8	70-120		0					
Surr: 4-Bromofluorobenzene	20.17	0	20	0	101	75-120		0					
Surr: Dibromofluoromethane	19.62	0	20	0	98.1	85-115		0					
Surr: Toluene-d8	18.11	0	20	0	90.6	85-120		0					

LCS				Sample ID: VLCSW1-140304-R136622				Units: µg/L			Analysis Date: 3/4/2014 05:44 PM		
Client ID:			Run ID: VMS5_140304A			SeqNo: 2664025			Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	24	1.0	20	0	120	80-120	0						
Ethylbenzene	23.16	1.0	20	0	116	75-125	0						
m,p-Xylene	45.76	2.0	40	0	114	75-130	0						
o-Xylene	22.96	1.0	20	0	115	80-120	0						
Toluene	22.26	1.0	20	0	111	75-120	0						
Xylenes, Total	68.72	3.0	60	0	115	75-130	0						
Surr: 1,2-Dichloroethane-d4	18.28	0	20	0	91.4	70-120	0						
Surr: 4-Bromofluorobenzene	20.8	0	20	0	104	75-120	0						
Surr: Dibromofluoromethane	19.11	0	20	0	95.6	85-115	0						
Surr: Toluene-d8	18.53	0	20	0	92.6	85-120	0						

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



Client: HRL Compliance Solutions  
 Work Order: 1403074  
 Project: WPX PA 31-36 SW 3.3.14

## QC BATCH REPORT

Batch ID: **R136622** Instrument ID **VMS5** Method: **SW8260**

MS					Sample ID: 1403074-01A MS			Units: µg/L		Analysis Date: 3/5/2014 03:46 AM	
Client ID: CO RIVER UG			Run ID: VMS5_140304A			SeqNo: 2664042		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.56	1.0	20	0	118	80-120	0				
Ethylbenzene	22.71	1.0	20	0	114	75-125	0				
m,p-Xylene	45.06	2.0	40	0	113	75-130	0				
o-Xylene	22.23	1.0	20	0	111	80-120	0				
Toluene	21.72	1.0	20	0	109	75-120	0				
Xylenes, Total	67.29	3.0	60	0	112	75-130	0				
Surr: 1,2-Dichloroethane-d4	18.34	0	20	0	91.7	70-120	0				
Surr: 4-Bromofluorobenzene	21.3	0	20	0	106	75-120	0				
Surr: Dibromofluoromethane	19.37	0	20	0	96.8	85-115	0				
Surr: Toluene-d8	18.49	0	20	0	92.4	85-120	0				

MSD					Sample ID: 1403074-01A MSD		Units: µg/L		Analysis Date: 3/5/2014 04:12 AM		
Client ID: CO RIVER UG			Run ID: VMS5_140304A			SeqNo: 2664043		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.98	1.0	20	0	110	80-120	23.56	6.94	30		
Ethylbenzene	21.97	1.0	20	0	110	75-125	22.71	3.31	30		
m,p-Xylene	43.48	2.0	40	0	109	75-130	45.06	3.57	30		
o-Xylene	21.44	1.0	20	0	107	80-120	22.23	3.62	30		
Toluene	20.52	1.0	20	0	103	75-120	21.72	5.68	30		
Xylenes, Total	64.92	3.0	60	0	108	75-130	67.29	3.59	30		
Surr: 1,2-Dichloroethane-d4	17.87	0	20	0	89.4	70-120	18.34	2.6	30		
Surr: 4-Bromofluorobenzene	21.09	0	20	0	105	75-120	21.3	0.991	30		
Surr: Dibromofluoromethane	19.08	0	20	0	95.4	85-115	19.37	1.51	30		
Surr: Toluene-d8	18.55	0	20	0	92.8	85-120	18.49	0.324	30		

The following samples were analyzed in this batch:

1403074-01A	1403074-02A	1403074-03A
1403074-04A	1403074-05A	1403074-06A

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

Client: HRL Compliance Solutions  
 Work Order: 1403074  
 Project: WPX PA 31-36 SW 3.3.14

## QC BATCH REPORT

Batch ID: **56324** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56324-56324</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140305A</b>				SeqNo: <b>2664413</b>		Prep Date: <b>3/5/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-56324-56324</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140305A</b>				SeqNo: <b>2664412</b>		Prep Date: <b>3/5/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 471 10 495 0 95.2 80-120 0

<b>DUP</b>		Sample ID: <b>14021237-05B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140305A</b>				SeqNo: <b>2664379</b>		Prep Date: <b>3/5/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 7366 20 0 0 0 0-0 7476 1.48 20

<b>DUP</b>		Sample ID: <b>14021280-03C DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140305A</b>				SeqNo: <b>2664403</b>		Prep Date: <b>3/5/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 264 20 0 0 0 0-0 272 2.99 20

The following samples were analyzed in this batch:

1403074-01B	1403074-02B	1403074-03B
1403074-04B	1403074-05B	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1403074  
**Project:** WPX PA 31-36 SW 3.3.14

## QC BATCH REPORT

Batch ID: **R136629** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140305-R136629</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 10:00 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140305A</b>				SeqNo: <b>2664070</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140305-R136629</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 10:00 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140305A</b>				SeqNo: <b>2664071</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 50.98 3.0 50 0 102 80-120 0

<b>MS</b>		Sample ID: <b>1403074-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 10:00 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140305A</b>				SeqNo: <b>2664073</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 187.4 3.0 50 142.5 90 75-125 0

<b>MSD</b>		Sample ID: <b>1403074-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/5/2014 10:00 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140305A</b>				SeqNo: <b>2664074</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 187.4 3.0 50 142.5 90 75-125 187.4 0 20

The following samples were analyzed in this batch:

1403074-01B	1403074-02B	1403074-03B
1403074-04B	1403074-05B	

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

**Client:** HRL Compliance Solutions  
**Work Order:** 1403074  
**Project:** WPX PA 31-36 SW 3.3.14

## QC BATCH REPORT

Batch ID: **R136634** Instrument ID **IC4** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R136634</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 12:27 PM</b>		
Client ID:		Run ID: <b>IC4_140304B</b>				SeqNo: <b>2664179</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R136634</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 12:47 PM</b>		
Client ID:		Run ID: <b>IC4_140304B</b>				SeqNo: <b>2664181</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 10.33 1.0 10 0 103 85-110 0

<b>MS</b>		Sample ID: <b>1403074-03B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 05:15 PM</b>		
Client ID: <b>SPRING 01</b>		Run ID: <b>IC4_140304B</b>				SeqNo: <b>2664198</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 86.46 10 50 35.57 102 75-125 0

<b>MSD</b>		Sample ID: <b>1403074-03B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/4/2014 05:35 PM</b>		
Client ID: <b>SPRING 01</b>		Run ID: <b>IC4_140304B</b>				SeqNo: <b>2664199</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 86.82 10 50 35.57 103 75-125 86.46 0.419 20

The following samples were analyzed in this batch:

1403074-01B	1403074-02B	1403074-03B
1403074-04B	1403074-05B	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

1403074

PAGE

1 of 1

DISPOSAL By Lab or Return to Client

PROJECT NAME	WPX PA 31-36 SW 3.3.14	SAMPLER	Casey Richardson					DATE	3.3.14				TURNAROUND	24 Hour			
PROJECT No.		SITE ID															
		EDD FORMAT															
		PURCHASE ORDER															
COMPANY NAME	HCSI	BILL TO COMPANY	WPX Energy														
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolina Blaney														
ADDRESS	2385 F 1/2 Road	ADDRESS	1058 County Road 215														
CITY / STATE / ZIP	Grand Junction, CO. 81505	CITY / STATE / ZIP	Parachute, CO 81635														
PHONE	970-243-3271	PHONE	970-683-2295														
FAX	970-243-3280	FAX	970-285-9573														
E-MAIL	mmumby@hrlcomp.com	E-MAIL	karolina.blaney@wpxenergy.com														
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	Chlorides	Sulfates						
1	CO RIVER UG	SW	3.3.14	1220	4	1.8		X	X	X	X						
2	CO RIVER DG			1233				X	X	X	X						
3	SPRING 01			1247				X	X	X	X						
4	POND			1307				X	X	X	X						
5	SPRING UG			1325				X	X	X	X						
6	TRIP BLANK																

\*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)	
	<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"/>	

3.3.14

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

SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY <i>Casey Richardson</i>	CASEY RICHARDSON	3.3.14	1445
RECEIVED BY <i>Colby Goerner</i>	Colby Goerner	3.3.14	1445
RELINQUISHED BY <i>Colby Goerner</i>	Colby Goerner	3.3.14	1445
RECEIVED BY <i>Feder</i>			
RELINQUISHED BY <i>Diane F. Shaw</i>			
RECEIVED BY <i>Diane F. Shaw</i>	Diane F. Shaw	3/4/14	1200

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 04-Mar-14 12:00

Work Order: 1403074

Received by: DS

Checklist completed by Diane Shaw  
eSignature

04-Mar-14  
Date

Reviewed by: Ann Preston  
eSignature

04-Mar-14  
Date

Matrices: Surface Water

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>3.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/4/2014 1:08:51 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 03MAR14  
Act/Wgt: 48.0 LB  
QAD: 103923490/IN/US/900

Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



SHIP TO: (616) 399-6870  
Sample receiving  
ALS Holland  
3352 128TH AVE

BILL RECIPIENT

Ref # 1001-030314-1  
Invoice #  
PO #  
Dept #

HOLLAND, MI 49424

TUE - 04 MAR AA  
STANDARD OVERNIGHT

TRK# 7980 9442 6908  
0201

XX GRRR

49424  
MI-US  
GRR



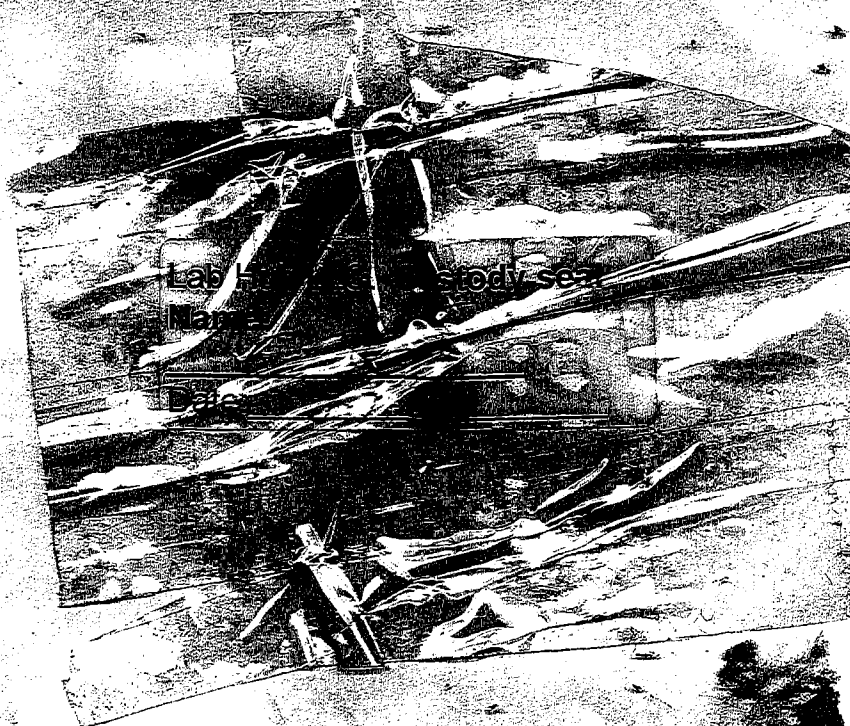
522610001F220

## 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](http://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.





07-Mar-2014

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

Re: **WPX PA 31-36 SW 3.5.14**

Work Order: **1403197**

Dear Mark,

ALS Environmental received 6 samples on 06-Mar-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 19.

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

Sincerely,

**Ann Preston**

Electronically approved by: Chad Whelton

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](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.5.14  
**Work Order:** 1403197

**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>
1403197-01	CO RIVER UG	Surface Water		3/5/2014 10:00	3/6/2014 10:00	<input type="checkbox"/>
1403197-02	CO RIVER DG	Surface Water		3/5/2014 10:13	3/6/2014 10:00	<input type="checkbox"/>
1403197-03	SPRING 01	Surface Water		3/5/2014 10:28	3/6/2014 10:00	<input type="checkbox"/>
1403197-04	POND 01	Surface Water		3/5/2014 10:54	3/6/2014 10:00	<input type="checkbox"/>
1403197-05	SPRING UG	Surface Water		3/5/2014 11:10	3/6/2014 10:00	<input type="checkbox"/>
1403197-06	Trip Blank	Water		3/5/2014	3/6/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.5.14  
**WorkOrder:** 1403197

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 07-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.5.14

Sample ID: CO RIVER UG

Collection Date: 3/5/2014 10:00 AM

Work Order: 1403197

Lab ID: 1403197-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
Ethylbenzene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
m,p-Xylene	ND		2.0	µg/L	1	3/6/2014 05:40 PM
o-Xylene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
Toluene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
Xylenes, Total	ND		3.0	µg/L	1	3/6/2014 05:40 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/6/2014 05:40 PM
Surr: 4-Bromofluorobenzene	86.0		75-120	%REC	1	3/6/2014 05:40 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/6/2014 05:40 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/6/2014 05:40 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	3/7/2014 11:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/6/2014 11:01 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/7/14	Analyst: <b>YM</b>
Total Dissolved Solids	510		10	mg/L	1	3/7/2014 08:45 AM

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

**ALS Group USA, Corp**

Date: 07-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.5.14

Sample ID: CO RIVER DG

Collection Date: 3/5/2014 10:13 AM

Work Order: 1403197

Lab ID: 1403197-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/6/2014 06:05 PM
Ethylbenzene	ND		1.0	µg/L	1	3/6/2014 06:05 PM
m,p-Xylene	ND		2.0	µg/L	1	3/6/2014 06:05 PM
o-Xylene	ND		1.0	µg/L	1	3/6/2014 06:05 PM
Toluene	ND		1.0	µg/L	1	3/6/2014 06:05 PM
Xylenes, Total	ND		3.0	µg/L	1	3/6/2014 06:05 PM
Surr: 1,2-Dichloroethane-d4	104		70-120	%REC	1	3/6/2014 06:05 PM
Surr: 4-Bromofluorobenzene	87.2		75-120	%REC	1	3/6/2014 06:05 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	3/6/2014 06:05 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/6/2014 06:05 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	160		3.0	mg/L	1	3/7/2014 11:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/6/2014 12:02 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/7/14	Analyst: <b>YM</b>
Total Dissolved Solids	520		10	mg/L	1	3/7/2014 08:45 AM

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

# ALS Group USA, Corp

Date: 07-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.5.14

Sample ID: SPRING 01

Collection Date: 3/5/2014 10:28 AM

Work Order: 1403197

Lab ID: 1403197-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/6/2014 06:29 PM
Ethylbenzene	ND		1.0	µg/L	1	3/6/2014 06:29 PM
m,p-Xylene	ND		2.0	µg/L	1	3/6/2014 06:29 PM
o-Xylene	ND		1.0	µg/L	1	3/6/2014 06:29 PM
Toluene	ND		1.0	µg/L	1	3/6/2014 06:29 PM
Xylenes, Total	ND		3.0	µg/L	1	3/6/2014 06:29 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	1	3/6/2014 06:29 PM
Surr: 4-Bromofluorobenzene	89.0		75-120	%REC	1	3/6/2014 06:29 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	3/6/2014 06:29 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	3/6/2014 06:29 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	3/7/2014 11:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		10	mg/L	10	3/6/2014 12:22 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/7/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	3/7/2014 08:45 AM

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

# ALS Group USA, Corp

Date: 07-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.5.14

Sample ID: POND 01

Collection Date: 3/5/2014 10:54 AM

Work Order: 1403197

Lab ID: 1403197-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
Ethylbenzene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
m,p-Xylene	ND		2.0	µg/L	1	3/6/2014 05:40 PM
o-Xylene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
Toluene	ND		1.0	µg/L	1	3/6/2014 05:40 PM
Xylenes, Total	ND		3.0	µg/L	1	3/6/2014 05:40 PM
Surr: 1,2-Dichloroethane-d4	106		70-120	%REC	1	3/6/2014 05:40 PM
Surr: 4-Bromofluorobenzene	97.9		75-120	%REC	1	3/6/2014 05:40 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/6/2014 05:40 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/6/2014 05:40 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	25		3.0	mg/L	1	3/7/2014 11:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/6/2014 12:43 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/7/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		10	mg/L	1	3/7/2014 08:45 AM

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

# ALS Group USA, Corp

Date: 07-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.5.14

Sample ID: SPRING UG

Collection Date: 3/5/2014 11:10 AM

Work Order: 1403197

Lab ID: 1403197-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/6/2014 05:16 PM
Ethylbenzene	ND		1.0	µg/L	1	3/6/2014 05:16 PM
m,p-Xylene	ND		2.0	µg/L	1	3/6/2014 05:16 PM
o-Xylene	ND		1.0	µg/L	1	3/6/2014 05:16 PM
Toluene	ND		1.0	µg/L	1	3/6/2014 05:16 PM
Xylenes, Total	ND		3.0	µg/L	1	3/6/2014 05:16 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	1	3/6/2014 05:16 PM
Surr: 4-Bromofluorobenzene	97.2		75-120	%REC	1	3/6/2014 05:16 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	3/6/2014 05:16 PM
Surr: Toluene-d8	98.8		85-120	%REC	1	3/6/2014 05:16 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	25		3.0	mg/L	1	3/7/2014 11:30 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		10	mg/L	10	3/6/2014 01:03 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/7/14	Analyst: <b>YM</b>
Total Dissolved Solids	450		10	mg/L	1	3/7/2014 08:45 AM

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

**ALS Group USA, Corp****Date:** 07-Mar-14**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 3.5.14**Work Order:** 1403197**Sample ID:** Trip Blank**Lab ID:** 1403197-06**Collection Date:** 3/5/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/6/2014 04:52 PM
Ethylbenzene	ND		1.0	µg/L	1	3/6/2014 04:52 PM
m,p-Xylene	ND		2.0	µg/L	1	3/6/2014 04:52 PM
o-Xylene	ND		1.0	µg/L	1	3/6/2014 04:52 PM
Toluene	ND		1.0	µg/L	1	3/6/2014 04:52 PM
Xylenes, Total	ND		3.0	µg/L	1	3/6/2014 04:52 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	1	3/6/2014 04:52 PM
Surr: 4-Bromofluorobenzene	97.5		75-120	%REC	1	3/6/2014 04:52 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	3/6/2014 04:52 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/6/2014 04:52 PM

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



# ALS Group USA, Corp

Date: 07-Mar-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **R136721A** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBKWK1-140306-R136721A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/6/2014 01:11 PM</b>		
Client ID:		Run ID: <b>VMS8_140306A</b>				SeqNo: <b>2666237</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.57	0	20	0	103	70-120	0			
Surr: 4-Bromofluorobenzene	19.32	0	20	0	96.6	75-120	0			
Surr: Dibromofluoromethane	20.17	0	20	0	101	85-115	0			
Surr: Toluene-d8	19.81	0	20	0	99	85-120	0			

LCS		Sample ID: <b>VLCSW1-140306-R136721A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/6/2014 11:58 AM</b>		
Client ID:		Run ID: <b>VMS8_140306A</b>				SeqNo: <b>2666236</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.28	1.0	20	0	106	80-120	0			
Ethylbenzene	22.26	1.0	20	0	111	75-125	0			
m,p-Xylene	43.59	2.0	40	0	109	75-130	0			
o-Xylene	21.87	1.0	20	0	109	80-120	0			
Toluene	21.45	1.0	20	0	107	75-120	0			
Xylenes, Total	65.46	3.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.35	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	20.04	0	20	0	100	75-120	0			
Surr: Dibromofluoromethane	20.05	0	20	0	100	85-115	0			
Surr: Toluene-d8	20	0	20	0	100	85-120	0			

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **R136721A**      Instrument ID **VMS8**      Method: **SW8260**

MS				Sample ID: 1403098-01A MS			Units: µg/L		Analysis Date: 3/6/2014 09:46 PM		
Client ID:			Run ID: VMS8_140306A			SeqNo: 2666371		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.13	1.0	20	0	106	80-120	0				
Ethylbenzene	21.39	1.0	20	0	107	75-125	0				
m,p-Xylene	41.36	2.0	40	0	103	75-130	0				
o-Xylene	20.89	1.0	20	0	104	80-120	0				
Toluene	20.8	1.0	20	0.33	102	75-120	0				
Xylenes, Total	62.25	3.0	60	0	104	75-130	0				
Surr: 1,2-Dichloroethane-d4	20.78	0	20	0	104	70-120	0				
Surr: 4-Bromofluorobenzene	20.32	0	20	0	102	75-120	0				
Surr: Dibromofluoromethane	20.08	0	20	0	100	85-115	0				
Surr: Toluene-d8	20.09	0	20	0	100	85-120	0				

MSD				Sample ID: 1403098-01A MSD			Units: µg/L		Analysis Date: 3/6/2014 10:10 PM		
Client ID:			Run ID: VMS8_140306A			SeqNo: 2666377		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.14	1.0	20	0	106	80-120	21.13	0.0473	30		
Ethylbenzene	22.05	1.0	20	0	110	75-125	21.39	3.04	30		
m,p-Xylene	42.96	2.0	40	0	107	75-130	41.36	3.8	30		
o-Xylene	21.4	1.0	20	0	107	80-120	20.89	2.41	30		
Toluene	21.54	1.0	20	0.33	106	75-120	20.8	3.5	30		
Xylenes, Total	64.36	3.0	60	0	107	75-130	62.25	3.33	30		
Surr: 1,2-Dichloroethane-d4	20.61	0	20	0	103	70-120	20.78	0.821	30		
Surr: 4-Bromofluorobenzene	20.66	0	20	0	103	75-120	20.32	1.66	30		
Surr: Dibromofluoromethane	20.31	0	20	0	102	85-115	20.08	1.14	30		
Surr: Toluene-d8	20.38	0	20	0	102	85-120	20.09	1.43	30		

The following samples were analyzed in this batch:

1403197-04A	1403197-05A	1403197-06A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **R136738**      Instrument ID **VMS9**      Method: **SW8260**

Sample ID: VBLKW1-140306-R136738				Units: µg/L			Analysis Date: 3/6/2014 04:52 PM			
Client ID:		Run ID: VMS9_140306A			SeqNo: 2666294		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.48	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	17.77	0	20	0	88.8	75-120	0			
Surr: Dibromofluoromethane	20.33	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.69	0	20	0	98.4	85-120	0			

LCS				Sample ID: <b>VLCSW1-140306-R136738</b>			Units: <b>µg/L</b>		Analysis Date: <b>3/6/2014 03:14 PM</b>		
Client ID:			Run ID: <b>VMS9_140306A</b>			SeqNo: <b>2666293</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.63	1.0	20	0	108	80-120	0				
Ethylbenzene	20.1	1.0	20	0	100	75-125	0				
m,p-Xylene	40.06	2.0	40	0	100	75-130	0				
o-Xylene	19.72	1.0	20	0	98.6	80-120	0				
Toluene	20.77	1.0	20	0	104	75-120	0				
Xylenes, Total	59.78	3.0	60	0	99.6	75-130	0				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.13</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>70-120</i>	<i>0</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>75-120</i>	<i>0</i>				
<i>Surr: Dibromofluoromethane</i>	<i>20.56</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>85-115</i>	<i>0</i>				
<i>Surr: Toluene-d8</i>	<i>19.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>85-120</i>	<i>0</i>				

MS				Sample ID: 1403098-04A MS				Units: µg/L			Analysis Date: 3/7/2014 12:12 PM		
Client ID:			Run ID: VMS9_140306A			SeqNo: 2666310		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	21.96	1.0	20	0	110	80-120	0						
Ethylbenzene	20.49	1.0	20	0	102	75-125	0						
m,p-Xylene	40.98	2.0	40	0	102	75-130	0						
o-Xylene	20.13	1.0	20	0	101	80-120	0						
Toluene	22.12	1.0	20	0	111	75-120	0						
Xylenes, Total	61.11	3.0	60	0	102	75-130	0						
Surr: 1,2-Dichloroethane-d4	20.9	0	20	0	104	70-120	0						
Surr: 4-Bromofluorobenzene	19.55	0	20	0	97.8	75-120	0						
Surr: Dibromofluoromethane	21.1	0	20	0	106	85-115	0						
Surr: Toluene-d8	20.27	0	20	0	101	85-120	0						

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **R136738**      Instrument ID **VMS9**      Method: **SW8260**

MSD				Sample ID: 1403098-04A MSD			Units: µg/L		Analysis Date: 3/7/2014 12:37 PM		
Client ID:		Run ID: VMS9_140306A			SeqNo: 2666311		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.32	1.0	20	0	107	80-120	21.96	2.96	30		
Ethylbenzene	19.46	1.0	20	0	97.3	75-125	20.49	5.16	30		
m,p-Xylene	39.54	2.0	40	0	98.8	75-130	40.98	3.58	30		
o-Xylene	19.31	1.0	20	0	96.6	80-120	20.13	4.16	30		
Toluene	21.11	1.0	20	0	106	75-120	22.12	4.67	30		
Xylenes, Total	58.85	3.0	60	0	98.1	75-130	61.11	3.77	30		
Surr: 1,2-Dichloroethane-d4	20.36	0	20	0	102	70-120	20.9	2.62	30		
Surr: 4-Bromofluorobenzene	19.31	0	20	0	96.6	75-120	19.55	1.24	30		
Surr: Dibromofluoromethane	20.64	0	20	0	103	85-115	21.1	2.2	30		
Surr: Toluene-d8	20.02	0	20	0	100	85-120	20.27	1.24	30		

The following samples were analyzed in this batch:

1403197-01A	1403197-02A	1403197-03A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **56368** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56368-56368</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 08:45 AM</b>		
Client ID:		Run ID: <b>TDS_140307A</b>				SeqNo: <b>2666777</b>		Prep Date: <b>3/7/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-56368-56368</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 08:45 AM</b>		
Client ID:		Run ID: <b>TDS_140307A</b>				SeqNo: <b>2666775</b>		Prep Date: <b>3/7/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 483 10 495 0 97.6 80-120 0

<b>DUP</b>		Sample ID: <b>14021307-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 08:45 AM</b>		
Client ID:		Run ID: <b>TDS_140307A</b>				SeqNo: <b>2666748</b>		Prep Date: <b>3/7/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 419 10 0 0 0 0-0 423 0.95 20

<b>DUP</b>		Sample ID: <b>1403197-02B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 08:45 AM</b>		
Client ID: <b>CO RIVER DG</b>		Run ID: <b>TDS_140307A</b>				SeqNo: <b>2666762</b>		Prep Date: <b>3/7/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 522 10 0 0 0 0-0 519 0.576 20

The following samples were analyzed in this batch:

1403197-01B	1403197-02B	1403197-03B
1403197-04B	1403197-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **R136779**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140307-R136779</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 11:30 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140307D</b>				SeqNo: <b>2666831</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140307-R136779</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 11:30 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140307D</b>				SeqNo: <b>2666832</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      49.98      3.0      50      0      100      80-120      0

<b>MS</b>		Sample ID: <b>1403197-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 11:30 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140307D</b>				SeqNo: <b>2666847</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      190      3.0      50      145      90      75-125      0

<b>MSD</b>		Sample ID: <b>1403197-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/7/2014 11:30 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140307D</b>				SeqNo: <b>2666848</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      195      3.0      50      145      100      75-125      190      2.6      20

The following samples were analyzed in this batch:

1403197-01B	1403197-02B	1403197-03B
1403197-04B	1403197-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403197  
**Project:** WPX PA 31-36 SW 3.5.14

## QC BATCH REPORT

Batch ID: **R136789**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R136789</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/6/2014 08:40 AM</b>		
Client ID:		Run ID: <b>IC3_140306A</b>				SeqNo: <b>2666987</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	0.2742	1.0								J

<b>LCS</b>		Sample ID: <b>LCS-R136789</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/6/2014 09:00 AM</b>		
Client ID:		Run ID: <b>IC3_140306A</b>				SeqNo: <b>2666988</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	10.05	1.0	10	0	100	85-110	0			

<b>MS</b>		Sample ID: <b>1403197-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/6/2014 11:22 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC3_140306A</b>				SeqNo: <b>2666990</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	149.8	10	50	102.4	94.8	75-125	0			

<b>MSD</b>		Sample ID: <b>1403197-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/6/2014 11:42 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC3_140306A</b>				SeqNo: <b>2666991</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	147.7	10	50	102.4	90.7	75-125	149.8	1.39	20	

The following samples were analyzed in this batch:

1403197-01B	1403197-02B	1403197-03B
1403197-04B	1403197-05B	

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

## Chain-of-Custody

Form 202r8

**WORKORDER**  
#

1403197

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

[illegible]

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

**For metals or anions, please detail analytes below.**

<b>Comments:</b>  <div style="text-align: center;"> </div>	<b>QC PACKAGE (check below)</b>	
	<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"/>	
<b>Preservative Key:</b> 1-HCl   2-HNO3   3-H2SO4   4-NaOH   5-NaHSO4   7-Other   8-4 degrees C   9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	<i>Casey</i>	CASEY RICHARDSON	3-5-14	1210
RECEIVED BY	<i>[Signature]</i>	<i>W. Chapman</i>	3-5-14	1210
RELINQUISHED BY	<i>[Signature]</i>	<i>Wichman</i>	3-5-14	1300
RECEIVED BY	<i>[Signature]</i>	Diane F. Shea	3/6/14	1000
RELINQUISHED BY				
RECEIVED BY				



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 06-Mar-14 10:00

Work Order: 1403197

Received by: DS

Checklist completed by Diane Shaw

06-Mar-14

Reviewed by: Ann Preston

06-Mar-14

eSignature

Date

eSignature

Date

Matrices: Surface Water

Carrier name: FedEx

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

Sample(s) received on ice?

Yes ☒

No ☐

Temperature(s)/Thermometer(s):

3.2 c

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

3/6/2014 10:48:50 AM

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

pH adjusted?

Yes ☐

No ☒

N/A ☐

pH adjusted by:

-

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 05MAR14  
ActWgt: 50.0 LB  
CAD: 163923490/INET3490  
Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



Ref # 1001-030414-1  
Invoice #  
PO #  
Dept #

SHIP TO: (616) 399-6670  
Sample receiving  
ALS Holland  
3352 128TH AVE

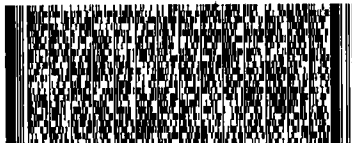
HOLLAND, MI 49424

THU - 06 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7981 2425 3203  
0201

XX GRRA

49424  
MI-US  
GRR



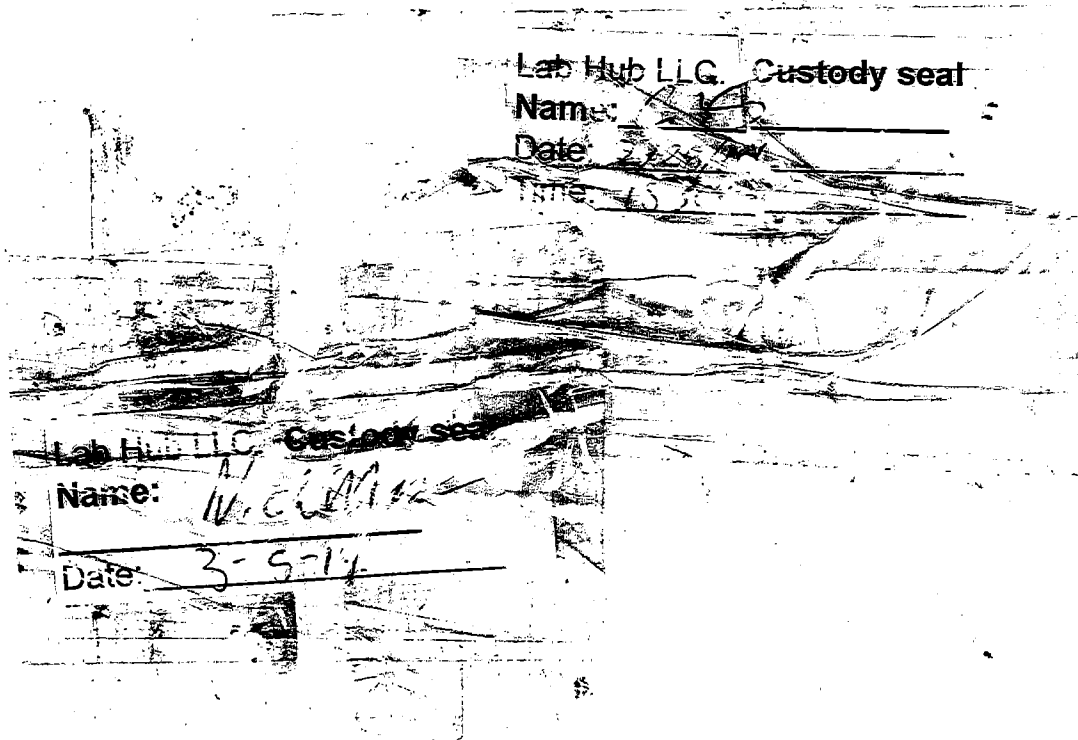
52251/CCAF/720

**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](http://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.





11-Mar-2014

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

Re: **WPX PA 31-36 SW 3-7-14**

Work Order: **1403328**

Dear Mark,

ALS Environmental received 6 samples on 08-Mar-2014 10:15 AM for the analyses presented in the following report.

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

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: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3-7-14  
**Work Order:** 1403328

## 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>
1403328-01	CO River UG	Surface Water		3/7/2014 09:45	3/8/2014 10:15	<input type="checkbox"/>
1403328-02	CO River DG	Surface Water		3/7/2014 09:50	3/8/2014 10:15	<input type="checkbox"/>
1403328-03	Spring 01	Surface Water		3/7/2014 10:04	3/8/2014 10:15	<input type="checkbox"/>
1403328-04	Pond 01	Surface Water		3/7/2014 10:18	3/8/2014 10:15	<input type="checkbox"/>
1403328-05	Spring UG	Surface Water		3/7/2014 10:33	3/8/2014 10:15	<input type="checkbox"/>
1403328-06	Trip Blank	Water		3/7/2014	3/8/2014 10:15	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3-7-14  
**WorkOrder:** 1403328

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 11-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3-7-14

Sample ID: CO River UG

Collection Date: 3/7/2014 09:45 AM

Work Order: 1403328

Lab ID: 1403328-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/10/2014 04:55 PM
Ethylbenzene	ND		1.0	µg/L	1	3/10/2014 04:55 PM
m,p-Xylene	ND		2.0	µg/L	1	3/10/2014 04:55 PM
o-Xylene	ND		1.0	µg/L	1	3/10/2014 04:55 PM
Toluene	ND		1.0	µg/L	1	3/10/2014 04:55 PM
Xylenes, Total	ND		3.0	µg/L	1	3/10/2014 04:55 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/10/2014 04:55 PM
Surr: 4-Bromofluorobenzene	97.6		75-120	%REC	1	3/10/2014 04:55 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	3/10/2014 04:55 PM
Surr: Toluene-d8	99.4		85-120	%REC	1	3/10/2014 04:55 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Chloride	130		10	mg/L	10	3/11/2014 12:49 PM
Sulfate	98		10	mg/L	10	3/11/2014 12:49 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/10/14	Analyst: <b>YM</b>
Total Dissolved Solids	510		10	mg/L	1	3/11/2014 10:30 AM

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

# ALS Group USA, Corp

Date: 11-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3-7-14

Sample ID: CO River DG

Collection Date: 3/7/2014 09:50 AM

Work Order: 1403328

Lab ID: 1403328-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/10/2014 05:20 PM
Ethylbenzene	ND		1.0	µg/L	1	3/10/2014 05:20 PM
m,p-Xylene	ND		2.0	µg/L	1	3/10/2014 05:20 PM
o-Xylene	ND		1.0	µg/L	1	3/10/2014 05:20 PM
Toluene	ND		1.0	µg/L	1	3/10/2014 05:20 PM
Xylenes, Total	ND		3.0	µg/L	1	3/10/2014 05:20 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	3/10/2014 05:20 PM
Surr: 4-Bromofluorobenzene	98.0		75-120	%REC	1	3/10/2014 05:20 PM
Surr: Dibromofluoromethane	99.8		85-115	%REC	1	3/10/2014 05:20 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	3/10/2014 05:20 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Chloride	150		10	mg/L	10	3/11/2014 01:54 PM
Sulfate	110		10	mg/L	10	3/11/2014 01:54 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/10/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	3/11/2014 10:30 AM

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

**ALS Group USA, Corp**

Date: 11-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3-7-14

Sample ID: Spring 01

Collection Date: 3/7/2014 10:04 AM

Work Order: 1403328

Lab ID: 1403328-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/10/2014 05:44 PM
Ethylbenzene	ND		1.0	µg/L	1	3/10/2014 05:44 PM
m,p-Xylene	ND		2.0	µg/L	1	3/10/2014 05:44 PM
o-Xylene	ND		1.0	µg/L	1	3/10/2014 05:44 PM
Toluene	ND		1.0	µg/L	1	3/10/2014 05:44 PM
Xylenes, Total	ND		3.0	µg/L	1	3/10/2014 05:44 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	3/10/2014 05:44 PM
Surr: 4-Bromofluorobenzene	97.3		75-120	%REC	1	3/10/2014 05:44 PM
Surr: Dibromofluoromethane	99.7		85-115	%REC	1	3/10/2014 05:44 PM
Surr: Toluene-d8	98.4		85-120	%REC	1	3/10/2014 05:44 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Chloride	8.1		4.0	mg/L	4	3/11/2014 03:13 PM
Sulfate	34		4.0	mg/L	4	3/11/2014 03:13 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/10/14	Analyst: <b>YM</b>
Total Dissolved Solids	400		10	mg/L	1	3/11/2014 10:30 AM

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



**ALS Group USA, Corp**

Date: 11-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3-7-14

Sample ID: Pond 01

Collection Date: 3/7/2014 10:18 AM

Work Order: 1403328

Lab ID: 1403328-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/10/2014 06:09 PM
Ethylbenzene	ND		1.0	µg/L	1	3/10/2014 06:09 PM
m,p-Xylene	ND		2.0	µg/L	1	3/10/2014 06:09 PM
o-Xylene	ND		1.0	µg/L	1	3/10/2014 06:09 PM
Toluene	ND		1.0	µg/L	1	3/10/2014 06:09 PM
Xylenes, Total	ND		3.0	µg/L	1	3/10/2014 06:09 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/10/2014 06:09 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	3/10/2014 06:09 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/10/2014 06:09 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/10/2014 06:09 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Chloride	20		4.0	mg/L	4	3/11/2014 02:33 PM
Sulfate	33		4.0	mg/L	4	3/11/2014 02:33 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/10/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		10	mg/L	1	3/11/2014 10:30 AM

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

**ALS Group USA, Corp**

Date: 11-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3-7-14

Sample ID: Spring UG

Collection Date: 3/7/2014 10:33 AM

Work Order: 1403328

Lab ID: 1403328-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/10/2014 06:33 PM
Ethylbenzene	ND		1.0	µg/L	1	3/10/2014 06:33 PM
m,p-Xylene	ND		2.0	µg/L	1	3/10/2014 06:33 PM
o-Xylene	ND		1.0	µg/L	1	3/10/2014 06:33 PM
Toluene	ND		1.0	µg/L	1	3/10/2014 06:33 PM
Xylenes, Total	ND		3.0	µg/L	1	3/10/2014 06:33 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/10/2014 06:33 PM
Surr: 4-Bromofluorobenzene	97.6		75-120	%REC	1	3/10/2014 06:33 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	3/10/2014 06:33 PM
Surr: Toluene-d8	99.1		85-120	%REC	1	3/10/2014 06:33 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Chloride	19		4.0	mg/L	4	3/11/2014 02:53 PM
Sulfate	36		4.0	mg/L	4	3/11/2014 02:53 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/10/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	3/11/2014 10:30 AM

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

**ALS Group USA, Corp**

Date: 11-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3-7-14

Work Order: 1403328

Sample ID: Trip Blank

Lab ID: 1403328-06

Collection Date: 3/7/2014

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 01:11 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 01:11 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 01:11 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 01:11 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 01:11 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 01:11 PM
Surr: 1,2-Dichloroethane-d4	106		70-120	%REC	1	3/11/2014 01:11 PM
Surr: 4-Bromofluorobenzene	89.2		75-120	%REC	1	3/11/2014 01:11 PM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	3/11/2014 01:11 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/11/2014 01:11 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403328  
**Project:** WPX PA 31-36 SW 3-7-14

**QC BATCH REPORT**

Batch ID: **R136852** Instrument ID **VMS8** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBKWK1-140310-R136852</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/10/2014 01:38 PM</b>		
Client ID:		Run ID: <b>VMS8_140310A</b>				SeqNo: <b>2668637</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.35	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	19.65	0	20	0	98.2	75-120	0			
Surr: Dibromofluoromethane	19.93	0	20	0	99.6	85-115	0			
Surr: Toluene-d8	20.09	0	20	0	100	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140310-R136852</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/10/2014 12:00 PM</b>		
Client ID:		Run ID: <b>VMS8_140310A</b>				SeqNo: <b>2668636</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.58	1.0	20	0	113	80-120	0			
Ethylbenzene	23.37	1.0	20	0	117	75-125	0			
m,p-Xylene	45.17	2.0	40	0	113	75-130	0			
o-Xylene	22.94	1.0	20	0	115	80-120	0			
Toluene	22.32	1.0	20	0	112	75-120	0			
Xylenes, Total	68.11	3.0	60	0	114	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.34	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	20.35	0	20	0	102	75-120	0			
Surr: Dibromofluoromethane	20.39	0	20	0	102	85-115	0			
Surr: Toluene-d8	20.06	0	20	0	100	85-120	0			

The following samples were analyzed in this batch:

1403328-01A	1403328-02A	1403328-03A
1403328-04A	1403328-05A	

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403328  
 Project: WPX PA 31-36 SW 3-7-14

## QC BATCH REPORT

Batch ID: **R136943** Instrument ID **VMS9** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBLKW1-140311-R136943</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/11/2014 12:22 PM</b>		
Client ID:		Run ID: <b>VMS9_140311A</b>				SeqNo: <b>2669701</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	21.1	0	20	0	106	70-120	0			
Surr: 4-Bromofluorobenzene	18.07	0	20	0	90.4	75-120	0			
Surr: Dibromofluoromethane	19.86	0	20	0	99.3	85-115	0			
Surr: Toluene-d8	19.58	0	20	0	97.9	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140311-R136943</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/11/2014 10:45 AM</b>		
Client ID:		Run ID: <b>VMS9_140311A</b>				SeqNo: <b>2669700</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.81	1.0	20	0	104	80-120	0			
Ethylbenzene	19.7	1.0	20	0	98.5	75-125	0			
m,p-Xylene	40.98	2.0	40	0	102	75-130	0			
o-Xylene	20.11	1.0	20	0	101	80-120	0			
Toluene	21.19	1.0	20	0	106	75-120	0			
Xylenes, Total	61.09	3.0	60	0	102	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.31	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	20.1	0	20	0	100	75-120	0			
Surr: Dibromofluoromethane	19.95	0	20	0	99.8	85-115	0			
Surr: Toluene-d8	19.99	0	20	0	100	85-120	0			

The following samples were analyzed in this batch:

1403328-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403328  
**Project:** WPX PA 31-36 SW 3-7-14

## QC BATCH REPORT

Batch ID: **56456**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56456-56456</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 10:30 AM</b>		
Client ID:		Run ID: <b>TDS_140311A</b>				SeqNo: <b>2669204</b>		Prep Date: <b>3/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56456-56456</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 10:30 AM</b>		
Client ID:		Run ID: <b>TDS_140311A</b>				SeqNo: <b>2669203</b>		Prep Date: <b>3/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      477      10      495      0      96.4      80-120      0

<b>DUP</b>		Sample ID: <b>1403289-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 10:30 AM</b>		
Client ID:		Run ID: <b>TDS_140311A</b>				SeqNo: <b>2669183</b>		Prep Date: <b>3/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      440      20      0      0      0      0-0      424      3.7      20

<b>DUP</b>		Sample ID: <b>1403328-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 10:30 AM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>TDS_140311A</b>				SeqNo: <b>2669194</b>		Prep Date: <b>3/10/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      506      10      0      0      0      0-0      509      0.591      20

The following samples were analyzed in this batch:

1403328-01B	1403328-02B	1403328-03B
1403328-04B	1403328-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403328  
**Project:** WPX PA 31-36 SW 3-7-14

## QC BATCH REPORT

Batch ID: **R136954**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R136954</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 12:08 PM</b>		
Client ID:		Run ID: <b>IC3_140311A</b>				SeqNo: <b>2669789</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	1.0								
Sulfate	ND	1.0								

<b>LCS</b>		Sample ID: <b>LCS-R136954</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 12:29 PM</b>		
Client ID:		Run ID: <b>IC3_140311A</b>				SeqNo: <b>2669790</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.534	1.0	10	0	95.3	88-107	0			
Sulfate	9.69	1.0	10	0	96.9	85-110	0			

<b>MS</b>		Sample ID: <b>1403328-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 01:13 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>IC3_140311A</b>				SeqNo: <b>2669792</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	178.5	10	50	129.1	98.8	75-125	0			
Sulfate	142.7	10	50	98.02	89.3	75-125	0			

<b>MSD</b>		Sample ID: <b>1403328-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 01:34 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>IC3_140311A</b>				SeqNo: <b>2669796</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	178.2	10	50	129.1	98.2	75-125	178.5	0.152	20	
Sulfate	143.5	10	50	98.02	91	75-125	142.7	0.598	20	

The following samples were analyzed in this batch:

1403328-01B	1403328-02B	1403328-03B
1403328-04B	1403328-05B	

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

## Chain-of-Custody

Form 202r8

**WORKORDER**  
#

1403328

PAGE 1 of 1





DISPOSAL	<del>By Lab</del> or Return to Client
----------	---------------------------------------

[illegible]

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

**For metals or anions, please detail analytes below.**

<b>Comments:</b>     <div style="text-align: center;"> </div>	<b>QC PACKAGE (check below)</b>	
	<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"/>	
<b>Preservative Key:</b> 1-HCl   2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH   5-NaHSO <sub>4</sub> 7-Other   8-4 degrees C   9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		CASEY RICHARDSON	3-2-14	1130
RECEIVED BY		KEITH WIERENGA	3-7-14	1130
RELINQUISHED BY		KEITH WIERENGA	3-7-14	12:00
RECEIVED BY		KEITH WIERENGA	3/8/14	1015
RELINQUISHED BY				
RECEIVED BY				



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 08-Mar-14 10:15

Work Order: 1403328

Received by: KRW

Checklist completed by Keith Wurenga  
eSignature

08-Mar-14  
Date

Reviewed by: Ann Preston  
eSignature

10-Mar-14  
Date

Matrices: Surface Water

Carrier name: FedEx

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

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

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

Chain of custody present? Yes ☒ No ☐

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

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

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

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

Sample(s) received on ice? Yes ☒ No ☐

Temperature(s)/Thermometer(s): 3.0 C

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 3/8/2014 11:00:14 AM

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

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

pH adjusted? Yes ☐ No ☒ N/A ☐

pH adjusted by:

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



12-Mar-2014

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

Re: **WPX PA 31-36 SW 3.10.14**

Work Order: **1403362**

Dear Mark,

ALS Environmental received 6 samples on 11-Mar-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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

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

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.10.14  
**Work Order:** 1403362

## 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>
1403362-01	CO RIVER UG	Surface Water		3/10/2014 12:30	3/11/2014 09:30	<input type="checkbox"/>
1403362-02	CO RIVER DG	Surface Water		3/10/2014 12:40	3/11/2014 09:30	<input type="checkbox"/>
1403362-03	SPRING 01	Surface Water		3/10/2014 12:50	3/11/2014 09:30	<input type="checkbox"/>
1403362-04	POND 01	Surface Water		3/10/2014 13:05	3/11/2014 09:30	<input type="checkbox"/>
1403362-05	SPRING UG	Surface Water		3/10/2014 13:15	3/11/2014 09:30	<input type="checkbox"/>
1403362-06	Trip Blank	Water		3/10/2014 08:45	3/11/2014 09:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.10.14  
**WorkOrder:** 1403362

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 12-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: CO RIVER UG

Collection Date: 3/10/2014 12:30 PM

Work Order: 1403362

Lab ID: 1403362-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 03:33 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 03:33 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 03:33 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 03:33 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 03:33 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 03:33 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	3/11/2014 03:33 PM
Surr: 4-Bromofluorobenzene	98.2		75-120	%REC	1	3/11/2014 03:33 PM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	3/11/2014 03:33 PM
Surr: Toluene-d8	99.6		85-120	%REC	1	3/11/2014 03:33 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	3/12/2014 10:20 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	99		10	mg/L	10	3/11/2014 04:12 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/12/14	Analyst: <b>KF</b>
Total Dissolved Solids	500		10	mg/L	1	3/12/2014 08:50 AM

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

# ALS Group USA, Corp

Date: 12-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: CO RIVER DG

Collection Date: 3/10/2014 12:40 PM

Work Order: 1403362

Lab ID: 1403362-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 03:58 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 03:58 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 03:58 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 03:58 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 03:58 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 03:58 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	1	3/11/2014 03:58 PM
Surr: 4-Bromofluorobenzene	97.4		75-120	%REC	1	3/11/2014 03:58 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/11/2014 03:58 PM
Surr: Toluene-d8	97.6		85-120	%REC	1	3/11/2014 03:58 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	160		3.0	mg/L	1	3/12/2014 10:20 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/11/2014 04:32 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/12/14	Analyst: <b>KF</b>
Total Dissolved Solids	520		10	mg/L	1	3/12/2014 08:50 AM

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

# ALS Group USA, Corp

Date: 12-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: SPRING 01

Collection Date: 3/10/2014 12:50 PM

Work Order: 1403362

Lab ID: 1403362-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 04:22 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 04:22 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 04:22 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 04:22 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 04:22 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 04:22 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/11/2014 04:22 PM
Surr: 4-Bromofluorobenzene	99.4		75-120	%REC	1	3/11/2014 04:22 PM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	3/11/2014 04:22 PM
Surr: Toluene-d8	101		85-120	%REC	1	3/11/2014 04:22 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	7.5		3.0	mg/L	1	3/12/2014 10:20 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/11/2014 04:53 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/12/14	Analyst: <b>KF</b>
Total Dissolved Solids	410		10	mg/L	1	3/12/2014 08:50 AM

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

# ALS Group USA, Corp

Date: 12-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: POND 01

Collection Date: 3/10/2014 01:05 PM

Work Order: 1403362

Lab ID: 1403362-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 04:47 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 04:47 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 04:47 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 04:47 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 04:47 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 04:47 PM
Surr: 1,2-Dichloroethane-d4	99.4		70-120	%REC	1	3/11/2014 04:47 PM
Surr: 4-Bromofluorobenzene	99.6		75-120	%REC	1	3/11/2014 04:47 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	3/11/2014 04:47 PM
Surr: Toluene-d8	99.4		85-120	%REC	1	3/11/2014 04:47 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	22		3.0	mg/L	1	3/12/2014 10:20 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/11/2014 05:13 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/12/14	Analyst: <b>KF</b>
Total Dissolved Solids	400		10	mg/L	1	3/12/2014 08:50 AM

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



**ALS Group USA, Corp**

Date: 12-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: SPRING UG

Collection Date: 3/10/2014 01:15 PM

Work Order: 1403362

Lab ID: 1403362-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 05:11 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 05:11 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 05:11 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 05:11 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 05:11 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 05:11 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/11/2014 05:11 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	3/11/2014 05:11 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/11/2014 05:11 PM
Surr: Toluene-d8	101		85-120	%REC	1	3/11/2014 05:11 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	3/12/2014 10:20 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	38		10	mg/L	10	3/11/2014 05:33 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/12/14	Analyst: <b>KF</b>
Total Dissolved Solids	450		10	mg/L	1	3/12/2014 08:50 AM

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

**ALS Group USA, Corp**

Date: 12-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Work Order: 1403362

Sample ID: Trip Blank

Lab ID: 1403362-06

Collection Date: 3/10/2014 08:45 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/11/2014 03:09 PM
Ethylbenzene	ND		1.0	µg/L	1	3/11/2014 03:09 PM
m,p-Xylene	ND		2.0	µg/L	1	3/11/2014 03:09 PM
o-Xylene	ND		1.0	µg/L	1	3/11/2014 03:09 PM
Toluene	ND		1.0	µg/L	1	3/11/2014 03:09 PM
Xylenes, Total	ND		3.0	µg/L	1	3/11/2014 03:09 PM
Surr: 1,2-Dichloroethane-d4	104		70-120	%REC	1	3/11/2014 03:09 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	3/11/2014 03:09 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/11/2014 03:09 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	3/11/2014 03:09 PM

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

# ALS Group USA, Corp

Date: 12-Mar-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403362  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R136908A** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBK1-130311-R136908A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/11/2014 01:31 PM</b>		
Client ID:		Run ID: <b>VMS8_140311A</b>				SeqNo: <b>2669622</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.45	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	19.74	0	20	0	98.7	75-120	0			
Surr: Dibromofluoromethane	19.86	0	20	0	99.3	85-115	0			
Surr: Toluene-d8	20.01	0	20	0	100	85-120	0			

LCS		Sample ID: <b>VLCSW1-140311-R136908A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/11/2014 10:39 AM</b>		
Client ID:		Run ID: <b>VMS8_140311A</b>				SeqNo: <b>2669618</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.96	1.0	20	0	110	80-120	0			
Ethylbenzene	22.44	1.0	20	0	112	75-125	0			
m,p-Xylene	43.33	2.0	40	0	108	75-130	0			
o-Xylene	22.02	1.0	20	0	110	80-120	0			
Toluene	21.65	1.0	20	0	108	75-120	0			
Xylenes, Total	65.35	3.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.29	0	20	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	20	0	20	0	100	75-120	0			
Surr: Dibromofluoromethane	20.45	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.72	0	20	0	98.6	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403362  
 Project: WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R136908A** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 1403362-01A MS			Units: µg/L		Analysis Date: 3/11/2014 09:16 PM		
Client ID: CO RIVER UG			Run ID: VMS8_140311A			SeqNo: 2670280		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	22.57	1.0	20	0	113	80-120		0				
Ethylbenzene	22.85	1.0	20	0	114	75-125		0				
m,p-Xylene	43.87	2.0	40	0	110	75-130		0				
o-Xylene	22.05	1.0	20	0	110	80-120		0				
Toluene	21.98	1.0	20	0	110	75-120		0				
Xylenes, Total	65.92	3.0	60	0	110	75-130		0				
Surr: 1,2-Dichloroethane-d4	20.23	0	20	0	101	70-120		0				
Surr: 4-Bromofluorobenzene	20.18	0	20	0	101	75-120		0				
Surr: Dibromofluoromethane	19.86	0	20	0	99.3	85-115		0				
Surr: Toluene-d8	19.87	0	20	0	99.4	85-120		0				

MSD					Sample ID: 1403362-01A MSD		Units: µg/L		Analysis Date: 3/11/2014 09:40 PM		
Client ID: CO RIVER UG			Run ID: VMS8_140311A			SeqNo: 2670283		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.15	1.0	20	0	111	80-120	22.57	1.88	30		
Ethylbenzene	22.47	1.0	20	0	112	75-125	22.85	1.68	30		
m,p-Xylene	42.92	2.0	40	0	107	75-130	43.87	2.19	30		
o-Xylene	21.41	1.0	20	0	107	80-120	22.05	2.95	30		
Toluene	21.94	1.0	20	0	110	75-120	21.98	0.182	30		
Xylenes, Total	64.33	3.0	60	0	107	75-130	65.92	2.44	30		
Surr: 1,2-Dichloroethane-d4	20.58	0	20	0	103	70-120	20.23	1.72	30		
Surr: 4-Bromofluorobenzene	20.01	0	20	0	100	75-120	20.18	0.846	30		
Surr: Dibromofluoromethane	20.2	0	20	0	101	85-115	19.86	1.7	30		
Surr: Toluene-d8	20.26	0	20	0	101	85-120	19.87	1.94	30		

The following samples were analyzed in this batch:

1403362-01A	1403362-02A	1403362-03A
1403362-04A	1403362-05A	1403362-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403362  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **56480**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56480-56480</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140312A</b>				SeqNo: <b>2670432</b>		Prep Date: <b>3/12/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56480-56480</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140312A</b>				SeqNo: <b>2670431</b>		Prep Date: <b>3/12/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      473      10      495      0      95.6      80-120      0

<b>DUP</b>		Sample ID: <b>1403238-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 08:50 AM</b>		
Client ID:		Run ID: <b>TDS_140312A</b>				SeqNo: <b>2670409</b>		Prep Date: <b>3/12/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      41      10      0      0      0      0-0      42      2.41      20

<b>DUP</b>		Sample ID: <b>1403362-04B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 08:50 AM</b>		
Client ID: <b>POND 01</b>		Run ID: <b>TDS_140312A</b>				SeqNo: <b>2670424</b>		Prep Date: <b>3/12/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      405      10      0      0      0      0-0      405      0      20

The following samples were analyzed in this batch:

1403362-01B	1403362-02B	1403362-03B
1403362-04B	1403362-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403362  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R136978**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140312-R136978</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 10:20 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140312E</b>				SeqNo: <b>2670090</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140312-R136978</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 10:20 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140312E</b>				SeqNo: <b>2670091</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.98      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>1403289-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 10:20 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140312E</b>				SeqNo: <b>2670094</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      112.5      3.0      50      59.98      105      75-125      0

<b>MSD</b>		Sample ID: <b>1403289-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/12/2014 10:20 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140312E</b>				SeqNo: <b>2670095</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      110      3.0      50      59.98      100      75-125      112.5      2.25      20

The following samples were analyzed in this batch:

1403362-01B	1403362-02B	1403362-03B
1403362-04B	1403362-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403362  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R136979**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R136979</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 03:31 PM</b>		
Client ID:		Run ID: <b>IC4_140311B</b>				SeqNo: <b>2670113</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R136979</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 03:52 PM</b>		
Client ID:		Run ID: <b>IC4_140311B</b>				SeqNo: <b>2670114</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.43      1.0      10      0      104      85-110      0

<b>MS</b>		Sample ID: <b>1403362-05B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 05:53 PM</b>		
Client ID: <b>SPRING UG</b>		Run ID: <b>IC4_140311B</b>				SeqNo: <b>2670120</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      87.33      10      50      37.79      99.1      75-125      0

<b>MSD</b>		Sample ID: <b>1403362-05B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/11/2014 06:14 PM</b>		
Client ID: <b>SPRING UG</b>		Run ID: <b>IC4_140311B</b>				SeqNo: <b>2670121</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      87.12      10      50      37.79      98.7      75-125      87.33      0.241      20

The following samples were analyzed in this batch:

1403362-01B	1403362-02B	1403362-03B
1403362-04B	1403362-05B	

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



# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 399-6070

## Chain-of-Custody

WORKORDER  
#


1403362

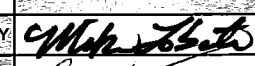
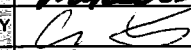
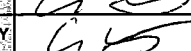
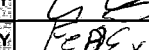
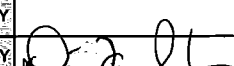
Form 202r8

PROJECT NAME		WPX PA 31-36 SW		SAMPLER		Mike Lobato		DATE		3/10/14		PAGE		1 of 1	
PROJECT No.				SITE ID		PA 31-36		TURNAROUND		24 HR		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HRL Compliance Solutions, Inc.		EDD FORMAT											
SEND REPORT TO		Mark Mumby		PURCHASE ORDER											
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		WPX Energy									
CITY / STATE / ZIP		Grand Junction, CO 81505		INVOICE ATTENTION		Karolina Blaney									
PHONE		970-243-3271		ADDRESS		1058 Co. Rd. 215									
FAX		970-243-3280		CITY / STATE / ZIP		Parachute, CO 81635									
E-MAIL		mmumby@hrlcomp.com		PHONE		970-683-2295									
				FAX											
				E-MAIL		Karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	CHLORIDE	SULFATES				
1	CO RIVER UG	SW	3/10/14	1230	4	1, 8		X	X	X	X				
2	CO RIVER DG	SW	3/10/14	1240	4	1, 8		X	X	X	X				
3	SPRING 01	SW	3/10/14	1250	4	1, 8		X	X	X	X				
4	POND 01	SW	3/10/14	1305	4	1, 8		X	X	X	X				
5	SPRING UG	SW	3/10/14	1315	4	1, 8		X	X	X	X				
6	TRIP BLANK	L	3/10/14	0845	1	1, 8		X							

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

For metals or anions, please detail analytes below.

Comments:  4.22 	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)
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: 	Mike Lobato	3/10/14	1400
RECEIVED BY: 	Colby Kraemer	3/10/14	1400
RELINQUISHED BY: 	Colby Kraemer	3/10/14	1400
RECEIVED BY: 			
RELINQUISHED BY:			
RECEIVED BY: 	Diane F. Shaw	3/11/14	0930



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 11-Mar-14 00:00

Work Order: 1403362

Received by: DS

Checklist completed by Diane Shaw 11-Mar-14  
eSignature Date

Reviewed by: Ann Preston 12-Mar-14  
eSignature Date

Matrices: Surface Water

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>4.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/11/2014 10:13:07 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

SHIP TO: 4749  
127 E. ...  
...  
3352 128TH AVE  
HOLLAND, MI 49424

Original FedEx



Ship Date: 10MAR14  
Act Wgt: 60.0 LB  
CAD: 103923490/NET3  
Dims: 24 X 14 X 16 IN

Delivery Address Bar Code



Ref # 1001-031014-1  
Invoice #  
PO #  
Dept #

BILL RECEIPT

TUE - 11 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7981 6740 3078  
0201

XX GRRR

49424  
GRR



0226VCC4FF220

## 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 attach it to your shipment so that the barcode portion of the label can be read and scanned.

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14-Mar-2014

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

Re: **WPX PA 31-36 SW 3.12.14**

Work Order: **1403524**

Dear Mark,

ALS Environmental received 6 samples on 13-Mar-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 18.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.12.14  
**Work Order:** 1403524

## 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>
1403524-01	CO RIVER UG	Surface Water		3/12/2014 13:15	3/13/2014 10:00	<input type="checkbox"/>
1403524-02	CO RIVER DG	Surface Water		3/12/2014 13:04	3/13/2014 10:00	<input type="checkbox"/>
1403524-03	SPRING 01	Surface Water		3/12/2014 13:30	3/13/2014 10:00	<input type="checkbox"/>
1403524-04	POND 01	Surface Water		3/12/2014 13:43	3/13/2014 10:00	<input type="checkbox"/>
1403524-05	SPRING UG	Surface Water		3/12/2014 13:55	3/13/2014 10:00	<input type="checkbox"/>
1403524-06	Trip Blank	Water		3/12/2014 14:39	3/13/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.12.14  
**WorkOrder:** 1403524

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 14-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.12.14

Sample ID: CO RIVER UG

Collection Date: 3/12/2014 01:15 PM

Work Order: 1403524

Lab ID: 1403524-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/13/2014 02:09 PM
Ethylbenzene	ND		1.0	µg/L	1	3/13/2014 02:09 PM
m,p-Xylene	ND		2.0	µg/L	1	3/13/2014 02:09 PM
o-Xylene	ND		1.0	µg/L	1	3/13/2014 02:09 PM
Toluene	ND		1.0	µg/L	1	3/13/2014 02:09 PM
Xylenes, Total	ND		3.0	µg/L	1	3/13/2014 02:09 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	1	3/13/2014 02:09 PM
Surr: 4-Bromofluorobenzene	99.4		75-120	%REC	1	3/13/2014 02:09 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/13/2014 02:09 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	3/13/2014 02:09 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	3/13/2014 12:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/13/2014 01:34 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/14/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	3/14/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 14-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.12.14

Sample ID: CO RIVER DG

Collection Date: 3/12/2014 01:04 PM

Work Order: 1403524

Lab ID: 1403524-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/13/2014 02:34 PM
Ethylbenzene	ND		1.0	µg/L	1	3/13/2014 02:34 PM
m,p-Xylene	ND		2.0	µg/L	1	3/13/2014 02:34 PM
o-Xylene	ND		1.0	µg/L	1	3/13/2014 02:34 PM
Toluene	ND		1.0	µg/L	1	3/13/2014 02:34 PM
Xylenes, Total	ND		3.0	µg/L	1	3/13/2014 02:34 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/13/2014 02:34 PM
Surr: 4-Bromofluorobenzene	99.1		75-120	%REC	1	3/13/2014 02:34 PM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	3/13/2014 02:34 PM
Surr: Toluene-d8	97.7		85-120	%REC	1	3/13/2014 02:34 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	120		3.0	mg/L	1	3/13/2014 12:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/13/2014 01:54 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/14/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	3/14/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 14-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.12.14

Sample ID: SPRING 01

Collection Date: 3/12/2014 01:30 PM

Work Order: 1403524

Lab ID: 1403524-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/13/2014 02:58 PM
Ethylbenzene	ND		1.0	µg/L	1	3/13/2014 02:58 PM
m,p-Xylene	ND		2.0	µg/L	1	3/13/2014 02:58 PM
o-Xylene	ND		1.0	µg/L	1	3/13/2014 02:58 PM
Toluene	ND		1.0	µg/L	1	3/13/2014 02:58 PM
Xylenes, Total	ND		3.0	µg/L	1	3/13/2014 02:58 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/13/2014 02:58 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	3/13/2014 02:58 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/13/2014 02:58 PM
Surr: Toluene-d8	100		85-120	%REC	1	3/13/2014 02:58 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	7.5		3.0	mg/L	1	3/13/2014 12:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		10	mg/L	10	3/13/2014 02:15 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/14/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		10	mg/L	1	3/14/2014 08:20 AM

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



**ALS Group USA, Corp**

Date: 14-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.12.14

Sample ID: POND 01

Collection Date: 3/12/2014 01:43 PM

Work Order: 1403524

Lab ID: 1403524-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/13/2014 03:23 PM
Ethylbenzene	ND		1.0	µg/L	1	3/13/2014 03:23 PM
m,p-Xylene	ND		2.0	µg/L	1	3/13/2014 03:23 PM
o-Xylene	ND		1.0	µg/L	1	3/13/2014 03:23 PM
Toluene	ND		1.0	µg/L	1	3/13/2014 03:23 PM
Xylenes, Total	ND		3.0	µg/L	1	3/13/2014 03:23 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/13/2014 03:23 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	3/13/2014 03:23 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	3/13/2014 03:23 PM
Surr: Toluene-d8	97.8		85-120	%REC	1	3/13/2014 03:23 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	17		3.0	mg/L	1	3/13/2014 12:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/13/2014 02:35 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/14/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		10	mg/L	1	3/14/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 14-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.12.14

Sample ID: SPRING UG

Collection Date: 3/12/2014 01:55 PM

Work Order: 1403524

Lab ID: 1403524-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/13/2014 03:48 PM
Ethylbenzene	ND		1.0	µg/L	1	3/13/2014 03:48 PM
m,p-Xylene	ND		2.0	µg/L	1	3/13/2014 03:48 PM
o-Xylene	ND		1.0	µg/L	1	3/13/2014 03:48 PM
Toluene	ND		1.0	µg/L	1	3/13/2014 03:48 PM
Xylenes, Total	ND		3.0	µg/L	1	3/13/2014 03:48 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/13/2014 03:48 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/13/2014 03:48 PM
Surr: Dibromofluoromethane	99.8		85-115	%REC	1	3/13/2014 03:48 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	3/13/2014 03:48 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	17		3.0	mg/L	1	3/13/2014 12:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		10	mg/L	10	3/13/2014 03:35 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/14/14	Analyst: <b>YM</b>
Total Dissolved Solids	470		10	mg/L	1	3/14/2014 08:20 AM

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

**ALS Group USA, Corp**

Date: 14-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.12.14

Work Order: 1403524

Sample ID: Trip Blank

Lab ID: 1403524-06

Collection Date: 3/12/2014 02:39 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/13/2014 01:45 PM
Ethylbenzene	ND		1.0	µg/L	1	3/13/2014 01:45 PM
m,p-Xylene	ND		2.0	µg/L	1	3/13/2014 01:45 PM
o-Xylene	ND		1.0	µg/L	1	3/13/2014 01:45 PM
Toluene	ND		1.0	µg/L	1	3/13/2014 01:45 PM
Xylenes, Total	ND		3.0	µg/L	1	3/13/2014 01:45 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/13/2014 01:45 PM
Surr: 4-Bromofluorobenzene	99.3		75-120	%REC	1	3/13/2014 01:45 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/13/2014 01:45 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	3/13/2014 01:45 PM

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

# ALS Group USA, Corp

Date: 14-Mar-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403524  
**Project:** WPX PA 31-36 SW 3.12.14

## QC BATCH REPORT

Batch ID: **R137045A** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBKWK1-140313-R137045A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/13/2014 01:20 PM</b>		
Client ID:		Run ID: <b>VMS8_140313A</b>				SeqNo: <b>2672049</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.1	0	20	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	19.78	0	20	0	98.9	75-120	0			
Surr: Dibromofluoromethane	20.31	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.83	0	20	0	99.2	85-120	0			

LCS		Sample ID: <b>VLCSW2-140313-R137045A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/13/2014 12:31 PM</b>		
Client ID:		Run ID: <b>VMS8_140313A</b>				SeqNo: <b>2672048</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.93	1.0	20	0	115	80-120	0			
Ethylbenzene	22.92	1.0	20	0	115	75-125	0			
m,p-Xylene	44.36	2.0	40	0	111	75-130	0			
o-Xylene	22.58	1.0	20	0	113	80-120	0			
Toluene	22.41	1.0	20	0	112	75-120	0			
Xylenes, Total	66.94	3.0	60	0	112	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.29	0	20	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	20.55	0	20	0	103	75-120	0			
Surr: Dibromofluoromethane	20.56	0	20	0	103	85-115	0			
Surr: Toluene-d8	19.89	0	20	0	99.4	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403524  
 Project: WPX PA 31-36 SW 3.12.14

## QC BATCH REPORT

Batch ID: **R137045A** Instrument ID **VMS8** Method: **SW8260**

MS				Sample ID: 1403423-02A MS				Units: µg/L		Analysis Date: 3/13/2014 09:30 PM	
Client ID:			Run ID: VMS8_140313A			SeqNo: 2672086		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.35	1.0	20	0	107	80-120	0				
Ethylbenzene	21.48	1.0	20	0	107	75-125	0				
m,p-Xylene	41.33	2.0	40	0	103	75-130	0				
o-Xylene	20.76	1.0	20	0	104	80-120	0				
Toluene	21.16	1.0	20	0	106	75-120	0				
Xylenes, Total	62.09	3.0	60	0	103	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.39	0	20	0	97	70-120	0				
Surr: 4-Bromofluorobenzene	20.43	0	20	0	102	75-120	0				
Surr: Dibromofluoromethane	19.97	0	20	0	99.8	85-115	0				
Surr: Toluene-d8	19.77	0	20	0	98.8	85-120	0				

MSD				Sample ID: 1403423-02A MSD			Units: µg/L		Analysis Date: 3/13/2014 09:55 PM		
Client ID:		Run ID: VMS8_140313A			SeqNo: 2672087		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.38	1.0	20	0	112	80-120	21.35	4.71	30		
Ethylbenzene	22.25	1.0	20	0	111	75-125	21.48	3.52	30		
m,p-Xylene	42.89	2.0	40	0	107	75-130	41.33	3.7	30		
o-Xylene	21.4	1.0	20	0	107	80-120	20.76	3.04	30		
Toluene	21.67	1.0	20	0	108	75-120	21.16	2.38	30		
Xylenes, Total	64.29	3.0	60	0	107	75-130	62.09	3.48	30		
Surr: 1,2-Dichloroethane-d4	19.78	0	20	0	98.9	70-120	19.39	1.99	30		
Surr: 4-Bromofluorobenzene	20.28	0	20	0	101	75-120	20.43	0.737	30		
Surr: Dibromofluoromethane	19.91	0	20	0	99.6	85-115	19.97	0.301	30		
Surr: Toluene-d8	19.97	0	20	0	99.8	85-120	19.77	1.01	30		

The following samples were analyzed in this batch:

1403524-01A	1403524-02A	1403524-03A
1403524-04A	1403524-05A	1403524-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403524  
**Project:** WPX PA 31-36 SW 3.12.14

## QC BATCH REPORT

Batch ID: **56539**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56539-56539</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/14/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140314A</b>				SeqNo: <b>2672470</b>		Prep Date: <b>3/14/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56539-56539</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/14/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140314A</b>				SeqNo: <b>2672469</b>		Prep Date: <b>3/14/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      474      10      495      0      95.8      80-120      0

<b>DUP</b>		Sample ID: <b>1403472-03A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/14/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140314A</b>				SeqNo: <b>2672451</b>		Prep Date: <b>3/14/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      141000      40      0      0      0      0-0      154400      9.06      20

<b>DUP</b>		Sample ID: <b>1403476-01C DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/14/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140314A</b>				SeqNo: <b>2672453</b>		Prep Date: <b>3/14/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      498      20      0      0      0      0-0      488      2.03      20

The following samples were analyzed in this batch:

1403524-01B	1403524-02B	1403524-03B
1403524-04B	1403524-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403524  
**Project:** WPX PA 31-36 SW 3.12.14

## QC BATCH REPORT

Batch ID: **R137051**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140313-R137051</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 12:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140313G</b>				SeqNo: <b>2671532</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140313-R137051</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 12:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140313G</b>				SeqNo: <b>2671533</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.98      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>1403085-07A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 12:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140313G</b>				SeqNo: <b>2671535</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      229.9      3.0      50      185      90      75-125      0

<b>MSD</b>		Sample ID: <b>1403085-07A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 12:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140313G</b>				SeqNo: <b>2671536</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      234.9      3.0      50      185      100      75-125      229.9      2.15      20

The following samples were analyzed in this batch:

1403524-01B	1403524-02B	1403524-03B
1403524-04B	1403524-05B	

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403524  
 Project: WPX PA 31-36 SW 3.12.14

## QC BATCH REPORT

Batch ID: **R137106** Instrument ID **IC4** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137106</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 12:52 PM</b>		
Client ID:		Run ID: <b>IC4_140313B</b>				SeqNo: <b>2672514</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R137106</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 01:14 PM</b>		
Client ID:		Run ID: <b>IC4_140313B</b>				SeqNo: <b>2672515</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 10.51 1.0 10 0 105 85-110 0

<b>MS</b>		Sample ID: <b>1403524-04B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 02:55 PM</b>		
Client ID: <b>POND 01</b>		Run ID: <b>IC4_140313B</b>				SeqNo: <b>2672521</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 86.5 10 50 35.68 102 75-125 0

<b>MSD</b>		Sample ID: <b>1403524-04B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/13/2014 03:15 PM</b>		
Client ID: <b>POND 01</b>		Run ID: <b>IC4_140313B</b>				SeqNo: <b>2672522</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 84.46 10 50 35.68 97.6 75-125 86.5 2.38 20

The following samples were analyzed in this batch:

1403524-01B	1403524-02B	1403524-03B
1403524-04B	1403524-05B	

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





# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 399-6070

## Chain-of-Custody

WORKORDER  
#

1403524

Form 202r8

PROJECT NAME		WPX PA 31-36 SW		SAMPLER		Finn Whiting		DATE		3/12/14		PAGE		1 of 1	
PROJECT No.				SITE ID		PA 31-36		TURNAROUND		24 HR		DISPOSAL		By Lab or Return to Client	
EDD FORMAT				PURCHASE ORDER											
COMPANY NAME		HRL Compliance Solutions, Inc.		BILL TO COMPANY		WPX Energy									
SEND REPORT TO		Mark Mumby		INVOICE ATTN TO		Karolina Blaney									
ADDRESS		2385 F 1/2 Road		ADDRESS		1058 Co. Rd. 215									
CITY / STATE / ZIP		Grand Junction, CO 81505		CITY / STATE / ZIP		Parachute, CO 81635									
PHONE		970-243-3271		PHONE		970-683-2295									
FAX		970-243-3280		FAX											
E-MAIL		mmumby@hrlcomp.com		E-MAIL		Karolina.blaney@wpxenergy.com									
Lab ID		Field ID		Matrix		Sample Date		Sample Time		# Bottles		Pres.		QC	
1		CO RIVER UG		SW		3/12/14		1315		4		1, 8			
2		CO RIVER DG		SW		3/12/14		1304		4		1, 8			
3		SPRING 01		SW		3/12/14		1330		4		1, 8			
4		POND 01		SW		3/12/14		1343		4		1, 8			
5		SPRING UG		SW		3/12/14		1355		4		1, 8			
6		TRIP BLANK		L		3/12/14		1439		1		1, 8			

\*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		Finn Whiting		3/12/14		1440	
RECEIVED BY		W.M.M.		3-12-14		1440	
RELINQUISHED BY		W.M.M.		3-12-14		1500	
RECEIVED BY		Diane F. Shaw		3/13/14		1000	
RELINQUISHED BY							
RECEIVED BY							

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 13-Mar-14 10:00

Work Order: 1403524

Received by: DS

Checklist completed by Diane Shaw 13-Mar-14  
eSignature Date

Reviewed by: Ann Preston 14-Mar-14  
eSignature Date

Matrices: Surface Water

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>3.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/13/2014 11:06:52 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC

Origin ID: RILA



127 E First Street  
PARACHUTE, CO 81635

Ship Date: 12MAR14  
ActWght: 40.0 LB  
CAD: 103923490/INET3490  
Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



SHIP TO: (616) 399-6070

BILL RECIPIENT

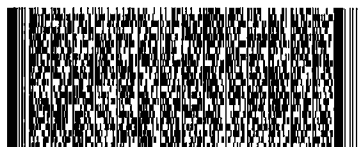
Sample recieving  
ALS Holland  
3352 128TH AVE

HOLLAND, MI 49424

Ref # 1001-031214-1  
Invoice #  
PO #  
Dept #

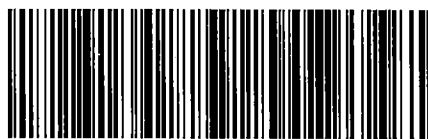
THU - 13 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7981 9957 7089  
0201



**XX GRRA**

**49424**  
MI-US  
GRR



522G1UC4F/F220

**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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Lab Hub LLC. Custody seal

Name: WMA

Date: 3-12

Time: 1700



18-Mar-2014

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

Re: **WPX PA 31-36 SW 3.14.14**

Work Order: **1403654**

Dear Mark,

ALS Environmental received 6 samples on 15-Mar-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.14.14  
**Work Order:** 1403654

## 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>
1403654-01	CO RIVER UG	Surface Water		3/14/2014 10:31	3/15/2014 09:30	<input type="checkbox"/>
1403654-02	CO RIVER DG	Surface Water		3/14/2014 10:46	3/15/2014 09:30	<input type="checkbox"/>
1403654-03	SPRING 01	Surface Water		3/14/2014 11:05	3/15/2014 09:30	<input type="checkbox"/>
1403654-04	POND 01	Surface Water		3/14/2014 11:31	3/15/2014 09:30	<input type="checkbox"/>
1403654-05	SPRING UG	Surface Water		3/14/2014 11:52	3/15/2014 09:30	<input type="checkbox"/>
1403654-06	TRIP BLANK	Water		3/14/2014	3/15/2014 09:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.14.14  
**WorkOrder:** 1403654

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 18-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.14.14

Sample ID: CO RIVER UG

Collection Date: 3/14/2014 10:31 AM

Work Order: 1403654

Lab ID: 1403654-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/17/2014 02:03 PM
Ethylbenzene	ND		1.0	µg/L	1	3/17/2014 02:03 PM
m,p-Xylene	ND		2.0	µg/L	1	3/17/2014 02:03 PM
o-Xylene	ND		1.0	µg/L	1	3/17/2014 02:03 PM
Toluene	ND		1.0	µg/L	1	3/17/2014 02:03 PM
Xylenes, Total	ND		3.0	µg/L	1	3/17/2014 02:03 PM
Surr: 1,2-Dichloroethane-d4	97.4		70-120	%REC	1	3/17/2014 02:03 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/17/2014 02:03 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	3/17/2014 02:03 PM
Surr: Toluene-d8	97.7		85-120	%REC	1	3/17/2014 02:03 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	140		3.0	mg/L	1	3/17/2014 02:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/17/2014 12:40 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	510		10	mg/L	1	3/18/2014 08:20 AM

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



# ALS Group USA, Corp

Date: 18-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.14.14

Sample ID: CO RIVER DG

Collection Date: 3/14/2014 10:46 AM

Work Order: 1403654

Lab ID: 1403654-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/17/2014 02:28 PM
Ethylbenzene	ND		1.0	µg/L	1	3/17/2014 02:28 PM
m,p-Xylene	ND		2.0	µg/L	1	3/17/2014 02:28 PM
o-Xylene	ND		1.0	µg/L	1	3/17/2014 02:28 PM
Toluene	ND		1.0	µg/L	1	3/17/2014 02:28 PM
Xylenes, Total	ND		3.0	µg/L	1	3/17/2014 02:28 PM
Surr: 1,2-Dichloroethane-d4	97.7		70-120	%REC	1	3/17/2014 02:28 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/17/2014 02:28 PM
Surr: Dibromofluoromethane	99.9		85-115	%REC	1	3/17/2014 02:28 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	3/17/2014 02:28 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	150		3.0	mg/L	1	3/17/2014 02:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/17/2014 01:00 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	3/18/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 18-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.14.14

Sample ID: SPRING 01

Collection Date: 3/14/2014 11:05 AM

Work Order: 1403654

Lab ID: 1403654-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/17/2014 02:52 PM
Ethylbenzene	ND		1.0	µg/L	1	3/17/2014 02:52 PM
m,p-Xylene	ND		2.0	µg/L	1	3/17/2014 02:52 PM
o-Xylene	ND		1.0	µg/L	1	3/17/2014 02:52 PM
Toluene	ND		1.0	µg/L	1	3/17/2014 02:52 PM
Xylenes, Total	ND		3.0	µg/L	1	3/17/2014 02:52 PM
Surr: 1,2-Dichloroethane-d4	95.8		70-120	%REC	1	3/17/2014 02:52 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/17/2014 02:52 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	3/17/2014 02:52 PM
Surr: Toluene-d8	97.7		85-120	%REC	1	3/17/2014 02:52 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	8.5		3.0	mg/L	1	3/17/2014 02:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/17/2014 01:20 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		10	mg/L	1	3/18/2014 08:20 AM

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

**ALS Group USA, Corp**

Date: 18-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.14.14

Sample ID: POND 01

Collection Date: 3/14/2014 11:31 AM

Work Order: 1403654

Lab ID: 1403654-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/17/2014 03:17 PM
Ethylbenzene	ND		1.0	µg/L	1	3/17/2014 03:17 PM
m,p-Xylene	ND		2.0	µg/L	1	3/17/2014 03:17 PM
o-Xylene	ND		1.0	µg/L	1	3/17/2014 03:17 PM
Toluene	ND		1.0	µg/L	1	3/17/2014 03:17 PM
Xylenes, Total	ND		3.0	µg/L	1	3/17/2014 03:17 PM
Surr: 1,2-Dichloroethane-d4	98.6		70-120	%REC	1	3/17/2014 03:17 PM
Surr: 4-Bromofluorobenzene	103		75-120	%REC	1	3/17/2014 03:17 PM
Surr: Dibromofluoromethane	99.8		85-115	%REC	1	3/17/2014 03:17 PM
Surr: Toluene-d8	97.2		85-120	%REC	1	3/17/2014 03:17 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	22		3.0	mg/L	1	3/17/2014 02:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		10	mg/L	10	3/17/2014 01:41 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	400		10	mg/L	1	3/18/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 18-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.14.14

Sample ID: SPRING UG

Collection Date: 3/14/2014 11:52 AM

Work Order: 1403654

Lab ID: 1403654-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/17/2014 03:41 PM
Ethylbenzene	ND		1.0	µg/L	1	3/17/2014 03:41 PM
m,p-Xylene	ND		2.0	µg/L	1	3/17/2014 03:41 PM
o-Xylene	ND		1.0	µg/L	1	3/17/2014 03:41 PM
Toluene	ND		1.0	µg/L	1	3/17/2014 03:41 PM
Xylenes, Total	ND		3.0	µg/L	1	3/17/2014 03:41 PM
Surr: 1,2-Dichloroethane-d4	98.2		70-120	%REC	1	3/17/2014 03:41 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	3/17/2014 03:41 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	3/17/2014 03:41 PM
Surr: Toluene-d8	96.6		85-120	%REC	1	3/17/2014 03:41 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	18		3.0	mg/L	1	3/17/2014 02:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		10	mg/L	10	3/17/2014 02:01 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	460		10	mg/L	1	3/18/2014 08:20 AM

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

**ALS Group USA, Corp**

Date: 18-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.14.14

Sample ID: TRIP BLANK

Collection Date: 3/14/2014

Work Order: 1403654

Lab ID: 1403654-06

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/17/2014 01:39 PM
Ethylbenzene	ND		1.0	µg/L	1	3/17/2014 01:39 PM
m,p-Xylene	ND		2.0	µg/L	1	3/17/2014 01:39 PM
o-Xylene	ND		1.0	µg/L	1	3/17/2014 01:39 PM
Toluene	ND		1.0	µg/L	1	3/17/2014 01:39 PM
Xylenes, Total	ND		3.0	µg/L	1	3/17/2014 01:39 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/17/2014 01:39 PM
Surr: 4-Bromofluorobenzene	97.3		75-120	%REC	1	3/17/2014 01:39 PM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	3/17/2014 01:39 PM
Surr: Toluene-d8	97.8		85-120	%REC	1	3/17/2014 01:39 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403654  
**Project:** WPX PA 31-36 SW 3.14.14

**QC BATCH REPORT**

Batch ID: **R137202A** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBKWK1-140317-R137202A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/17/2014 12:49 PM</b>		
Client ID:		Run ID: <b>VMS8_140317A</b>				SeqNo: <b>2674963</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.66	0	20	0	98.3	70-120	0			
Surr: 4-Bromofluorobenzene	19.95	0	20	0	99.8	75-120	0			
Surr: Dibromofluoromethane	19.92	0	20	0	99.6	85-115	0			
Surr: Toluene-d8	19.43	0	20	0	97.2	85-120	0			

LCS		Sample ID: <b>VLCSW1-140317-R137202A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/17/2014 11:11 AM</b>		
Client ID:		Run ID: <b>VMS8_140317A</b>				SeqNo: <b>2674962</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.61	1.0	20	0	113	80-120	0			
Ethylbenzene	22.48	1.0	20	0	112	75-125	0			
m,p-Xylene	43.54	2.0	40	0	109	75-130	0			
o-Xylene	22.11	1.0	20	0	111	80-120	0			
Toluene	21.84	1.0	20	0	109	75-120	0			
Xylenes, Total	65.65	3.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.56	0	20	0	97.8	70-120	0			
Surr: 4-Bromofluorobenzene	20.22	0	20	0	101	75-120	0			
Surr: Dibromofluoromethane	20.21	0	20	0	101	85-115	0			
Surr: Toluene-d8	19.59	0	20	0	98	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403654  
 Project: WPX PA 31-36 SW 3.14.14

## QC BATCH REPORT

Batch ID: **R137202A** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 1403691-02A MS			Units: µg/L		Analysis Date: 3/17/2014 09:01 PM		
Client ID:			Run ID: VMS8_140317A			SeqNo: 2675821		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	23.4	1.0	20	0	117	80-120		0				
Ethylbenzene	22.49	1.0	20	0	112	75-125		0				
m,p-Xylene	43.21	2.0	40	0	108	75-130		0				
o-Xylene	21.59	1.0	20	0	108	80-120		0				
Toluene	21.92	1.0	20	0	110	75-120		0				
Xylenes, Total	64.8	3.0	60	0	108	75-130		0				
Surr: 1,2-Dichloroethane-d4	19.58	0	20	0	97.9	70-120		0				
Surr: 4-Bromofluorobenzene	20.8	0	20	0	104	75-120		0				
Surr: Dibromofluoromethane	20.12	0	20	0	101	85-115		0				
Surr: Toluene-d8	19.52	0	20	0	97.6	85-120		0				

MSD					Sample ID: 1403691-02A MSD		Units: µg/L		Analysis Date: 3/17/2014 09:25 PM		
Client ID:			Run ID: VMS8_140317A			SeqNo: 2675822		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.82	1.0	20	0	114	80-120	23.4	2.51	30		
Ethylbenzene	22.27	1.0	20	0	111	75-125	22.49	0.983	30		
m,p-Xylene	42.32	2.0	40	0	106	75-130	43.21	2.08	30		
o-Xylene	21.66	1.0	20	0	108	80-120	21.59	0.324	30		
Toluene	21.54	1.0	20	0	108	75-120	21.92	1.75	30		
Xylenes, Total	63.98	3.0	60	0	107	75-130	64.8	1.27	30		
Surr: 1,2-Dichloroethane-d4	19.35	0	20	0	96.8	70-120	19.58	1.18	30		
Surr: 4-Bromofluorobenzene	20.5	0	20	0	102	75-120	20.8	1.45	30		
Surr: Dibromofluoromethane	20.05	0	20	0	100	85-115	20.12	0.349	30		
Surr: Toluene-d8	19.04	0	20	0	95.2	85-120	19.52	2.49	30		

The following samples were analyzed in this batch:

1403654-01A	1403654-02A	1403654-03A
1403654-04A	1403654-05A	1403654-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403654  
**Project:** WPX PA 31-36 SW 3.14.14

## QC BATCH REPORT

Batch ID: **56641**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56641-56641</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/18/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140318A</b>				SeqNo: <b>2676002</b>		Prep Date: <b>3/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56641-56641</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/18/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140318A</b>				SeqNo: <b>2676003</b>		Prep Date: <b>3/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      481      10      495      0      97.2      80-120      0

<b>DUP</b>		Sample ID: <b>1403635-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/18/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140318A</b>				SeqNo: <b>2676009</b>		Prep Date: <b>3/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      432      20      0      0      0      0-0      428      0.93      20

The following samples were analyzed in this batch:

1403654-01B	1403654-02B	1403654-03B
1403654-04B	1403654-05B	

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



Client: HRL Compliance Solutions, Inc  
 Work Order: 1403654  
 Project: WPX PA 31-36 SW 3.14.14

## QC BATCH REPORT

Batch ID: **R137252** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140317-R137252</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 02:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140317O</b>				SeqNo: <b>2675024</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140317-R137252</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 02:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140317O</b>				SeqNo: <b>2675025</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 49.98 3.0 50 0 100 80-120 0

<b>MS</b>		Sample ID: <b>1403654-05BMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 02:15 PM</b>		
Client ID: <b>SPRING UG</b>		Run ID: <b>WETCHEM_140317O</b>				SeqNo: <b>2675038</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 116 3.0 100 17.99 98 75-125 0

<b>MSD</b>		Sample ID: <b>1403654-05BMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 02:15 PM</b>		
Client ID: <b>SPRING UG</b>		Run ID: <b>WETCHEM_140317O</b>				SeqNo: <b>2675039</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 118 3.0 100 17.99 100 75-125 116 1.71 20

The following samples were analyzed in this batch:

1403654-01B	1403654-02B	1403654-03B
1403654-04B	1403654-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403654  
**Project:** WPX PA 31-36 SW 3.14.14

## QC BATCH REPORT

Batch ID: **R137259**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137259</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 07:40 AM</b>		
Client ID:		Run ID: <b>IC4_140317A</b>				SeqNo: <b>2675163</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R137259</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 11:59 AM</b>		
Client ID:		Run ID: <b>IC4_140317A</b>				SeqNo: <b>2675164</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.52      1.0      10      0      105      85-110      0

<b>MS</b>		Sample ID: <b>1403654-05B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 02:21 PM</b>		
Client ID: <b>SPRING UG</b>		Run ID: <b>IC4_140317A</b>				SeqNo: <b>2675171</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      87.44      10      50      35.9      103      75-125      0

<b>MSD</b>		Sample ID: <b>1403654-05B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/17/2014 02:41 PM</b>		
Client ID: <b>SPRING UG</b>		Run ID: <b>IC4_140317A</b>				SeqNo: <b>2675172</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      83.51      10      50      35.9      95.2      75-125      87.44      4.59      20

The following samples were analyzed in this batch:

1403654-01B	1403654-02B	1403654-03B
1403654-04B	1403654-05B	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

1403654

PROJECT NAME		WPX PA 31-36 SW 3-14-14		SAMPLER		Casey Richardson		DATE		3-14-14		PAGE		1 of 1	
PROJECT No.				SITE ID				TURNAROUND		24 Hour		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HCSI		EDD FORMAT											
SEND REPORT TO		Mark Mumby		PURCHASE ORDER											
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		WPX Energy									
CITY / STATE / ZIP		Grand Junction, CO. 81505		INVOICE ATTN TO		Karolina Blaney									
PHONE		970-243-3271		ADDRESS		1058 County Road 215									
FAX		970-243-3280		CITY / STATE / ZIP		Parachute, CO 81635									
E-MAIL		mmumby@hrlcomp.com		PHONE		970-683-2295									
				FAX		970-285-9573									
				E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	Chlorides	Sulfates				
1	CO RIVER UG	SW	3-14-14	1031	4	1.8		X	X	X	X				
2	CO RIVER DG			1046				X	X	X	X				
3	SPRING 01			1105				X	X	X	X				
4	POND 01			1131				X	X	X	X				
5	SPRING UG			1152				X	X	X	X				
6	TRIP BLANK														

\*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)	
	<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"/>	

4.2°C

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

SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY <i>Cg RJW</i>	CASEY RICHARDSON	3-14-14	1255
RECEIVED BY <i>Cg RJW</i>	Colby Koerner	3-14-14	1255
RELINQUISHED BY <i>Cg RJW</i>	Colby Koerner	3-14-14	1255
RECEIVED BY <i>Fed Ex</i>			
RELINQUISHED BY <i>Diane F. Shaw</i>			
RECEIVED BY <i>Diane F. Shaw</i>	Diane F. Shaw	3/5/14	0930

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 15-Mar-14 09:30

Work Order: 1403654

Received by: DS

Checklist completed by Diane Shaw  
eSignature

15-Mar-14  
Date

Reviewed by: Chad Whelton  
eSignature

17-Mar-14  
Date

Matrices: Surface Water

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>4.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/15/2014 10:52:18 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



BILL RECIPIENT

Ship Date: 14MAR14  
ActWgt: 36.0 LB  
CAD: 103923490/INET3490  
Dims: 24 X 14 X 15 IN

Delivery Address Bar Code



Ref # 1001-031414-2  
Invoice #  
PO #  
Dept #

SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

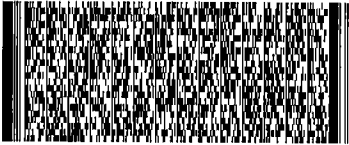
HOLLAND, MI 49424

SATURDAY 12:00P  
PRIORITY OVERNIGHT

TRK# 7982 2571 3187  
0201

X0 GRRR

49424  
MI-US  
GRR



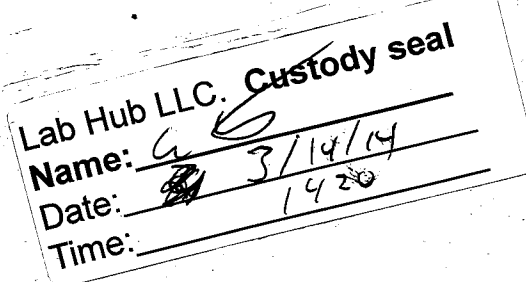
522G1VCC4FFZ20

## 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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20-Mar-2014

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

Re: **WPX PA 31-36 SW 3.17.14**

Work Order: **1403765**

Dear Mark,

ALS Environmental received 6 samples on 19-Mar-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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.17.14  
**Work Order:** 1403765

## 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>
1403765-01	CO RIVER UG	Surface Water		3/17/2014 12:02	3/19/2014 10:00	<input type="checkbox"/>
1403765-02	CO RIVER DG	Surface Water		3/17/2014 12:14	3/19/2014 10:00	<input type="checkbox"/>
1403765-03	SPRING 01	Surface Water		3/17/2014 12:30	3/19/2014 10:00	<input type="checkbox"/>
1403765-04	POND 01	Surface Water		3/17/2014 12:46	3/19/2014 10:00	<input type="checkbox"/>
1403765-05	SPRING UG	Surface Water		3/17/2014 13:03	3/19/2014 10:00	<input type="checkbox"/>
1403765-06	TRIP BLANK	Water		3/17/2014	3/19/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.17.14  
**WorkOrder:** 1403765

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter



# ALS Group USA, Corp

Date: 20-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.17.14

Sample ID: CO RIVER UG

Collection Date: 3/17/2014 12:02 PM

Work Order: 1403765

Lab ID: 1403765-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/19/2014 03:33 PM
Ethylbenzene	ND		1.0	µg/L	1	3/19/2014 03:33 PM
m,p-Xylene	ND		2.0	µg/L	1	3/19/2014 03:33 PM
o-Xylene	ND		1.0	µg/L	1	3/19/2014 03:33 PM
Toluene	ND		1.0	µg/L	1	3/19/2014 03:33 PM
Xylenes, Total	ND		3.0	µg/L	1	3/19/2014 03:33 PM
Surr: 1,2-Dichloroethane-d4	115		70-120	%REC	1	3/19/2014 03:33 PM
Surr: 4-Bromofluorobenzene	90.6		75-120	%REC	1	3/19/2014 03:33 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1	3/19/2014 03:33 PM
Surr: Toluene-d8	96.6		85-120	%REC	1	3/19/2014 03:33 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	3/19/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/19/2014 05:36 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/19/14	Analyst: <b>AT</b>
Total Dissolved Solids	500		10	mg/L	1	3/20/2014 08:16 AM

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

**ALS Group USA, Corp**

Date: 20-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.17.14

Work Order: 1403765

Sample ID: CO RIVER DG

Lab ID: 1403765-02

Collection Date: 3/17/2014 12:14 PM

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/19/2014 03:57 PM
Ethylbenzene	ND		1.0	µg/L	1	3/19/2014 03:57 PM
m,p-Xylene	ND		2.0	µg/L	1	3/19/2014 03:57 PM
o-Xylene	ND		1.0	µg/L	1	3/19/2014 03:57 PM
Toluene	ND		1.0	µg/L	1	3/19/2014 03:57 PM
Xylenes, Total	ND		3.0	µg/L	1	3/19/2014 03:57 PM
Surr: 1,2-Dichloroethane-d4	114		70-120	%REC	1	3/19/2014 03:57 PM
Surr: 4-Bromofluorobenzene	91.4		75-120	%REC	1	3/19/2014 03:57 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	3/19/2014 03:57 PM
Surr: Toluene-d8	94.7		85-120	%REC	1	3/19/2014 03:57 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	3/19/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/19/2014 05:56 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/19/14	Analyst: <b>AT</b>
Total Dissolved Solids	490		10	mg/L	1	3/20/2014 08:16 AM

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

# ALS Group USA, Corp

Date: 20-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.17.14

Sample ID: SPRING 01

Collection Date: 3/17/2014 12:30 PM

Work Order: 1403765

Lab ID: 1403765-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/19/2014 04:22 PM
Ethylbenzene	ND		1.0	µg/L	1	3/19/2014 04:22 PM
m,p-Xylene	ND		2.0	µg/L	1	3/19/2014 04:22 PM
o-Xylene	ND		1.0	µg/L	1	3/19/2014 04:22 PM
Toluene	ND		1.0	µg/L	1	3/19/2014 04:22 PM
Xylenes, Total	ND		3.0	µg/L	1	3/19/2014 04:22 PM
Surr: 1,2-Dichloroethane-d4	118		70-120	%REC	1	3/19/2014 04:22 PM
Surr: 4-Bromofluorobenzene	93.8		75-120	%REC	1	3/19/2014 04:22 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	3/19/2014 04:22 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	3/19/2014 04:22 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	45		3.0	mg/L	1	3/19/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		10	mg/L	10	3/19/2014 06:16 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/19/14	Analyst: <b>AT</b>
Total Dissolved Solids	420		10	mg/L	1	3/20/2014 08:16 AM

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

# ALS Group USA, Corp

Date: 20-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.17.14

Sample ID: POND 01

Collection Date: 3/17/2014 12:46 PM

Work Order: 1403765

Lab ID: 1403765-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/19/2014 04:46 PM
Ethylbenzene	ND		1.0	µg/L	1	3/19/2014 04:46 PM
m,p-Xylene	ND		2.0	µg/L	1	3/19/2014 04:46 PM
o-Xylene	ND		1.0	µg/L	1	3/19/2014 04:46 PM
Toluene	ND		1.0	µg/L	1	3/19/2014 04:46 PM
Xylenes, Total	ND		3.0	µg/L	1	3/19/2014 04:46 PM
Surr: 1,2-Dichloroethane-d4	115		70-120	%REC	1	3/19/2014 04:46 PM
Surr: 4-Bromofluorobenzene	94.7		75-120	%REC	1	3/19/2014 04:46 PM
Surr: Dibromofluoromethane	107		85-115	%REC	1	3/19/2014 04:46 PM
Surr: Toluene-d8	102		85-120	%REC	1	3/19/2014 04:46 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	20		3.0	mg/L	1	3/19/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	40		10	mg/L	10	3/19/2014 06:37 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/19/14	Analyst: <b>AT</b>
Total Dissolved Solids	390		10	mg/L	1	3/20/2014 08:16 AM

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

**ALS Group USA, Corp**

Date: 20-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.17.14

Sample ID: SPRING UG

Collection Date: 3/17/2014 01:03 PM

Work Order: 1403765

Lab ID: 1403765-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/19/2014 05:10 PM
Ethylbenzene	ND		1.0	µg/L	1	3/19/2014 05:10 PM
m,p-Xylene	ND		2.0	µg/L	1	3/19/2014 05:10 PM
o-Xylene	ND		1.0	µg/L	1	3/19/2014 05:10 PM
Toluene	ND		1.0	µg/L	1	3/19/2014 05:10 PM
Xylenes, Total	ND		3.0	µg/L	1	3/19/2014 05:10 PM
Surr: 1,2-Dichloroethane-d4	112		70-120	%REC	1	3/19/2014 05:10 PM
Surr: 4-Bromofluorobenzene	92.1		75-120	%REC	1	3/19/2014 05:10 PM
Surr: Dibromofluoromethane	106		85-115	%REC	1	3/19/2014 05:10 PM
Surr: Toluene-d8	99.7		85-120	%REC	1	3/19/2014 05:10 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	37		3.0	mg/L	1	3/19/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	38		10	mg/L	10	3/19/2014 07:37 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/19/14	Analyst: <b>AT</b>
Total Dissolved Solids	460		10	mg/L	1	3/20/2014 08:16 AM

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

**ALS Group USA, Corp**

Date: 20-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.17.14

Work Order: 1403765

Sample ID: TRIP BLANK

Lab ID: 1403765-06

Collection Date: 3/17/2014

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/19/2014 02:44 PM
Ethylbenzene	ND		1.0	µg/L	1	3/19/2014 02:44 PM
m,p-Xylene	ND		2.0	µg/L	1	3/19/2014 02:44 PM
o-Xylene	ND		1.0	µg/L	1	3/19/2014 02:44 PM
Toluene	ND		1.0	µg/L	1	3/19/2014 02:44 PM
Xylenes, Total	ND		3.0	µg/L	1	3/19/2014 02:44 PM
Surr: 1,2-Dichloroethane-d4	111		70-120	%REC	1	3/19/2014 02:44 PM
Surr: 4-Bromofluorobenzene	91.4		75-120	%REC	1	3/19/2014 02:44 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1	3/19/2014 02:44 PM
Surr: Toluene-d8	97.8		85-120	%REC	1	3/19/2014 02:44 PM

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

# ALS Group USA, Corp

Date: 20-Mar-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403765  
**Project:** WPX PA 31-36 SW 3.17.14

## QC BATCH REPORT

Batch ID: **R137390** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: <b>VBK1-140319-R137390</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/19/2014 01:55 PM</b>		
Client ID:		Run ID: <b>VMS9_140319A</b>				SeqNo: <b>2678144</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	22.22	0	20	0	111	70-120	0			
Surr: 4-Bromofluorobenzene	18.45	0	20	0	92.2	75-120	0			
Surr: Dibromofluoromethane	20.89	0	20	0	104	85-115	0			
Surr: Toluene-d8	19.57	0	20	0	97.8	85-120	0			

LCS		Sample ID: <b>VLCSW1-140319-R137390</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/19/2014 12:42 PM</b>		
Client ID:		Run ID: <b>VMS9_140319A</b>				SeqNo: <b>2678143</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.5	1.0	20	0	108	80-120	0			
Ethylbenzene	19.77	1.0	20	0	98.8	75-125	0			
m,p-Xylene	39.87	2.0	40	0	99.7	75-130	0			
o-Xylene	19.98	1.0	20	0	99.9	80-120	0			
Toluene	21.43	1.0	20	0	107	75-120	0			
Xylenes, Total	59.85	3.0	60	0	99.8	75-130	0			
Surr: 1,2-Dichloroethane-d4	21.55	0	20	0	108	70-120	0			
Surr: 4-Bromofluorobenzene	20.64	0	20	0	103	75-120	0			
Surr: Dibromofluoromethane	21.05	0	20	0	105	85-115	0			
Surr: Toluene-d8	19.92	0	20	0	99.6	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403765  
 Project: WPX PA 31-36 SW 3.17.14

## QC BATCH REPORT

Batch ID: **R137390** Instrument ID **VMS9** Method: **SW8260**

MS					Sample ID: 1403765-01A MS			Units: µg/L		Analysis Date: 3/19/2014 10:28 PM	
Client ID: CO RIVER UG			Run ID: VMS9_140319A			SeqNo: 2678157		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.64	1.0	20	0	108	80-120		0			
Ethylbenzene	19.33	1.0	20	0	96.6	75-125		0			
m,p-Xylene	39.67	2.0	40	0	99.2	75-130		0			
o-Xylene	20.01	1.0	20	0	100	80-120		0			
Toluene	21.66	1.0	20	0	108	75-120		0			
Xylenes, Total	59.68	3.0	60	0	99.5	75-130		0			
Surr: 1,2-Dichloroethane-d4	22.5	0	20	0	112	70-120		0			
Surr: 4-Bromofluorobenzene	20.95	0	20	0	105	75-120		0			
Surr: Dibromofluoromethane	21.14	0	20	0	106	85-115		0			
Surr: Toluene-d8	19.73	0	20	0	98.6	85-120		0			

MSD				Sample ID: 1403765-01A MSD			Units: µg/L		Analysis Date: 3/19/2014 10:52 PM		
Client ID: CO RIVER UG			Run ID: VMS9_140319A			SeqNo: 2678158		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.59	1.0	20	0	108	80-120	21.64	0.231	30		
Ethylbenzene	20.06	1.0	20	0	100	75-125	19.33	3.71	30		
m,p-Xylene	39.35	2.0	40	0	98.4	75-130	39.67	0.81	30		
o-Xylene	19.33	1.0	20	0	96.6	80-120	20.01	3.46	30		
Toluene	21	1.0	20	0	105	75-120	21.66	3.09	30		
Xylenes, Total	58.68	3.0	60	0	97.8	75-130	59.68	1.69	30		
Surr: 1,2-Dichloroethane-d4	22.42	0	20	0	112	70-120	22.5	0.356	30		
Surr: 4-Bromofluorobenzene	21.12	0	20	0	106	75-120	20.95	0.808	30		
Surr: Dibromofluoromethane	21.22	0	20	0	106	85-115	21.14	0.378	30		
Surr: Toluene-d8	20.07	0	20	0	100	85-120	19.73	1.71	30		

The following samples were analyzed in this batch:

1403765-01A	1403765-02A	1403765-03A
1403765-04A	1403765-05A	1403765-06A

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403765  
**Project:** WPX PA 31-36 SW 3.17.14

## QC BATCH REPORT

Batch ID: **56715**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56715-56715</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 08:16 AM</b>		
Client ID:		Run ID: <b>TDS_140320A</b>				SeqNo: <b>2678583</b>		Prep Date: <b>3/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56715-56715</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 08:16 AM</b>		
Client ID:		Run ID: <b>TDS_140320A</b>				SeqNo: <b>2678584</b>		Prep Date: <b>3/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      469      10      495      0      94.7      80-120      0

<b>DUP</b>		Sample ID: <b>1403643-06B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 08:16 AM</b>		
Client ID:		Run ID: <b>TDS_140320A</b>				SeqNo: <b>2678590</b>		Prep Date: <b>3/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      924      10      0      0      0      0-0      893      3.41      20

<b>DUP</b>		Sample ID: <b>1403765-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 08:16 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>TDS_140320A</b>				SeqNo: <b>2678605</b>		Prep Date: <b>3/19/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      505      10      0      0      0      0-0      499      1.2      20

The following samples were analyzed in this batch:

1403765-01B	1403765-02B	1403765-03B
1403765-04B	1403765-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403765  
**Project:** WPX PA 31-36 SW 3.17.14

## QC BATCH REPORT

Batch ID: **R137378** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140319-R137378</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140319A</b>				SeqNo: <b>2677496</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140319-R137378</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140319A</b>				SeqNo: <b>2677497</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 51.98 3.0 50 0 104 80-120 0

<b>MS</b>		Sample ID: <b>1403085-11A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140319A</b>				SeqNo: <b>2677499</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 239.9 3.0 50 185 110 75-125 0

<b>MSD</b>		Sample ID: <b>1403085-11A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140319A</b>				SeqNo: <b>2677500</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 239.9 3.0 50 185 110 75-125 239.9 0 20

The following samples were analyzed in this batch:

1403765-01B	1403765-02B	1403765-03B
1403765-04B	1403765-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403765  
**Project:** WPX PA 31-36 SW 3.17.14

## QC BATCH REPORT

Batch ID: **R137434**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137434</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 03:35 PM</b>		
Client ID:		Run ID: <b>IC3_140319B</b>				SeqNo: <b>2678695</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R137434</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 03:55 PM</b>		
Client ID:		Run ID: <b>IC3_140319B</b>				SeqNo: <b>2678696</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.25      1.0      10      0      103      85-110      0

<b>MS</b>		Sample ID: <b>1403359-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 04:55 PM</b>		
Client ID:		Run ID: <b>IC3_140319B</b>				SeqNo: <b>2678699</b>		Prep Date:		DF: <b>3</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      37.84      3.0      10      28.94      89      75-125      0

<b>MSD</b>		Sample ID: <b>1403359-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/19/2014 05:16 PM</b>		
Client ID:		Run ID: <b>IC3_140319B</b>				SeqNo: <b>2678700</b>		Prep Date:		DF: <b>3</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      38.12      3.0      10      28.94      91.8      75-125      37.84      0.726      20

The following samples were analyzed in this batch:

1403765-01B	1403765-02B	1403765-03B
1403765-04B	1403765-05B	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

1403765

PROJECT NAME		WPX PA 31-36 SW 3.17.14		SAMPLER		Casey Richardson		DATE		3.17.14		PAGE		1 of 1	
PROJECT No.				SITE ID				TURNAROUND		24 Hour		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HCSI		EDD FORMAT											
SEND REPORT TO		Mark Mumby		PURCHASE ORDER											
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		WPX Energy									
CITY / STATE / ZIP		Grand Junction, CO. 81505		INVOICE ATTN TO		Karolina Blaney									
PHONE		970-243-3271		ADDRESS		1058 County Road 215									
FAX		970-243-3280		CITY / STATE / ZIP		Parachute, CO 81635									
E-MAIL		mmumby@hrlcomp.com		PHONE		970-683-2295									
				FAX		970-285-9573									
				E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	Chlorides	Sulfates				
1	CO RIVER UG	SW	3.17.14	1202	4	1,8		X	X	X	X				
2	CO RIVER DG			1214											
3	SPRING 01			1230											
4	POND 01			1246											
5	SPRING UG			1303											
6	TRIP BLANK														

\*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:	<p>5.2°C</p> <p><i>[Signature]</i></p>
QC PACKAGE (check below)	
x	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY <i>[Signature]</i>	CASEY RICHARDSON	3.17.14	1400
RECEIVED BY <i>[Signature]</i>	Colby Kormaner	3.17.14	1400
RELINQUISHED BY <i>[Signature]</i>	Colby Kormaner	3.17.14	1420
RECEIVED BY <i>[Signature]</i>			
RELINQUISHED BY <i>[Signature]</i>			
RECEIVED BY <i>[Signature]</i>	Diane F. Shaw	3/19/14	1000

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **19-Mar-14 10:00**

Work Order: **1403765**

Received by: **DS**

Checklist completed by <u>Diane Shaw</u>	19-Mar-14	Reviewed by: <u>Ann Preston</u>	19-Mar-14
eSignature	Date	eSignature	Date

Matrices: **Surface Water**

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>5.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/19/2014 10:45:07 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC

Origin ID: RILA



127 E First Street

PARACHUTE, CO 81635

Ship Date: 17/MAR/14  
ActWgt: 45.0 LB  
CAD: 103923490/NET3490  
Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



Ref # 1001-031714-3  
Invoice #  
PO #  
Dept #

SHIP TO: (616) 399-6070

BILL RECIPIENT

Sample receiving  
ALS Holland  
3352 128TH AVE

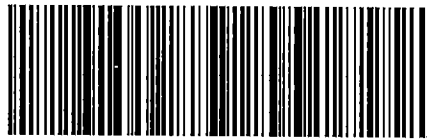
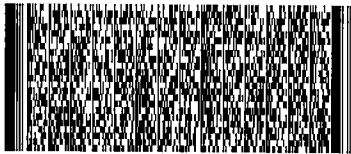
HOLLAND, MI 49424

TUE - 18 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7982 4201 0527  
0201

**XX GRRA**

**49424**  
MI-US  
GRR



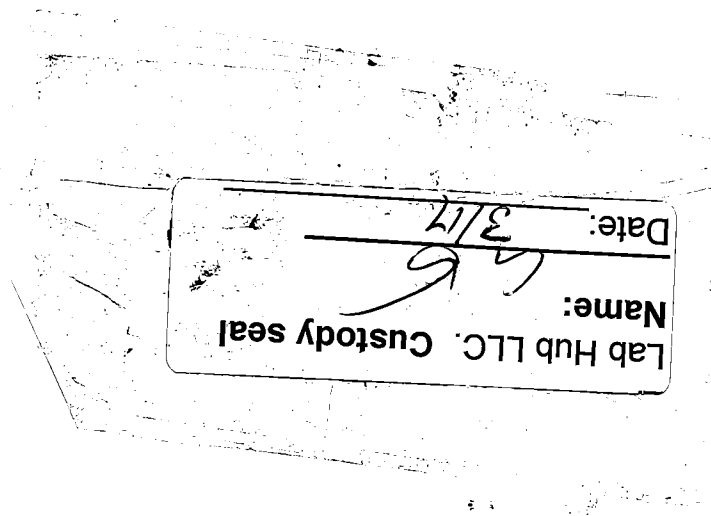
522G1/CCAFIF220

**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](http://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.





21-Mar-2014

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

Re: **WPX PA 31-36 SW 3.10.14**

Work Order: **1403849**

Dear Mark,

ALS Environmental received 6 samples on 20-Mar-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 20.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

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

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.10.14  
**Work Order:** 1403849

## 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>
1403849-01	CO RIVER UG	Surface Water		3/19/2014 10:20	3/20/2014 10:00	<input type="checkbox"/>
1403849-02	CO RIVER DG	Surface Water		3/19/2014 10:32	3/20/2014 10:00	<input type="checkbox"/>
1403849-03	SPRING 01	Surface Water		3/19/2014 10:42	3/20/2014 10:00	<input type="checkbox"/>
1403849-04	POND 01	Surface Water		3/19/2014 10:56	3/20/2014 10:00	<input type="checkbox"/>
1403849-05	SPRING UG	Surface Water		3/19/2014 11:08	3/20/2014 10:00	<input type="checkbox"/>
1403849-06	TRIP BLANK	Water		3/19/2014	3/20/2014 10:00	<input type="checkbox"/>



## ALS Group USA, Corp

Date: 21-Mar-14

---

**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 3.10.14

**Work Order:** 1403849

### Case Narrative

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Batch R137436 sample SPRING 01 MS recovery for Benzene was above control limits. The parent sample was Non-detect for Benzene. No data requires qualification.

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.10.14  
**WorkOrder:** 1403849

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 21-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: CO RIVER UG

Collection Date: 3/19/2014 10:20 AM

Work Order: 1403849

Lab ID: 1403849-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
Ethylbenzene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
m,p-Xylene	ND		2.0	µg/L	1	3/20/2014 12:38 PM
o-Xylene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
Toluene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
Xylenes, Total	ND		3.0	µg/L	1	3/20/2014 12:38 PM
Surr: 1,2-Dichloroethane-d4	99.8		70-120	%REC	1	3/20/2014 12:38 PM
Surr: 4-Bromofluorobenzene	97.0		75-120	%REC	1	3/20/2014 12:38 PM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	3/20/2014 12:38 PM
Surr: Toluene-d8	98.1		85-120	%REC	1	3/20/2014 12:38 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	3/20/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/20/2014 03:31 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/21/14	Analyst: <b>AT</b>
Total Dissolved Solids	500		10	mg/L	1	3/21/2014 08:15 AM

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

# ALS Group USA, Corp

Date: 21-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: CO RIVER DG

Collection Date: 3/19/2014 10:32 AM

Work Order: 1403849

Lab ID: 1403849-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
Ethylbenzene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
m,p-Xylene	ND		2.0	µg/L	1	3/20/2014 01:04 PM
o-Xylene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
Toluene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
Xylenes, Total	ND		3.0	µg/L	1	3/20/2014 01:04 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/20/2014 01:04 PM
Surr: 4-Bromofluorobenzene	98.4		75-120	%REC	1	3/20/2014 01:04 PM
Surr: Dibromofluoromethane	95.6		85-115	%REC	1	3/20/2014 01:04 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	3/20/2014 01:04 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	3/20/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/20/2014 03:51 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/21/14	Analyst: <b>AT</b>
Total Dissolved Solids	510		10	mg/L	1	3/21/2014 08:15 AM

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

# ALS Group USA, Corp

Date: 21-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: SPRING 01

Collection Date: 3/19/2014 10:42 AM

Work Order: 1403849

Lab ID: 1403849-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/20/2014 01:31 PM
Ethylbenzene	ND		1.0	µg/L	1	3/20/2014 01:31 PM
m,p-Xylene	ND		2.0	µg/L	1	3/20/2014 01:31 PM
o-Xylene	ND		1.0	µg/L	1	3/20/2014 01:31 PM
Toluene	ND		1.0	µg/L	1	3/20/2014 01:31 PM
Xylenes, Total	ND		3.0	µg/L	1	3/20/2014 01:31 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	3/20/2014 01:31 PM
Surr: 4-Bromofluorobenzene	97.8		75-120	%REC	1	3/20/2014 01:31 PM
Surr: Dibromofluoromethane	96.3		85-115	%REC	1	3/20/2014 01:31 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	3/20/2014 01:31 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	3/20/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		10	mg/L	10	3/20/2014 04:11 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/21/14	Analyst: <b>AT</b>
Total Dissolved Solids	430		10	mg/L	1	3/21/2014 08:15 AM

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

**ALS Group USA, Corp**

Date: 21-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: POND 01

Collection Date: 3/19/2014 10:56 AM

Work Order: 1403849

Lab ID: 1403849-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
Ethylbenzene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
m,p-Xylene	ND		2.0	µg/L	1	3/20/2014 12:38 PM
o-Xylene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
Toluene	ND		1.0	µg/L	1	3/20/2014 12:38 PM
Xylenes, Total	ND		3.0	µg/L	1	3/20/2014 12:38 PM
Surr: 1,2-Dichloroethane-d4	103		70-120	%REC	1	3/20/2014 12:38 PM
Surr: 4-Bromofluorobenzene	99.6		75-120	%REC	1	3/20/2014 12:38 PM
Surr: Dibromofluoromethane	95.8		85-115	%REC	1	3/20/2014 12:38 PM
Surr: Toluene-d8	97.8		85-120	%REC	1	3/20/2014 12:38 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	22		3.0	mg/L	1	3/20/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		10	mg/L	10	3/20/2014 05:52 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/21/14	Analyst: <b>AT</b>
Total Dissolved Solids	400		10	mg/L	1	3/21/2014 08:15 AM

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

**ALS Group USA, Corp**

Date: 21-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: SPRING UG

Collection Date: 3/19/2014 11:08 AM

Work Order: 1403849

Lab ID: 1403849-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
Ethylbenzene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
m,p-Xylene	ND		2.0	µg/L	1	3/20/2014 01:04 PM
o-Xylene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
Toluene	ND		1.0	µg/L	1	3/20/2014 01:04 PM
Xylenes, Total	ND		3.0	µg/L	1	3/20/2014 01:04 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	3/20/2014 01:04 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	3/20/2014 01:04 PM
Surr: Dibromofluoromethane	97.2		85-115	%REC	1	3/20/2014 01:04 PM
Surr: Toluene-d8	98.5		85-120	%REC	1	3/20/2014 01:04 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	3/20/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		10	mg/L	10	3/20/2014 06:12 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/21/14	Analyst: <b>AT</b>
Total Dissolved Solids	480		10	mg/L	1	3/21/2014 08:15 AM

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

**ALS Group USA, Corp**

Date: 21-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.10.14

Sample ID: TRIP BLANK

Collection Date: 3/19/2014

Work Order: 1403849

Lab ID: 1403849-06

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	3/20/2014 01:30 PM
Ethylbenzene	ND		1.0	µg/L	1	3/20/2014 01:30 PM
m,p-Xylene	ND		2.0	µg/L	1	3/20/2014 01:30 PM
o-Xylene	ND		1.0	µg/L	1	3/20/2014 01:30 PM
Toluene	ND		1.0	µg/L	1	3/20/2014 01:30 PM
Xylenes, Total	ND		3.0	µg/L	1	3/20/2014 01:30 PM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	3/20/2014 01:30 PM
Surr: 4-Bromofluorobenzene	97.4		75-120	%REC	1	3/20/2014 01:30 PM
Surr: Dibromofluoromethane	96.7		85-115	%REC	1	3/20/2014 01:30 PM
Surr: Toluene-d8	98.8		85-120	%REC	1	3/20/2014 01:30 PM

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403849  
**Project:** WPX PA 31-36 SW 3.10.14

**QC BATCH REPORT**

Batch ID: **R137435** Instrument ID **VMS5** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBK1-140320-R137435</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/20/2014 12:12 PM</b>		
Client ID:		Run ID: <b>VMS5_140320A</b>				SeqNo: <b>2679306</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.81	0	20	0	104	70-120	0			
Surr: 4-Bromofluorobenzene	19.62	0	20	0	98.1	75-120	0			
Surr: Dibromofluoromethane	19.45	0	20	0	97.2	85-115	0			
Surr: Toluene-d8	19.89	0	20	0	99.4	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140320-R137435</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/20/2014 11:20 AM</b>		
Client ID:		Run ID: <b>VMS5_140320A</b>				SeqNo: <b>2679305</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.77	1.0	20	0	93.8	80-120	0			
Ethylbenzene	18.36	1.0	20	0	91.8	75-125	0			
m,p-Xylene	36.5	2.0	40	0	91.2	75-130	0			
o-Xylene	18.13	1.0	20	0	90.6	80-120	0			
Toluene	18.3	1.0	20	0	91.5	75-120	0			
Xylenes, Total	54.63	3.0	60	0	91	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.12	0	20	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	20.18	0	20	0	101	75-120	0			
Surr: Dibromofluoromethane	19.89	0	20	0	99.4	85-115	0			
Surr: Toluene-d8	19.5	0	20	0	97.5	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403849  
 Project: WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R137435** Instrument ID **VMS5** Method: **SW8260**

MS				Sample ID: 1403849-05A MS			Units: µg/L		Analysis Date: 3/20/2014 09:20 PM	
Client ID: SPRING UG				Run ID: VMS5_140320A			SeqNo: 2679314		Prep Date:	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.18	1.0	20	0	95.9	80-120	0			
Ethylbenzene	19.21	1.0	20	0	96	75-125	0			
m,p-Xylene	37.7	2.0	40	0	94.2	75-130	0			
o-Xylene	18.63	1.0	20	0	93.2	80-120	0			
Toluene	18.51	1.0	20	0	92.6	75-120	0			
Xylenes, Total	56.33	3.0	60	0	93.9	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.48	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	21.12	0	20	0	106	75-120	0			
Surr: Dibromofluoromethane	19.48	0	20	0	97.4	85-115	0			
Surr: Toluene-d8	19.74	0	20	0	98.7	85-120	0			

MSD				Sample ID: 1403849-05A MSD			Units: µg/L		Analysis Date: 3/20/2014 09:45 PM	
Client ID: SPRING UG				Run ID: VMS5_140320A			SeqNo: 2679315		Prep Date:	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.54	1.0	20	0	92.7	80-120	19.18	3.39	30	
Ethylbenzene	19.06	1.0	20	0	95.3	75-125	19.21	0.784	30	
m,p-Xylene	38.11	2.0	40	0	95.3	75-130	37.7	1.08	30	
o-Xylene	18.76	1.0	20	0	93.8	80-120	18.63	0.695	30	
Toluene	18.22	1.0	20	0	91.1	75-120	18.51	1.58	30	
Xylenes, Total	56.87	3.0	60	0	94.8	75-130	56.33	0.954	30	
Surr: 1,2-Dichloroethane-d4	20.27	0	20	0	101	70-120	20.48	1.03	30	
Surr: 4-Bromofluorobenzene	20.96	0	20	0	105	75-120	21.12	0.76	30	
Surr: Dibromofluoromethane	19.54	0	20	0	97.7	85-115	19.48	0.308	30	
Surr: Toluene-d8	19.74	0	20	0	98.7	85-120	19.74	0	30	

The following samples were analyzed in this batch:

1403849-04A 1403849-05A 1403849-06A

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403849  
 Project: WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R137436** Instrument ID **VMS6** Method: **SW8260**

MBLK				Sample ID: VBLKW1-140320-R137436				Units: µg/L			Analysis Date: 3/20/2014 12:11 PM		
Client ID:			Run ID: VMS6_140320A				SeqNo: 2679422			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Benzene	ND	1.0											
Ethylbenzene	ND	1.0											
m,p-Xylene	ND	2.0											
o-Xylene	ND	1.0											
Toluene	ND	1.0											
Xylenes, Total	ND	3.0											
Surr: 1,2-Dichloroethane-d4	19.59	0	20	0	98	70-120		0					
Surr: 4-Bromofluorobenzene	19.79	0	20	0	99	75-120		0					
Surr: Dibromofluoromethane	18.92	0	20	0	94.6	85-115		0					
Surr: Toluene-d8	19.67	0	20	0	98.4	85-120		0					

LCS				Sample ID: VLCSW1-140320-R137436				Units: µg/L		Analysis Date: 3/20/2014 11:18 AM	
Client ID:		Run ID: VMS6_140320A				SeqNo: 2679420		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.88	1.0	20	0	109	80-120	0				
Ethylbenzene	21.19	1.0	20	0	106	75-125	0				
m,p-Xylene	41.98	2.0	40	0	105	75-130	0				
o-Xylene	20.8	1.0	20	0	104	80-120	0				
Toluene	21.44	1.0	20	0	107	75-120	0				
Xylenes, Total	62.78	3.0	60	0	105	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.77	0	20	0	98.8	70-120	0				
Surr: 4-Bromofluorobenzene	20.19	0	20	0	101	75-120	0				
Surr: Dibromofluoromethane	20.24	0	20	0	101	85-115	0				
Surr: Toluene-d8	19.82	0	20	0	99.1	85-120	0				

MS				Sample ID: 1403849-03A MS				Units: µg/L		Analysis Date: 3/20/2014 09:33 PM	
Client ID: SPRING 01			Run ID: VMS6_140320A			SeqNo: 2679455		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.57	1.0	20	0	103	80-120	0				
Ethylbenzene	20.06	1.0	20	0	100	75-125	0				
m,p-Xylene	39.81	2.0	40	0	99.5	75-130	0				
o-Xylene	19.4	1.0	20	0	97	80-120	0				
Toluene	19.74	1.0	20	0	98.7	75-120	0				
Xylenes, Total	59.21	3.0	60	0	98.7	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.75	0	20	0	98.8	70-120	0				
Surr: 4-Bromofluorobenzene	19.98	0	20	0	99.9	75-120	0				
Surr: Dibromofluoromethane	19.48	0	20	0	97.4	85-115	0				
Surr: Toluene-d8	19.61	0	20	0	98	85-120	0				

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403849  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R137436**      Instrument ID **VMS6**      Method: **SW8260**

MSD				Sample ID: 1403849-03A MSD				Units: µg/L		Analysis Date: 3/20/2014 09:59 PM	
Client ID: SPRING 01			Run ID: VMS6_140320A		SeqNo: 2679457		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	24.25	1.0	20	0	121	80-120	20.57	16.4	30	S	
Ethylbenzene	23.97	1.0	20	0	120	75-125	20.06	17.8	30		
m,p-Xylene	47.27	2.0	40	0	118	75-130	39.81	17.1	30		
o-Xylene	23.48	1.0	20	0	117	80-120	19.4	19	30		
Toluene	23.47	1.0	20	0	117	75-120	19.74	17.3	30		
Xylenes, Total	70.75	3.0	60	0	118	75-130	59.21	17.8	30		
Surr: 1,2-Dichloroethane-d4	19.61	0	20	0	98	70-120	19.75	0.711	30		
Surr: 4-Bromofluorobenzene	20.28	0	20	0	101	75-120	19.98	1.49	30		
Surr: Dibromofluoromethane	19.76	0	20	0	98.8	85-115	19.48	1.43	30		
Surr: Toluene-d8	19.78	0	20	0	98.9	85-120	19.61	0.863	30		

The following samples were analyzed in this batch:      1403849-01A      1403849-02A      1403849-03A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403849  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **56763** Instrument ID **TDS** Method: **A2540 C-97**

MBLK		Sample ID: MBLK-56763-56763					Units: mg/L		Analysis Date: 3/21/2014 08:15 AM		
Client ID:			Run ID: TDS_140321A			SeqNo: 2679772		Prep Date: 3/21/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Total Dissolved Solids ND 10

DUP		Sample ID: 1403645-12B DUP					Units: mg/L		Analysis Date: 3/21/2014 08:15 AM		
Client ID:			Run ID: TDS_140321A			SeqNo: 2679777		Prep Date: 3/21/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Total Dissolved Solids 81 10 0 0 0 0-0 75 7.69 20

DUP		Sample ID: 1403772-02C DUP					Units: mg/L		Analysis Date: 3/21/2014 08:15 AM		
Client ID:			Run ID: TDS_140321A			SeqNo: 2679784		Prep Date: 3/21/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Total Dissolved Solids 1838 20 0 0 0 0-0 1770 3.77 20

The following samples were analyzed in this batch:

1403849-01B	1403849-02B	1403849-03B
1403849-04B	1403849-05B	

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1403849  
 Project: WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R137449** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140320-R137449</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140320H</b>				SeqNo: <b>2678967</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140320-R137449</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140320H</b>				SeqNo: <b>2678968</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 51.98 3.0 50 0 104 80-120 0

<b>MS</b>		Sample ID: <b>1403849-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 12:00 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140320H</b>				SeqNo: <b>2678979</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 190 3.0 50 140 100 75-125 0

<b>MSD</b>		Sample ID: <b>1403849-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 12:00 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140320H</b>				SeqNo: <b>2678980</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 190 3.0 50 140 100 75-125 190 0 20

The following samples were analyzed in this batch:

1403849-01B	1403849-02B	1403849-03B
1403849-04B	1403849-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1403849  
**Project:** WPX PA 31-36 SW 3.10.14

## QC BATCH REPORT

Batch ID: **R137509**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137509</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 01:49 PM</b>		
Client ID:		Run ID: <b>IC4_140320B</b>				SeqNo: <b>2680279</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R137509</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 02:10 PM</b>		
Client ID:		Run ID: <b>IC4_140320B</b>				SeqNo: <b>2680280</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.47      1.0      10      0      105      85-110      0

<b>MS</b>		Sample ID: <b>1403849-03B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 04:31 PM</b>		
Client ID: <b>SPRING 01</b>		Run ID: <b>IC4_140320B</b>				SeqNo: <b>2680287</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      86.13      10      50      34.78      103      75-125      0

<b>MSD</b>		Sample ID: <b>1403849-03B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/20/2014 04:51 PM</b>		
Client ID: <b>SPRING 01</b>		Run ID: <b>IC4_140320B</b>				SeqNo: <b>2680288</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      82.39      10      50      34.78      95.2      75-125      86.13      4.44      20

The following samples were analyzed in this batch:

1403849-01B	1403849-02B	1403849-03B
1403849-04B	1403849-05B	

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



# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 399-6070

## Chain-of-Custody

WORKORDER #

1403849

Form 202r8

PROJECT NAME WPX PA 31-36 SW		SAMPLER Mike Lobato		DATE 3/19/14		PAGE 1 of 1											
PROJECT No.		SITE ID PA 31-36		TURNAROUND 24 HR		DISPOSAL By Lab or Return to Client											
COMPANY NAME HRL Compliance Solutions, Inc.		BILL TO COMPANY WPX Energy															
SEND REPORT TO Mark Mumby		INVOICE ATTN TO Karolina Blaney															
ADDRESS 2385 F 1/2 Road		ADDRESS 1058 Co. Rd. 215															
CITY / STATE / ZIP Grand Junction, CO 81505		CITY / STATE / ZIP Parachute, CO 81635															
PHONE 970-243-3271		PHONE 970-683-2295															
FAX 970-243-3280		FAX															
E-MAIL mmumby@hrlcomp.com		E-MAIL Karolina.blaney@wpxenergy.com															
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	CHLORIDE	SULFATES						
1	CO RIVER UG	SW	3/19/14	1020	4	1, 8		X	X	X	X						
2	CO RIVER DG	SW	3/19/14	1032	4	1, 8		X	X	X	X						
3	SPRING 01	SW	3/19/14	1042	4	1, 8		X	X	X	X						
4	POND 01	SW	3/19/14	1056	4	1, 8		X	X	X	X						
5	SPRING UG	SW	3/19/14	1108	4	1, 8		X	X	X	X						
6	TRIP BLANK	L	3/19/14		1	1, 8		X									

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
	<input checked="" type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
	Mike Lobato	3/19/14	1248
	N.M.	3-19-14	1750
	N.M.	3-19	1430
	Diane S. Shaw	3/20/14	1000
RELINQUISHED BY			
RECEIVED BY			



Sample Receipt Checklist

Client Name: HRL

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

Work Order: 1403849

Received by: DS

Checklist completed by Diane Shaw  
eSignature

20-Mar-14  
Date

Reviewed by: Ann Preston  
eSignature

21-Mar-14  
Date

Matrices: Surface Water

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>2.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/20/2014 10:41:02 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC

Origin ID: RILA

**FedEx**  
Express

Ship Date: 19MAR14  
Ship Time: 06:00  
CMT: 00323490/NET3490

Dim: 25 X 14 X 15 IN

127 E First Street

PARACHUTE, CO 81635

SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

HOLLAND, MI 49424

BILL REC

Delivery Address Bar Code

1001-0319141

THU - 20 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7982 7436 2024  
0201

**XX GRRA**

49424  
MI-US  
GRR

52231004/F220

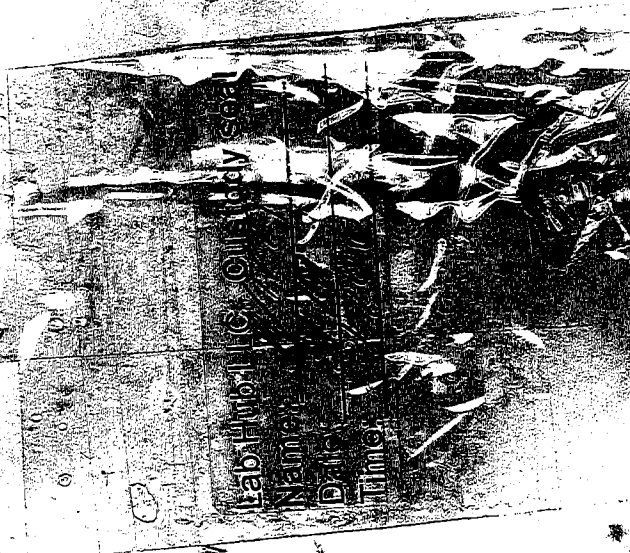
**After printing this label:**

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](http://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.

2.9c





25-Mar-2014

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

Re: **WRX PA 31-36 SW 3.21.14**

Work Order: **14031006**

Dear Mark,

ALS Environmental received 6 samples on 22-Mar-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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WRX PA 31-36 SW 3.21.14  
**Work Order:** 14031006

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**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>
14031006-01	CO River UG	Surface Water		3/21/2014 10:01	3/22/2014 10:00	<input type="checkbox"/>
14031006-02	CO River DG	Surface Water		3/21/2014 10:17	3/22/2014 10:00	<input type="checkbox"/>
14031006-03	Spring 01	Surface Water		3/21/2014 10:30	3/22/2014 10:00	<input type="checkbox"/>
14031006-04	Pond 01	Surface Water		3/21/2014 10:42	3/22/2014 10:00	<input type="checkbox"/>
14031006-05	Spring UG	Surface Water		3/21/2014 11:01	3/22/2014 10:00	<input type="checkbox"/>
14031006-06	Trip Blank	Water		3/21/2014	3/22/2014 10:00	<input type="checkbox"/>

---

**Client:** HRL Compliance Solutions, Inc  
**Project:** WRX PA 31-36 SW 3.21.14  
**WorkOrder:** 14031006

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 25-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WRX PA 31-36 SW 3.21.14

Sample ID: CO River UG

Collection Date: 3/21/2014 10:01 AM

Work Order: 14031006

Lab ID: 14031006-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/24/2014 01:56 PM
Ethylbenzene	ND		1.0	µg/L	1	3/24/2014 01:56 PM
m,p-Xylene	ND		2.0	µg/L	1	3/24/2014 01:56 PM
o-Xylene	ND		1.0	µg/L	1	3/24/2014 01:56 PM
Toluene	ND		1.0	µg/L	1	3/24/2014 01:56 PM
Xylenes, Total	ND		3.0	µg/L	1	3/24/2014 01:56 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/24/2014 01:56 PM
Surr: 4-Bromofluorobenzene	98.0		75-120	%REC	1	3/24/2014 01:56 PM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	3/24/2014 01:56 PM
Surr: Toluene-d8	103		85-120	%REC	1	3/24/2014 01:56 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	160		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/24/2014 05:02 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/25/14	Analyst: <b>AT</b>
Total Dissolved Solids	480		10	mg/L	1	3/25/2014 07:35 AM

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

**ALS Group USA, Corp**

Date: 25-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WRX PA 31-36 SW 3.21.14

Sample ID: CO River DG

Collection Date: 3/21/2014 10:17 AM

Work Order: 14031006

Lab ID: 14031006-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/24/2014 02:20 PM
Ethylbenzene	ND		1.0	µg/L	1	3/24/2014 02:20 PM
m,p-Xylene	ND		2.0	µg/L	1	3/24/2014 02:20 PM
o-Xylene	ND		1.0	µg/L	1	3/24/2014 02:20 PM
Toluene	ND		1.0	µg/L	1	3/24/2014 02:20 PM
Xylenes, Total	ND		3.0	µg/L	1	3/24/2014 02:20 PM
Surr: 1,2-Dichloroethane-d4	104		70-120	%REC	1	3/24/2014 02:20 PM
Surr: 4-Bromofluorobenzene	97.9		75-120	%REC	1	3/24/2014 02:20 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	3/24/2014 02:20 PM
Surr: Toluene-d8	103		85-120	%REC	1	3/24/2014 02:20 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	140		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/24/2014 06:43 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/25/14	Analyst: <b>AT</b>
Total Dissolved Solids	450		10	mg/L	1	3/25/2014 07:35 AM

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

# ALS Group USA, Corp

Date: 25-Mar-14

**Client:** HRL Compliance Solutions, Inc

**Project:** WRX PA 31-36 SW 3.21.14

**Sample ID:** Spring 01

**Collection Date:** 3/21/2014 10:30 AM

**Work Order:** 14031006

**Lab ID:** 14031006-03

**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/24/2014 02:45 PM
Ethylbenzene	ND		1.0	µg/L	1	3/24/2014 02:45 PM
m,p-Xylene	ND		2.0	µg/L	1	3/24/2014 02:45 PM
o-Xylene	ND		1.0	µg/L	1	3/24/2014 02:45 PM
Toluene	ND		1.0	µg/L	1	3/24/2014 02:45 PM
Xylenes, Total	ND		3.0	µg/L	1	3/24/2014 02:45 PM
Surr: 1,2-Dichloroethane-d4	97.0		70-120	%REC	1	3/24/2014 02:45 PM
Surr: 4-Bromofluorobenzene	96.3		75-120	%REC	1	3/24/2014 02:45 PM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	3/24/2014 02:45 PM
Surr: Toluene-d8	103		85-120	%REC	1	3/24/2014 02:45 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	14		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		5.0	mg/L	5	3/24/2014 07:03 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/25/14	Analyst: <b>AT</b>
Total Dissolved Solids	420		10	mg/L	1	3/25/2014 07:35 AM

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



# ALS Group USA, Corp

Date: 25-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WRX PA 31-36 SW 3.21.14

Sample ID: Pond 01

Collection Date: 3/21/2014 10:42 AM

Work Order: 14031006

Lab ID: 14031006-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/24/2014 03:09 PM
Ethylbenzene	ND		1.0	µg/L	1	3/24/2014 03:09 PM
m,p-Xylene	ND		2.0	µg/L	1	3/24/2014 03:09 PM
o-Xylene	ND		1.0	µg/L	1	3/24/2014 03:09 PM
Toluene	ND		1.0	µg/L	1	3/24/2014 03:09 PM
Xylenes, Total	ND		3.0	µg/L	1	3/24/2014 03:09 PM
Surr: 1,2-Dichloroethane-d4	98.5		70-120	%REC	1	3/24/2014 03:09 PM
Surr: 4-Bromofluorobenzene	96.4		75-120	%REC	1	3/24/2014 03:09 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/24/2014 03:09 PM
Surr: Toluene-d8	103		85-120	%REC	1	3/24/2014 03:09 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	38		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		5.0	mg/L	5	3/24/2014 07:24 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/25/14	Analyst: <b>AT</b>
Total Dissolved Solids	420		10	mg/L	1	3/25/2014 07:35 AM

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

# ALS Group USA, Corp

Date: 25-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WRX PA 31-36 SW 3.21.14

Sample ID: Spring UG

Collection Date: 3/21/2014 11:01 AM

Work Order: 14031006

Lab ID: 14031006-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/24/2014 03:34 PM
Ethylbenzene	ND		1.0	µg/L	1	3/24/2014 03:34 PM
m,p-Xylene	ND		2.0	µg/L	1	3/24/2014 03:34 PM
o-Xylene	ND		1.0	µg/L	1	3/24/2014 03:34 PM
Toluene	ND		1.0	µg/L	1	3/24/2014 03:34 PM
Xylenes, Total	ND		3.0	µg/L	1	3/24/2014 03:34 PM
Surr: 1,2-Dichloroethane-d4	99.0		70-120	%REC	1	3/24/2014 03:34 PM
Surr: 4-Bromofluorobenzene	97.7		75-120	%REC	1	3/24/2014 03:34 PM
Surr: Dibromofluoromethane	99.8		85-115	%REC	1	3/24/2014 03:34 PM
Surr: Toluene-d8	104		85-120	%REC	1	3/24/2014 03:34 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	25		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		5.0	mg/L	5	3/24/2014 07:44 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/25/14	Analyst: <b>AT</b>
Total Dissolved Solids	480		10	mg/L	1	3/25/2014 07:35 AM

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

**ALS Group USA, Corp**

Date: 25-Mar-14

**Client:** HRL Compliance Solutions, Inc**Project:** WRX PA 31-36 SW 3.21.14**Work Order:** 14031006**Sample ID:** Trip Blank**Lab ID:** 14031006-06**Collection Date:** 3/21/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/24/2014 01:31 PM
Ethylbenzene	ND		1.0	µg/L	1	3/24/2014 01:31 PM
m,p-Xylene	ND		2.0	µg/L	1	3/24/2014 01:31 PM
o-Xylene	ND		1.0	µg/L	1	3/24/2014 01:31 PM
Toluene	ND		1.0	µg/L	1	3/24/2014 01:31 PM
Xylenes, Total	ND		3.0	µg/L	1	3/24/2014 01:31 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	3/24/2014 01:31 PM
Surr: 4-Bromofluorobenzene	98.6		75-120	%REC	1	3/24/2014 01:31 PM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	3/24/2014 01:31 PM
Surr: Toluene-d8	102		85-120	%REC	1	3/24/2014 01:31 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031006  
**Project:** WRX PA 31-36 SW 3.21.14

**QC BATCH REPORT**

Batch ID: **R137591** Instrument ID **VMS8** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBKWK1-140324-R137591</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/24/2014 01:05 PM</b>		
Client ID:		Run ID: <b>VMS8_140324A</b>				SeqNo: <b>2683424</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.16	0	20	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	19.38	0	20	0	96.9	75-120	0			
Surr: Dibromofluoromethane	20.07	0	20	0	100	85-115	0			
Surr: Toluene-d8	20.38	0	20	0	102	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140324-R137591</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/24/2014 11:52 AM</b>		
Client ID:		Run ID: <b>VMS8_140324A</b>				SeqNo: <b>2683423</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.79	1.0	20	0	99	80-120	0			
Ethylbenzene	21.6	1.0	20	0	108	75-125	0			
m,p-Xylene	43.46	2.0	40	0	109	75-130	0			
o-Xylene	21.55	1.0	20	0	108	80-120	0			
Toluene	21.52	1.0	20	0	108	75-120	0			
Xylenes, Total	65.01	3.0	60	0	108	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.08	0	20	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	19.41	0	20	0	97	75-120	0			
Surr: Dibromofluoromethane	20.15	0	20	0	101	85-115	0			
Surr: Toluene-d8	21.09	0	20	0	105	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 14031006  
 Project: WRX PA 31-36 SW 3.21.14

## QC BATCH REPORT

Batch ID: **R137591** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 14031006-01B MS			Units: µg/L		Analysis Date: 3/24/2014 09:17 PM	
Client ID: CO River UG			Run ID: VMS8_140324A			SeqNo: 2683437		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.42	1.0	20	0	97.1	80-120		0			
Ethylbenzene	20.94	1.0	20	0	105	75-125		0			
m,p-Xylene	42.57	2.0	40	0	106	75-130		0			
o-Xylene	20.84	1.0	20	0	104	80-120		0			
Toluene	20.38	1.0	20	0	102	75-120		0			
Xylenes, Total	63.41	3.0	60	0	106	75-130		0			
Surr: 1,2-Dichloroethane-d4	20.54	0	20	0	103	70-120		0			
Surr: 4-Bromofluorobenzene	20.38	0	20	0	102	75-120		0			
Surr: Dibromofluoromethane	20.1	0	20	0	100	85-115		0			
Surr: Toluene-d8	20.04	0	20	0	100	85-120		0			

MSD					Sample ID: 14031006-01B MSD		Units: µg/L		Analysis Date: 3/24/2014 09:41 PM		
Client ID: CO River UG			Run ID: VMS8_140324A			SeqNo: 2683438		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.82	1.0	20	0	99.1	80-120	19.42	2.04	30		
Ethylbenzene	20.83	1.0	20	0	104	75-125	20.94	0.527	30		
m,p-Xylene	41.99	2.0	40	0	105	75-130	42.57	1.37	30		
o-Xylene	20.52	1.0	20	0	103	80-120	20.84	1.55	30		
Toluene	20.49	1.0	20	0	102	75-120	20.38	0.538	30		
Xylenes, Total	62.51	3.0	60	0	104	75-130	63.41	1.43	30		
Surr: 1,2-Dichloroethane-d4	20.82	0	20	0	104	70-120	20.54	1.35	30		
Surr: 4-Bromofluorobenzene	20.11	0	20	0	101	75-120	20.38	1.33	30		
Surr: Dibromofluoromethane	20.41	0	20	0	102	85-115	20.1	1.53	30		
Surr: Toluene-d8	20.17	0	20	0	101	85-120	20.04	0.647	30		

The following samples were analyzed in this batch:

14031006-01B	14031006-02B	14031006-03B
14031006-04B	14031006-05B	14031006-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031006  
**Project:** WRX PA 31-36 SW 3.21.14

## QC BATCH REPORT

Batch ID: **56872** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56872-56872</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 07:35 AM</b>		
Client ID:		Run ID: <b>TDS_140325A</b>				SeqNo: <b>2683243</b>		Prep Date: <b>3/25/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-56872-56872</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 07:35 AM</b>		
Client ID:		Run ID: <b>TDS_140325A</b>				SeqNo: <b>2683244</b>		Prep Date: <b>3/25/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 493 10 495 0 99.6 80-120 0

<b>DUP</b>		Sample ID: <b>1403969-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 07:35 AM</b>		
Client ID:		Run ID: <b>TDS_140325A</b>				SeqNo: <b>2683230</b>		Prep Date: <b>3/25/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 612 20 0 0 0 0-0 576 6.06 20

The following samples were analyzed in this batch:

14031006-01A	14031006-02A	14031006-03A
14031006-04A	14031006-05A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031006  
**Project:** WRX PA 31-36 SW 3.21.14

## QC BATCH REPORT

Batch ID: **R137680**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137680</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/24/2014 09:10 AM</b>		
Client ID:		Run ID: <b>IC4_140324A</b>				SeqNo: <b>2683598</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	ND	1.0								

<b>LCS</b>		Sample ID: <b>LCS-R137680</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/24/2014 09:30 AM</b>		
Client ID:		Run ID: <b>IC4_140324A</b>				SeqNo: <b>2683599</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	10.42	1.0	10	0	104	85-110	0			

<b>MS</b>		Sample ID: <b>14031006-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/24/2014 05:22 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>IC4_140324A</b>				SeqNo: <b>2683618</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	154.8	10	50	103.5	102	75-125	0			

<b>MSD</b>		Sample ID: <b>14031006-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/24/2014 05:42 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>IC4_140324A</b>				SeqNo: <b>2683619</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	151.4	10	50	103.5	95.7	75-125	154.8	2.22	20	

The following samples were analyzed in this batch:

14031006-01A	14031006-02A	14031006-03A
14031006-04A	14031006-05A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031006  
**Project:** WRX PA 31-36 SW 3.21.14

## QC BATCH REPORT

Batch ID: **R137697**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>MB-R137697-R137697</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683982</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>LCS-R137697-R137697</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683983</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.99      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>14031006-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683985</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      639.9      3.0      500      159.9      96      75-125      0

<b>MSD</b>		Sample ID: <b>14031006-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683986</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      639.9      3.0      500      159.9      96      75-125      639.9      0      20

The following samples were analyzed in this batch:

14031006-01A	14031006-02A	14031006-03A
14031006-04A	14031006-05A	

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





# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

14031006

PROJECT NAME		WPX PA 31-36 SW 3-21-14		SAMPLER		Casey Richardson		DATE		3-21-14		PAGE		1 of 1	
PROJECT No.				SITE ID		Surface Water		TURNAROUND		24 HOUR		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HCSI		BILL TO COMPANY		WPX Energy									
SEND REPORT TO		Mark Mumby		INVOICE ATTN TO		Karolina Blaney									
ADDRESS		2385 F 1/2 Road		ADDRESS		1058 County Road 215									
CITY / STATE / ZIP		Grand Junction, CO. 81505		CITY / STATE / ZIP		Parachute, CO 81635									
PHONE		970-243-3271		PHONE		970-683-2295									
FAX		970-243-3280		FAX		970-285-9573									
E-MAIL		mmumby@hrlcomp.com		E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TD5	CI-	SO4				
1	CO RIVER UG	SW	3-21-14	1001	4	1,8		x	x	x	x				
2	CO RIVER DE	SW	3-21-14	1017	4	1,8		x	x	x	x				
3	SPRING 01	SW	3-21-14	1030	4	1,8		x	x	x	x				
4	POND 01	SW	3-21-14	1042	4	1,8		x	x	x	x				
5	SPRING UG	SW	3-21-14	1101	4	1,8		x	x	x	x				
6	TRIP BLANK														

\*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)

3.6°C

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
Casey Richardson	CASEY RICHARDSON	3-21-14	12:00
Chase Freismuth	Chase Freismuth	3/21/14	12:00
Colby McGowan	Colby McGowan	3/21/14	1500
FedEx		3/22/14	1000

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 22-Mar-14 10:00

Work Order: 14031006

Received by: KRW

Checklist completed by Keith Wurenga  
eSignature

22-Mar-14  
Date

Reviewed by: Ann Preston  
eSignature

24-Mar-14  
Date

Matrices: Surface Water

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>3.6 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/22/2014 10:34:10 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 21MAR14  
Act/Wgt: 29.0 LB  
CAD: 103923490/NET3490  
Dims: 19 X 11 X 14 IN

Delivery Address Bar Code



Ref # 1001-032114-3  
Invoice #  
PO #  
Dept #

SHIP TO: (616) 399-6070  
Sample recieving  
ALS Holland  
3352 128TH AVE

BILL RECIPIENT

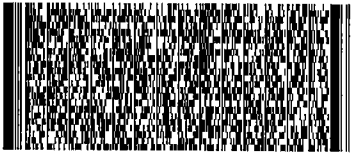
HOLLAND, MI 49424

SATURDAY 12:00P  
PRIORITY OVERNIGHT

TRK# 7983 0211 2576  
0201

**X0 GRRRA**

**49424**  
MI-US  
GRR



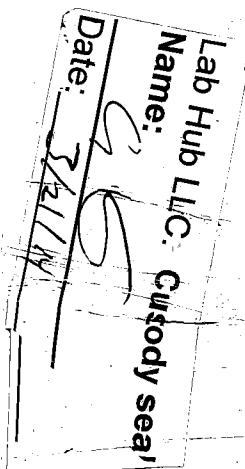
522GUC4F/F220

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26-Mar-2014

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

Re: **WPX PA 31-36 SW 3.24.14**

Work Order: **14031073**

Dear Mark,

ALS Environmental received 6 samples on 25-Mar-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 19.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.24.14  
**Work Order:** 14031073

## 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>
14031073-01	CO RIVER UG	Surface Water		3/24/2014 12:57	3/25/2014 10:00	<input type="checkbox"/>
14031073-02	CO RIVER DG	Surface Water		3/24/2014 13:08	3/25/2014 10:00	<input type="checkbox"/>
14031073-03	SPRING 01	Surface Water		3/24/2014 13:22	3/25/2014 10:00	<input type="checkbox"/>
14031073-04	POND 01	Surface Water		3/24/2014 13:40	3/25/2014 10:00	<input type="checkbox"/>
14031073-05	SPRING UG	Surface Water		3/24/2014 13:52	3/25/2014 10:00	<input type="checkbox"/>
14031073-06	Trip Blank	Water		3/24/2014	3/25/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.24.14  
**WorkOrder:** 14031073

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 26-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.24.14

Sample ID: CO RIVER UG

Collection Date: 3/24/2014 12:57 PM

Work Order: 14031073

Lab ID: 14031073-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/25/2014 06:04 PM
Ethylbenzene	ND		1.0	µg/L	1	3/25/2014 06:04 PM
m,p-Xylene	ND		2.0	µg/L	1	3/25/2014 06:04 PM
o-Xylene	ND		1.0	µg/L	1	3/25/2014 06:04 PM
Toluene	ND		1.0	µg/L	1	3/25/2014 06:04 PM
Xylenes, Total	ND		3.0	µg/L	1	3/25/2014 06:04 PM
Surr: 1,2-Dichloroethane-d4	98.0		70-120	%REC	1	3/25/2014 06:04 PM
Surr: 4-Bromofluorobenzene	96.6		75-120	%REC	1	3/25/2014 06:04 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/25/2014 06:04 PM
Surr: Toluene-d8	105		85-120	%REC	1	3/25/2014 06:04 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	170		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/25/2014 05:50 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/26/14	Analyst: <b>YM</b>
Total Dissolved Solids	470		10	mg/L	1	3/26/2014 08:23 AM

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

# ALS Group USA, Corp

Date: 26-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.24.14

Sample ID: CO RIVER DG

Collection Date: 3/24/2014 01:08 PM

Work Order: 14031073

Lab ID: 14031073-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/25/2014 06:29 PM
Ethylbenzene	ND		1.0	µg/L	1	3/25/2014 06:29 PM
m,p-Xylene	ND		2.0	µg/L	1	3/25/2014 06:29 PM
o-Xylene	ND		1.0	µg/L	1	3/25/2014 06:29 PM
Toluene	ND		1.0	µg/L	1	3/25/2014 06:29 PM
Xylenes, Total	ND		3.0	µg/L	1	3/25/2014 06:29 PM
Surr: 1,2-Dichloroethane-d4	96.9		70-120	%REC	1	3/25/2014 06:29 PM
Surr: 4-Bromofluorobenzene	97.6		75-120	%REC	1	3/25/2014 06:29 PM
Surr: Dibromofluoromethane	99.8		85-115	%REC	1	3/25/2014 06:29 PM
Surr: Toluene-d8	105		85-120	%REC	1	3/25/2014 06:29 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	130		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/25/2014 06:10 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/26/14	Analyst: <b>YM</b>
Total Dissolved Solids	460		10	mg/L	1	3/26/2014 08:23 AM

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



# ALS Group USA, Corp

Date: 26-Mar-14

**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 3.24.14

**Sample ID:** SPRING 01

**Collection Date:** 3/24/2014 01:22 PM

**Work Order:** 14031073

**Lab ID:** 14031073-03

**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/25/2014 06:53 PM
Ethylbenzene	ND		1.0	µg/L	1	3/25/2014 06:53 PM
m,p-Xylene	ND		2.0	µg/L	1	3/25/2014 06:53 PM
o-Xylene	ND		1.0	µg/L	1	3/25/2014 06:53 PM
Toluene	ND		1.0	µg/L	1	3/25/2014 06:53 PM
Xylenes, Total	ND		3.0	µg/L	1	3/25/2014 06:53 PM
Surr: 1,2-Dichloroethane-d4	99.2		70-120	%REC	1	3/25/2014 06:53 PM
Surr: 4-Bromofluorobenzene	97.6		75-120	%REC	1	3/25/2014 06:53 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	1	3/25/2014 06:53 PM
Surr: Toluene-d8	101		85-120	%REC	1	3/25/2014 06:53 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	30		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		5.0	mg/L	5	3/25/2014 07:11 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/26/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		10	mg/L	1	3/26/2014 08:23 AM

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

# ALS Group USA, Corp

Date: 26-Mar-14

**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 3.24.14

**Sample ID:** POND 01

**Collection Date:** 3/24/2014 01:40 PM

**Work Order:** 14031073

**Lab ID:** 14031073-04

**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/25/2014 07:18 PM
Ethylbenzene	ND		1.0	µg/L	1	3/25/2014 07:18 PM
m,p-Xylene	ND		2.0	µg/L	1	3/25/2014 07:18 PM
o-Xylene	ND		1.0	µg/L	1	3/25/2014 07:18 PM
Toluene	ND		1.0	µg/L	1	3/25/2014 07:18 PM
Xylenes, Total	ND		3.0	µg/L	1	3/25/2014 07:18 PM
Surr: 1,2-Dichloroethane-d4	98.7		70-120	%REC	1	3/25/2014 07:18 PM
Surr: 4-Bromofluorobenzene	97.1		75-120	%REC	1	3/25/2014 07:18 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/25/2014 07:18 PM
Surr: Toluene-d8	103		85-120	%REC	1	3/25/2014 07:18 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	28		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		5.0	mg/L	5	3/25/2014 07:31 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/26/14	Analyst: <b>YM</b>
Total Dissolved Solids	340		10	mg/L	1	3/26/2014 08:23 AM

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

# ALS Group USA, Corp

Date: 26-Mar-14

**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 3.24.14

**Sample ID:** SPRING UG

**Collection Date:** 3/24/2014 01:52 PM

**Work Order:** 14031073

**Lab ID:** 14031073-05

**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/25/2014 07:42 PM
Ethylbenzene	ND		1.0	µg/L	1	3/25/2014 07:42 PM
m,p-Xylene	ND		2.0	µg/L	1	3/25/2014 07:42 PM
o-Xylene	ND		1.0	µg/L	1	3/25/2014 07:42 PM
Toluene	ND		1.0	µg/L	1	3/25/2014 07:42 PM
Xylenes, Total	ND		3.0	µg/L	1	3/25/2014 07:42 PM
Surr: 1,2-Dichloroethane-d4	98.8		70-120	%REC	1	3/25/2014 07:42 PM
Surr: 4-Bromofluorobenzene	96.9		75-120	%REC	1	3/25/2014 07:42 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/25/2014 07:42 PM
Surr: Toluene-d8	102		85-120	%REC	1	3/25/2014 07:42 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ND</b>
Chloride	23		3.0	mg/L	1	3/25/2014 12:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		5.0	mg/L	5	3/25/2014 07:52 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/26/14	Analyst: <b>YM</b>
Total Dissolved Solids	430		10	mg/L	1	3/26/2014 08:23 AM

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

**ALS Group USA, Corp****Date:** 26-Mar-14**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 3.24.14**Work Order:** 14031073**Sample ID:** Trip Blank**Lab ID:** 14031073-06**Collection Date:** 3/24/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/26/2014 11:55 AM
Ethylbenzene	ND		1.0	µg/L	1	3/26/2014 11:55 AM
m,p-Xylene	ND		2.0	µg/L	1	3/26/2014 11:55 AM
o-Xylene	ND		1.0	µg/L	1	3/26/2014 11:55 AM
Toluene	ND		1.0	µg/L	1	3/26/2014 11:55 AM
Xylenes, Total	ND		3.0	µg/L	1	3/26/2014 11:55 AM
Surr: 1,2-Dichloroethane-d4	96.4		70-120	%REC	1	3/26/2014 11:55 AM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	3/26/2014 11:55 AM
Surr: Dibromofluoromethane	90.6		85-115	%REC	1	3/26/2014 11:55 AM
Surr: Toluene-d8	92.6		85-120	%REC	1	3/26/2014 11:55 AM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031073  
**Project:** WPX PA 31-36 SW 3.24.14

**QC BATCH REPORT**

Batch ID: **R137679** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBKWK1-140325-R137679</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/25/2014 01:30 PM</b>		
Client ID:		Run ID: <b>VMS8_140325A</b>				SeqNo: <b>2685284</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.52	0	20	0	97.6	70-120	0			
Surr: 4-Bromofluorobenzene	19.57	0	20	0	97.8	75-120	0			
Surr: Dibromofluoromethane	19.56	0	20	0	97.8	85-115	0			
Surr: Toluene-d8	20.82	0	20	0	104	85-120	0			

LCS		Sample ID: <b>VLCSW1-140325-R137679</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/25/2014 12:17 PM</b>		
Client ID:		Run ID: <b>VMS8_140325A</b>				SeqNo: <b>2685281</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.03	1.0	20	0	100	80-120	0			
Ethylbenzene	21.92	1.0	20	0	110	75-125	0			
m,p-Xylene	43.88	2.0	40	0	110	75-130	0			
o-Xylene	21.29	1.0	20	0	106	80-120	0			
Toluene	21.56	1.0	20	0	108	75-120	0			
Xylenes, Total	65.17	3.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.6	0	20	0	98	70-120	0			
Surr: 4-Bromofluorobenzene	19.01	0	20	0	95	75-120	0			
Surr: Dibromofluoromethane	20.01	0	20	0	100	85-115	0			
Surr: Toluene-d8	21.01	0	20	0	105	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 14031073  
 Project: WPX PA 31-36 SW 3.24.14

## QC BATCH REPORT

Batch ID: **R137679** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 14031073-01A MS			Units: µg/L		Analysis Date: 3/25/2014 10:09 PM		
Client ID: CO RIVER UG				Run ID: VMS8_140325A			SeqNo: 2685299		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	19.72	1.0	20	0	98.6	80-120		0				
Ethylbenzene	21.1	1.0	20	0	106	75-125		0				
m,p-Xylene	41.98	2.0	40	0	105	75-130		0				
o-Xylene	20.56	1.0	20	0	103	80-120		0				
Toluene	20.82	1.0	20	0	104	75-120		0				
Xylenes, Total	62.54	3.0	60	0	104	75-130		0				
Surr: 1,2-Dichloroethane-d4	19.48	0	20	0	97.4	70-120		0				
Surr: 4-Bromofluorobenzene	19.6	0	20	0	98	75-120		0				
Surr: Dibromofluoromethane	19.62	0	20	0	98.1	85-115		0				
Surr: Toluene-d8	20.29	0	20	0	101	85-120		0				

MSD				Sample ID: 14031073-01A MSD			Units: µg/L		Analysis Date: 3/25/2014 10:33 PM		
Client ID: CO RIVER UG			Run ID: VMS8_140325A			SeqNo: 2685300		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.12	1.0	20	0	101	80-120	19.72	2.01	30		
Ethylbenzene	21.45	1.0	20	0	107	75-125	21.1	1.65	30		
m,p-Xylene	43.03	2.0	40	0	108	75-130	41.98	2.47	30		
o-Xylene	21	1.0	20	0	105	80-120	20.56	2.12	30		
Toluene	21.4	1.0	20	0	107	75-120	20.82	2.75	30		
Xylenes, Total	64.03	3.0	60	0	107	75-130	62.54	2.35	30		
Surr: 1,2-Dichloroethane-d4	19.82	0	20	0	99.1	70-120	19.48	1.73	30		
Surr: 4-Bromofluorobenzene	19.12	0	20	0	95.6	75-120	19.6	2.48	30		
Surr: Dibromofluoromethane	19.92	0	20	0	99.6	85-115	19.62	1.52	30		
Surr: Toluene-d8	20.8	0	20	0	104	85-120	20.29	2.48	30		

The following samples were analyzed in this batch:

14031073-01A	14031073-02A	14031073-03A
14031073-04A	14031073-05A	14031073-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031073  
**Project:** WPX PA 31-36 SW 3.24.14

## QC BATCH REPORT

Batch ID: **R137742**      Instrument ID **VMS6**      Method: **SW8260**

MBLK				Sample ID: VBLKW2-140325-R137742				Units: µg/L		Analysis Date: 3/26/2014 03:51 AM	
Client ID:			Run ID: VMS6_140325B			SeqNo: 2685859		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	2.0									
o-Xylene	ND	1.0									
Toluene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	19.06	0	20	0	95.3	70-120		0			
Surr: 4-Bromofluorobenzene	20.12	0	20	0	101	75-120		0			
Surr: Dibromofluoromethane	18.54	0	20	0	92.7	85-115		0			
Surr: Toluene-d8	18.83	0	20	0	94.2	85-120		0			

LCS				Sample ID: VLCSW2-140325-R137742				Units: µg/L		Analysis Date: 3/26/2014 02:31 AM	
Client ID:			Run ID: VMS6_140325B			SeqNo: 2685858		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.38	1.0	20	0	117	80-120	0				
Ethylbenzene	22.15	1.0	20	0	111	75-125	0				
m,p-Xylene	44.36	2.0	40	0	111	75-130	0				
o-Xylene	21.95	1.0	20	0	110	80-120	0				
Toluene	21.64	1.0	20	0	108	75-120	0				
Xylenes, Total	66.31	3.0	60	0	111	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.27	0	20	0	96.4	70-120	0				
Surr: 4-Bromofluorobenzene	20.42	0	20	0	102	75-120	0				
Surr: Dibromofluoromethane	19.69	0	20	0	98.4	85-115	0				
Surr: Toluene-d8	18.9	0	20	0	94.5	85-120	0				

MS					Sample ID: 14031051-01A MS			Units: µg/L		Analysis Date: 3/26/2014 12:22 PM	
Client ID:			Run ID: VMS6_140325B			SeqNo: 2685874		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.81	1.0	20	0	109	80-120	0				
Ethylbenzene	20.51	1.0	20	0	103	75-125	0				
m,p-Xylene	40.74	2.0	40	0	102	75-130	0				
o-Xylene	19.97	1.0	20	0	99.8	80-120	0				
Toluene	20	1.0	20	0	100	75-120	0				
Xylenes, Total	60.71	3.0	60	0	101	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.14	0	20	0	95.7	70-120	0				
Surr: 4-Bromofluorobenzene	20.57	0	20	0	103	75-120	0				
Surr: Dibromofluoromethane	19	0	20	0	95	85-115	0				
Surr: Toluene-d8	18.89	0	20	0	94.4	85-120	0				

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031073  
**Project:** WPX PA 31-36 SW 3.24.14

## QC BATCH REPORT

Batch ID: **R137742**      Instrument ID **VMS6**      Method: **SW8260**

MSD				Sample ID: 14031051-01A MSD				Units: µg/L		Analysis Date: 3/26/2014 12:48 PM	
Client ID:			Run ID: VMS6_140325B			SeqNo: 2685875		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.06	1.0	20	0	110	80-120	21.81	1.14	30		
Ethylbenzene	20.9	1.0	20	0	104	75-125	20.51	1.88	30		
m,p-Xylene	41.32	2.0	40	0	103	75-130	40.74	1.41	30		
o-Xylene	20.47	1.0	20	0	102	80-120	19.97	2.47	30		
Toluene	20.32	1.0	20	0	102	75-120	20	1.59	30		
Xylenes, Total	61.79	3.0	60	0	103	75-130	60.71	1.76	30		
Surr: 1,2-Dichloroethane-d4	18.97	0	20	0	94.8	70-120	19.14	0.892	30		
Surr: 4-Bromofluorobenzene	20.56	0	20	0	103	75-120	20.57	0.0486	30		
Surr: Dibromofluoromethane	19.48	0	20	0	97.4	85-115	19	2.49	30		
Surr: Toluene-d8	18.7	0	20	0	93.5	85-120	18.89	1.01	30		

The following samples were analyzed in this batch:

14031073-06A

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031073  
**Project:** WPX PA 31-36 SW 3.24.14

## QC BATCH REPORT

Batch ID: **56889**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56889-56889</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/26/2014 08:23 AM</b>		
Client ID:		Run ID: <b>TDS_140326B</b>				SeqNo: <b>2685595</b>		Prep Date: <b>3/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56889-56889</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/26/2014 08:23 AM</b>		
Client ID:		Run ID: <b>TDS_140326B</b>				SeqNo: <b>2685594</b>		Prep Date: <b>3/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      476      10      495      0      96.2      80-120      0

<b>DUP</b>		Sample ID: <b>1403869-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/26/2014 08:23 AM</b>		
Client ID:		Run ID: <b>TDS_140326B</b>				SeqNo: <b>2685577</b>		Prep Date: <b>3/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      383      10      0      0      0      0-0      383      0      20

<b>DUP</b>		Sample ID: <b>1403969-05A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/26/2014 08:23 AM</b>		
Client ID:		Run ID: <b>TDS_140326B</b>				SeqNo: <b>2685579</b>		Prep Date: <b>3/26/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      656      20      0      0      0      0-0      662      0.91      20

The following samples were analyzed in this batch:

14031073-01B	14031073-02B	14031073-03B
14031073-04B	14031073-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031073  
**Project:** WPX PA 31-36 SW 3.24.14

## QC BATCH REPORT

Batch ID: **R137697** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>MB-R137697-R137697</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683982</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>LCS-R137697-R137697</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683983</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 48.99 3.0 50 0 98 80-120 0

<b>MS</b>		Sample ID: <b>14031006-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683985</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 639.9 3.0 500 159.9 96 75-125 0

<b>MSD</b>		Sample ID: <b>14031006-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140325E</b>		SeqNo: <b>2683986</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 639.9 3.0 500 159.9 96 75-125 639.9 0 20

The following samples were analyzed in this batch:

14031073-01B	14031073-02B	14031073-03B
14031073-04B	14031073-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031073  
**Project:** WPX PA 31-36 SW 3.24.14

## QC BATCH REPORT

Batch ID: **R137775**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137775</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 04:44 PM</b>		
Client ID:		Run ID: <b>IC4_140325B</b>				SeqNo: <b>2685831</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R137775</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 05:10 PM</b>		
Client ID:		Run ID: <b>IC4_140325B</b>				SeqNo: <b>2685832</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.38      1.0      10      0      104      85-110      0

<b>MS</b>		Sample ID: <b>14031073-02B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 06:31 PM</b>		
Client ID: <b>CO RIVER DG</b>		Run ID: <b>IC4_140325B</b>				SeqNo: <b>2685836</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      158.7      10      50      106.6      104      75-125      0

<b>MSD</b>		Sample ID: <b>14031073-02B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/25/2014 06:51 PM</b>		
Client ID: <b>CO RIVER DG</b>		Run ID: <b>IC4_140325B</b>				SeqNo: <b>2685837</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      156.7      10      50      106.6      100      75-125      158.7      1.22      20

The following samples were analyzed in this batch:

14031073-01B	14031073-02B	14031073-03B
14031073-04B	14031073-05B	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

14031073

PROJECT NAME		WPX PA 31-36 SW 3.24.14		SAMPLER		Casey Richardson		DATE		3.24.14		PAGE		1 of 1	
PROJECT No.				SITE ID		Surface Water		TURNAROUND		24 Hour		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HCSI		EDD FORMAT											
SEND REPORT TO		Mark Mumby		PURCHASE ORDER											
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		WPX Energy									
CITY / STATE / ZIP		Grand Junction, CO. 81505		INVOICE ATTN TO		Karolina Blaney									
PHONE		970-243-3271		ADDRESS		1058 County Road 215									
FAX		970-243-3280		CITY / STATE / ZIP		Parachute, CO 81635									
E-MAIL		mmumby@hrlcomp.com		PHONE		970-683-2295									
				FAX		970-285-9573									
				E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	Cl <sup>-</sup>	SO <sub>4</sub>				
1	CO RIVER UG	SW	3.24.14	1257	4	1.8		X	X	X	X				
2	CO RIVER DG			1308				X	X	X	X				
3	SPRING 01			1322				X	X	X	X				
4	POND 01			1340				X	X	X	X				
5	SPRING UG			1352				X	X	X	X				
6	TRIP BLANK							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:  3.6.14 	QC PACKAGE (check below)	
	<input checked="" type="checkbox"/>	LEVEL II (Standard QC)
	<input type="checkbox"/>	LEVEL III (Std QC + forms)
	<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

SIGNATURE	PRINTED NAME	DATE	TIME
	CASEY RICHARDSON	3.24.14	1455
	Colby Goerner	3.24.14	1500
	Colby Goerner	3.24.14	1550
	Diane F. Shaw	3/25/14	1000

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 25-Mar-14 10:00

Work Order: 14031073

Received by: DS

Checklist completed by Diane Shaw  
eSignature

25-Mar-14  
Date

Reviewed by: Ann Preston  
eSignature

26-Mar-14  
Date

Matrices: Surface Water

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>3.6 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/25/2014 10:20:47 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



BILL RECIPIENT

SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

HOLLAND, MI 49424

Ship Date: 24MAR14  
ActWgt: 46.0 LB  
CAD: 103923490/NET3490  
Dims: 25 X 14 X 15 IN

Delivery Address-Bar Code



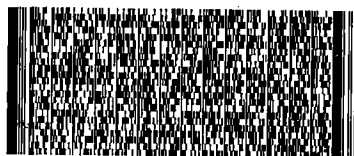
Ref # 1001-032414-2  
Invoice #  
PO #  
Dept #

TUE - 25 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7983 2021 6702  
0201

XX GRRA

49424  
MI-US  
GRR



52231/CO41/F220

## After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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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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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on [fedex.com](http://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 ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

<b>ALS Environmental</b> 3352 128th Avenue Holland, Michigan 49424 Tel. +1 616 399 6070 Fax. +1 616 399 6185	<b>CUSTODY SEAL</b> Date: <u>3/24/14</u> Time: <u>16:00</u> Name: <u>Lab Hub</u> Company: <u>Lab Hub</u>		Seal Broken By: Date:



28-Mar-2014

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

Re: **WPX PA 31-36 SW 3.26.14**

Work Order: **14031228**

Dear Mark,

ALS Environmental received 6 samples on 27-Mar-2014 09:00 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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.26.14  
**Work Order:** 14031228

## 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>
14031228-01	CO River UG	Surface Water		3/26/2014 10:03	3/27/2014 09:00	<input type="checkbox"/>
14031228-02	CO River DG	Surface Water		3/26/2014 10:16	3/27/2014 09:00	<input type="checkbox"/>
14031228-03	Spring 01	Surface Water		3/26/2014 10:32	3/27/2014 09:00	<input type="checkbox"/>
14031228-04	Pond 01	Surface Water		3/26/2014 10:57	3/27/2014 09:00	<input type="checkbox"/>
14031228-05	Spring UG	Surface Water		3/26/2014 11:07	3/27/2014 09:00	<input type="checkbox"/>
14031228-06	Trip Blank	Water		3/26/2014	3/27/2014 09:00	<input type="checkbox"/>



**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.26.14  
**WorkOrder:** 14031228

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 28-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.26.14

Sample ID: CO River UG

Collection Date: 3/26/2014 10:03 AM

Work Order: 14031228

Lab ID: 14031228-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/27/2014 05:51 PM
Ethylbenzene	ND		1.0	µg/L	1	3/27/2014 05:51 PM
m,p-Xylene	ND		2.0	µg/L	1	3/27/2014 05:51 PM
o-Xylene	ND		1.0	µg/L	1	3/27/2014 05:51 PM
Toluene	ND		1.0	µg/L	1	3/27/2014 05:51 PM
Xylenes, Total	ND		3.0	µg/L	1	3/27/2014 05:51 PM
Surr: 1,2-Dichloroethane-d4	98.6		70-120	%REC	1	3/27/2014 05:51 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	3/27/2014 05:51 PM
Surr: Dibromofluoromethane	97.0		85-115	%REC	1	3/27/2014 05:51 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	3/27/2014 05:51 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	3/27/2014 10:50 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/27/2014 03:02 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/28/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		10	mg/L	1	3/28/2014 08:20 AM

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

**ALS Group USA, Corp****Date:** 28-Mar-14**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 3.26.14**Sample ID:** CO River DG**Collection Date:** 3/26/2014 10:16 AM**Work Order:** 14031228**Lab ID:** 14031228-02**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/27/2014 06:17 PM
Ethylbenzene	ND		1.0	µg/L	1	3/27/2014 06:17 PM
m,p-Xylene	ND		2.0	µg/L	1	3/27/2014 06:17 PM
o-Xylene	ND		1.0	µg/L	1	3/27/2014 06:17 PM
Toluene	ND		1.0	µg/L	1	3/27/2014 06:17 PM
Xylenes, Total	ND		3.0	µg/L	1	3/27/2014 06:17 PM
Surr: 1,2-Dichloroethane-d4	99.4		70-120	%REC	1	3/27/2014 06:17 PM
Surr: 4-Bromofluorobenzene	97.8		75-120	%REC	1	3/27/2014 06:17 PM
Surr: Dibromofluoromethane	98.6		85-115	%REC	1	3/27/2014 06:17 PM
Surr: Toluene-d8	97.4		85-120	%REC	1	3/27/2014 06:17 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	150		3.0	mg/L	1	3/27/2014 10:50 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/27/2014 03:22 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/28/14	Analyst: <b>YM</b>
Total Dissolved Solids	490		10	mg/L	1	3/28/2014 08:20 AM

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

**ALS Group USA, Corp****Date:** 28-Mar-14**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 3.26.14**Work Order:** 14031228**Sample ID:** Spring 01**Lab ID:** 14031228-03**Collection Date:** 3/26/2014 10:32 AM**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/27/2014 06:43 PM
Ethylbenzene	ND		1.0	µg/L	1	3/27/2014 06:43 PM
m,p-Xylene	ND		2.0	µg/L	1	3/27/2014 06:43 PM
o-Xylene	ND		1.0	µg/L	1	3/27/2014 06:43 PM
Toluene	ND		1.0	µg/L	1	3/27/2014 06:43 PM
Xylenes, Total	ND		3.0	µg/L	1	3/27/2014 06:43 PM
Surr: 1,2-Dichloroethane-d4	98.1		70-120	%REC	1	3/27/2014 06:43 PM
Surr: 4-Bromofluorobenzene	99.4		75-120	%REC	1	3/27/2014 06:43 PM
Surr: Dibromofluoromethane	95.6		85-115	%REC	1	3/27/2014 06:43 PM
Surr: Toluene-d8	98.7		85-120	%REC	1	3/27/2014 06:43 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	25		3.0	mg/L	1	3/27/2014 10:50 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		5.0	mg/L	5	3/27/2014 03:42 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/28/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		10	mg/L	1	3/28/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 28-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.26.14

Sample ID: Pond 01

Collection Date: 3/26/2014 10:57 AM

Work Order: 14031228

Lab ID: 14031228-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/27/2014 07:09 PM
Ethylbenzene	ND		1.0	µg/L	1	3/27/2014 07:09 PM
m,p-Xylene	ND		2.0	µg/L	1	3/27/2014 07:09 PM
o-Xylene	ND		1.0	µg/L	1	3/27/2014 07:09 PM
Toluene	ND		1.0	µg/L	1	3/27/2014 07:09 PM
Xylenes, Total	ND		3.0	µg/L	1	3/27/2014 07:09 PM
Surr: 1,2-Dichloroethane-d4	97.9		70-120	%REC	1	3/27/2014 07:09 PM
Surr: 4-Bromofluorobenzene	98.7		75-120	%REC	1	3/27/2014 07:09 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	3/27/2014 07:09 PM
Surr: Toluene-d8	97.7		85-120	%REC	1	3/27/2014 07:09 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	35		3.0	mg/L	1	3/27/2014 10:50 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		5.0	mg/L	5	3/27/2014 04:43 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/28/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		10	mg/L	1	3/28/2014 08:20 AM

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

# ALS Group USA, Corp

Date: 28-Mar-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.26.14

Sample ID: Spring UG

Collection Date: 3/26/2014 11:07 AM

Work Order: 14031228

Lab ID: 14031228-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/27/2014 07:36 PM
Ethylbenzene	ND		1.0	µg/L	1	3/27/2014 07:36 PM
m,p-Xylene	ND		2.0	µg/L	1	3/27/2014 07:36 PM
o-Xylene	ND		1.0	µg/L	1	3/27/2014 07:36 PM
Toluene	ND		1.0	µg/L	1	3/27/2014 07:36 PM
Xylenes, Total	ND		3.0	µg/L	1	3/27/2014 07:36 PM
Surr: 1,2-Dichloroethane-d4	99.8		70-120	%REC	1	3/27/2014 07:36 PM
Surr: 4-Bromofluorobenzene	98.4		75-120	%REC	1	3/27/2014 07:36 PM
Surr: Dibromofluoromethane	97.9		85-115	%REC	1	3/27/2014 07:36 PM
Surr: Toluene-d8	97.0		85-120	%REC	1	3/27/2014 07:36 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	37		3.0	mg/L	1	3/27/2014 10:50 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		5.0	mg/L	5	3/27/2014 05:03 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 3/28/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	3/28/2014 08:20 AM

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

**ALS Group USA, Corp****Date:** 28-Mar-14**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 3.26.14**Work Order:** 14031228**Sample ID:** Trip Blank**Lab ID:** 14031228-06**Collection Date:** 3/26/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	3/27/2014 05:24 PM
Ethylbenzene	ND		1.0	µg/L	1	3/27/2014 05:24 PM
m,p-Xylene	ND		2.0	µg/L	1	3/27/2014 05:24 PM
o-Xylene	ND		1.0	µg/L	1	3/27/2014 05:24 PM
Toluene	ND		1.0	µg/L	1	3/27/2014 05:24 PM
Xylenes, Total	ND		3.0	µg/L	1	3/27/2014 05:24 PM
Surr: 1,2-Dichloroethane-d4	99.1		70-120	%REC	1	3/27/2014 05:24 PM
Surr: 4-Bromofluorobenzene	97.4		75-120	%REC	1	3/27/2014 05:24 PM
Surr: Dibromofluoromethane	96.0		85-115	%REC	1	3/27/2014 05:24 PM
Surr: Toluene-d8	97.4		85-120	%REC	1	3/27/2014 05:24 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031228  
**Project:** WPX PA 31-36 SW 3.26.14

**QC BATCH REPORT**

Batch ID: **R137863A** Instrument ID **VMS5** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBK1-140327-R137863A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/27/2014 02:46 PM</b>		
Client ID:		Run ID: <b>VMS5_140327A</b>				SeqNo: <b>2688727</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.75	0	20	0	98.8	70-120	0			
Surr: 4-Bromofluorobenzene	19.73	0	20	0	98.6	75-120	0			
Surr: Dibromofluoromethane	19.58	0	20	0	97.9	85-115	0			
Surr: Toluene-d8	19.75	0	20	0	98.8	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140327-R137863A</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/27/2014 01:52 PM</b>		
Client ID:		Run ID: <b>VMS5_140327A</b>				SeqNo: <b>2688726</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.09	1.0	20	0	105	80-120	0			
Ethylbenzene	20.13	1.0	20	0	101	75-125	0			
m,p-Xylene	39.6	2.0	40	0	99	75-130	0			
o-Xylene	19.68	1.0	20	0	98.4	80-120	0			
Toluene	19.74	1.0	20	0	98.7	75-120	0			
Xylenes, Total	59.28	3.0	60	0	98.8	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.41	0	20	0	97	70-120	0			
Surr: 4-Bromofluorobenzene	20.13	0	20	0	101	75-120	0			
Surr: Dibromofluoromethane	19.97	0	20	0	99.8	85-115	0			
Surr: Toluene-d8	19.68	0	20	0	98.4	85-120	0			

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



Client: HRL Compliance Solutions, Inc  
 Work Order: 14031228  
 Project: WPX PA 31-36 SW 3.26.14

## QC BATCH REPORT

Batch ID: **R137863A** Instrument ID **VMS5** Method: **SW8260**

MS					Sample ID: 14031213-03A MS			Units: µg/L		Analysis Date: 3/27/2014 11:59 PM		
Client ID:			Run ID: VMS5_140327A			SeqNo: 2688754		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	20.85	1.0	20	0	104	80-120		0				
Ethylbenzene	20.39	1.0	20	0	102	75-125		0				
m,p-Xylene	40.28	2.0	40	0	101	75-130		0				
o-Xylene	19.78	1.0	20	0	98.9	80-120		0				
Toluene	19.56	1.0	20	0	97.8	75-120		0				
Xylenes, Total	60.06	3.0	60	0	100	75-130		0				
Surr: 1,2-Dichloroethane-d4	19.61	0	20	0	98	70-120		0				
Surr: 4-Bromofluorobenzene	20.14	0	20	0	101	75-120		0				
Surr: Dibromofluoromethane	19.88	0	20	0	99.4	85-115		0				
Surr: Toluene-d8	19.56	0	20	0	97.8	85-120		0				

MSD					Sample ID: 14031213-03A MSD		Units: µg/L		Analysis Date: 3/28/2014 12:25 PM		
Client ID:			Run ID: VMS5_140327A			SeqNo: 2688756		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.38	1.0	20	0	96.9	80-120	20.85	7.31	30		
Ethylbenzene	19.43	1.0	20	0	97.2	75-125	20.39	4.82	30		
m,p-Xylene	38.63	2.0	40	0	96.6	75-130	40.28	4.18	30		
o-Xylene	19.09	1.0	20	0	95.4	80-120	19.78	3.55	30		
Toluene	18.28	1.0	20	0	91.4	75-120	19.56	6.77	30		
Xylenes, Total	57.72	3.0	60	0	96.2	75-130	60.06	3.97	30		
Surr: 1,2-Dichloroethane-d4	19.45	0	20	0	97.2	70-120	19.61	0.819	30		
Surr: 4-Bromofluorobenzene	19.98	0	20	0	99.9	75-120	20.14	0.798	30		
Surr: Dibromofluoromethane	19.86	0	20	0	99.3	85-115	19.88	0.101	30		
Surr: Toluene-d8	19.58	0	20	0	97.9	85-120	19.56	0.102	30		

The following samples were analyzed in this batch:

14031228-01A	14031228-02A	14031228-03A
14031228-04A	14031228-05A	14031228-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031228  
**Project:** WPX PA 31-36 SW 3.26.14

## QC BATCH REPORT

Batch ID: **56979**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-56979-56979</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/28/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140328A</b>				SeqNo: <b>2689152</b>		Prep Date: <b>3/28/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-56979-56979</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/28/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140328A</b>				SeqNo: <b>2689151</b>		Prep Date: <b>3/28/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      476      10      495      0      96.2      80-120      0

<b>DUP</b>		Sample ID: <b>14031117-07A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/28/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140328A</b>				SeqNo: <b>2689122</b>		Prep Date: <b>3/28/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      1004      20      0      0      0      0-0      980      2.42      20

<b>DUP</b>		Sample ID: <b>14031233-01D DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/28/2014 08:20 AM</b>		
Client ID:		Run ID: <b>TDS_140328A</b>				SeqNo: <b>2689142</b>		Prep Date: <b>3/28/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      17700      50      0      0      0      0-0      17790      0.479      20

The following samples were analyzed in this batch:

14031228-01B	14031228-02B	14031228-03B
14031228-04B	14031228-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031228  
**Project:** WPX PA 31-36 SW 3.26.14

## QC BATCH REPORT

Batch ID: **R137834**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140327-R137834</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 10:50 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140327D</b>				SeqNo: <b>2687195</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140327-R137834</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 10:50 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140327D</b>				SeqNo: <b>2687196</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      50.98      3.0      50      0      102      80-120      0

<b>MS</b>		Sample ID: <b>1403085-19A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 10:50 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140327D</b>				SeqNo: <b>2687198</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      224.9      3.0      50      185      80      75-125      0

<b>MSD</b>		Sample ID: <b>1403085-19A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 10:50 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140327D</b>				SeqNo: <b>2687199</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      229.9      3.0      50      185      90      75-125      224.9      2.2      20

The following samples were analyzed in this batch:

14031228-01B	14031228-02B	14031228-03B
14031228-04B	14031228-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031228  
**Project:** WPX PA 31-36 SW 3.26.14

## QC BATCH REPORT

Batch ID: **R137948**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R137948</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 08:40 AM</b>		
Client ID:		Run ID: <b>IC4_140327A</b>				SeqNo: <b>2689673</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R137948</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 09:00 AM</b>		
Client ID:		Run ID: <b>IC4_140327A</b>				SeqNo: <b>2689674</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.3      1.0      10      0      103      85-110      0

<b>MS</b>		Sample ID: <b>14031228-03B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 04:02 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>IC4_140327A</b>				SeqNo: <b>2689703</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      54.75      5.0      20      34.63      101      75-125      0

<b>MSD</b>		Sample ID: <b>14031228-03B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/27/2014 04:22 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>IC4_140327A</b>				SeqNo: <b>2689704</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      54.8      5.0      20      34.63      101      75-125      54.75      0.0958      20

The following samples were analyzed in this batch:

14031228-01B	14031228-02B	14031228-03B
14031228-04B	14031228-05B	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r8

WORKORDER  
#

14031228

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME WPX PA 31-36 SW 3-26-14

SAMPLER

Casey Richardson

DATE

3-26-14

TURNAROUND

24 Hour

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME HCSI

BILL TO COMPANY

WPX Energy

SEND REPORT TO Mark Mumby

INVOICE ATTN TO

Karolina Blaney

ADDRESS 2385 F 1/2 Road

ADDRESS

1058 County Road 215

CITY / STATE / ZIP Grand Junction, CO. 81505

CITY / STATE / ZIP

Parachute, CO 81635

PHONE 970-243-3271

PHONE

970-683-2295

FAX 970-243-3280

FAX

970-285-9573

E-MAIL mmumby@hrlcomp.com

E-MAIL

karolina.blaney@wpxenergy.com

Lab ID

Field ID

Matrix

Sample  
Date

Sample  
Time

#  
Bottles

Pres.

QC

BTEX

TDS

Chlorides

Sulfates

1

CO River UG

SW

3-26-14

1003

4

1,8

2

CO River DG

|

|

1016

|

|

3

Spring 01

|

|

1032

|

|

4

Pond 01

|

|

1057

|

|

5

Spring UG

|

|

1107

|

|

6

TRIP BLANK

|

|

|

|

|

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

Casey Richardson

Casey Richardson

3-26-14 1405

RECEIVED BY

N.M.

N.M.

3-26-14 1405

RELINQUISHED BY

N.M.

N.M.

3-26-14 1430

RECEIVED BY

KEITY WIERENCA

KEITY WIERENCA

3/27/14 0900

RELINQUISHED BY

RECEIVED BY

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 27-Mar-14 09:00

Work Order: 14031228

Received by: KRW

Checklist completed by Keith Wurenga 27-Mar-14  
eSignature Date

Reviewed by: Ann Preston 27-Mar-14  
eSignature Date

Matrices: Surface Water

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>3.6 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/27/2014 10:57:46 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 26MAR14  
ActWght: 58.0 LB  
CAD: 103923490/NET3490

Dims: 25 X 14 X 15 IN

SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

BILL RECIPIENT

HOLLAND, MI 49424

Delivery Address Bar Code



Ref # 1001-032614-3  
Invoice #  
PO #  
Dept #

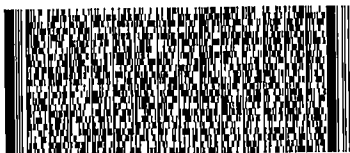
THU - 27 MAR 10:30A  
PRIORITY OVERNIGHT

TRK# 7983 4951 8481

0281

XX GRRA

49424  
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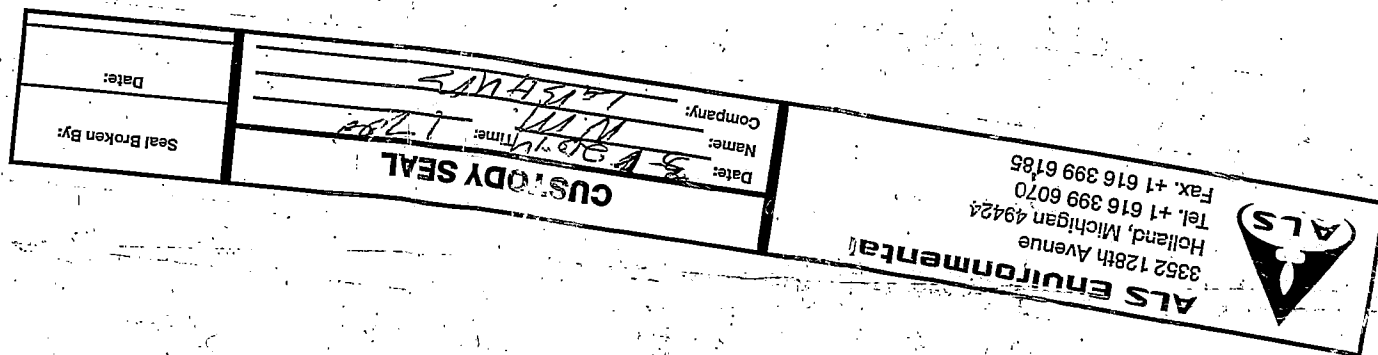


522G1/CC4/FZ20

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01-Apr-2014

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

Re: **WPX PA 31-36 SW 3.28.14**

Work Order: **14031373**

Dear Mark,

ALS Environmental received 6 samples on 29-Mar-2014 10:30 AM for the analyses presented in the following report.

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

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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.28.14  
**Work Order:** 14031373

## 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>
14031373-01	CO RIVER UG	Surface Water		3/28/2014 10:17	3/29/2014 10:30	<input type="checkbox"/>
14031373-02	CO RIVER DG	Surface Water		3/28/2014 10:05	3/29/2014 10:30	<input type="checkbox"/>
14031373-03	SPRING 01	Surface Water		3/28/2014 10:31	3/29/2014 10:30	<input type="checkbox"/>
14031373-04	POND 01	Surface Water		3/28/2014 10:45	3/29/2014 10:30	<input type="checkbox"/>
14031373-05	SPRING UG	Surface Water		3/28/2014 10:59	3/29/2014 10:30	<input type="checkbox"/>
14031373-06	Trip Blank	Water		3/28/2014 12:00	3/29/2014 10:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.28.14  
**WorkOrder:** 14031373

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 01-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.28.14

Sample ID: CO RIVER UG

Collection Date: 3/28/2014 10:17 AM

Work Order: 14031373

Lab ID: 14031373-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/31/2014 12:32 PM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2014 12:32 PM
m,p-Xylene	ND		2.0	µg/L	1	3/31/2014 12:32 PM
o-Xylene	ND		1.0	µg/L	1	3/31/2014 12:32 PM
Toluene	ND		1.0	µg/L	1	3/31/2014 12:32 PM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2014 12:32 PM
Surr: 1,2-Dichloroethane-d4	98.2		70-120	%REC	1	3/31/2014 12:32 PM
Surr: 4-Bromofluorobenzene	97.6		75-120	%REC	1	3/31/2014 12:32 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	3/31/2014 12:32 PM
Surr: Toluene-d8	99.6		85-120	%REC	1	3/31/2014 12:32 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	140		3.0	mg/L	1	3/31/2014 10:45 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	3/31/2014 08:13 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/1/14	Analyst: <b>AT</b>
Total Dissolved Solids	510		10	mg/L	1	4/1/2014 08:08 AM

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

# ALS Group USA, Corp

Date: 01-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.28.14

Sample ID: CO RIVER DG

Collection Date: 3/28/2014 10:05 AM

Work Order: 14031373

Lab ID: 14031373-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/31/2014 12:57 PM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2014 12:57 PM
m,p-Xylene	ND		2.0	µg/L	1	3/31/2014 12:57 PM
o-Xylene	ND		1.0	µg/L	1	3/31/2014 12:57 PM
Toluene	ND		1.0	µg/L	1	3/31/2014 12:57 PM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2014 12:57 PM
Surr: 1,2-Dichloroethane-d4	96.6		70-120	%REC	1	3/31/2014 12:57 PM
Surr: 4-Bromofluorobenzene	97.4		75-120	%REC	1	3/31/2014 12:57 PM
Surr: Dibromofluoromethane	98.6		85-115	%REC	1	3/31/2014 12:57 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	3/31/2014 12:57 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	140		3.0	mg/L	1	3/31/2014 10:45 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	3/31/2014 09:13 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/1/14	Analyst: <b>AT</b>
Total Dissolved Solids	510		10	mg/L	1	4/1/2014 08:08 AM

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

# ALS Group USA, Corp

Date: 01-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.28.14

Sample ID: SPRING 01

Collection Date: 3/28/2014 10:31 AM

Work Order: 14031373

Lab ID: 14031373-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/31/2014 01:21 PM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2014 01:21 PM
m,p-Xylene	ND		2.0	µg/L	1	3/31/2014 01:21 PM
o-Xylene	ND		1.0	µg/L	1	3/31/2014 01:21 PM
Toluene	ND		1.0	µg/L	1	3/31/2014 01:21 PM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2014 01:21 PM
Surr: 1,2-Dichloroethane-d4	98.7		70-120	%REC	1	3/31/2014 01:21 PM
Surr: 4-Bromofluorobenzene	98.8		75-120	%REC	1	3/31/2014 01:21 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	3/31/2014 01:21 PM
Surr: Toluene-d8	99.5		85-120	%REC	1	3/31/2014 01:21 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	10		3.0	mg/L	1	3/31/2014 10:45 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		5.0	mg/L	5	3/31/2014 09:34 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/1/14	Analyst: <b>AT</b>
Total Dissolved Solids	400		10	mg/L	1	4/1/2014 08:08 AM

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

**ALS Group USA, Corp**

Date: 01-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.28.14

Sample ID: POND 01

Collection Date: 3/28/2014 10:45 AM

Work Order: 14031373

Lab ID: 14031373-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/31/2014 01:45 PM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2014 01:45 PM
m,p-Xylene	ND		2.0	µg/L	1	3/31/2014 01:45 PM
o-Xylene	ND		1.0	µg/L	1	3/31/2014 01:45 PM
Toluene	ND		1.0	µg/L	1	3/31/2014 01:45 PM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2014 01:45 PM
Surr: 1,2-Dichloroethane-d4	98.6		70-120	%REC	1	3/31/2014 01:45 PM
Surr: 4-Bromofluorobenzene	96.0		75-120	%REC	1	3/31/2014 01:45 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/31/2014 01:45 PM
Surr: Toluene-d8	97.6		85-120	%REC	1	3/31/2014 01:45 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	18		3.0	mg/L	1	3/31/2014 10:45 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		5.0	mg/L	5	3/31/2014 09:54 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/1/14	Analyst: <b>AT</b>
Total Dissolved Solids	390		10	mg/L	1	4/1/2014 08:08 AM

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

**ALS Group USA, Corp**

Date: 01-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.28.14

Sample ID: SPRING UG

Collection Date: 3/28/2014 10:59 AM

Work Order: 14031373

Lab ID: 14031373-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/31/2014 02:10 PM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2014 02:10 PM
m,p-Xylene	ND		2.0	µg/L	1	3/31/2014 02:10 PM
o-Xylene	ND		1.0	µg/L	1	3/31/2014 02:10 PM
Toluene	ND		1.0	µg/L	1	3/31/2014 02:10 PM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2014 02:10 PM
Surr: 1,2-Dichloroethane-d4	98.4		70-120	%REC	1	3/31/2014 02:10 PM
Surr: 4-Bromofluorobenzene	97.2		75-120	%REC	1	3/31/2014 02:10 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	3/31/2014 02:10 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	3/31/2014 02:10 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	12		3.0	mg/L	1	3/31/2014 10:45 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		5.0	mg/L	5	3/31/2014 10:14 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/1/14	Analyst: <b>AT</b>
Total Dissolved Solids	510		10	mg/L	1	4/1/2014 08:08 AM

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

**ALS Group USA, Corp**

Date: 01-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 3.28.14**Work Order:** 14031373**Sample ID:** Trip Blank**Lab ID:** 14031373-06**Collection Date:** 3/28/2014 12:00 PM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	3/31/2014 12:08 PM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2014 12:08 PM
m,p-Xylene	ND		2.0	µg/L	1	3/31/2014 12:08 PM
o-Xylene	ND		1.0	µg/L	1	3/31/2014 12:08 PM
Toluene	ND		1.0	µg/L	1	3/31/2014 12:08 PM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2014 12:08 PM
Surr: 1,2-Dichloroethane-d4	96.0		70-120	%REC	1	3/31/2014 12:08 PM
Surr: 4-Bromofluorobenzene	95.9		75-120	%REC	1	3/31/2014 12:08 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	3/31/2014 12:08 PM
Surr: Toluene-d8	98.7		85-120	%REC	1	3/31/2014 12:08 PM

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031373  
**Project:** WPX PA 31-36 SW 3.28.14

**QC BATCH REPORT**

Batch ID: **R138025** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBKWK1-140331-R138025</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/31/2014 11:43 AM</b>		
Client ID:		Run ID: <b>VMS8_140331A</b>				SeqNo: <b>2693467</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.34	0	20	0	96.7	70-120	0			
Surr: 4-Bromofluorobenzene	19.79	0	20	0	99	75-120	0			
Surr: Dibromofluoromethane	19.49	0	20	0	97.4	85-115	0			
Surr: Toluene-d8	19.98	0	20	0	99.9	85-120	0			

LCS		Sample ID: <b>VLCSW1-140331-R138025</b>				Units: <b>µg/L</b>		Analysis Date: <b>3/31/2014 10:30 AM</b>		
Client ID:		Run ID: <b>VMS8_140331A</b>				SeqNo: <b>2693466</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.5	1.0	20	0	97.5	80-120	0			
Ethylbenzene	19.44	1.0	20	0	97.2	75-125	0			
m,p-Xylene	38.28	2.0	40	0	95.7	75-130	0			
o-Xylene	19.19	1.0	20	0	96	80-120	0			
Toluene	18.69	1.0	20	0	93.4	75-120	0			
Xylenes, Total	57.47	3.0	60	0	95.8	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.5	0	20	0	97.5	70-120	0			
Surr: 4-Bromofluorobenzene	19.89	0	20	0	99.4	75-120	0			
Surr: Dibromofluoromethane	20.61	0	20	0	103	85-115	0			
Surr: Toluene-d8	19.62	0	20	0	98.1	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 14031373  
 Project: WPX PA 31-36 SW 3.28.14

## QC BATCH REPORT

Batch ID: **R138025** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 14031373-01A MS			Units: µg/L		Analysis Date: 3/31/2014 08:22 PM	
Client ID: CO RIVER UG			Run ID: VMS8_140331A			SeqNo: 2693474		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.54	1.0	20	0	103	80-120		0			
Ethylbenzene	19.35	1.0	20	0	96.8	75-125		0			
m,p-Xylene	38.22	2.0	40	0	95.6	75-130		0			
o-Xylene	19.25	1.0	20	0	96.2	80-120		0			
Toluene	18.98	1.0	20	0	94.9	75-120		0			
Xylenes, Total	57.47	3.0	60	0	95.8	75-130		0			
Surr: 1,2-Dichloroethane-d4	20.17	0	20	0	101	70-120		0			
Surr: 4-Bromofluorobenzene	20.1	0	20	0	100	75-120		0			
Surr: Dibromofluoromethane	20.5	0	20	0	102	85-115		0			
Surr: Toluene-d8	19.35	0	20	0	96.8	85-120		0			

MSD				Sample ID: 14031373-01A MSD			Units: µg/L		Analysis Date: 3/31/2014 08:46 PM		
Client ID: CO RIVER UG			Run ID: VMS8_140331A			SeqNo: 2693475		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.01	1.0	20	0	100	80-120	20.54	2.61	30		
Ethylbenzene	19.45	1.0	20	0	97.2	75-125	19.35	0.515	30		
m,p-Xylene	38.23	2.0	40	0	95.6	75-130	38.22	0.0262	30		
o-Xylene	19.17	1.0	20	0	95.8	80-120	19.25	0.416	30		
Toluene	19.25	1.0	20	0	96.2	75-120	18.98	1.41	30		
Xylenes, Total	57.4	3.0	60	0	95.7	75-130	57.47	0.122	30		
Surr: 1,2-Dichloroethane-d4	20.16	0	20	0	101	70-120	20.17	0.0496	30		
Surr: 4-Bromofluorobenzene	20.23	0	20	0	101	75-120	20.1	0.645	30		
Surr: Dibromofluoromethane	20.05	0	20	0	100	85-115	20.5	2.22	30		
Surr: Toluene-d8	19.84	0	20	0	99.2	85-120	19.35	2.5	30		

The following samples were analyzed in this batch:

14031373-01A	14031373-02A	14031373-03A
14031373-04A	14031373-05A	14031373-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031373  
**Project:** WPX PA 31-36 SW 3.28.14

## QC BATCH REPORT

Batch ID: **57071**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57071-57071</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 08:08 AM</b>		
Client ID:		Run ID: <b>TDS_140401A</b>				SeqNo: <b>2693924</b>		Prep Date: <b>4/1/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57071-57071</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 08:08 AM</b>		
Client ID:		Run ID: <b>TDS_140401A</b>				SeqNo: <b>2693925</b>		Prep Date: <b>4/1/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      497      10      495      0      100      80-120      0

<b>DUP</b>		Sample ID: <b>14031139-01C DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 08:08 AM</b>		
Client ID:		Run ID: <b>TDS_140401A</b>				SeqNo: <b>2693865</b>		Prep Date: <b>4/1/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      952      20      0      0      0      0-0      890      6.73      20

<b>DUP</b>		Sample ID: <b>14031139-05C DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 08:08 AM</b>		
Client ID:		Run ID: <b>TDS_140401A</b>				SeqNo: <b>2693872</b>		Prep Date: <b>4/1/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      1930      20      0      0      0      0-0      2008      3.96      20

The following samples were analyzed in this batch:

14031373-01B	14031373-02B	14031373-03B
14031373-04B	14031373-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031373  
**Project:** WPX PA 31-36 SW 3.28.14

## QC BATCH REPORT

Batch ID: **R138043**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138043</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 04:10 AM</b>		
Client ID:		Run ID: <b>IC3_140331A</b>				SeqNo: <b>2691725</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R138043</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 04:30 AM</b>		
Client ID:		Run ID: <b>IC3_140331A</b>				SeqNo: <b>2691726</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      9.906      1.0      10      0      99.1      85-110      0

<b>MS</b>		Sample ID: <b>14031373-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 08:33 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC3_140331A</b>				SeqNo: <b>2691738</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      149.7      10      50      102.9      93.6      75-125      0

<b>MSD</b>		Sample ID: <b>14031373-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 08:53 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC3_140331A</b>				SeqNo: <b>2691739</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      148.5      10      50      102.9      91.1      75-125      149.7      0.819      20

The following samples were analyzed in this batch:

14031373-01B	14031373-02B	14031373-03B
14031373-04B	14031373-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14031373  
**Project:** WPX PA 31-36 SW 3.28.14

## QC BATCH REPORT

Batch ID: **R138101**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140331-R138101</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 10:45 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140331Q</b>				SeqNo: <b>2692783</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140331-R138101</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 10:45 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140331Q</b>				SeqNo: <b>2692784</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.98      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>14031373-01BMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 10:45 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140331Q</b>				SeqNo: <b>2692786</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      192.4      3.0      50      137.5      110      75-125      0

<b>MSD</b>		Sample ID: <b>14031373-01BMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>3/31/2014 10:45 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140331Q</b>				SeqNo: <b>2692787</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      192.4      3.0      50      137.5      110      75-125      192.4      0      20

The following samples were analyzed in this batch:

14031373-01B	14031373-02B	14031373-03B
14031373-04B	14031373-05B	

**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  
#

14031373

PROJECT NAME		WPX PA 31-36 SW		SAMPLER		Finn Whiting		DATE		3/28/2014		PAGE		1 of 1	
PROJECT No.				SITE ID		PA 31-36		TURNAROUND		24 HOUR		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HRL Compliance Solutions, Inc		EDD FORMAT											
SEND REPORT TO		Mark Mumby		PURCHASE ORDER											
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		WPX Energy									
CITY / STATE / ZIP		Grand Junction, CO, 81505		INVOICE ATTN TO		Karolina Blaney									
PHONE		970-243-3271		ADDRESS		1058 Co. Rd. 215									
FAX		970-243-3280		CITY / STATE / ZIP		Parachute, CO 81635									
E-MAIL		mmumby@hrlcomp.com		PHONE		970-683-2295									
				FAX											
				E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	CHLORIDE	SULFATES				
1	CO RIVER UG	SW	3/28/2014	1017	4	1,8		x	x	x	x				
2	CO RIVER DG	SW	3/28/2014	1005	4	1,8		x	x	x	x				
3	SPRING 01	SW	3/28/2014	1031	4	1,8		x	x	x	x				
4	POND 01	SW	3/28/2014	1045	4	1,8		x	x	x	x				
5	SPRING UG	SW	3/28/2014	1059	4	1,8		x	x	x	x				
6	TRIP BLANK	L	3/28/2014	12:00	4	1,8		x							

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
<p>3.4'c</p>	<input type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Finn Whiting	3/28/2014	1136
RECEIVED BY	Colby Garner	3/28/14	1136
RELINQUISHED BY	Colby Garner	3/28/14	1220
RECEIVED BY	Diane F. Shaw	3/29/14	1030

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 29-Mar-14 10:30

Work Order: 14031373

Received by: DS

Checklist completed by Diane Shaw 29-Mar-14  
eSignature Date

Reviewed by: Ann Preston 31-Mar-14  
eSignature Date

Matrices: Surface Water

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>3.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>3/29/2014 12:58:30 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (970) 424-4749  
Lab Hub, LLC  
127 E First Street  
PARACHUTE, CO 81635

Origin ID: RILA



Ship Date: 28MAR14  
ActWgt: 12.0 LB  
CAD: 10:523490 616 6185

Order # 12121314

Delivery Address Bar Code



Ref # 1001 J32614 1  
Invoice #  
PO #  
Dept #

SHIP TO: (616) 399-6070  
Sample receiving  
ALS Holland  
3352 128TH AVE

BILL RECIPIENT

HOLLAND, MI 49424

TU DAY 12:00P  
PRIORITY OVERNIGHT

TRKW 79ES 7:45 0703  
0201

X0 GRRR

49424  
MI-US  
GRR



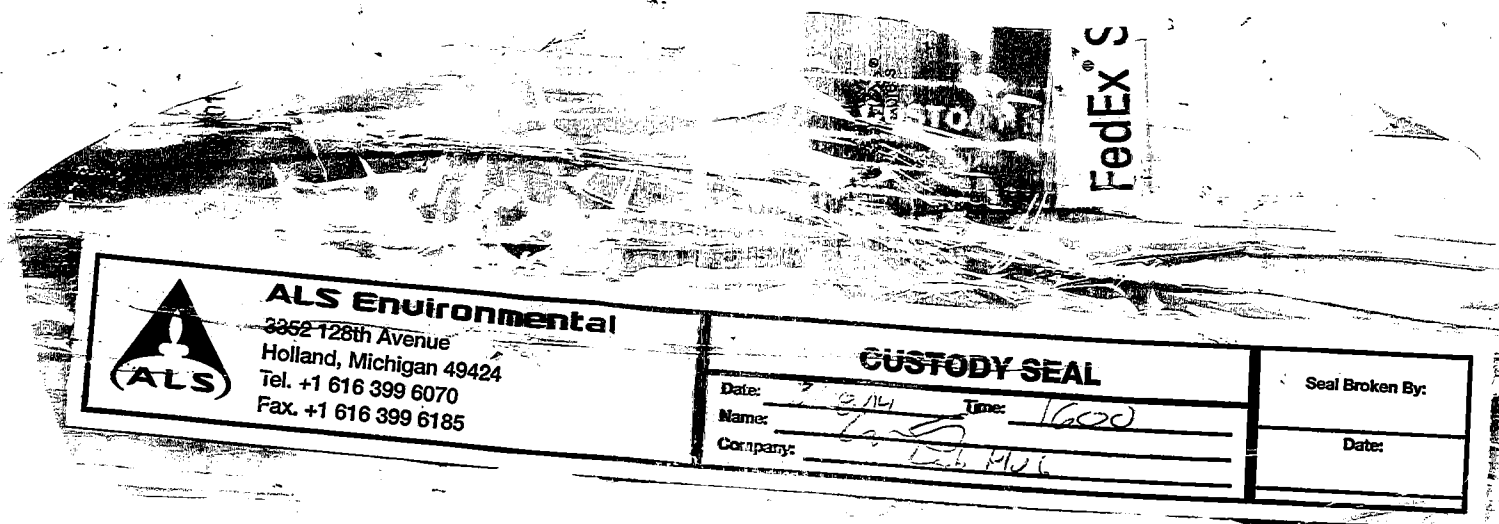
020100047220

## 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 stick 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.

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02-Apr-2014

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

Re: **WPX PA 31-36 SW 3.31.14**

Work Order: **1404020**

Dear Mark,

ALS Environmental received 6 samples on 01-Apr-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.31.14  
**Work Order:** 1404020

## 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>
1404020-01	CO River UG	Surface Water		3/31/2014 10:48	4/1/2014 09:30	<input type="checkbox"/>
1404020-02	CO River DG	Surface Water		3/31/2014 10:48	4/1/2014 09:30	<input type="checkbox"/>
1404020-03	Spring 01	Surface Water		3/31/2014 11:02	4/1/2014 09:30	<input type="checkbox"/>
1404020-04	Pond 01	Surface Water		3/31/2014 11:34	4/1/2014 09:30	<input type="checkbox"/>
1404020-05	Spring UG	Surface Water		3/31/2014 11:47	4/1/2014 09:30	<input type="checkbox"/>
1404020-06	Trip Blank	Water		3/31/2014	4/1/2014 09:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 3.31.14  
**WorkOrder:** 1404020

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 02-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.31.14

Sample ID: CO River UG

Collection Date: 3/31/2014 10:48 AM

Work Order: 1404020

Lab ID: 1404020-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/1/2014 04:02 PM
Ethylbenzene	ND		1.0	µg/L	1	4/1/2014 04:02 PM
m,p-Xylene	ND		2.0	µg/L	1	4/1/2014 04:02 PM
o-Xylene	ND		1.0	µg/L	1	4/1/2014 04:02 PM
Toluene	ND		1.0	µg/L	1	4/1/2014 04:02 PM
Xylenes, Total	ND		3.0	µg/L	1	4/1/2014 04:02 PM
Surr: 1,2-Dichloroethane-d4	94.8		70-120	%REC	1	4/1/2014 04:02 PM
Surr: 4-Bromofluorobenzene	99.2		75-120	%REC	1	4/1/2014 04:02 PM
Surr: Dibromofluoromethane	96.5		85-115	%REC	1	4/1/2014 04:02 PM
Surr: Toluene-d8	94.2		85-120	%REC	1	4/1/2014 04:02 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	140		3.0	mg/L	1	4/1/2014 03:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	4/1/2014 12:09 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/2/14	Analyst: <b>KF</b>
Total Dissolved Solids	510		10	mg/L	1	4/2/2014 07:55 AM

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

# ALS Group USA, Corp

Date: 02-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.31.14

Sample ID: CO River DG

Collection Date: 3/31/2014 10:48 AM

Work Order: 1404020

Lab ID: 1404020-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/1/2014 04:28 PM
Ethylbenzene	ND		1.0	µg/L	1	4/1/2014 04:28 PM
m,p-Xylene	ND		2.0	µg/L	1	4/1/2014 04:28 PM
o-Xylene	ND		1.0	µg/L	1	4/1/2014 04:28 PM
Toluene	ND		1.0	µg/L	1	4/1/2014 04:28 PM
Xylenes, Total	ND		3.0	µg/L	1	4/1/2014 04:28 PM
Surr: 1,2-Dichloroethane-d4	95.4		70-120	%REC	1	4/1/2014 04:28 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	4/1/2014 04:28 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	4/1/2014 04:28 PM
Surr: Toluene-d8	94.0		85-120	%REC	1	4/1/2014 04:28 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	160		3.0	mg/L	1	4/1/2014 03:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	4/1/2014 12:29 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/2/14	Analyst: <b>KF</b>
Total Dissolved Solids	520		10	mg/L	1	4/2/2014 07:55 AM

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

# ALS Group USA, Corp

Date: 02-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.31.14

Sample ID: Spring 01

Collection Date: 3/31/2014 11:02 AM

Work Order: 1404020

Lab ID: 1404020-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/1/2014 04:54 PM
Ethylbenzene	ND		1.0	µg/L	1	4/1/2014 04:54 PM
m,p-Xylene	ND		2.0	µg/L	1	4/1/2014 04:54 PM
o-Xylene	ND		1.0	µg/L	1	4/1/2014 04:54 PM
Toluene	ND		1.0	µg/L	1	4/1/2014 04:54 PM
Xylenes, Total	ND		3.0	µg/L	1	4/1/2014 04:54 PM
Surr: 1,2-Dichloroethane-d4	95.0		70-120	%REC	1	4/1/2014 04:54 PM
Surr: 4-Bromofluorobenzene	98.8		75-120	%REC	1	4/1/2014 04:54 PM
Surr: Dibromofluoromethane	96.2		85-115	%REC	1	4/1/2014 04:54 PM
Surr: Toluene-d8	93.8		85-120	%REC	1	4/1/2014 04:54 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	9.5		3.0	mg/L	1	4/1/2014 03:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		5.0	mg/L	5	4/1/2014 12:50 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/2/14	Analyst: <b>KF</b>
Total Dissolved Solids	400		10	mg/L	1	4/2/2014 07:55 AM

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

# ALS Group USA, Corp

Date: 02-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.31.14

Sample ID: Pond 01

Collection Date: 3/31/2014 11:34 AM

Work Order: 1404020

Lab ID: 1404020-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/1/2014 05:20 PM
Ethylbenzene	ND		1.0	µg/L	1	4/1/2014 05:20 PM
m,p-Xylene	ND		2.0	µg/L	1	4/1/2014 05:20 PM
o-Xylene	ND		1.0	µg/L	1	4/1/2014 05:20 PM
Toluene	ND		1.0	µg/L	1	4/1/2014 05:20 PM
Xylenes, Total	ND		3.0	µg/L	1	4/1/2014 05:20 PM
Surr: 1,2-Dichloroethane-d4	95.6		70-120	%REC	1	4/1/2014 05:20 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	4/1/2014 05:20 PM
Surr: Dibromofluoromethane	96.0		85-115	%REC	1	4/1/2014 05:20 PM
Surr: Toluene-d8	93.6		85-120	%REC	1	4/1/2014 05:20 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	16		3.0	mg/L	1	4/1/2014 03:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	40		5.0	mg/L	5	4/1/2014 01:10 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/2/14	Analyst: <b>KF</b>
Total Dissolved Solids	380		10	mg/L	1	4/2/2014 07:55 AM

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

**ALS Group USA, Corp**

Date: 02-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.31.14

Sample ID: Spring UG

Collection Date: 3/31/2014 11:47 AM

Work Order: 1404020

Lab ID: 1404020-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/1/2014 05:46 PM
Ethylbenzene	ND		1.0	µg/L	1	4/1/2014 05:46 PM
m,p-Xylene	ND		2.0	µg/L	1	4/1/2014 05:46 PM
o-Xylene	ND		1.0	µg/L	1	4/1/2014 05:46 PM
Toluene	ND		1.0	µg/L	1	4/1/2014 05:46 PM
Xylenes, Total	ND		3.0	µg/L	1	4/1/2014 05:46 PM
Surr: 1,2-Dichloroethane-d4	95.0		70-120	%REC	1	4/1/2014 05:46 PM
Surr: 4-Bromofluorobenzene	102		75-120	%REC	1	4/1/2014 05:46 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	4/1/2014 05:46 PM
Surr: Toluene-d8	94.2		85-120	%REC	1	4/1/2014 05:46 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	11		3.0	mg/L	1	4/1/2014 03:00 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		5.0	mg/L	5	4/1/2014 02:11 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/2/14	Analyst: <b>KF</b>
Total Dissolved Solids	450		10	mg/L	1	4/2/2014 07:55 AM

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



**ALS Group USA, Corp**

Date: 02-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 3.31.14

Work Order: 1404020

Sample ID: Trip Blank

Lab ID: 1404020-06

Collection Date: 3/31/2014

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/1/2014 06:12 PM
Ethylbenzene	ND		1.0	µg/L	1	4/1/2014 06:12 PM
m,p-Xylene	ND		2.0	µg/L	1	4/1/2014 06:12 PM
o-Xylene	ND		1.0	µg/L	1	4/1/2014 06:12 PM
Toluene	ND		1.0	µg/L	1	4/1/2014 06:12 PM
Xylenes, Total	ND		3.0	µg/L	1	4/1/2014 06:12 PM
Surr: 1,2-Dichloroethane-d4	96.4		70-120	%REC	1	4/1/2014 06:12 PM
Surr: 4-Bromofluorobenzene	99.6		75-120	%REC	1	4/1/2014 06:12 PM
Surr: Dibromofluoromethane	96.0		85-115	%REC	1	4/1/2014 06:12 PM
Surr: Toluene-d8	93.3		85-120	%REC	1	4/1/2014 06:12 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404020  
**Project:** WPX PA 31-36 SW 3.31.14

**QC BATCH REPORT**

Batch ID: **R138167A** Instrument ID **VMS5** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBK1-140401-R138167A</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/1/2014 02:44 PM</b>		
Client ID:		Run ID: <b>VMS5_140401A</b>				SeqNo: <b>2695245</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	18.94	0	20	0	94.7	70-120	0			
Surr: 4-Bromofluorobenzene	19.61	0	20	0	98	75-120	0			
Surr: Dibromofluoromethane	19.29	0	20	0	96.4	85-115	0			
Surr: Toluene-d8	18.54	0	20	0	92.7	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140401-R138167A</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/1/2014 01:26 PM</b>		
Client ID:		Run ID: <b>VMS5_140401A</b>				SeqNo: <b>2695243</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.74	1.0	20	0	109	80-120	0			
Ethylbenzene	19.59	1.0	20	0	98	75-125	0			
m,p-Xylene	38.3	2.0	40	0	95.8	75-130	0			
o-Xylene	19.11	1.0	20	0	95.6	80-120	0			
Toluene	19.36	1.0	20	0	96.8	75-120	0			
Xylenes, Total	57.41	3.0	60	0	95.7	75-130	0			
Surr: 1,2-Dichloroethane-d4	18.85	0	20	0	94.2	70-120	0			
Surr: 4-Bromofluorobenzene	20.31	0	20	0	102	75-120	0			
Surr: Dibromofluoromethane	19.85	0	20	0	99.2	85-115	0			
Surr: Toluene-d8	18.83	0	20	0	94.2	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404020  
 Project: WPX PA 31-36 SW 3.31.14

## QC BATCH REPORT

Batch ID: **R138167A** Instrument ID **VMS5** Method: **SW8260**

MS					Sample ID: 1404020-02A MS			Units: µg/L		Analysis Date: 4/1/2014 11:25 PM	
Client ID: CO River DG			Run ID: VMS5_140401A			SeqNo: 2695260		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.44	1.0	20	0	107	80-120	0				
Ethylbenzene	20.15	1.0	20	0	101	75-125	0				
m,p-Xylene	39.21	2.0	40	0	98	75-130	0				
o-Xylene	19.3	1.0	20	0	96.5	80-120	0				
Toluene	19.56	1.0	20	0	97.8	75-120	0				
Xylenes, Total	58.51	3.0	60	0	97.5	75-130	0				
Surr: 1,2-Dichloroethane-d4	18.79	0	20	0	94	70-120	0				
Surr: 4-Bromofluorobenzene	21.52	0	20	0	108	75-120	0				
Surr: Dibromofluoromethane	19.51	0	20	0	97.6	85-115	0				
Surr: Toluene-d8	18.81	0	20	0	94	85-120	0				

MSD				Sample ID: 1404020-02A MSD			Units: µg/L		Analysis Date: 4/1/2014 11:51 PM		
Client ID: CO River DG			Run ID: VMS5_140401A			SeqNo: 2695261		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.39	1.0	20	0	102	80-120	21.44	5.02	30		
Ethylbenzene	19.3	1.0	20	0	96.5	75-125	20.15	4.31	30		
m,p-Xylene	38.39	2.0	40	0	96	75-130	39.21	2.11	30		
o-Xylene	18.92	1.0	20	0	94.6	80-120	19.3	1.99	30		
Toluene	18.75	1.0	20	0	93.8	75-120	19.56	4.23	30		
Xylenes, Total	57.31	3.0	60	0	95.5	75-130	58.51	2.07	30		
Surr: 1,2-Dichloroethane-d4	18.93	0	20	0	94.6	70-120	18.79	0.742	30		
Surr: 4-Bromofluorobenzene	21.36	0	20	0	107	75-120	21.52	0.746	30		
Surr: Dibromofluoromethane	19.6	0	20	0	98	85-115	19.51	0.46	30		
Surr: Toluene-d8	18.72	0	20	0	93.6	85-120	18.81	0.48	30		

The following samples were analyzed in this batch:

1404020-01A	1404020-02A	1404020-03A
1404020-04A	1404020-05A	1404020-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404020  
**Project:** WPX PA 31-36 SW 3.31.14

## QC BATCH REPORT

Batch ID: **57155**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57155-57155</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/2/2014 07:55 AM</b>		
Client ID:		Run ID: <b>TDS_140402A</b>				SeqNo: <b>2695852</b>		Prep Date: <b>4/2/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57155-57155</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/2/2014 07:55 AM</b>		
Client ID:		Run ID: <b>TDS_140402A</b>				SeqNo: <b>2695853</b>		Prep Date: <b>4/2/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      478      10      495      0      96.6      80-120      0

<b>DUP</b>		Sample ID: <b>1404020-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/2/2014 07:55 AM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>TDS_140402A</b>				SeqNo: <b>2695822</b>		Prep Date: <b>4/2/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      531      10      0      0      0      0-0      512      3.64      20

The following samples were analyzed in this batch:

1404020-01B	1404020-02B	1404020-03B
1404020-04B	1404020-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404020  
**Project:** WPX PA 31-36 SW 3.31.14

## QC BATCH REPORT

Batch ID: **R138197**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138197</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 09:10 AM</b>		
Client ID:		Run ID: <b>IC3_140401A</b>				SeqNo: <b>2694666</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R138197</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 09:30 AM</b>		
Client ID:		Run ID: <b>IC3_140401A</b>				SeqNo: <b>2694667</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10      1.0      10      0      100      85-110      0

<b>MS</b>		Sample ID: <b>1404020-04B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 01:30 PM</b>		
Client ID: <b>Pond 01</b>		Run ID: <b>IC3_140401A</b>				SeqNo: <b>2694673</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      59.72      5.0      20      39.83      99.5      75-125      0

<b>MSD</b>		Sample ID: <b>1404020-04B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 01:50 PM</b>		
Client ID: <b>Pond 01</b>		Run ID: <b>IC3_140401A</b>				SeqNo: <b>2694674</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      60.21      5.0      20      39.83      102      75-125      59.72      0.815      20

The following samples were analyzed in this batch:

1404020-01B	1404020-02B	1404020-03B
1404020-04B	1404020-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404020  
**Project:** WPX PA 31-36 SW 3.31.14

## QC BATCH REPORT

Batch ID: **R138256**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140401-R138256</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 03:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140401U</b>				SeqNo: <b>2696567</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140401-R138256</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 03:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140401U</b>				SeqNo: <b>2696568</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      49.98      3.0      50      0      100      80-120      0

<b>MS</b>		Sample ID: <b>1404020-03BMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 03:00 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>WETCHEM_140401U</b>				SeqNo: <b>2696572</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      57.48      3.0      50      9.49      96      75-125      0

<b>MSD</b>		Sample ID: <b>1404020-03BMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/1/2014 03:00 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>WETCHEM_140401U</b>				SeqNo: <b>2696573</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      58.48      3.0      50      9.49      98      75-125      57.48      1.72      20

The following samples were analyzed in this batch:

1404020-01B	1404020-02B	1404020-03B
1404020-04B	1404020-05B	

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-8070 FX: (616) 399-8185

## Chain-of-Custody

Form 202r8

WORKORDER #

1404020

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME WPX PA 31-38 SW 3-31-14

SAMPLER

Casey Richardson

DATE

3-31-14

TURNAROUND

24 Hour

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME HCSI

BILL TO COMPANY WPX Energy

SEND REPORT TO Mark Mumby

INVOICE ATTN TO Karolina Blaney

ADDRESS 2385 F 1/2 Road

ADDRESS 1058 County Road 215

CITY / STATE / ZIP Grand Junction, CO. 81505

CITY / STATE / ZIP Parachute, CO 81635

PHONE 970-243-3271

PHONE 970-683-2295

FAX 970-243-3280

FAX 970-285-9573

E-MAIL mmumby@hrcorp.com

E-MAIL karolina.blaney@wpxenergy.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

# Bottles

Pres.

QC

BTEX

TDS

Chlorides

Sulfates

01 CO River UG

SW

3-31-14

1048

4

1.8

✓

✓

✓

✓

02 CO River DG

03 Spring 01

04 Pond 01

05 Spring UG

06 Trip Blank

W

3-31-14

—

1

1.8

✓

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

or 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)

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

Casey Richardson

3-31-14

1250

RECEIVED BY

Colby Kerner

3-31-14

1250

RELINQUISHED BY

Colby Kerner

3-31-14

1300

RECEIVED BY

Colby Kerner

RELINQUISHED BY

Colby Kerner

RECEIVED BY

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

Sample Receipt Checklist

Client Name: HRL

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

Work Order: 1404020

Received by: JR

Checklist completed by Joseph Ribar  
eSignature

01-Apr-14  
Date

Reviewed by: Ann Preston  
eSignature

01-Apr-14  
Date

Matrices: surface water

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>3.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/1/2014 11:15:52 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



 <b>ALS Environmental</b> 3362 128th Avenue Holland, Michigan 49424 Tel. +1 616 399 6070 Fax. +1 616 399 6070	<b>CUSTODY SEAL</b>		Seal Broken By:
	Date: <u>3/7/14</u>	Time: <u>1300</u>	Date:
	Name: <u>Cedric</u>		
	Company: <u>Le-6 Lb</u>		

1983 9466 3928  
**XX GRRRA**  
 01 APR 10:30A  
 PRIORITY OVERNIGHT  
 49424  
 MI US  
 GRR

9466 3928 01 APR 02:04  
 51201 7888 0200

RT	<b>828</b>	<b>5</b>	<b>B</b>
ST	<b>14</b>		3928 04.01

320



04-Apr-2014

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

Re: **WPX PA 31-36 SW 4.2.14**

Work Order: **1404178**

Dear Mark,

ALS Environmental received 6 samples on 03-Apr-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 17.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.2.14  
**Work Order:** 1404178

## 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>
1404178-01	CO RIVER UG	Surface Water		4/2/2014 10:32	4/3/2014 10:00	<input type="checkbox"/>
1404178-02	CO RIVER DG	Surface Water		4/2/2014 10:42	4/3/2014 10:00	<input type="checkbox"/>
1404178-03	SPRING 01	Surface Water		4/2/2014 10:50	4/3/2014 10:00	<input type="checkbox"/>
1404178-04	POND 01	Surface Water		4/2/2014 11:00	4/3/2014 10:00	<input type="checkbox"/>
1404178-05	SPRING UG	Surface Water		4/2/2014 11:10	4/3/2014 10:00	<input type="checkbox"/>
1404178-06	Trip Blank	Water		4/2/2014	4/3/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.2.14  
**WorkOrder:** 1404178

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 04-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.2.14

Sample ID: CO RIVER UG

Collection Date: 4/2/2014 10:32 AM

Work Order: 1404178

Lab ID: 1404178-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	4/3/2014 05:20 PM
Ethylbenzene	ND		1.0	µg/L	1	4/3/2014 05:20 PM
m,p-Xylene	ND		2.0	µg/L	1	4/3/2014 05:20 PM
o-Xylene	ND		1.0	µg/L	1	4/3/2014 05:20 PM
Toluene	ND		1.0	µg/L	1	4/3/2014 05:20 PM
Xylenes, Total	ND		3.0	µg/L	1	4/3/2014 05:20 PM
Surr: 1,2-Dichloroethane-d4	94.8		70-120	%REC	1	4/3/2014 05:20 PM
Surr: 4-Bromofluorobenzene	96.8		75-120	%REC	1	4/3/2014 05:20 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	4/3/2014 05:20 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	4/3/2014 05:20 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	4/3/2014 03:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ND</b>
Sulfate	99		10	mg/L	10	4/3/2014 05:28 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	480		10	mg/L	1	4/4/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 04-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.2.14

Sample ID: CO RIVER DG

Collection Date: 4/2/2014 10:42 AM

Work Order: 1404178

Lab ID: 1404178-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	4/3/2014 05:44 PM
Ethylbenzene	ND		1.0	µg/L	1	4/3/2014 05:44 PM
m,p-Xylene	ND		2.0	µg/L	1	4/3/2014 05:44 PM
o-Xylene	ND		1.0	µg/L	1	4/3/2014 05:44 PM
Toluene	ND		1.0	µg/L	1	4/3/2014 05:44 PM
Xylenes, Total	ND		3.0	µg/L	1	4/3/2014 05:44 PM
Surr: 1,2-Dichloroethane-d4	95.6		70-120	%REC	1	4/3/2014 05:44 PM
Surr: 4-Bromofluorobenzene	98.1		75-120	%REC	1	4/3/2014 05:44 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	4/3/2014 05:44 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	4/3/2014 05:44 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	4/3/2014 03:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ND</b>
Sulfate	94		10	mg/L	10	4/3/2014 06:28 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	4/4/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 04-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.2.14

Sample ID: SPRING 01

Collection Date: 4/2/2014 10:50 AM

Work Order: 1404178

Lab ID: 1404178-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	4/3/2014 06:09 PM
Ethylbenzene	ND		1.0	µg/L	1	4/3/2014 06:09 PM
m,p-Xylene	ND		2.0	µg/L	1	4/3/2014 06:09 PM
o-Xylene	ND		1.0	µg/L	1	4/3/2014 06:09 PM
Toluene	ND		1.0	µg/L	1	4/3/2014 06:09 PM
Xylenes, Total	ND		3.0	µg/L	1	4/3/2014 06:09 PM
Surr: 1,2-Dichloroethane-d4	97.0		70-120	%REC	1	4/3/2014 06:09 PM
Surr: 4-Bromofluorobenzene	98.5		75-120	%REC	1	4/3/2014 06:09 PM
Surr: Dibromofluoromethane	98.6		85-115	%REC	1	4/3/2014 06:09 PM
Surr: Toluene-d8	98.8		85-120	%REC	1	4/3/2014 06:09 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	4/3/2014 03:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ND</b>
Sulfate	36		5.0	mg/L	5	4/3/2014 06:49 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		10	mg/L	1	4/4/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 04-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.2.14

Sample ID: POND 01

Collection Date: 4/2/2014 11:00 AM

Work Order: 1404178

Lab ID: 1404178-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	4/3/2014 06:33 PM
Ethylbenzene	ND		1.0	µg/L	1	4/3/2014 06:33 PM
m,p-Xylene	ND		2.0	µg/L	1	4/3/2014 06:33 PM
o-Xylene	ND		1.0	µg/L	1	4/3/2014 06:33 PM
Toluene	ND		1.0	µg/L	1	4/3/2014 06:33 PM
Xylenes, Total	ND		3.0	µg/L	1	4/3/2014 06:33 PM
Surr: 1,2-Dichloroethane-d4	91.2		70-120	%REC	1	4/3/2014 06:33 PM
Surr: 4-Bromofluorobenzene	97.0		75-120	%REC	1	4/3/2014 06:33 PM
Surr: Dibromofluoromethane	97.0		85-115	%REC	1	4/3/2014 06:33 PM
Surr: Toluene-d8	99.8		85-120	%REC	1	4/3/2014 06:33 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	4/3/2014 03:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ND</b>
Sulfate	39		5.0	mg/L	5	4/3/2014 07:09 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	360		10	mg/L	1	4/4/2014 08:12 AM

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



# ALS Group USA, Corp

Date: 04-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.2.14

Sample ID: SPRING UG

Collection Date: 4/2/2014 11:10 AM

Work Order: 1404178

Lab ID: 1404178-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	4/3/2014 06:57 PM
Ethylbenzene	ND		1.0	µg/L	1	4/3/2014 06:57 PM
m,p-Xylene	ND		2.0	µg/L	1	4/3/2014 06:57 PM
o-Xylene	ND		1.0	µg/L	1	4/3/2014 06:57 PM
Toluene	ND		1.0	µg/L	1	4/3/2014 06:57 PM
Xylenes, Total	ND		3.0	µg/L	1	4/3/2014 06:57 PM
Surr: 1,2-Dichloroethane-d4	92.4		70-120	%REC	1	4/3/2014 06:57 PM
Surr: 4-Bromofluorobenzene	97.5		75-120	%REC	1	4/3/2014 06:57 PM
Surr: Dibromofluoromethane	98.6		85-115	%REC	1	4/3/2014 06:57 PM
Surr: Toluene-d8	97.7		85-120	%REC	1	4/3/2014 06:57 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	47		3.0	mg/L	1	4/3/2014 03:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ND</b>
Sulfate	33		5.0	mg/L	5	4/3/2014 07:29 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/4/14	Analyst: <b>YM</b>
Total Dissolved Solids	440		10	mg/L	1	4/4/2014 08:12 AM

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

**ALS Group USA, Corp**

Date: 04-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.2.14

Work Order: 1404178

Sample ID: Trip Blank

Lab ID: 1404178-06

Collection Date: 4/2/2014

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>AK</b>
Benzene	ND		1.0	µg/L	1	4/3/2014 04:55 PM
Ethylbenzene	ND		1.0	µg/L	1	4/3/2014 04:55 PM
m,p-Xylene	ND		2.0	µg/L	1	4/3/2014 04:55 PM
o-Xylene	ND		1.0	µg/L	1	4/3/2014 04:55 PM
Toluene	ND		1.0	µg/L	1	4/3/2014 04:55 PM
Xylenes, Total	ND		3.0	µg/L	1	4/3/2014 04:55 PM
Surr: 1,2-Dichloroethane-d4	94.4		70-120	%REC	1	4/3/2014 04:55 PM
Surr: 4-Bromofluorobenzene	95.4		75-120	%REC	1	4/3/2014 04:55 PM
Surr: Dibromofluoromethane	95.6		85-115	%REC	1	4/3/2014 04:55 PM
Surr: Toluene-d8	97.6		85-120	%REC	1	4/3/2014 04:55 PM

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

# ALS Group USA, Corp

Date: 04-Apr-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404178  
**Project:** WPX PA 31-36 SW 4.2.14

## QC BATCH REPORT

Batch ID: **R138329A** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: <b>VBKWK1-140403-R138329A</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/3/2014 04:06 PM</b>		
Client ID:		Run ID: <b>VMS8_140403A</b>				SeqNo: <b>2698981</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.06	0	20	0	95.3	70-120	0			
Surr: 4-Bromofluorobenzene	19.23	0	20	0	96.2	75-120	0			
Surr: Dibromofluoromethane	19.35	0	20	0	96.8	85-115	0			
Surr: Toluene-d8	19.55	0	20	0	97.8	85-120	0			

LCS		Sample ID: <b>VLCSW1-140403-R138329A</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/3/2014 02:27 PM</b>		
Client ID:		Run ID: <b>VMS8_140403A</b>				SeqNo: <b>2698980</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.08	1.0	20	0	100	80-120	0			
Ethylbenzene	19.24	1.0	20	0	96.2	75-125	0			
m,p-Xylene	38.87	2.0	40	0	97.2	75-130	0			
o-Xylene	19.22	1.0	20	0	96.1	80-120	0			
Toluene	19.1	1.0	20	0	95.5	75-120	0			
Xylenes, Total	58.09	3.0	60	0	96.8	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.24	0	20	0	96.2	70-120	0			
Surr: 4-Bromofluorobenzene	19.81	0	20	0	99	75-120	0			
Surr: Dibromofluoromethane	20.39	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.92	0	20	0	99.6	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404178  
 Project: WPX PA 31-36 SW 4.2.14

## QC BATCH REPORT

Batch ID: **R138329A** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 1404178-01A MS			Units: µg/L		Analysis Date: 4/4/2014 01:04 AM	
Client ID: CO RIVER UG			Run ID: VMS8_140403A			SeqNo: 2698992		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.72	1.0	20	0	104	80-120		0			
Ethylbenzene	19.79	1.0	20	0	99	75-125		0			
m,p-Xylene	39.07	2.0	40	0	97.7	75-130		0			
o-Xylene	19.21	1.0	20	0	96	80-120		0			
Toluene	19.92	1.0	20	0	99.6	75-120		0			
Xylenes, Total	58.28	3.0	60	0	97.1	75-130		0			
Surr: 1,2-Dichloroethane-d4	18.75	0	20	0	93.8	70-120		0			
Surr: 4-Bromofluorobenzene	18.95	0	20	0	94.8	75-120		0			
Surr: Dibromofluoromethane	19.63	0	20	0	98.2	85-115		0			
Surr: Toluene-d8	19.93	0	20	0	99.6	85-120		0			

MSD				Sample ID: 1404178-01A MSD			Units: µg/L		Analysis Date: 4/4/2014 01:28 AM		
Client ID: CO RIVER UG			Run ID: VMS8_140403A			SeqNo: 2698993		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.06	1.0	20	0	100	80-120	20.72	3.24	30		
Ethylbenzene	19.01	1.0	20	0	95	75-125	19.79	4.02	30		
m,p-Xylene	37.29	2.0	40	0	93.2	75-130	39.07	4.66	30		
o-Xylene	18.57	1.0	20	0	92.8	80-120	19.21	3.39	30		
Toluene	19.14	1.0	20	0	95.7	75-120	19.92	3.99	30		
Xylenes, Total	55.86	3.0	60	0	93.1	75-130	58.28	4.24	30		
Surr: 1,2-Dichloroethane-d4	18.66	0	20	0	93.3	70-120	18.75	0.481	30		
Surr: 4-Bromofluorobenzene	19.39	0	20	0	97	75-120	18.95	2.3	30		
Surr: Dibromofluoromethane	19.93	0	20	0	99.6	85-115	19.63	1.52	30		
Surr: Toluene-d8	19.65	0	20	0	98.2	85-120	19.93	1.41	30		

The following samples were analyzed in this batch:

1404178-01A	1404178-02A	1404178-03A
1404178-04A	1404178-05A	1404178-06A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404178  
**Project:** WPX PA 31-36 SW 4.2.14

## QC BATCH REPORT

Batch ID: **57211** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57211-57211</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/4/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140404A</b>				SeqNo: <b>2699200</b>		Prep Date: <b>4/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-57211-57211</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/4/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140404A</b>				SeqNo: <b>2699201</b>		Prep Date: <b>4/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 469 10 495 0 94.7 80-120 0

<b>DUP</b>		Sample ID: <b>14031405-24B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/4/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140404A</b>				SeqNo: <b>2700221</b>		Prep Date: <b>4/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 80 10 0 0 0 0-0 87 8.38 20

<b>DUP</b>		Sample ID: <b>1404178-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/4/2014 08:12 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>TDS_140404A</b>				SeqNo: <b>2700222</b>		Prep Date: <b>4/4/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 497 10 0 0 0 0-0 0

The following samples were analyzed in this batch:

1404178-01B	1404178-02B	1404178-03B
1404178-04B	1404178-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404178  
**Project:** WPX PA 31-36 SW 4.2.14

## QC BATCH REPORT

Batch ID: **R138371** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140403-R138371</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 03:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140403S</b>				SeqNo: <b>2698915</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140403-R138371</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 03:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140403S</b>				SeqNo: <b>2698916</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 52.98 3.0 50 0 106 80-120 0

<b>MS</b>		Sample ID: <b>1404178-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 03:45 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140403S</b>				SeqNo: <b>2698925</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 190 3.0 50 135 110 75-125 0

<b>MSD</b>		Sample ID: <b>1404178-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 03:45 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140403S</b>				SeqNo: <b>2698926</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 185 3.0 50 135 100 75-125 190 2.67 20

The following samples were analyzed in this batch:

1404178-01B	1404178-02B	1404178-03B
1404178-04B	1404178-05B	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404178  
**Project:** WPX PA 31-36 SW 4.2.14

## QC BATCH REPORT

Batch ID: **R138382** Instrument ID **IC3** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138382</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 04:07 PM</b>		
Client ID:		Run ID: <b>IC3_140403B</b>				SeqNo: <b>2699445</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R138382</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 04:27 PM</b>		
Client ID:		Run ID: <b>IC3_140403B</b>				SeqNo: <b>2699446</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 9.891 1.0 10 0 98.9 85-110 0

<b>MS</b>		Sample ID: <b>1404178-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 05:48 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC3_140403B</b>				SeqNo: <b>2699448</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 152 10 50 98.68 107 75-125 0

<b>MSD</b>		Sample ID: <b>1404178-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/3/2014 06:08 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC3_140403B</b>				SeqNo: <b>2699449</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 149.2 10 50 98.68 101 75-125 152 1.82 20

The following samples were analyzed in this batch:

1404178-01B	1404178-02B	1404178-03B
1404178-04B	1404178-05B	

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



# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 309-6070

## Chain-of-Custody

Form 202-g

PROJECT NAME		SAMPLER		DATE													
WPX PA 31-36 SW		Mike Lobato		4/2/14													
PROJECT No.		SITE ID		TURNAROUND													
		PA 31-36		24 HR													
COMPANY NAME		EDD FORMAT															
HRL Compliance Solutions, Inc.																	
PURCHASE ORDER		BILL TO COMPANY															
		WPX Energy															
SEND REPORT TO		INVOICE ATTN TO															
Mark Mumby		Karolina Blaney															
ADDRESS		ADDRESS															
2385 F 1/2 Road		1058 Co. Rd. 215															
CITY/STATE/ZIP		CITY/STATE/ZIP															
Grand Junction, CO 81505		Parachute, CO 81635															
PHONE		PHONE															
970-243-3271		970-683-2295															
FAX		FAX															
970-243-3280																	
E-MAIL		E-MAIL															
mmumby@hrlcomp.com		Karolina.blaney@wpxenergy.com															
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BIEX	TDS	CHLORIDE	SULFATES						
1	CO RIVER UG	SW	4/2/14	1032	4	1, 8		X	X	X	X						
2	CO RIVER DG	SW	4/2/14	1042	4	1, 8		X	X	X	X						
3	SPRING 01	SW	4/2/14	1050	4	1, 8		X	X	X	X						
4	POND 01	SW	4/2/14	1100	4	1, 8		X	X	X	X						
5	SPRING UG	SW	4/2/14	1110	4	1, 8		X	X	X	X						
6	TRIP BLANK	L	4/2/14	—	1	1, 8		X									

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)	
	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		PRINT
RELINQUISHED BY	<i>Mike Lobato</i>	Mike Lobato
RECEIVED BY	<i>[Signature]</i>	[Signature]
RELINQUISHED BY	<i>[Signature]</i>	[Signature]
RECEIVED BY	<i>[Signature]</i>	[Signature]
RELINQUISHED BY		
RECEIVED BY		



Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 03-Apr-14 10:00

Work Order: 1404178

Received by: DS

Checklist completed by Diane Shaw  
eSignature

03-Apr-14  
Date

Reviewed by: Ann Preston  
eSignature

04-Apr-14  
Date

Matrices: Surface Water

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>4/3/2014 12:33:18 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input 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:

From: (616) 399-6070  
 Sample Receiving  
 ALS Laboratory Group  
 3352 128th Avenue

Holland, MI 49424

Origin ID: GRRR

**FedEx**  
Express



J14101402070326

Ship Date: 02APR14  
 ActWgt: 60.0 LB  
 CAD: 2264840/NET3490

Dim: 24 X 15 X 15 IN

SHIP TO: (616) 399-6070

BILL SENDER

sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

HOLLAND, MI 49424

Delivery Address Bar Code



Ref # 040214-6  
 Invoice #  
 PO #  
 Dept #

2 of 3

MP# 7984 2664 4564

8263

Mstr# 7984 2664 4542

**68 GRRR**



522G1/7800/F220



**ALS Environmental**

3352 128th Avenue  
 Holland, Michigan 49424  
 Tel: +1 616 399 6070  
 Fax: +1 616 399 6165

- 03 APR AA  
**OVERNIGHT**

**49424**  
 MI-US  
**GRR**



/templates/components/dotcom\_label\_contents/FoldInstr/en/Folding\_instructions.html loading...  
 /templates/components/dotcom\_label\_contents/WarningsOriginalLabel/en/Folding\_warning.htm...  
 /templates/components/dotcom\_label\_contents/TnCDom/us/en/TC\_dom.html loading...

Date:  
 Name:  
 Company:

**TODAY SEAL**

1300



09-Apr-2014

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

Re: **WPX PA 31-36 SW 4.4.14**

Work Order: **1404313**

Dear Mark,

ALS Environmental received 8 samples on 05-Apr-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 21.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.4.14  
**Work Order:** 1404313

## 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>
1404313-01	CO River UG	Surface Water		4/4/2014 09:47	4/5/2014 10:00	<input type="checkbox"/>
1404313-02	CO River DG	Surface Water		4/4/2014 09:57	4/5/2014 10:00	<input type="checkbox"/>
1404313-03	Spring 01	Surface Water		4/4/2014 10:08	4/5/2014 10:00	<input type="checkbox"/>
1404313-04	Spring 02	Surface Water		4/4/2014 10:15	4/5/2014 10:00	<input type="checkbox"/>
1404313-05	Culvert 01	Surface Water		4/4/2014 10:05	4/5/2014 10:00	<input type="checkbox"/>
1404313-06	Pond 01	Surface Water		4/4/2014 10:38	4/5/2014 10:00	<input type="checkbox"/>
1404313-07	Spring UG	Surface Water		4/4/2014 10:48	4/5/2014 10:00	<input type="checkbox"/>
1404313-08	Trip Blank	Water		4/4/2014	4/5/2014 10:00	<input type="checkbox"/>

## ALS Group USA, Corp

*Date: 09-Apr-14*

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**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 4.4.14

**Work Order:** 1404313

### **Case Narrative**

---

Batch 57350 duplicate data for TDS is not related to this project's samples. No data requires qualification.

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.4.14  
**WorkOrder:** 1404313

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Sample ID: CO River UG

Collection Date: 4/4/2014 09:47 AM

Work Order: 1404313

Lab ID: 1404313-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/7/2014 09:17 PM
Ethylbenzene	ND		1.0	µg/L	1	4/7/2014 09:17 PM
m,p-Xylene	ND		2.0	µg/L	1	4/7/2014 09:17 PM
o-Xylene	ND		1.0	µg/L	1	4/7/2014 09:17 PM
Toluene	ND		1.0	µg/L	1	4/7/2014 09:17 PM
Xylenes, Total	ND		3.0	µg/L	1	4/7/2014 09:17 PM
Surr: 1,2-Dichloroethane-d4	110		70-120	%REC	1	4/7/2014 09:17 PM
Surr: 4-Bromofluorobenzene	91.7		75-120	%REC	1	4/7/2014 09:17 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	4/7/2014 09:17 PM
Surr: Toluene-d8	97.8		85-120	%REC	1	4/7/2014 09:17 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	140		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	4/8/2014 03:21 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	500		10	mg/L	1	4/8/2014 08:00 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Sample ID: CO River DG

Collection Date: 4/4/2014 09:57 AM

Work Order: 1404313

Lab ID: 1404313-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/7/2014 09:46 PM
Ethylbenzene	ND		1.0	µg/L	1	4/7/2014 09:46 PM
m,p-Xylene	ND		2.0	µg/L	1	4/7/2014 09:46 PM
o-Xylene	ND		1.0	µg/L	1	4/7/2014 09:46 PM
Toluene	ND		1.0	µg/L	1	4/7/2014 09:46 PM
Xylenes, Total	ND		3.0	µg/L	1	4/7/2014 09:46 PM
Surr: 1,2-Dichloroethane-d4	107		70-120	%REC	1	4/7/2014 09:46 PM
Surr: 4-Bromofluorobenzene	92.6		75-120	%REC	1	4/7/2014 09:46 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	4/7/2014 09:46 PM
Surr: Toluene-d8	104		85-120	%REC	1	4/7/2014 09:46 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	110		10	mg/L	10	4/8/2014 03:41 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	490		10	mg/L	1	4/8/2014 08:00 AM

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



# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Sample ID: Spring 01

Collection Date: 4/4/2014 10:08 AM

Work Order: 1404313

Lab ID: 1404313-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/7/2014 10:18 PM
Ethylbenzene	ND		1.0	µg/L	1	4/7/2014 10:18 PM
m,p-Xylene	ND		2.0	µg/L	1	4/7/2014 10:18 PM
o-Xylene	ND		1.0	µg/L	1	4/7/2014 10:18 PM
Toluene	ND		1.0	µg/L	1	4/7/2014 10:18 PM
Xylenes, Total	ND		3.0	µg/L	1	4/7/2014 10:18 PM
Surr: 1,2-Dichloroethane-d4	112		70-120	%REC	1	4/7/2014 10:18 PM
Surr: 4-Bromofluorobenzene	101		75-120	%REC	1	4/7/2014 10:18 PM
Surr: Dibromofluoromethane	112		85-115	%REC	1	4/7/2014 10:18 PM
Surr: Toluene-d8	109		85-120	%REC	1	4/7/2014 10:18 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	4/8/2014 12:59 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	400		10	mg/L	1	4/8/2014 08:00 AM

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

**ALS Group USA, Corp**

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Work Order: 1404313

Sample ID: Spring 02

Lab ID: 1404313-04

Collection Date: 4/4/2014 10:15 AM

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/7/2014 10:50 PM
Ethylbenzene	ND		1.0	µg/L	1	4/7/2014 10:50 PM
m,p-Xylene	ND		2.0	µg/L	1	4/7/2014 10:50 PM
o-Xylene	ND		1.0	µg/L	1	4/7/2014 10:50 PM
Toluene	ND		1.0	µg/L	1	4/7/2014 10:50 PM
Xylenes, Total	ND		3.0	µg/L	1	4/7/2014 10:50 PM
Surr: 1,2-Dichloroethane-d4	109		70-120	%REC	1	4/7/2014 10:50 PM
Surr: 4-Bromofluorobenzene	88.9		75-120	%REC	1	4/7/2014 10:50 PM
Surr: Dibromofluoromethane	110		85-115	%REC	1	4/7/2014 10:50 PM
Surr: Toluene-d8	98.1		85-120	%REC	1	4/7/2014 10:50 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		4.0	mg/L	4	4/8/2014 01:19 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	440		20	mg/L	1	4/8/2014 08:00 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Sample ID: Culvert 01

Collection Date: 4/4/2014 10:05 AM

Work Order: 1404313

Lab ID: 1404313-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/7/2014 11:24 PM
Ethylbenzene	ND		1.0	µg/L	1	4/7/2014 11:24 PM
m,p-Xylene	ND		2.0	µg/L	1	4/7/2014 11:24 PM
o-Xylene	ND		1.0	µg/L	1	4/7/2014 11:24 PM
Toluene	ND		1.0	µg/L	1	4/7/2014 11:24 PM
Xylenes, Total	ND		3.0	µg/L	1	4/7/2014 11:24 PM
Surr: 1,2-Dichloroethane-d4	109		70-120	%REC	1	4/7/2014 11:24 PM
Surr: 4-Bromofluorobenzene	89.2		75-120	%REC	1	4/7/2014 11:24 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	4/7/2014 11:24 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	4/7/2014 11:24 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	54		4.0	mg/L	4	4/8/2014 01:40 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	400		10	mg/L	1	4/8/2014 08:00 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Sample ID: Pond 01

Collection Date: 4/4/2014 10:38 AM

Work Order: 1404313

Lab ID: 1404313-06

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/7/2014 11:57 PM
Ethylbenzene	ND		1.0	µg/L	1	4/7/2014 11:57 PM
m,p-Xylene	ND		2.0	µg/L	1	4/7/2014 11:57 PM
o-Xylene	ND		1.0	µg/L	1	4/7/2014 11:57 PM
Toluene	ND		1.0	µg/L	1	4/7/2014 11:57 PM
Xylenes, Total	ND		3.0	µg/L	1	4/7/2014 11:57 PM
Surr: 1,2-Dichloroethane-d4	115		70-120	%REC	1	4/7/2014 11:57 PM
Surr: 4-Bromofluorobenzene	88.4		75-120	%REC	1	4/7/2014 11:57 PM
Surr: Dibromofluoromethane	111		85-115	%REC	1	4/7/2014 11:57 PM
Surr: Toluene-d8	98.8		85-120	%REC	1	4/7/2014 11:57 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	17		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		4.0	mg/L	4	4/8/2014 02:00 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	360		10	mg/L	1	4/9/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.4.14

Sample ID: Spring UG

Collection Date: 4/4/2014 10:48 AM

Work Order: 1404313

Lab ID: 1404313-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 12:31 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 12:31 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 12:31 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 12:31 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 12:31 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 12:31 PM
Surr: 1,2-Dichloroethane-d4	112		70-120	%REC	1	4/8/2014 12:31 PM
Surr: 4-Bromofluorobenzene	88.9		75-120	%REC	1	4/8/2014 12:31 PM
Surr: Dibromofluoromethane	112		85-115	%REC	1	4/8/2014 12:31 PM
Surr: Toluene-d8	101		85-120	%REC	1	4/8/2014 12:31 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	17		3.0	mg/L	1	4/7/2014 04:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	4/8/2014 02:20 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	440		10	mg/L	1	4/9/2014 08:12 AM

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

**ALS Group USA, Corp**

Date: 09-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.4.14**Work Order:** 1404313**Sample ID:** Trip Blank**Lab ID:** 1404313-08**Collection Date:** 4/4/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 01:06 AM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 01:06 AM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 01:06 AM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 01:06 AM
Toluene	ND		1.0	µg/L	1	4/8/2014 01:06 AM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 01:06 AM
Surr: 1,2-Dichloroethane-d4	113		70-120	%REC	1	4/8/2014 01:06 AM
Surr: 4-Bromofluorobenzene	89.3		75-120	%REC	1	4/8/2014 01:06 AM
Surr: Dibromofluoromethane	113		85-115	%REC	1	4/8/2014 01:06 AM
Surr: Toluene-d8	98.9		85-120	%REC	1	4/8/2014 01:06 AM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404313  
**Project:** WPX PA 31-36 SW 4.4.14

**QC BATCH REPORT**

Batch ID: **R138495** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: <b>VBK2-140407-R138495</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/7/2014 05:40 PM</b>		
Client ID:		Run ID: <b>VMS9_140407B</b>				SeqNo: <b>2702376</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	22.09	0	20	0	110	70-120	0			
Surr: 4-Bromofluorobenzene	17.88	0	20	0	89.4	75-120	0			
Surr: Dibromofluoromethane	21.42	0	20	0	107	85-115	0			
Surr: Toluene-d8	18.02	0	20	0	90.1	85-120	0			

LCS		Sample ID: <b>VLCSW2-140407-R138495</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/7/2014 04:01 PM</b>		
Client ID:		Run ID: <b>VMS9_140407B</b>				SeqNo: <b>2702375</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.76	1.0	20	0	109	80-120	0			
Ethylbenzene	18.83	1.0	20	0	94.2	75-125	0			
m,p-Xylene	37.87	2.0	40	0	94.7	75-130	0			
o-Xylene	18.92	1.0	20	0	94.6	80-120	0			
Toluene	20.58	1.0	20	0	103	75-120	0			
Xylenes, Total	56.79	3.0	60	0	94.6	75-130	0			
Surr: 1,2-Dichloroethane-d4	20.53	0	20	0	103	70-120	0			
Surr: 4-Bromofluorobenzene	21.12	0	20	0	106	75-120	0			
Surr: Dibromofluoromethane	20.15	0	20	0	101	85-115	0			
Surr: Toluene-d8	20.06	0	20	0	100	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404313  
 Project: WPX PA 31-36 SW 4.4.14

## QC BATCH REPORT

Batch ID: **R138495** Instrument ID **VMS9** Method: **SW8260**

MS					Sample ID: 1404313-04B MS			Units: µg/L		Analysis Date: 4/8/2014 04:41 AM	
Client ID: Spring 02			Run ID: VMS9_140407B			SeqNo: 2702387		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.52	1.0	20	0	118	80-120	0				
Ethylbenzene	20.4	1.0	20	0	102	75-125	0				
m,p-Xylene	41.49	2.0	40	0	104	75-130	0				
o-Xylene	20.06	1.0	20	0	100	80-120	0				
Toluene	23.17	1.0	20	0	116	75-120	0				
Xylenes, Total	61.55	3.0	60	0	103	75-130	0				
Surr: 1,2-Dichloroethane-d4	21.96	0	20	0	110	70-120	0				
Surr: 4-Bromofluorobenzene	20.51	0	20	0	103	75-120	0				
Surr: Dibromofluoromethane	21.53	0	20	0	108	85-115	0				
Surr: Toluene-d8	21.16	0	20	0	106	85-120	0				

MSD				Sample ID: 1404313-04B MSD			Units: µg/L		Analysis Date: 4/8/2014 05:11 AM		
Client ID: Spring 02			Run ID: VMS9_140407B			SeqNo: 2702388		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.83	1.0	20	0	119	80-120	23.52	1.31	30		
Ethylbenzene	20.38	1.0	20	0	102	75-125	20.4	0.0981	30		
m,p-Xylene	41.25	2.0	40	0	103	75-130	41.49	0.58	30		
o-Xylene	19.98	1.0	20	0	99.9	80-120	20.06	0.4	30		
Toluene	22.77	1.0	20	0	114	75-120	23.17	1.74	30		
Xylenes, Total	61.23	3.0	60	0	102	75-130	61.55	0.521	30		
Surr: 1,2-Dichloroethane-d4	20.95	0	20	0	105	70-120	21.96	4.71	30		
Surr: 4-Bromofluorobenzene	20.26	0	20	0	101	75-120	20.51	1.23	30		
Surr: Dibromofluoromethane	20.98	0	20	0	105	85-115	21.53	2.59	30		
Surr: Toluene-d8	21.07	0	20	0	105	85-120	21.16	0.426	30		

The following samples were analyzed in this batch:

1404313-01B	1404313-02B	1404313-03B
1404313-04B	1404313-05B	1404313-06B
1404313-07B	1404313-08A	

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404313  
**Project:** WPX PA 31-36 SW 4.4.14

## QC BATCH REPORT

Batch ID: **57350**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57350-57350</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 08:00 AM</b>		
Client ID:		Run ID: <b>TDS_140408A</b>				SeqNo: <b>2702598</b>		Prep Date: <b>4/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57350-57350</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 08:00 AM</b>		
Client ID:		Run ID: <b>TDS_140408A</b>				SeqNo: <b>2702597</b>		Prep Date: <b>4/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      469      10      495      0      94.7      80-120      0

<b>DUP</b>		Sample ID: <b>1404280-06A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 08:00 AM</b>		
Client ID:		Run ID: <b>TDS_140408A</b>				SeqNo: <b>2702584</b>		Prep Date: <b>4/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      490      20      0      0      0      0-0      492      0.407      20

<b>DUP</b>		Sample ID: <b>1404289-04A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 08:00 AM</b>		
Client ID:		Run ID: <b>TDS_140408A</b>				SeqNo: <b>2702588</b>		Prep Date: <b>4/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      4396      20      0      0      0      0-0      4420      0.544      20      H

The following samples were analyzed in this batch:

1404313-01A	1404313-02A	1404313-03A
1404313-04A	1404313-05A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404313  
**Project:** WPX PA 31-36 SW 4.4.14

## QC BATCH REPORT

Batch ID: **57364** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57364-57364</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703745</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-57364-57364</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703746</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 447 10 495 0 90.3 80-120 0

<b>DUP</b>		Sample ID: <b>1404263-03A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703708</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 66 20 0 0 0 0-0 66 0 20

<b>DUP</b>		Sample ID: <b>1404366-03B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703723</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 385 10 0 0 0 0-0 375 2.63 20

The following samples were analyzed in this batch:

1404313-06A 1404313-07A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404313  
**Project:** WPX PA 31-36 SW 4.4.14

## QC BATCH REPORT

Batch ID: **R138505** Instrument ID **WETCHEM** Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140407-R138505</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/7/2014 04:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140407Q</b>				SeqNo: <b>2701817</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140407-R138505</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/7/2014 04:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140407Q</b>				SeqNo: <b>2701818</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 49.98 3.0 50 0 100 80-120 0

<b>MS</b>		Sample ID: <b>1404280-06A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/7/2014 04:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140407Q</b>				SeqNo: <b>2701825</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 175 3.0 50 115 120 75-125 0

<b>MSD</b>		Sample ID: <b>1404280-06A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/7/2014 04:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140407Q</b>				SeqNo: <b>2701826</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 175 3.0 50 115 120 75-125 175 0 20

The following samples were analyzed in this batch:

1404313-01A	1404313-02A	1404313-03A
1404313-04A	1404313-05A	1404313-06A
1404313-07A		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404313  
**Project:** WPX PA 31-36 SW 4.4.14

## QC BATCH REPORT

Batch ID: **R138535** Instrument ID **IC4** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138535</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 10:23 AM</b>		
Client ID:		Run ID: <b>IC4_140408A</b>				SeqNo: <b>2702706</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R138535</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 10:43 AM</b>		
Client ID:		Run ID: <b>IC4_140408A</b>				SeqNo: <b>2702707</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 10.46 1.0 10 0 105 85-110 0

<b>MS</b>		Sample ID: <b>1404206-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 11:38 AM</b>		
Client ID:		Run ID: <b>IC4_140408A</b>				SeqNo: <b>2702709</b>		Prep Date:		DF: <b>100</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 1444 100 500 1037 81.4 75-125 0

<b>MSD</b>		Sample ID: <b>1404206-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 11:59 AM</b>		
Client ID:		Run ID: <b>IC4_140408A</b>				SeqNo: <b>2702710</b>		Prep Date:		DF: <b>100</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 1456 100 500 1037 83.7 75-125 1444 0.808 20

The following samples were analyzed in this batch:

1404313-01A	1404313-02A	1404313-03A
1404313-04A	1404313-05A	1404313-06A
1404313-07A		

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



# ALS Laboratory Group

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## Chain-of-Custody

Form 202r8

WORKORDER  
#

1404313

PROJECT NAME		WPX PA 31-36 SW 4.4.14		SAMPLER		Casey Richardson		DATE		4.4.14		PAGE		1 of 1	
PROJECT No.				SITE ID		PA 31-36 Surface Water		TURNAROUND		24 Hour		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HCSI		BILL TO COMPANY		WPX Energy									
SEND REPORT TO		Mark Mumby		INVOICE ATTN TO		Karolina Blaney									
ADDRESS		2385 F 1/2 Road		ADDRESS		1058 County Road 215									
CITY / STATE / ZIP		Grand Junction, CO. 81505		CITY / STATE / ZIP		Parachute, CO 81635									
PHONE		970-243-3271		PHONE		970-683-2295									
FAX		970-243-3280		FAX		970-285-9573									
E-MAIL		mmumby@hrlcomp.com		E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	Chlorides	Sulfates				
1	CO River UG	SW	4.4.14	947	4	1.8		x	x	x	x				
2	CO River DG	SW		957	4	1.8		x	x	x	x				
3	Spring 01	SW		1008	4	1.8		x	x	x	x				
4	Spring 02	SW		1015	4	1.8		x	x	x	x				
5	Culvert 01	SW		1005	4	1.8		x	x	x	x				
6	Pond 01	SW		1038	4	1.8		x	x	x	x				
7	Spring UG	SW		1048	4	1.8		x	x	x	x				
8	TRIP BLANK							x							

\*Time Zone (Circle): EST CST 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)
4.2°C [Signature]	<input checked="" type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY [Signature]	Casey Richardson	4.4.14	1140
RECEIVED BY [Signature]	N. Martinez	4-4-14	1740
RELINQUISHED BY [Signature]	N. Martinez	4-4-14	1245
RECEIVED BY [Signature]	KATHLEEN	4/3/14	1000
RELINQUISHED BY			
RECEIVED BY			

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 05-Apr-14 10:00

Work Order: 1404313

Received by: KRW

Checklist completed by Keith Wurenga  
eSignature

05-Apr-14  
Date

Reviewed by: Ann Preston  
eSignature

07-Apr-14  
Date

Matrices: Surface Water

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>4.2 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/5/2014 10:56:45 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



# ALS Environmental

3352 128th Avenue  
Holland, Michigan 49424  
Tel. +1 616 399 6070  
Fax. +1 616 399 6185

## CUSTODY SEAL

Date: 9-4-94 Time: 1700  
Name: W. H. H. H.  
Company: ALS

Seal Broken By:

Date:



09-Apr-2014

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

Re: **WPX PA 31-36 SW 4.7.14**

Work Order: **1404366**

Dear Mark,

ALS Environmental received 8 samples on 08-Apr-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 18.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.7.14  
**Work Order:** 1404366

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**Work Order Sample Summary**

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<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>
1404366-01	CO River UG	Surface Water		4/7/2014 10:45	4/8/2014 10:00	<input type="checkbox"/>
1404366-02	CO River DG	Surface Water		4/7/2014 10:55	4/8/2014 10:00	<input type="checkbox"/>
1404366-03	Spring 01	Surface Water		4/7/2014 11:15	4/8/2014 10:00	<input type="checkbox"/>
1404366-04	Spring 02	Surface Water		4/7/2014 11:20	4/8/2014 10:00	<input type="checkbox"/>
1404366-05	Culvert 01	Surface Water		4/7/2014 11:05	4/8/2014 10:00	<input type="checkbox"/>
1404366-06	Pond 01	Surface Water		4/7/2014 11:30	4/8/2014 10:00	<input type="checkbox"/>
1404366-07	Spring UG	Surface Water		4/7/2014 11:45	4/8/2014 10:00	<input type="checkbox"/>
1404366-08	Trip Blank	Water		4/7/2014	4/8/2014 10:00	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.7.14  
**WorkOrder:** 1404366

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: CO River UG

Collection Date: 4/7/2014 10:45 AM

Work Order: 1404366

Lab ID: 1404366-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 06:16 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 06:16 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 06:16 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 06:16 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 06:16 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 06:16 PM
Surr: 1,2-Dichloroethane-d4	96.8		70-120	%REC	1	4/8/2014 06:16 PM
Surr: 4-Bromofluorobenzene	94.9		75-120	%REC	1	4/8/2014 06:16 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	4/8/2014 06:16 PM
Surr: Toluene-d8	102		85-120	%REC	1	4/8/2014 06:16 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	120		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	96		10	mg/L	10	4/8/2014 06:29 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	480		10	mg/L	1	4/9/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: CO River DG

Collection Date: 4/7/2014 10:55 AM

Work Order: 1404366

Lab ID: 1404366-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 06:42 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 06:42 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 06:42 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 06:42 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 06:42 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 06:42 PM
Surr: 1,2-Dichloroethane-d4	96.4		70-120	%REC	1	4/8/2014 06:42 PM
Surr: 4-Bromofluorobenzene	94.8		75-120	%REC	1	4/8/2014 06:42 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	4/8/2014 06:42 PM
Surr: Toluene-d8	100		85-120	%REC	1	4/8/2014 06:42 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	140		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	96		10	mg/L	10	4/8/2014 06:50 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	450		10	mg/L	1	4/9/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: Spring 01

Collection Date: 4/7/2014 11:15 AM

Work Order: 1404366

Lab ID: 1404366-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 07:07 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 07:07 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 07:07 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 07:07 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 07:07 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 07:07 PM
Surr: 1,2-Dichloroethane-d4	95.2		70-120	%REC	1	4/8/2014 07:07 PM
Surr: 4-Bromofluorobenzene	95.2		75-120	%REC	1	4/8/2014 07:07 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	4/8/2014 07:07 PM
Surr: Toluene-d8	101		85-120	%REC	1	4/8/2014 07:07 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	9.0		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		5.0	mg/L	5	4/8/2014 07:10 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	380		10	mg/L	1	4/9/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: Spring 02

Collection Date: 4/7/2014 11:20 AM

Work Order: 1404366

Lab ID: 1404366-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 07:32 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 07:32 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 07:32 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 07:32 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 07:32 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 07:32 PM
Surr: 1,2-Dichloroethane-d4	95.4		70-120	%REC	1	4/8/2014 07:32 PM
Surr: 4-Bromofluorobenzene	94.4		75-120	%REC	1	4/8/2014 07:32 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1	4/8/2014 07:32 PM
Surr: Toluene-d8	101		85-120	%REC	1	4/8/2014 07:32 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	7.5		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		5.0	mg/L	5	4/8/2014 07:30 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	410		10	mg/L	1	4/9/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: Culvert 01

Collection Date: 4/7/2014 11:05 AM

Work Order: 1404366

Lab ID: 1404366-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 07:58 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 07:58 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 07:58 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 07:58 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 07:58 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 07:58 PM
Surr: 1,2-Dichloroethane-d4	93.2		70-120	%REC	1	4/8/2014 07:58 PM
Surr: 4-Bromofluorobenzene	93.0		75-120	%REC	1	4/8/2014 07:58 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	4/8/2014 07:58 PM
Surr: Toluene-d8	101		85-120	%REC	1	4/8/2014 07:58 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	8.5		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	52		5.0	mg/L	5	4/8/2014 07:50 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	400		10	mg/L	1	4/9/2014 08:12 AM

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

# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: Pond 01

Collection Date: 4/7/2014 11:30 AM

Work Order: 1404366

Lab ID: 1404366-06

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 08:23 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 08:23 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 08:23 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 08:23 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 08:23 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 08:23 PM
Surr: 1,2-Dichloroethane-d4	92.0		70-120	%REC	1	4/8/2014 08:23 PM
Surr: 4-Bromofluorobenzene	95.1		75-120	%REC	1	4/8/2014 08:23 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1	4/8/2014 08:23 PM
Surr: Toluene-d8	102		85-120	%REC	1	4/8/2014 08:23 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	14		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	38		5.0	mg/L	5	4/8/2014 05:29 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	360		10	mg/L	1	4/9/2014 08:12 AM

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



# ALS Group USA, Corp

Date: 09-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.7.14

Sample ID: Spring UG

Collection Date: 4/7/2014 11:45 AM

Work Order: 1404366

Lab ID: 1404366-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 08:48 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 08:48 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 08:48 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 08:48 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 08:48 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 08:48 PM
Surr: 1,2-Dichloroethane-d4	90.6		70-120	%REC	1	4/8/2014 08:48 PM
Surr: 4-Bromofluorobenzene	94.4		75-120	%REC	1	4/8/2014 08:48 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	4/8/2014 08:48 PM
Surr: Toluene-d8	103		85-120	%REC	1	4/8/2014 08:48 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>ED</b>
Chloride	10		3.0	mg/L	1	4/9/2014 12:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		5.0	mg/L	5	4/8/2014 08:10 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/9/14	Analyst: <b>AT</b>
Total Dissolved Solids	420		10	mg/L	1	4/9/2014 08:12 AM

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

**ALS Group USA, Corp**

Date: 09-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.7.14**Work Order:** 1404366**Sample ID:** Trip Blank**Lab ID:** 1404366-08**Collection Date:** 4/7/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/8/2014 05:51 PM
Ethylbenzene	ND		1.0	µg/L	1	4/8/2014 05:51 PM
m,p-Xylene	ND		2.0	µg/L	1	4/8/2014 05:51 PM
o-Xylene	ND		1.0	µg/L	1	4/8/2014 05:51 PM
Toluene	ND		1.0	µg/L	1	4/8/2014 05:51 PM
Xylenes, Total	ND		3.0	µg/L	1	4/8/2014 05:51 PM
Surr: 1,2-Dichloroethane-d4	94.6		70-120	%REC	1	4/8/2014 05:51 PM
Surr: 4-Bromofluorobenzene	94.4		75-120	%REC	1	4/8/2014 05:51 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	4/8/2014 05:51 PM
Surr: Toluene-d8	102		85-120	%REC	1	4/8/2014 05:51 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404366  
**Project:** WPX PA 31-36 SW 4.7.14

# QC BATCH REPORT

Batch ID: **R138530A** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: <b>VBLKW2-140408-R138530A</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/8/2014 02:03 PM</b>		
Client ID:		Run ID: <b>VMS5_140408A</b>				SeqNo: <b>2703664</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.54	0	20	0	97.7	70-120	0			
Surr: 4-Bromofluorobenzene	19.25	0	20	0	96.2	75-120	0			
Surr: Dibromofluoromethane	20.03	0	20	0	100	85-115	0			
Surr: Toluene-d8	20.32	0	20	0	102	85-120	0			

LCS		Sample ID: <b>VLCSW2-140408-R138530A</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/8/2014 12:47 PM</b>		
Client ID:		Run ID: <b>VMS5_140408A</b>				SeqNo: <b>2703663</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.93	1.0	20	0	99.6	80-120	0			
Ethylbenzene	19.89	1.0	20	0	99.4	75-125	0			
m,p-Xylene	39.32	2.0	40	0	98.3	75-130	0			
o-Xylene	19.46	1.0	20	0	97.3	80-120	0			
Toluene	19.57	1.0	20	0	97.8	75-120	0			
Xylenes, Total	58.78	3.0	60	0	98	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.5	0	20	0	97.5	70-120	0			
Surr: 4-Bromofluorobenzene	19.35	0	20	0	96.8	75-120	0			
Surr: Dibromofluoromethane	20.2	0	20	0	101	85-115	0			
Surr: Toluene-d8	20.24	0	20	0	101	85-120	0			

The following samples were analyzed in this batch:

1404366-01A	1404366-02A	1404366-03A
1404366-04A	1404366-05A	1404366-06A
1404366-07A	1404366-08A	

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404366  
**Project:** WPX PA 31-36 SW 4.7.14

## QC BATCH REPORT

Batch ID: **57364**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57364-57364</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703745</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57364-57364</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703746</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      447      10      495      0      90.3      80-120      0

<b>DUP</b>		Sample ID: <b>1404263-03A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID:		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703708</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      66      20      0      0      0      0-0      66      0      20

<b>DUP</b>		Sample ID: <b>1404366-03B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 08:12 AM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>TDS_140409A</b>				SeqNo: <b>2703723</b>		Prep Date: <b>4/9/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      385      10      0      0      0      0-0      375      2.63      20

The following samples were analyzed in this batch:

1404366-01B	1404366-02B	1404366-03B
1404366-04B	1404366-05B	1404366-06B
1404366-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404366  
**Project:** WPX PA 31-36 SW 4.7.14

## QC BATCH REPORT

Batch ID: **R138605**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138605</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 04:48 PM</b>		
Client ID:		Run ID: <b>IC3_140408B</b>				SeqNo: <b>2704388</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R138605</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 05:09 PM</b>		
Client ID:		Run ID: <b>IC3_140408B</b>				SeqNo: <b>2704405</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      9.613      1.0      10      0      96.1      85-110      0

<b>MS</b>		Sample ID: <b>1404366-06B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 05:49 PM</b>		
Client ID: <b>Pond 01</b>		Run ID: <b>IC3_140408B</b>				SeqNo: <b>2704407</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      56.61      5.0      20      38.02      93      75-125      0

<b>MSD</b>		Sample ID: <b>1404366-06B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/8/2014 06:09 PM</b>		
Client ID: <b>Pond 01</b>		Run ID: <b>IC3_140408B</b>				SeqNo: <b>2704408</b>		Prep Date:		DF: <b>5</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      57.86      5.0      20      38.02      99.2      75-125      56.61      2.17      20

The following samples were analyzed in this batch:

1404366-01B	1404366-02B	1404366-03B
1404366-04B	1404366-05B	1404366-06B
1404366-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404366  
**Project:** WPX PA 31-36 SW 4.7.14

## QC BATCH REPORT

Batch ID: **R138629**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140409-R138629</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 12:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140409K</b>				SeqNo: <b>2705065</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140409-R138629</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 12:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140409K</b>				SeqNo: <b>2705066</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.98      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>1404366-03B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 12:15 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>WETCHEM_140409K</b>				SeqNo: <b>2705071</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      58.98      3.0      50      8.99      100      75-125      0

<b>MSD</b>		Sample ID: <b>1404366-03B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/9/2014 12:15 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>WETCHEM_140409K</b>				SeqNo: <b>2705072</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      57.98      3.0      50      8.99      98      75-125      58.98      1.71      20

The following samples were analyzed in this batch:

1404366-01B	1404366-02B	1404366-03B
1404366-04B	1404366-05B	1404366-06B
1404366-07B		

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



**Environmental**

Cincinnati, OH  
+1 513 733 5336

Everett, WA  
+1 425 356 2600

Fort Collins, CO  
+1 970 490 1511

Holland, MI  
+1 616 399 6070

# Chain of Custody Form

Page 1 of 1

COC ID: 12928

Houston, TX  
+1 281 530 5656

Middletown, PA  
+1 717 944 5541

Spring City, PA  
+1 610 948 4903

Salt Lake City, UT  
+1 801 266 7700

South Charleston, WV  
+1 304 356 3168

York, PA  
+1 717 505 5280

ALS Project Manager:

ALS Work Order #:

1404366

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	PA 31-36	A	BTEX
Work Order		Project Number		B	TDS
Company Name	HCSI	Bill To Company	WPX Energy	C	Chlorides
Send Report To	Mark Mumbly	Invoice Attn	Karoline Blaney	D	Sulfates
Address	2385 F <sup>1</sup> / <sub>2</sub> Rd	Address	1058 Co. Road 215	E	
City/State/Zip	Grand Junction, CO 81505	City/State/Zip	Parachute, CO 81635	F	
Phone	970-243-3271	Phone	970-683-2295	G	
Fax	970-243-3280	Fax	970-285-9573	H	
e-Mail Address	mmumbly@hcsi.com	e-Mail Address	karoline.blaney@wpxenergy.com	I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	CO River UG	4/7/14	1045	SW	1,8	4	X	X	X	X							
2	CO River DG		1055														
3	Spring 01		1115														
4	Spring 02		1120														
5	Culvert 01		1105														
6	Pond 01		1130														
7	Spring UG		1145														
8	Trip Blank	-	-	TB		1	X										
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
				<input type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input checked="" type="checkbox"/> 24 Hour			
Relinquished by:	Date:	Time:	Received by:	Notes:			
Mark Lento	4/7/14	1330	W. M.				
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp	QC Package: (Check One Box Below)	
W. M.	4-7-14	1345	OSF		3.2C	<input checked="" type="checkbox"/> Level I Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Data <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):				
DES	4/8/14	1100					
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>3</sub> 7-Other 8-4°C 9-5035							

- Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.  
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.  
 3. The Chain of Custody is a legal document. All information must be completed accurately.

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Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 08-Apr-14 10:00

Work Order: 1404366

Received by: DS

Checklist completed by Diane Shaw 08-Apr-14  
eSignature Date

Reviewed by: Ann Preston 08-Apr-14  
eSignature Date

Matrices: Surface Water

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>3.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/8/2014 11:02:30 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



From: (810) 399-8070  
 Sample Receiving  
 ALS Laboratory Group  
 3352 128th Avenue  
 Holland, MI 49424

Origin ID: GRRR



Ship Date: 07APR14  
 Weight: 35.0 LB  
 CAC: 22948498-ET3480

Dim: 24 X 15 X 15 IN

SHIP TO: (810) 399-8070  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

HOLLAND, MI 49424

BILL BENDER

Delivery Address Bar Code



Ref # 040714-1  
 Invoice #  
 PO #  
 Dept #

TUE - 08 APR 10:30A  
 PRIORITY OVERNIGHT

TRK 7084 7091 8285  
 E291



68 GRRR

49424  
 MI US  
 GRR



5221UF00M720

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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Seal Broken By:	Company: ALS KALCHING	ALS Environmental 3352 128th Avenue Holland, Michigan 49424 Tel: +1 616 399 8070 Fax: +1 616 399 8185
	Name: N. MARCHAL Date: 4-7-14 Time: 1700	
Letter:	CUSTODY SEAL	



11-Apr-2014

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

Re: **WPX PA 31-36 SW 4.9.14**

Work Order: **1404496**

Dear Mark,

ALS Environmental received 8 samples on 10-Apr-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 19.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.9.14  
**Work Order:** 1404496

**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>
1404496-01	CO RIVER UG	Surface Water		4/9/2014 09:15	4/10/2014 09:30	<input type="checkbox"/>
1404496-02	CO RIVER DG	Surface Water		4/9/2014 09:25	4/10/2014 09:30	<input type="checkbox"/>
1404496-03	Culvert 01	Surface Water		4/9/2014 09:35	4/10/2014 09:30	<input type="checkbox"/>
1404496-04	Spring 01	Surface Water		4/9/2014 09:40	4/10/2014 09:30	<input type="checkbox"/>
1404496-05	Spring 02	Surface Water		4/9/2014 09:45	4/10/2014 09:30	<input type="checkbox"/>
1404496-06	Pond 01	Surface Water		4/9/2014 10:00	4/10/2014 09:30	<input type="checkbox"/>
1404496-07	Spring UG	Surface Water		4/9/2014 10:10	4/10/2014 09:30	<input type="checkbox"/>
1404496-08	Trip Blank	Water		4/9/2014	4/10/2014 09:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.9.14  
**WorkOrder:** 1404496

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: CO RIVER UG

Collection Date: 4/9/2014 09:15 AM

Work Order: 1404496

Lab ID: 1404496-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 02:20 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 02:20 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 02:20 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 02:20 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 02:20 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 02:20 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	4/10/2014 02:20 PM
Surr: 4-Bromofluorobenzene	96.0		75-120	%REC	1	4/10/2014 02:20 PM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	4/10/2014 02:20 PM
Surr: Toluene-d8	99.8		85-120	%REC	1	4/10/2014 02:20 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	120		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	4/10/2014 05:38 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	440		10	mg/L	1	4/11/2014 08:00 AM

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

**ALS Group USA, Corp**

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: CO RIVER DG

Collection Date: 4/9/2014 09:25 AM

Work Order: 1404496

Lab ID: 1404496-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 02:46 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 02:46 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 02:46 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 02:46 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 02:46 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 02:46 PM
Surr: 1,2-Dichloroethane-d4	99.2		70-120	%REC	1	4/10/2014 02:46 PM
Surr: 4-Bromofluorobenzene	96.6		75-120	%REC	1	4/10/2014 02:46 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	4/10/2014 02:46 PM
Surr: Toluene-d8	100		85-120	%REC	1	4/10/2014 02:46 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	130		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	100		10	mg/L	10	4/10/2014 06:39 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	440		10	mg/L	1	4/11/2014 08:00 AM

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

**ALS Group USA, Corp**

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: Culvert 01

Collection Date: 4/9/2014 09:35 AM

Work Order: 1404496

Lab ID: 1404496-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 03:12 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 03:12 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 03:12 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 03:12 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 03:12 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 03:12 PM
Surr: 1,2-Dichloroethane-d4	99.2		70-120	%REC	1	4/10/2014 03:12 PM
Surr: 4-Bromofluorobenzene	95.9		75-120	%REC	1	4/10/2014 03:12 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	4/10/2014 03:12 PM
Surr: Toluene-d8	99.8		85-120	%REC	1	4/10/2014 03:12 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	11		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	51		4.0	mg/L	4	4/10/2014 06:59 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	400		10	mg/L	1	4/11/2014 08:00 AM

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

# ALS Group USA, Corp

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: Spring 01

Collection Date: 4/9/2014 09:40 AM

Work Order: 1404496

Lab ID: 1404496-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 03:38 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 03:38 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 03:38 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 03:38 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 03:38 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 03:38 PM
Surr: 1,2-Dichloroethane-d4	98.6		70-120	%REC	1	4/10/2014 03:38 PM
Surr: 4-Bromofluorobenzene	95.8		75-120	%REC	1	4/10/2014 03:38 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	4/10/2014 03:38 PM
Surr: Toluene-d8	99.4		85-120	%REC	1	4/10/2014 03:38 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	11		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	4/10/2014 07:19 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		10	mg/L	1	4/11/2014 08:00 AM

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



**ALS Group USA, Corp**

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: Spring 02

Collection Date: 4/9/2014 09:45 AM

Work Order: 1404496

Lab ID: 1404496-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 04:03 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 04:03 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 04:03 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 04:03 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 04:03 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 04:03 PM
Surr: 1,2-Dichloroethane-d4	99.0		70-120	%REC	1	4/10/2014 04:03 PM
Surr: 4-Bromofluorobenzene	95.4		75-120	%REC	1	4/10/2014 04:03 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	4/10/2014 04:03 PM
Surr: Toluene-d8	101		85-120	%REC	1	4/10/2014 04:03 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	9.0		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	4/10/2014 07:39 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	4/11/2014 08:00 AM

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

**ALS Group USA, Corp**

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: Pond 01

Collection Date: 4/9/2014 10:00 AM

Work Order: 1404496

Lab ID: 1404496-06

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 04:29 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 04:29 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 04:29 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 04:29 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 04:29 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 04:29 PM
Surr: 1,2-Dichloroethane-d4	99.6		70-120	%REC	1	4/10/2014 04:29 PM
Surr: 4-Bromofluorobenzene	94.8		75-120	%REC	1	4/10/2014 04:29 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	4/10/2014 04:29 PM
Surr: Toluene-d8	99.4		85-120	%REC	1	4/10/2014 04:29 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	17		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	38		4.0	mg/L	4	4/10/2014 08:00 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	370		10	mg/L	1	4/11/2014 08:00 AM

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

**ALS Group USA, Corp**

Date: 11-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.9.14

Sample ID: Spring UG

Collection Date: 4/9/2014 10:10 AM

Work Order: 1404496

Lab ID: 1404496-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 04:54 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 04:54 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 04:54 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 04:54 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 04:54 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 04:54 PM
Surr: 1,2-Dichloroethane-d4	98.3		70-120	%REC	1	4/10/2014 04:54 PM
Surr: 4-Bromofluorobenzene	95.4		75-120	%REC	1	4/10/2014 04:54 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	4/10/2014 04:54 PM
Surr: Toluene-d8	100		85-120	%REC	1	4/10/2014 04:54 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	13		3.0	mg/L	1	4/11/2014 10:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	4/10/2014 08:20 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/11/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	4/11/2014 08:00 AM

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

**ALS Group USA, Corp**

Date: 11-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.9.14**Work Order:** 1404496**Sample ID:** Trip Blank**Lab ID:** 1404496-08**Collection Date:** 4/9/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/10/2014 01:55 PM
Ethylbenzene	ND		1.0	µg/L	1	4/10/2014 01:55 PM
m,p-Xylene	ND		2.0	µg/L	1	4/10/2014 01:55 PM
o-Xylene	ND		1.0	µg/L	1	4/10/2014 01:55 PM
Toluene	ND		1.0	µg/L	1	4/10/2014 01:55 PM
Xylenes, Total	ND		3.0	µg/L	1	4/10/2014 01:55 PM
Surr: 1,2-Dichloroethane-d4	98.2		70-120	%REC	1	4/10/2014 01:55 PM
Surr: 4-Bromofluorobenzene	95.8		75-120	%REC	1	4/10/2014 01:55 PM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	4/10/2014 01:55 PM
Surr: Toluene-d8	101		85-120	%REC	1	4/10/2014 01:55 PM

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

# ALS Group USA, Corp

Date: 11-Apr-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404496  
**Project:** WPX PA 31-36 SW 4.9.14

## QC BATCH REPORT

Batch ID: **R138680** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: <b>VBK1-140410-R138680</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/10/2014 01:03 PM</b>		
Client ID:		Run ID: <b>VMS5_140410A</b>				SeqNo: <b>2707524</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.58	0	20	0	97.9	70-120	0			
Surr: 4-Bromofluorobenzene	19.33	0	20	0	96.6	75-120	0			
Surr: Dibromofluoromethane	20.02	0	20	0	100	85-115	0			
Surr: Toluene-d8	19.95	0	20	0	99.8	85-120	0			

LCS		Sample ID: <b>VLCSW1-140410-R138680</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/10/2014 11:46 AM</b>		
Client ID:		Run ID: <b>VMS5_140410A</b>				SeqNo: <b>2707522</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.38	1.0	20	0	107	80-120	0			
Ethylbenzene	21.05	1.0	20	0	105	75-125	0			
m,p-Xylene	41.43	2.0	40	0	104	75-130	0			
o-Xylene	20.69	1.0	20	0	103	80-120	0			
Toluene	20.92	1.0	20	0	105	75-120	0			
Xylenes, Total	62.12	3.0	60	0	104	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.39	0	20	0	97	70-120	0			
Surr: 4-Bromofluorobenzene	19.4	0	20	0	97	75-120	0			
Surr: Dibromofluoromethane	19.87	0	20	0	99.4	85-115	0			
Surr: Toluene-d8	20.09	0	20	0	100	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404496  
 Project: WPX PA 31-36 SW 4.9.14

## QC BATCH REPORT

Batch ID: **R138680** Instrument ID **VMS5** Method: **SW8260**

MS					Sample ID: 1404499-01A MS			Units: µg/L		Analysis Date: 4/10/2014 09:59 PM		
Client ID:			Run ID: VMS5_140410A			SeqNo: 2707551		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	22.88	1.0	20	0	114	80-120		0				
Ethylbenzene	22.9	1.0	20	0	114	75-125		0				
m,p-Xylene	45.2	2.0	40	0	113	75-130		0				
o-Xylene	22.12	1.0	20	0	111	80-120		0				
Toluene	22.53	1.0	20	0.37	111	75-120		0				
Xylenes, Total	67.32	3.0	60	0	112	75-130		0				
Surr: 1,2-Dichloroethane-d4	19.34	0	20	0	96.7	70-120		0				
Surr: 4-Bromofluorobenzene	19.92	0	20	0	99.6	75-120		0				
Surr: Dibromofluoromethane	19.57	0	20	0	97.8	85-115		0				
Surr: Toluene-d8	20.07	0	20	0	100	85-120		0				

MSD				Sample ID: 1404499-01A MSD			Units: µg/L		Analysis Date: 4/10/2014 10:24 PM		
Client ID:		Run ID: VMS5_140410A			SeqNo: 2707552		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.69	1.0	20	0	108	80-120	22.88	5.34	30		
Ethylbenzene	22.16	1.0	20	0	111	75-125	22.9	3.28	30		
m,p-Xylene	44.17	2.0	40	0	110	75-130	45.2	2.31	30		
o-Xylene	21.68	1.0	20	0	108	80-120	22.12	2.01	30		
Toluene	21.19	1.0	20	0.37	104	75-120	22.53	6.13	30		
Xylenes, Total	65.85	3.0	60	0	110	75-130	67.32	2.21	30		
Surr: 1,2-Dichloroethane-d4	19.53	0	20	0	97.6	70-120	19.34	0.978	30		
Surr: 4-Bromofluorobenzene	19.66	0	20	0	98.3	75-120	19.92	1.31	30		
Surr: Dibromofluoromethane	19.92	0	20	0	99.6	85-115	19.57	1.77	30		
Surr: Toluene-d8	20.04	0	20	0	100	85-120	20.07	0.15	30		

The following samples were analyzed in this batch:

1404496-01A	1404496-02A	1404496-03A
1404496-04A	1404496-05A	1404496-06A
1404496-07A	1404496-08A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404496  
**Project:** WPX PA 31-36 SW 4.9.14

## QC BATCH REPORT

Batch ID: **57470** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57470-57470</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 08:00 AM</b>		
Client ID:		Run ID: <b>TDS_140411A</b>				SeqNo: <b>2708146</b>		Prep Date: <b>4/11/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-57470-57470</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 08:00 AM</b>		
Client ID:		Run ID: <b>TDS_140411A</b>				SeqNo: <b>2708145</b>		Prep Date: <b>4/11/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 462 10 495 0 93.3 80-120 0

<b>DUP</b>		Sample ID: <b>1404496-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 08:00 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>TDS_140411A</b>				SeqNo: <b>2708135</b>		Prep Date: <b>4/11/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 447 10 0 0 0 0-0 445 0.448 20

The following samples were analyzed in this batch:

1404496-01B	1404496-02B	1404496-03B
1404496-04B	1404496-05B	1404496-06B
1404496-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404496  
**Project:** WPX PA 31-36 SW 4.9.14

## QC BATCH REPORT

Batch ID: **R138744**      Instrument ID **IC4**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138744</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/10/2014 04:24 PM</b>		
Client ID:		Run ID: <b>IC4_140410B</b>				SeqNo: <b>2707824</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R138744</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/10/2014 04:50 PM</b>		
Client ID:		Run ID: <b>IC4_140410B</b>				SeqNo: <b>2707825</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      10.35      1.0      10      0      103      85-110      0

<b>MS</b>		Sample ID: <b>1404496-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/10/2014 05:58 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC4_140410B</b>				SeqNo: <b>2707827</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      154      10      50      99.64      109      75-125      0

<b>MSD</b>		Sample ID: <b>1404496-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/10/2014 06:19 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>IC4_140410B</b>				SeqNo: <b>2707828</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      154.3      10      50      99.64      109      75-125      154      0.245      20

The following samples were analyzed in this batch:

1404496-01B	1404496-02B	1404496-03B
1404496-04B	1404496-05B	1404496-06B
1404496-07B		

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404496  
**Project:** WPX PA 31-36 SW 4.9.14

## QC BATCH REPORT

Batch ID: **R138745**      Instrument ID **WETCHEM**      Method: **E325.2**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140411-R138745</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140411D</b>				SeqNo: <b>2707862</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>MBLK</b>		Sample ID: <b>WBLKW1-140411-R138745</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140411D</b>				SeqNo: <b>2707865</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140411-R138745</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140411D</b>				SeqNo: <b>2707863</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      51.98      3.0      50      0      104      80-120      0

<b>LCS</b>		Sample ID: <b>WLCSW1-140411-R138745</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140411D</b>				SeqNo: <b>2707866</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      51.98      3.0      50      0      104      80-120      0

<b>MS</b>		Sample ID: <b>1404042-06C MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140411D</b>				SeqNo: <b>2707869</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      195      3.0      50      140      110      75-125      0

<b>MSD</b>		Sample ID: <b>1404042-06C MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/11/2014 10:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140411D</b>				SeqNo: <b>2707870</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      195      3.0      50      140      110      75-125      195      0      20

The following samples were analyzed in this batch:

1404496-01B	1404496-02B	1404496-03B
1404496-04B	1404496-05B	1404496-06B
1404496-07B		

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



# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 399-6070

## Chain-of-Custody

WORKORDER #

1404496

Form 262a

PROJECT NAME	WPX PA 31-36 SW	SAMPLER	Mike Lobato				DATE	4/9/14				PAGE	1 of 1			
PROJECT NO.		SITE ID	PA 31-36				TURNAROUND	24 HR				DISPOSAL	By Lab or Return to Client			
		EDD FORMAT														
		PURCHASE ORDER														
COMPANY NAME	HRL Compliance Solutions, Inc.	BILL TO COMPANY	WPX Energy													
SEND REPORT TO	Mark Mumby	INVOICE ATTN TO	Karolina Blaney													
ADDRESS	2385 F 1/2 Road	ADDRESS	1058 Co. Rd. 215													
CITY / STATE / ZIP	Grand Junction, CO 81505	CITY / STATE / ZIP	Parachute, CO 81635													
PHONE	970-243-3271	PHONE	970-683-2295													
FAX	970-243-3280	FAX														
E-MAIL	mmumby@hrlcomp.com	E-MAIL	Karolina.blaney@wpxenergy.com													
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	CHLORIDE	SULFATES					
1	CO RIVER UG	SW	4/9/14	0915	4	1, 8		X	X	X	X					
2	CO RIVER DG	SW	4/9/14	0925	4	1, 8		X	X	X	X					
3	Culvert 01	SW	4/9/14	0935	4	1, 8		X	X	X	X					
4	Spring 01	SW	4/9/14	0940	4	1, 8		X	X	X	X					
5	Spring 02	SW	4/9/14	0945	4	1, 8		X	X	X	X					
6	Pond 01	SW	4/9/14	1000	4	1, 8		X	X	X	X					
7	Spring UG	SW	4/9/14	1010	4	1, 8		X	X	X	X					
8	TRIP BLANK	L	4/9/14	—	1	1, 8		X								

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

For metals or anions, please detail analytes below.

Comments:

3.2°C

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

SIGNATURE	PRINTED NAME	DATE	TIME
<i>Mike Lobato</i>	Mike Lobato	4/9/14	1438
<i>N. Martinez</i>	N. Martinez	4/9/14	1438
<i>N. Martinez</i>	N. Martinez	4-9-14	1450
<i>Diane F. She</i>	Diane F. She	4/10/14	0930

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

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 10-Apr-14 09:30

Work Order: 1404496

Received by: DS

Checklist completed by Diane Shaw 10-Apr-14  
eSignature Date

Reviewed by: Ann Preston 10-Apr-14  
eSignature Date

Matrices: Surface Water

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>3.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/10/2014 10:58:40 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

ALS Parachute Custody Seal

Date: 4-9-14 Time: 1630

Name: W. W. A. [unclear]



15-Apr-2014

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

Re: **WPX PA 31-36 SW 4.11.14**

Work Order: **1404653**

Dear Mark,

ALS Environmental received 8 samples on 12-Apr-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 19.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.11.14  
**Work Order:** 1404653

**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>
1404653-01	CO RIVER UG	Surface Water		4/11/2014 09:59	4/12/2014 10:00	<input type="checkbox"/>
1404653-02	CO RIVER DG	Surface Water		4/11/2014 10:12	4/12/2014 10:00	<input type="checkbox"/>
1404653-03	Culvert 01	Surface Water		4/11/2014 10:22	4/12/2014 10:00	<input type="checkbox"/>
1404653-04	Spring 01	Surface Water		4/11/2014 10:29	4/12/2014 10:00	<input type="checkbox"/>
1404653-05	Spring 02	Surface Water		4/11/2014 10:35	4/12/2014 10:00	<input type="checkbox"/>
1404653-06	Pond 01	Surface Water		4/11/2014 11:01	4/12/2014 10:00	<input type="checkbox"/>
1404653-07	Spring UG	Surface Water		4/11/2014 11:15	4/12/2014 10:00	<input type="checkbox"/>
1404653-08	Trip Blank	Water		4/11/2014	4/12/2014 10:00	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.11.14  
**WorkOrder:** 1404653

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: CO RIVER UG

Collection Date: 4/11/2014 09:59 AM

Work Order: 1404653

Lab ID: 1404653-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 04:07 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 04:07 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 04:07 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 04:07 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 04:07 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 04:07 PM
Surr: 1,2-Dichloroethane-d4	98.8		70-120	%REC	1	4/12/2014 04:07 PM
Surr: 4-Bromofluorobenzene	96.5		75-120	%REC	1	4/12/2014 04:07 PM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	4/12/2014 04:07 PM
Surr: Toluene-d8	99.8		85-120	%REC	1	4/12/2014 04:07 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	52		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	91		10	mg/L	10	4/14/2014 07:21 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		20	mg/L	1	4/15/2014 08:30 AM

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



# ALS Group USA, Corp

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: CO RIVER DG

Collection Date: 4/11/2014 10:12 AM

Work Order: 1404653

Lab ID: 1404653-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 04:33 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 04:33 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 04:33 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 04:33 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 04:33 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 04:33 PM
Surr: 1,2-Dichloroethane-d4	97.6		70-120	%REC	1	4/12/2014 04:33 PM
Surr: 4-Bromofluorobenzene	96.6		75-120	%REC	1	4/12/2014 04:33 PM
Surr: Dibromofluoromethane	98.3		85-115	%REC	1	4/12/2014 04:33 PM
Surr: Toluene-d8	98.8		85-120	%REC	1	4/12/2014 04:33 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	100		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	89		10	mg/L	10	4/14/2014 07:41 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	370		20	mg/L	1	4/15/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: Culvert 01

Collection Date: 4/11/2014 10:22 AM

Work Order: 1404653

Lab ID: 1404653-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 04:59 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 04:59 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 04:59 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 04:59 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 04:59 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 04:59 PM
Surr: 1,2-Dichloroethane-d4	97.6		70-120	%REC	1	4/12/2014 04:59 PM
Surr: 4-Bromofluorobenzene	94.0		75-120	%REC	1	4/12/2014 04:59 PM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	4/12/2014 04:59 PM
Surr: Toluene-d8	98.0		85-120	%REC	1	4/12/2014 04:59 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	52		4.0	mg/L	4	4/14/2014 08:01 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		20	mg/L	1	4/15/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: Spring 01

Collection Date: 4/11/2014 10:29 AM

Work Order: 1404653

Lab ID: 1404653-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 05:25 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 05:25 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 05:25 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 05:25 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 05:25 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 05:25 PM
Surr: 1,2-Dichloroethane-d4	98.4		70-120	%REC	1	4/12/2014 05:25 PM
Surr: 4-Bromofluorobenzene	96.8		75-120	%REC	1	4/12/2014 05:25 PM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	4/12/2014 05:25 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	4/12/2014 05:25 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	32		4.0	mg/L	4	4/14/2014 08:21 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		10	mg/L	1	4/15/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: Spring 02

Collection Date: 4/11/2014 10:35 AM

Work Order: 1404653

Lab ID: 1404653-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 05:51 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 05:51 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 05:51 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 05:51 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 05:51 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 05:51 PM
Surr: 1,2-Dichloroethane-d4	98.0		70-120	%REC	1	4/12/2014 05:51 PM
Surr: 4-Bromofluorobenzene	96.4		75-120	%REC	1	4/12/2014 05:51 PM
Surr: Dibromofluoromethane	98.9		85-115	%REC	1	4/12/2014 05:51 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	4/12/2014 05:51 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	8.0		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	4/14/2014 08:42 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	4/15/2014 08:30 AM

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

**ALS Group USA, Corp**

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: Pond 01

Collection Date: 4/11/2014 11:01 AM

Work Order: 1404653

Lab ID: 1404653-06

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 06:17 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 06:17 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 06:17 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 06:17 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 06:17 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 06:17 PM
Surr: 1,2-Dichloroethane-d4	98.5		70-120	%REC	1	4/12/2014 06:17 PM
Surr: 4-Bromofluorobenzene	98.2		75-120	%REC	1	4/12/2014 06:17 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	4/12/2014 06:17 PM
Surr: Toluene-d8	98.8		85-120	%REC	1	4/12/2014 06:17 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	22		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		4.0	mg/L	4	4/14/2014 09:02 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	340		10	mg/L	1	4/15/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: Spring UG

Collection Date: 4/11/2014 11:15 AM

Work Order: 1404653

Lab ID: 1404653-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 06:42 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 06:42 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 06:42 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 06:42 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 06:42 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 06:42 PM
Surr: 1,2-Dichloroethane-d4	98.2		70-120	%REC	1	4/12/2014 06:42 PM
Surr: 4-Bromofluorobenzene	96.9		75-120	%REC	1	4/12/2014 06:42 PM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	4/12/2014 06:42 PM
Surr: Toluene-d8	99.0		85-120	%REC	1	4/12/2014 06:42 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	4/15/2014 09:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	32		4.0	mg/L	4	4/14/2014 09:22 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/15/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	4/15/2014 08:30 AM

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

**ALS Group USA, Corp**

Date: 15-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.11.14

Sample ID: Trip Blank

Collection Date: 4/11/2014

Work Order: 1404653

Lab ID: 1404653-08

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/12/2014 03:15 PM
Ethylbenzene	ND		1.0	µg/L	1	4/12/2014 03:15 PM
m,p-Xylene	ND		2.0	µg/L	1	4/12/2014 03:15 PM
o-Xylene	ND		1.0	µg/L	1	4/12/2014 03:15 PM
Toluene	ND		1.0	µg/L	1	4/12/2014 03:15 PM
Xylenes, Total	ND		3.0	µg/L	1	4/12/2014 03:15 PM
Surr: 1,2-Dichloroethane-d4	97.8		70-120	%REC	1	4/12/2014 03:15 PM
Surr: 4-Bromofluorobenzene	95.2		75-120	%REC	1	4/12/2014 03:15 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	1	4/12/2014 03:15 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	4/12/2014 03:15 PM

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

# ALS Group USA, Corp

Date: 15-Apr-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404653  
**Project:** WPX PA 31-36 SW 4.11.14

## QC BATCH REPORT

Batch ID: **R138799** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: <b>VBK1-140412-R138799</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/12/2014 02:50 PM</b>		
Client ID:		Run ID: <b>VMS5_140412A</b>				SeqNo: <b>2710225</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20.11	0	20	0	101	70-120	0			
Surr: 4-Bromofluorobenzene	19.15	0	20	0	95.8	75-120	0			
Surr: Dibromofluoromethane	20.16	0	20	0	101	85-115	0			
Surr: Toluene-d8	19.81	0	20	0	99	85-120	0			

LCS		Sample ID: <b>VLCSW1-140412-R138799</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/12/2014 01:58 PM</b>		
Client ID:		Run ID: <b>VMS5_140412A</b>				SeqNo: <b>2710222</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.55	1.0	20	0	113	80-120	0			
Ethylbenzene	21.99	1.0	20	0	110	75-125	0			
m,p-Xylene	43.68	2.0	40	0	109	75-130	0			
o-Xylene	21.99	1.0	20	0	110	80-120	0			
Toluene	21.92	1.0	20	0	110	75-120	0			
Xylenes, Total	65.67	3.0	60	0	109	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.17	0	20	0	95.8	70-120	0			
Surr: 4-Bromofluorobenzene	19.74	0	20	0	98.7	75-120	0			
Surr: Dibromofluoromethane	19.84	0	20	0	99.2	85-115	0			
Surr: Toluene-d8	19.93	0	20	0	99.6	85-120	0			

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404653  
**Project:** WPX PA 31-36 SW 4.11.14

## QC BATCH REPORT

Batch ID: **R138799**      Instrument ID **VMS5**      Method: **SW8260**

MS				Sample ID: 1404653-07A MS		Units: µg/L		Analysis Date: 4/12/2014 11:50 PM		
Client ID: Spring UG			Run ID: VMS5_140412A		SeqNo: 2710260		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.2	1.0	20	0	111	80-120	0			
Ethylbenzene	22.48	1.0	20	0	112	75-125	0			
m,p-Xylene	44.48	2.0	40	0	111	75-130	0			
o-Xylene	21.95	1.0	20	0	110	80-120	0			
Toluene	21.47	1.0	20	0	107	75-120	0			
Xylenes, Total	66.43	3.0	60	0	111	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.31	0	20	0	96.6	70-120	0			
Surr: 4-Bromofluorobenzene	20.1	0	20	0	100	75-120	0			
Surr: Dibromofluoromethane	19.65	0	20	0	98.2	85-115	0			
Surr: Toluene-d8	19.95	0	20	0	99.8	85-120	0			

The following samples were analyzed in this batch:

1404653-01A	1404653-02A	1404653-03A
1404653-04A	1404653-05A	1404653-06A
1404653-07A	1404653-08A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404653  
**Project:** WPX PA 31-36 SW 4.11.14

## QC BATCH REPORT

Batch ID: **57575** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57575-57575</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140415A</b>				SeqNo: <b>2712734</b>		Prep Date: <b>4/15/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-57575-57575</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140415A</b>				SeqNo: <b>2712732</b>		Prep Date: <b>4/15/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 465 10 495 0 93.9 80-120 0

<b>DUP</b>		Sample ID: <b>1404626-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140415A</b>				SeqNo: <b>2712709</b>		Prep Date: <b>4/15/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 708 20 0 0 0 0-0 722 1.96 20

<b>DUP</b>		Sample ID: <b>1404653-05B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 08:30 AM</b>		
Client ID: <b>Spring 02</b>		Run ID: <b>TDS_140415A</b>				SeqNo: <b>2712723</b>		Prep Date: <b>4/15/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 421 10 0 0 0 0-0 416 1.19 20

The following samples were analyzed in this batch:

1404653-01B	1404653-02B	1404653-03B
1404653-04B	1404653-05B	1404653-06B
1404653-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404653  
**Project:** WPX PA 31-36 SW 4.11.14

## QC BATCH REPORT

Batch ID: **R138898**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140415-R138898</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 09:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140415A</b>				SeqNo: <b>2712487</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140415-R138898</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 09:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140415A</b>				SeqNo: <b>2712488</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      50.98      3.0      50      0      102      80-120      0

<b>MS</b>		Sample ID: <b>1404626-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 09:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140415A</b>				SeqNo: <b>2712491</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      314.9      3.0      50      259.9      110      75-125      0      O

<b>MSD</b>		Sample ID: <b>1404626-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/15/2014 09:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140415A</b>				SeqNo: <b>2712492</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      309.9      3.0      50      259.9      100      75-125      314.9      1.6      20      O

The following samples were analyzed in this batch:

1404653-01B	1404653-02B	1404653-03B
1404653-04B	1404653-05B	1404653-06B
1404653-07B		

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404653  
 Project: WPX PA 31-36 SW 4.11.14

## QC BATCH REPORT

Batch ID: **R138922** Instrument ID **IC4** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R138922</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/14/2014 06:40 AM</b>		
Client ID:		Run ID: <b>IC4_140414A</b>				SeqNo: <b>2712940</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R138922</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/14/2014 07:00 AM</b>		
Client ID:		Run ID: <b>IC4_140414A</b>				SeqNo: <b>2712942</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 10.08 1.0 10 0 101 85-110 0

<b>MS</b>		Sample ID: <b>1404456-09A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/14/2014 11:04 AM</b>		
Client ID:		Run ID: <b>IC4_140414A</b>				SeqNo: <b>2712960</b>		Prep Date:		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 201 20 100 101.8 99.3 75-125 0

<b>MSD</b>		Sample ID: <b>1404456-09A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/14/2014 11:25 AM</b>		
Client ID:		Run ID: <b>IC4_140414A</b>				SeqNo: <b>2712962</b>		Prep Date:		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 203.2 20 100 101.8 101 75-125 201 1.04 20

The following samples were analyzed in this batch:

1404653-01B	1404653-02B	1404653-03B
1404653-04B	1404653-05B	1404653-06B
1404653-07B		





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



**WORKORDER**

1404653

**Comments:**

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Finn Whiting	4/11/14	1148
RECEIVED BY		F. Whiting	4-11-14	11:48
RELINQUISHED BY		Diane F. Shu	4-11-14	1200
RECEIVED BY		Diane F. Shu	4/12/14	1000
RELINQUISHED BY				
RECEIVED BY				

**Descriptive Key:** 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-NaHSO<sub>4</sub> 7-Other 8-4 degrees C 9-5035

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 12-Apr-14 10:00

Work Order: 1404653

Received by: DS

Checklist completed by Diane Shaw  
eSignature

12-Apr-14  
Date

Reviewed by: Ann Preston  
eSignature

14-Apr-14  
Date

Matrices: Surface Water

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>3.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/12/2014 12:00:55 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (810) 398-8870  
 Sample Receiving  
 ALS Laboratory Group  
 3352 128th Avenue  
 Holland, MI 49424

Origin ID: GRRRA



Ship Date: 11APR14  
 Actual: 48.0 LB  
 CAD: 22548468NET3499

Dim: 24 X 15 X 15 IN

Delivery Address Bar Code



Ref # 041114-1  
 Invoice #  
 PO #  
 Dept #

SHIP TO: (810) 398-8870  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

BILL SENDER

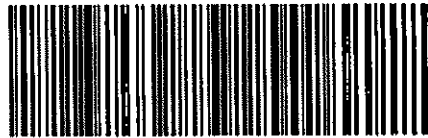
HOLLAND, MI 49424

SATURDAY 12:00P  
 PRIORITY OVERNIGHT

TRK# 7885 2986 7203  
 GHI

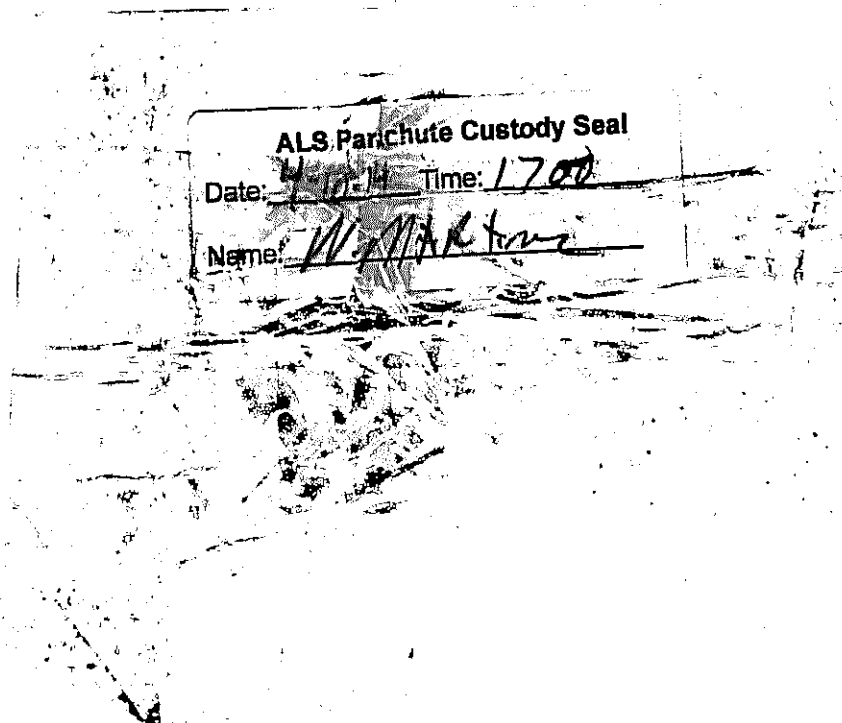
49424  
 MI-LIN  
 GRR

68 GRRRA



8220 LF800F720

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 /templates/components/dotcom\_label\_contents/TrnCDom/user/TC\_dom.html loading...





16-Apr-2014

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

Re: **WPX PA 31-36 SW 4.14.14**

Work Order: **1404723**

Dear Mark,

ALS Environmental received 8 samples on 15-Apr-2014 11:00 AM for the analyses presented in the following report.

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

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 20.

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 

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.14.14  
**Work Order:** 1404723

**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>
1404723-01	CO RIVER UG	Surface Water		4/14/2014 10:37	4/15/2014 11:00	<input type="checkbox"/>
1404723-02	CO RIVER DG	Surface Water		4/14/2014 10:53	4/15/2014 11:00	<input type="checkbox"/>
1404723-03	Culvert 01	Surface Water		4/14/2014 11:28	4/15/2014 11:00	<input type="checkbox"/>
1404723-04	Spring 01	Surface Water		4/14/2014 11:20	4/15/2014 11:00	<input type="checkbox"/>
1404723-05	Spring 02	Surface Water		4/14/2014 11:10	4/15/2014 11:00	<input type="checkbox"/>
1404723-06	Pond 01	Surface Water		4/14/2014 11:43	4/15/2014 11:00	<input type="checkbox"/>
1404723-07	Spring UG	Surface Water		4/14/2014 12:00	4/15/2014 11:00	<input type="checkbox"/>
1404723-08	Trip Blank	Water		4/14/2014	4/15/2014 11:00	<input type="checkbox"/>

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**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.14.14**Work Order:** 1404723**Case Narrative**

---

Batch R139048 sample Spring 01 MSD recovery for Sulfate was above control limits. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for Sulfate.

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.14.14  
**WorkOrder:** 1404723

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: CO RIVER UG

Collection Date: 4/14/2014 10:37 AM

Work Order: 1404723

Lab ID: 1404723-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 05:43 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 05:43 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 05:43 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 05:43 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 05:43 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 05:43 PM
Surr: 1,2-Dichloroethane-d4	96.1		70-120	%REC	1	4/15/2014 05:43 PM
Surr: 4-Bromofluorobenzene	94.6		75-120	%REC	1	4/15/2014 05:43 PM
Surr: Dibromofluoromethane	96.9		85-115	%REC	1	4/15/2014 05:43 PM
Surr: Toluene-d8	97.0		85-120	%REC	1	4/15/2014 05:43 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	60		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	61		10	mg/L	10	4/16/2014 10:34 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	240		20	mg/L	1	4/16/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: CO RIVER DG

Collection Date: 4/14/2014 10:53 AM

Work Order: 1404723

Lab ID: 1404723-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 06:08 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 06:08 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 06:08 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 06:08 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 06:08 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 06:08 PM
Surr: 1,2-Dichloroethane-d4	96.4		70-120	%REC	1	4/15/2014 06:08 PM
Surr: 4-Bromofluorobenzene	97.4		75-120	%REC	1	4/15/2014 06:08 PM
Surr: Dibromofluoromethane	98.7		85-115	%REC	1	4/15/2014 06:08 PM
Surr: Toluene-d8	96.6		85-120	%REC	1	4/15/2014 06:08 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	60		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	64		10	mg/L	10	4/16/2014 10:54 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	250		20	mg/L	1	4/16/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: Culvert 01

Collection Date: 4/14/2014 11:28 AM

Work Order: 1404723

Lab ID: 1404723-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 06:34 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 06:34 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 06:34 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 06:34 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 06:34 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 06:34 PM
Surr: 1,2-Dichloroethane-d4	93.9		70-120	%REC	1	4/15/2014 06:34 PM
Surr: 4-Bromofluorobenzene	96.0		75-120	%REC	1	4/15/2014 06:34 PM
Surr: Dibromofluoromethane	97.8		85-115	%REC	1	4/15/2014 06:34 PM
Surr: Toluene-d8	97.1		85-120	%REC	1	4/15/2014 06:34 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	14		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	56		4.0	mg/L	4	4/16/2014 11:14 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	4/16/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: Spring 01

Collection Date: 4/14/2014 11:20 AM

Work Order: 1404723

Lab ID: 1404723-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 06:59 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 06:59 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 06:59 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 06:59 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 06:59 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 06:59 PM
Surr: 1,2-Dichloroethane-d4	96.0		70-120	%REC	1	4/15/2014 06:59 PM
Surr: 4-Bromofluorobenzene	95.0		75-120	%REC	1	4/15/2014 06:59 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	4/15/2014 06:59 PM
Surr: Toluene-d8	96.6		85-120	%REC	1	4/15/2014 06:59 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	8.0		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	30		4.0	mg/L	4	4/16/2014 11:34 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	370		10	mg/L	1	4/16/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: Spring 02

Collection Date: 4/14/2014 11:10 AM

Work Order: 1404723

Lab ID: 1404723-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 07:24 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 07:24 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 07:24 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 07:24 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 07:24 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 07:24 PM
Surr: 1,2-Dichloroethane-d4	96.4		70-120	%REC	1	4/15/2014 07:24 PM
Surr: 4-Bromofluorobenzene	96.2		75-120	%REC	1	4/15/2014 07:24 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	4/15/2014 07:24 PM
Surr: Toluene-d8	96.2		85-120	%REC	1	4/15/2014 07:24 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		4.0	mg/L	4	4/16/2014 12:36 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	520		20	mg/L	1	4/16/2014 08:30 AM

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



# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: Pond 01

Collection Date: 4/14/2014 11:43 AM

Work Order: 1404723

Lab ID: 1404723-06

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 07:50 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 07:50 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 07:50 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 07:50 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 07:50 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 07:50 PM
Surr: 1,2-Dichloroethane-d4	96.5		70-120	%REC	1	4/15/2014 07:50 PM
Surr: 4-Bromofluorobenzene	94.6		75-120	%REC	1	4/15/2014 07:50 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	4/15/2014 07:50 PM
Surr: Toluene-d8	96.5		85-120	%REC	1	4/15/2014 07:50 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	14		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		4.0	mg/L	4	4/16/2014 12:56 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	360		10	mg/L	1	4/16/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: Spring UG

Collection Date: 4/14/2014 12:00 PM

Work Order: 1404723

Lab ID: 1404723-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 08:15 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 08:15 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 08:15 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 08:15 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 08:15 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 08:15 PM
Surr: 1,2-Dichloroethane-d4	95.0		70-120	%REC	1	4/15/2014 08:15 PM
Surr: 4-Bromofluorobenzene	95.8		75-120	%REC	1	4/15/2014 08:15 PM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	4/15/2014 08:15 PM
Surr: Toluene-d8	96.5		85-120	%REC	1	4/15/2014 08:15 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	13		3.0	mg/L	1	4/16/2014 03:30 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	4/16/2014 01:17 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/16/14	Analyst: <b>YM</b>
Total Dissolved Solids	430		10	mg/L	1	4/16/2014 08:30 AM

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

**ALS Group USA, Corp**

Date: 16-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.14.14

Sample ID: Trip Blank

Collection Date: 4/14/2014

Work Order: 1404723

Lab ID: 1404723-08

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/15/2014 03:11 PM
Ethylbenzene	ND		1.0	µg/L	1	4/15/2014 03:11 PM
m,p-Xylene	ND		2.0	µg/L	1	4/15/2014 03:11 PM
o-Xylene	ND		1.0	µg/L	1	4/15/2014 03:11 PM
Toluene	ND		1.0	µg/L	1	4/15/2014 03:11 PM
Xylenes, Total	ND		3.0	µg/L	1	4/15/2014 03:11 PM
Surr: 1,2-Dichloroethane-d4	96.0		70-120	%REC	1	4/15/2014 03:11 PM
Surr: 4-Bromofluorobenzene	95.6		75-120	%REC	1	4/15/2014 03:11 PM
Surr: Dibromofluoromethane	98.1		85-115	%REC	1	4/15/2014 03:11 PM
Surr: Toluene-d8	98.2		85-120	%REC	1	4/15/2014 03:11 PM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404723  
**Project:** WPX PA 31-36 SW 4.14.14

**QC BATCH REPORT**

Batch ID: **R138929** Instrument ID **VMS5** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBK1-140415-R138929</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/15/2014 01:30 PM</b>		
Client ID:		Run ID: <b>VMS5_140415A</b>				SeqNo: <b>2714645</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	19.09	0	20	0	95.4	70-120	0			
Surr: 4-Bromofluorobenzene	18.91	0	20	0	94.6	75-120	0			
Surr: Dibromofluoromethane	19.88	0	20	0	99.4	85-115	0			
Surr: Toluene-d8	19.39	0	20	0	97	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140415-R138929</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/15/2014 12:39 PM</b>		
Client ID:		Run ID: <b>VMS5_140415A</b>				SeqNo: <b>2714644</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.33	1.0	20	0	112	80-120	0			
Ethylbenzene	21.02	1.0	20	0	105	75-125	0			
m,p-Xylene	41.59	2.0	40	0	104	75-130	0			
o-Xylene	20.77	1.0	20	0	104	80-120	0			
Toluene	21.04	1.0	20	0	105	75-120	0			
Xylenes, Total	62.36	3.0	60	0	104	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.05	0	20	0	95.2	70-120	0			
Surr: 4-Bromofluorobenzene	19.82	0	20	0	99.1	75-120	0			
Surr: Dibromofluoromethane	19.57	0	20	0	97.8	85-115	0			
Surr: Toluene-d8	19.7	0	20	0	98.5	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404723  
 Project: WPX PA 31-36 SW 4.14.14

## QC BATCH REPORT

Batch ID: **R138929** Instrument ID **VMS5** Method: **SW8260**

MS					Sample ID: 1404723-05A MS			Units: µg/L		Analysis Date: 4/15/2014 10:21 PM		
Client ID: Spring 02			Run ID: VMS5_140415A			SeqNo: 2714658		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	22.49	1.0	20	0	112	80-120	0					
Ethylbenzene	22.22	1.0	20	0	111	75-125	0					
m,p-Xylene	43.85	2.0	40	0	110	75-130	0					
o-Xylene	21.71	1.0	20	0	109	80-120	0					
Toluene	21.43	1.0	20	0	107	75-120	0					
Xylenes, Total	65.56	3.0	60	0	109	75-130	0					
Surr: 1,2-Dichloroethane-d4	19.15	0	20	0	95.8	70-120	0					
Surr: 4-Bromofluorobenzene	20.14	0	20	0	101	75-120	0					
Surr: Dibromofluoromethane	19.58	0	20	0	97.9	85-115	0					
Surr: Toluene-d8	19.79	0	20	0	99	85-120	0					

MSD				Sample ID: 1404723-05A MSD			Units: µg/L		Analysis Date: 4/15/2014 10:46 PM		
Client ID: Spring 02			Run ID: VMS5_140415A			SeqNo: 2714659		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.18	1.0	20	0	111	80-120	22.49	1.39	30		
Ethylbenzene	22.18	1.0	20	0	111	75-125	22.22	0.18	30		
m,p-Xylene	43.9	2.0	40	0	110	75-130	43.85	0.114	30		
o-Xylene	21.77	1.0	20	0	109	80-120	21.71	0.276	30		
Toluene	21.02	1.0	20	0	105	75-120	21.43	1.93	30		
Xylenes, Total	65.67	3.0	60	0	109	75-130	65.56	0.168	30		
Surr: 1,2-Dichloroethane-d4	19.07	0	20	0	95.4	70-120	19.15	0.419	30		
Surr: 4-Bromofluorobenzene	19.96	0	20	0	99.8	75-120	20.14	0.898	30		
Surr: Dibromofluoromethane	19.68	0	20	0	98.4	85-115	19.58	0.509	30		
Surr: Toluene-d8	19.4	0	20	0	97	85-120	19.79	1.99	30		

The following samples were analyzed in this batch:

1404723-01A	1404723-02A	1404723-03A
1404723-04A	1404723-05A	1404723-06A
1404723-07A	1404723-08A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404723  
**Project:** WPX PA 31-36 SW 4.14.14

## QC BATCH REPORT

Batch ID: **57628**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57628-57628</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140416B</b>				SeqNo: <b>2714969</b>		Prep Date: <b>4/16/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57628-57628</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140416B</b>				SeqNo: <b>2714968</b>		Prep Date: <b>4/16/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      454      10      495      0      91.7      80-120      0

<b>DUP</b>		Sample ID: <b>1404593-04A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140416B</b>				SeqNo: <b>2714950</b>		Prep Date: <b>4/16/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      780      20      0      0      0      0-0      774      0.772      20

<b>DUP</b>		Sample ID: <b>1404723-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 08:30 AM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>TDS_140416B</b>				SeqNo: <b>2714953</b>		Prep Date: <b>4/16/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      230      20      0      0      0      0-0      238      3.42      20

The following samples were analyzed in this batch:

1404723-01B	1404723-02B	1404723-03B
1404723-04B	1404723-05B	1404723-06B
1404723-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404723  
**Project:** WPX PA 31-36 SW 4.14.14

## QC BATCH REPORT

Batch ID: **R139048**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R139048</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 08:40 AM</b>		
Client ID:		Run ID: <b>IC3_140416A</b>				SeqNo: <b>2716376</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R139048</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 09:00 AM</b>		
Client ID:		Run ID: <b>IC3_140416A</b>				SeqNo: <b>2716378</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      9.995      1.0      10      0      100      85-110      0

<b>MS</b>		Sample ID: <b>1404723-04B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 11:56 AM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>IC3_140416A</b>				SeqNo: <b>2716390</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      54.11      4.0      20      29.93      121      75-125      0

<b>MSD</b>		Sample ID: <b>1404723-04B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 12:16 PM</b>		
Client ID: <b>Spring 01</b>		Run ID: <b>IC3_140416A</b>				SeqNo: <b>2716392</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      55.41      4.0      20      29.93      127      75-125      54.11      2.36      20      S

The following samples were analyzed in this batch:

1404723-01B	1404723-02B	1404723-03B
1404723-04B	1404723-05B	1404723-06B
1404723-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404723  
**Project:** WPX PA 31-36 SW 4.14.14

## QC BATCH REPORT

Batch ID: **R139049**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140416-R139049</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 03:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140416L</b>				SeqNo: <b>2716428</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140416-R139049</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 03:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140416L</b>				SeqNo: <b>2716429</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      50.98      3.0      50      0      102      80-120      0

<b>MS</b>		Sample ID: <b>1404723-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 03:30 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140416L</b>				SeqNo: <b>2716431</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      115      3.0      50      59.98      110      75-125      0

<b>MSD</b>		Sample ID: <b>1404723-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/16/2014 03:30 PM</b>		
Client ID: <b>CO RIVER UG</b>		Run ID: <b>WETCHEM_140416L</b>				SeqNo: <b>2716432</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      110      3.0      50      59.98      100      75-125      115      4.45      20

The following samples were analyzed in this batch:

1404723-01B	1404723-02B	1404723-03B
1404723-04B	1404723-05B	1404723-06B
1404723-07B		

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





# ALS Environmental

3352 128<sup>th</sup> Avenue Holland, MI 49424  
PH: (616) 399-6070

## Chain-of-Custody

WORKORDER #

1404723

PROJECTNAME WPX PA 31-36 SW 4-14-14		SAMPLER Finn Whiting CASEY		DATE 4/14/14		PAGE 1 of 1	
PROJECT No.		SITE ID PA 31-36 RICHARDSON		TURNAROUND 24 HR		DISPOSAL By Lab or Return to Client	
COMPANYNAME HRL Compliance Solutions, Inc.		BILL TO COMPANY WPX Energy					
SEND REPORT TO Mark Mumby		INVOICE ATTN TO Karolina Blaney					
ADDRESS 2385 F 1/2 Road		ADDRESS 1058 Co. Rd. 215					
CITY/STATE/ZIP Grand Junction, CO 81505		CITY/STATE/ZIP Parachute, CO 81635					
PHONE 970-243-3271		PHONE 970-683-2295					
FAX 970-243-3280		FAX					
E-MAIL mmumby@hrlcomp.com		E-MAIL Karolina.blaney@wpxenergy.com					

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	CHLORIDE	SULFATES
1	CO RIVER UG	SW	4/14/14	1037	4	1, 8		X	X	X	X
2	CO RIVER DG	SW	4/14/14	1053	4	1, 8		X	X	X	X
3	Culvert 01	SW	4/14/14	1128	4	1, 8		X	X	X	X
4	Spring 01	SW	4/14/14	1120	4	1, 8		X	X	X	X
5	Spring 02	SW	4/14/14	1110	4	1, 8		X	X	X	X
6	Pond 01	SW	4/14/14	1143	4	1, 8		X	X	X	X
7	Spring UG	SW	4/14/14	1200	4	1, 8		X	X	X	X
8	TRIP BLANK	L	4/14/14		1	1, 8		X			

Time Zone (Circle): EST CST EST 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:

4.22 M

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
<i>[Signature]</i>	Finn Whiting CASEY RICHARDSON	04/14/14	1250
<i>[Signature]</i>	Nich M... 4-14-14	4-14-14	1255
<i>[Signature]</i>	11. M... 4-14-14	4-14-14	1300
<i>[Signature]</i>	Diane F. Shee	4/15/14	1100
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 15-Apr-14 11:00

Work Order: 1404723

Received by: DS

Checklist completed by Diane Shaw  
eSignature

15-Apr-14  
Date

Reviewed by: Ann Preston  
eSignature

15-Apr-14  
Date

Matrices: Surface Water

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>4.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/15/2014 12:05:10 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input 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:

From: (816) 399-8070  
Sample Receiving  
ALS Laboratory Group  
3352 128th Avenue  
Holland, MI 49424

Origin ID: GRRA



Ship Date: 14APR14  
Actual: 07.9 LB  
CAD: 2264648NET3400

Dim: 24 X 18 X 15 IN

Delivery Address Bar Code



Ref # 041414-1  
Invoice #  
PO #  
Dept #

SHIP TO: (816) 399-8070  
sample receiving  
ALS Laboratory Group  
3352 128TH AVE

BILL BENDER

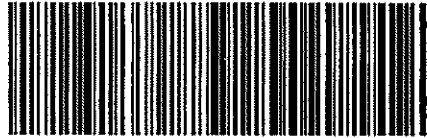
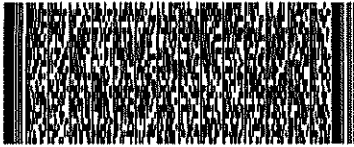
HOLLAND, MI 49424

TUE - 15 APR 10:30A  
PRIORITY OVERNIGHT

TRK# 7985 4524 1481  
(RRT)

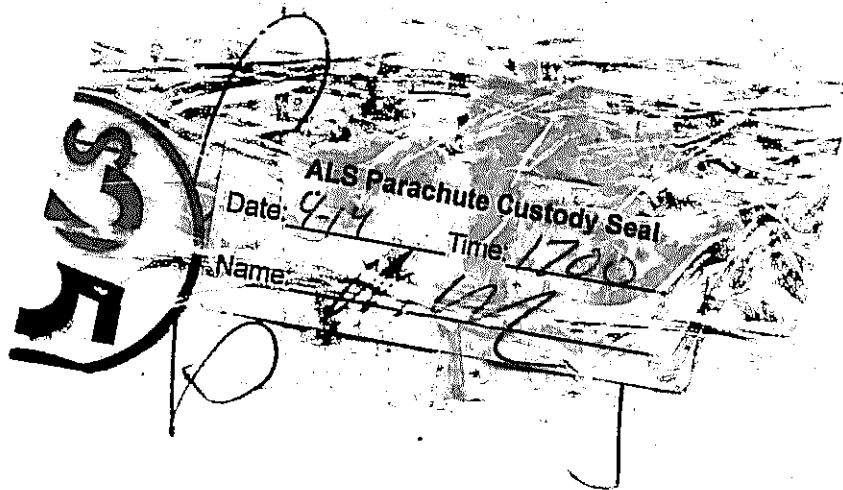
**68 GRRA**

49424  
MS-UB  
GRR



8220 V100P220

/templates/components/dotcom\_label\_content/FoldingInstructions/en/Folding\_instructions.html loading...  
/templates/components/dotcom\_label\_content/WarningsOriginalLabel/en/Folding\_warning.html loading...  
/templates/components/dotcom\_label\_content/TrCDomVue/en/TC\_dom.html loading...





21-Apr-2014

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

Re: **WPX PA 31-36 SW 4.16.14**

Work Order: **1404922**

Dear Mark,

ALS Environmental received 8 samples on 17-Apr-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 21.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.16.14  
**Work Order:** 1404922

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**Work Order Sample Summary**

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<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>
1404922-01	CO River UG	Surface Water		4/16/2014 11:08	4/17/2014 09:30	<input type="checkbox"/>
1404922-02	CO River DG	Surface Water		4/16/2014 11:18	4/17/2014 09:30	<input type="checkbox"/>
1404922-03	Spring 01	Surface Water		4/16/2014 11:42	4/17/2014 09:30	<input type="checkbox"/>
1404922-04	Spring 02	Surface Water		4/16/2014 11:50	4/17/2014 09:30	<input type="checkbox"/>
1404922-05	Culvert 01	Surface Water		4/16/2014 11:33	4/17/2014 09:30	<input type="checkbox"/>
1404922-06	Pond 01	Surface Water		4/16/2014 12:06	4/17/2014 09:30	<input type="checkbox"/>
1404922-07	Spring UG	Surface Water		4/16/2014 12:23	4/17/2014 09:30	<input type="checkbox"/>
1404922-08	Trip Blank	Water		4/16/2014	4/17/2014 09:30	<input type="checkbox"/>

---

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.16.14  
**WorkOrder:** 1404922

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

**ALS Group USA, Corp**

Date: 21-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.16.14

Sample ID: CO River UG

Collection Date: 4/16/2014 11:08 AM

Work Order: 1404922

Lab ID: 1404922-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 08:03 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 08:03 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 08:03 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 08:03 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 08:03 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 08:03 PM
Surr: 1,2-Dichloroethane-d4	99.6		70-120	%REC	1	4/17/2014 08:03 PM
Surr: 4-Bromofluorobenzene	84.2		75-120	%REC	1	4/17/2014 08:03 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	4/17/2014 08:03 PM
Surr: Toluene-d8	98.0		85-120	%REC	1	4/17/2014 08:03 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	77		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	70		10	mg/L	10	4/18/2014 12:33 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	340		10	mg/L	1	4/18/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 21-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.16.14

Sample ID: CO River DG

Collection Date: 4/16/2014 11:18 AM

Work Order: 1404922

Lab ID: 1404922-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 08:28 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 08:28 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 08:28 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 08:28 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 08:28 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 08:28 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	4/17/2014 08:28 PM
Surr: 4-Bromofluorobenzene	82.8		75-120	%REC	1	4/17/2014 08:28 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	4/17/2014 08:28 PM
Surr: Toluene-d8	102		85-120	%REC	1	4/17/2014 08:28 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	95		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	71		10	mg/L	10	4/18/2014 01:34 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	360		10	mg/L	1	4/18/2014 08:30 AM

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



# ALS Group USA, Corp

Date: 21-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.16.14

Sample ID: Spring 01

Collection Date: 4/16/2014 11:42 AM

Work Order: 1404922

Lab ID: 1404922-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 08:52 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 08:52 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 08:52 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 08:52 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 08:52 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 08:52 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	4/17/2014 08:52 PM
Surr: 4-Bromofluorobenzene	82.8		75-120	%REC	1	4/17/2014 08:52 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	4/17/2014 08:52 PM
Surr: Toluene-d8	98.6		85-120	%REC	1	4/17/2014 08:52 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	4/18/2014 01:54 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		10	mg/L	1	4/18/2014 08:30 AM

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

**ALS Group USA, Corp**

Date: 21-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.16.14

Sample ID: Spring 02

Collection Date: 4/16/2014 11:50 AM

Work Order: 1404922

Lab ID: 1404922-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 09:16 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 09:16 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 09:16 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 09:16 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 09:16 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 09:16 PM
Surr: 1,2-Dichloroethane-d4	104		70-120	%REC	1	4/17/2014 09:16 PM
Surr: 4-Bromofluorobenzene	83.2		75-120	%REC	1	4/17/2014 09:16 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	4/17/2014 09:16 PM
Surr: Toluene-d8	103		85-120	%REC	1	4/17/2014 09:16 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	16		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	34		4.0	mg/L	4	4/18/2014 02:14 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	470		10	mg/L	1	4/18/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 21-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.16.14

Sample ID: Culvert 01

Collection Date: 4/16/2014 11:33 AM

Work Order: 1404922

Lab ID: 1404922-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 09:41 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 09:41 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 09:41 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 09:41 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 09:41 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 09:41 PM
Surr: 1,2-Dichloroethane-d4	105		70-120	%REC	1	4/17/2014 09:41 PM
Surr: 4-Bromofluorobenzene	83.6		75-120	%REC	1	4/17/2014 09:41 PM
Surr: Dibromofluoromethane	106		85-115	%REC	1	4/17/2014 09:41 PM
Surr: Toluene-d8	104		85-120	%REC	1	4/17/2014 09:41 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	55		4.0	mg/L	4	4/18/2014 02:34 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	450		10	mg/L	1	4/18/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 21-Apr-14

**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 4.16.14

**Sample ID:** Pond 01

**Collection Date:** 4/16/2014 12:06 PM

**Work Order:** 1404922

**Lab ID:** 1404922-06

**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 10:05 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 10:05 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 10:05 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 10:05 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 10:05 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 10:05 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	4/17/2014 10:05 PM
Surr: 4-Bromofluorobenzene	78.7		75-120	%REC	1	4/17/2014 10:05 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	4/17/2014 10:05 PM
Surr: Toluene-d8	100		85-120	%REC	1	4/17/2014 10:05 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	37		4.0	mg/L	4	4/18/2014 02:55 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	370		10	mg/L	1	4/18/2014 08:30 AM

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

# ALS Group USA, Corp

Date: 21-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.16.14

Sample ID: Spring UG

Collection Date: 4/16/2014 12:23 PM

Work Order: 1404922

Lab ID: 1404922-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/17/2014 10:30 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2014 10:30 PM
m,p-Xylene	ND		2.0	µg/L	1	4/17/2014 10:30 PM
o-Xylene	ND		1.0	µg/L	1	4/17/2014 10:30 PM
Toluene	ND		1.0	µg/L	1	4/17/2014 10:30 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2014 10:30 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	4/17/2014 10:30 PM
Surr: 4-Bromofluorobenzene	82.1		75-120	%REC	1	4/17/2014 10:30 PM
Surr: Dibromofluoromethane	107		85-115	%REC	1	4/17/2014 10:30 PM
Surr: Toluene-d8	102		85-120	%REC	1	4/17/2014 10:30 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	11		3.0	mg/L	1	4/17/2014 04:15 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	4/18/2014 03:15 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/18/14	Analyst: <b>YM</b>
Total Dissolved Solids	460		10	mg/L	1	4/18/2014 08:30 AM

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

**ALS Group USA, Corp**

Date: 21-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.16.14**Work Order:** 1404922**Sample ID:** Trip Blank**Lab ID:** 1404922-08**Collection Date:** 4/16/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	4/18/2014 10:17 AM
Ethylbenzene	ND		1.0	µg/L	1	4/18/2014 10:17 AM
m,p-Xylene	ND		2.0	µg/L	1	4/18/2014 10:17 AM
o-Xylene	ND		1.0	µg/L	1	4/18/2014 10:17 AM
Toluene	ND		1.0	µg/L	1	4/18/2014 10:17 AM
Xylenes, Total	ND		3.0	µg/L	1	4/18/2014 10:17 AM
Surr: 1,2-Dichloroethane-d4	102		70-120	%REC	1	4/18/2014 10:17 AM
Surr: 4-Bromofluorobenzene	83.0		75-120	%REC	1	4/18/2014 10:17 AM
Surr: Dibromofluoromethane	103		85-115	%REC	1	4/18/2014 10:17 AM
Surr: Toluene-d8	101		85-120	%REC	1	4/18/2014 10:17 AM

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404922  
**Project:** WPX PA 31-36 SW 4.16.14

**QC BATCH REPORT**

Batch ID: **R139128** Instrument ID **VMS9** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBK1-140417-R139128</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/17/2014 04:22 PM</b>		
Client ID:		Run ID: <b>VMS9_140417A</b>				SeqNo: <b>2719120</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	20	0	20	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	17.08	0	20	0	85.4	75-120	0			
Surr: Dibromofluoromethane	20.27	0	20	0	101	85-115	0			
Surr: Toluene-d8	20.12	0	20	0	101	85-120	0			

<b>LCS</b>		Sample ID: <b>VLCSW1-140417-R139128</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/17/2014 02:44 PM</b>		
Client ID:		Run ID: <b>VMS9_140417A</b>				SeqNo: <b>2719119</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	23.44	1.0	20	0	117	80-120	0			
Ethylbenzene	21.42	1.0	20	0	107	75-125	0			
m,p-Xylene	43.06	2.0	40	0	108	75-130	0			
o-Xylene	20.95	1.0	20	0	105	80-120	0			
Toluene	23.57	1.0	20	0	118	75-120	0			
Xylenes, Total	64.01	3.0	60	0	107	75-130	0			
Surr: 1,2-Dichloroethane-d4	19.63	0	20	0	98.2	70-120	0			
Surr: 4-Bromofluorobenzene	18.94	0	20	0	94.7	75-120	0			
Surr: Dibromofluoromethane	20.24	0	20	0	101	85-115	0			
Surr: Toluene-d8	20.55	0	20	0	103	85-120	0			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404922  
 Project: WPX PA 31-36 SW 4.16.14

## QC BATCH REPORT

Batch ID: **R139128** Instrument ID **VMS9** Method: **SW8260**

MS					Sample ID: 1404279-03C MS			Units: µg/L		Analysis Date: 4/18/2014 12:32 PM		
Client ID:			Run ID: VMS9_140417A			SeqNo: 2719139		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	23.75	1.0	20	0	119	80-120		0				
Ethylbenzene	20.91	1.0	20	0	105	75-125		0				
m,p-Xylene	42.14	2.0	40	0	105	75-130		0				
o-Xylene	20.07	1.0	20	0	100	80-120		0				
Toluene	23.46	1.0	20	0	117	75-120		0				
Xylenes, Total	62.21	3.0	60	0	104	75-130		0				
Surr: 1,2-Dichloroethane-d4	19.45	0	20	0	97.2	70-120		0				
Surr: 4-Bromofluorobenzene	19.31	0	20	0	96.6	75-120		0				
Surr: Dibromofluoromethane	19.66	0	20	0	98.3	85-115		0				
Surr: Toluene-d8	20.77	0	20	0	104	85-120		0				

MSD					Sample ID: 1404279-03C MSD		Units: µg/L		Analysis Date: 4/18/2014 12:56 PM		
Client ID:			Run ID: VMS9_140417A			SeqNo: 2719140		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.43	1.0	20	0	117	80-120	23.75	1.36	30		
Ethylbenzene	20.31	1.0	20	0	102	75-125	20.91	2.91	30		
m,p-Xylene	41.29	2.0	40	0	103	75-130	42.14	2.04	30		
o-Xylene	20.06	1.0	20	0	100	80-120	20.07	0.0498	30		
Toluene	23.32	1.0	20	0	117	75-120	23.46	0.599	30		
Xylenes, Total	61.35	3.0	60	0	102	75-130	62.21	1.39	30		
Surr: 1,2-Dichloroethane-d4	19.56	0	20	0	97.8	70-120	19.45	0.564	30		
Surr: 4-Bromofluorobenzene	19.05	0	20	0	95.2	75-120	19.31	1.36	30		
Surr: Dibromofluoromethane	19.97	0	20	0	99.8	85-115	19.66	1.56	30		
Surr: Toluene-d8	20.69	0	20	0	103	85-120	20.77	0.386	30		

The following samples were analyzed in this batch:

1404922-01A	1404922-02A	1404922-03A
1404922-04A	1404922-05A	1404922-06A
1404922-07A	1404922-08A	

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404922  
**Project:** WPX PA 31-36 SW 4.16.14

## QC BATCH REPORT

Batch ID: **R139166**      Instrument ID **VMS9**      Method: **SW8260**

MBLK				Sample ID: VBLKW2-140417-R139166				Units: µg/L		Analysis Date: 4/18/2014 04:11 AM	
Client ID:			Run ID: VMS9_140417B				SeqNo: 2720072		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	2.0									
o-Xylene	ND	1.0									
Toluene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	19.81	0	20	0	99	70-120		0			
Surr: 4-Bromofluorobenzene	17.12	0	20	0	85.6	75-120		0			
Surr: Dibromofluoromethane	19.83	0	20	0	99.2	85-115		0			
Surr: Toluene-d8	21.01	0	20	0	105	85-120		0			

LCS				Sample ID: VLCSW3-140417-R139166				Units: µg/L		Analysis Date: 4/18/2014 09:04 AM	
Client ID:		Run ID: VMS9_140417B				SeqNo: 2720085		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	22.86	1.0	20	0	114	80-120	0				
Ethylbenzene	20.26	1.0	20	0	101	75-125	0				
m,p-Xylene	40.96	2.0	40	0	102	75-130	0				
o-Xylene	20.03	1.0	20	0	100	80-120	0				
Toluene	22.84	1.0	20	0	114	75-120	0				
Xylenes, Total	60.99	3.0	60	0	102	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.4	0	20	0	97	70-120	0				
Surr: 4-Bromofluorobenzene	18.77	0	20	0	93.8	75-120	0				
Surr: Dibromofluoromethane	20.59	0	20	0	103	85-115	0				
Surr: Toluene-d8	20.93	0	20	0	105	85-120	0				

MS					Sample ID: 1404613-10B MS			Units: µg/L		Analysis Date: 4/18/2014 12:44 PM	
Client ID:			Run ID: VMS9_140417B			SeqNo: 2720102		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.68	1.0	20	0	118	80-120	0				
Ethylbenzene	20.82	1.0	20	0	104	75-125	0				
m,p-Xylene	41.65	2.0	40	0	104	75-130	0				
o-Xylene	20.52	1.0	20	0	103	80-120	0				
Toluene	23.36	1.0	20	0	117	75-120	0				
Xylenes, Total	62.17	3.0	60	0	104	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.91	0	20	0	99.6	70-120	0				
Surr: 4-Bromofluorobenzene	19.51	0	20	0	97.6	75-120	0				
Surr: Dibromofluoromethane	20.58	0	20	0	103	85-115	0				
Surr: Toluene-d8	20.8	0	20	0	104	85-120	0				

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404922  
**Project:** WPX PA 31-36 SW 4.16.14

## QC BATCH REPORT

Batch ID: **R139166**      Instrument ID **VMS9**      Method: **SW8260**

MSD				Sample ID: 1404613-10B MSD				Units: µg/L		Analysis Date: 4/18/2014 01:08 PM	
Client ID:			Run ID: VMS9_140417B			SeqNo: 2720103		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.58	1.0	20	0	118	80-120	23.68	0.423	30		
Ethylbenzene	20.87	1.0	20	0	104	75-125	20.82	0.24	30		
m,p-Xylene	41.28	2.0	40	0	103	75-130	41.65	0.892	30		
o-Xylene	19.98	1.0	20	0	99.9	80-120	20.52	2.67	30		
Toluene	23.09	1.0	20	0	115	75-120	23.36	1.16	30		
Xylenes, Total	61.26	3.0	60	0	102	75-130	62.17	1.47	30		
Surr: 1,2-Dichloroethane-d4	19.4	0	20	0	97	70-120	19.91	2.59	30		
Surr: 4-Bromofluorobenzene	19.34	0	20	0	96.7	75-120	19.51	0.875	30		
Surr: Dibromofluoromethane	20.19	0	20	0	101	85-115	20.58	1.91	30		
Surr: Toluene-d8	20.7	0	20	0	104	85-120	20.8	0.482	30		

The following samples were analyzed in this batch: 1404922-08A

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404922  
**Project:** WPX PA 31-36 SW 4.16.14

## QC BATCH REPORT

Batch ID: **57749**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57749-57749</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140418A</b>				SeqNo: <b>2719959</b>		Prep Date: <b>4/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57749-57749</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140418A</b>				SeqNo: <b>2719958</b>		Prep Date: <b>4/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      480      10      495      0      97      80-120      0

<b>DUP</b>		Sample ID: <b>1404703-04B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 08:30 AM</b>		
Client ID:		Run ID: <b>TDS_140418A</b>				SeqNo: <b>2719947</b>		Prep Date: <b>4/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      573      10      0      0      0      0-0      580      1.21      20

<b>DUP</b>		Sample ID: <b>1404922-02B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 08:30 AM</b>		
Client ID: <b>CO River DG</b>		Run ID: <b>TDS_140418A</b>				SeqNo: <b>2719951</b>		Prep Date: <b>4/18/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      350      10      0      0      0      0-0      357      1.98      20

The following samples were analyzed in this batch:

1404922-01B	1404922-02B	1404922-03B
1404922-04B	1404922-05B	1404922-06B
1404922-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1404922  
**Project:** WPX PA 31-36 SW 4.16.14

## QC BATCH REPORT

Batch ID: **R139154**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140417-R139154</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/17/2014 04:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140417O</b>				SeqNo: <b>2718821</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140417-R139154</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/17/2014 04:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140417O</b>				SeqNo: <b>2718822</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      50.98      3.0      50      0      102      80-120      0

<b>MS</b>		Sample ID: <b>1404042-18A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/17/2014 04:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140417O</b>				SeqNo: <b>2718824</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      120      3.0      50      74.98      90      75-125      0

<b>MSD</b>		Sample ID: <b>1404042-18A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/17/2014 04:15 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140417O</b>				SeqNo: <b>2718825</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      130      3.0      50      74.98      110      75-125      120      8      20

The following samples were analyzed in this batch:

1404922-01B	1404922-02B	1404922-03B
1404922-04B	1404922-05B	1404922-06B
1404922-07B		

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 1404922  
 Project: WPX PA 31-36 SW 4.16.14

## QC BATCH REPORT

Batch ID: **R139241** Instrument ID **IC4** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R139241</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 11:52 AM</b>		
Client ID:		Run ID: <b>IC4_140418B</b>				SeqNo: <b>2721046</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R139241</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 12:13 PM</b>		
Client ID:		Run ID: <b>IC4_140418B</b>				SeqNo: <b>2721048</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 10.25 1.0 10 0 102 85-110 0

<b>MS</b>		Sample ID: <b>1404922-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 12:53 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>IC4_140418B</b>				SeqNo: <b>2721051</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 121.8 10 50 69.67 104 75-125 0

<b>MSD</b>		Sample ID: <b>1404922-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/18/2014 01:13 PM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>IC4_140418B</b>				SeqNo: <b>2721053</b>		Prep Date:		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 120.2 10 50 69.67 101 75-125 121.8 1.31 20

The following samples were analyzed in this batch:

1404922-01B	1404922-02B	1404922-03B
1404922-04B	1404922-05B	1404922-06B
1404922-07B		

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

## Chain-of-Custody

Form 202r1

## WORKORDER

1404922

PAGE

1 of 4

**DISPOSAL**

~~By Lab~~ or Return to Client

[illegible]

Zone (Circle): EST CST MST PST Matrix: O = oil S = solid NS = non-solid W = water L = liquid E = extract F = filter  
metals or anions, please detail analytes below.

**ments:**





QC PACKAGE (check below)

x	LEVEL II (Standard QC)
---	------------------------

**LEVEL III (Std QC + formula)**

**LEVEL IV (Std QC + forms + raw data)**

Relative 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		Casey Richardson	4-16-14	1335
RECEIVED BY		N. M.	4-16	1340
RELINQUISHED BY		N. M.	4-16	1400
RECEIVED BY		Kevin W. Eberhart	4/17/14	0930
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 17-Apr-14 09:30

Work Order: 1404922

Received by: KRW

Checklist completed by Keith Wurenga  
eSignature

17-Apr-14  
Date

Reviewed by: Ann Preston  
eSignature

18-Apr-14  
Date

Matrices: Surface Water

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>3.2 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/17/2014 3:03:13 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (616) 385-8078  
Sample Receiving  
ALS Laboratory Group  
3352 128th Avenue  
Holland, MI 49424

Origin ID: GRRA



Ship Date: 16APR14  
ActWgt: 55.0 LB  
CAD: 2284849NET3480

Dim: 24 X 15 X 15 IN.

Delivery Address Bar Code



Ref # 041614-1  
Invoice #  
PO #  
Dept #

SHIP TO: (616) 385-8078  
sample receiving  
ALS Laboratory Group  
3352 128TH AVE

BILL SENDER

HOLLAND, MI 49424

THU - 17 APR 10:30A  
PRIORITY OVERNIGHT

TRK# 7885 7211 1799  
E281

68 GRRA

49424  
MI-US  
GRR



0220 UNDEF 230

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.

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RK#  
2071

7985 7211 1799

THU - 17 APR 10:30A  
PRIORITY OVERNIGHT

XX GRRA

49424  
MI-US  
GRR



438031 17Apr 01:47 MEMH 512C1/7809/CF50

LAB HUB  
127 1ST ST

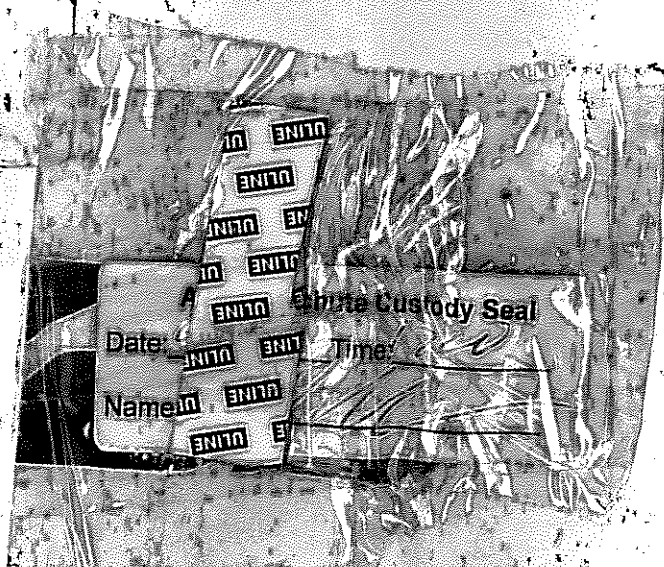
PARACHUTE 00 81635-8700

P: WEST S: TROY I:

90B-2480

1Z702603036585 0201

HKR92UR COOLE112 APR 15 08:42:34 2014  
US 8161 HIP 13.1.1 ZEBRAZ4NP







22-Apr-2014

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

Re: **WPX PA 31-36 SW 4.18.14**

Work Order: **14041040**

Dear Mark,

ALS Environmental received 8 samples on 19-Apr-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 20.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

Environmental 

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

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**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.18.14  
**Work Order:** 14041040

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**Work Order Sample Summary**

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<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>
14041040-01	CO River UG	Surface Water		4/18/2014 10:43	4/19/2014 10:00	<input type="checkbox"/>
14041040-02	CO River DG	Surface Water		4/18/2014 10:52	4/19/2014 10:00	<input type="checkbox"/>
14041040-03	Spring 01	Surface Water		4/18/2014 11:08	4/19/2014 10:00	<input type="checkbox"/>
14041040-04	Spring 02	Surface Water		4/18/2014 11:14	4/19/2014 10:00	<input type="checkbox"/>
14041040-05	Culvert 01	Surface Water		4/18/2014 11:01	4/19/2014 10:00	<input type="checkbox"/>
14041040-06	Pond 01	Surface Water		4/18/2014 11:30	4/19/2014 10:00	<input type="checkbox"/>
14041040-07	Spring UG	Surface Water		4/18/2014 11:45	4/19/2014 10:00	<input type="checkbox"/>
14041040-08	Trip Blank	Water		4/18/2014	4/19/2014 10:00	<input type="checkbox"/>

---

## ALS Group USA, Corp

*Date: 22-Apr-14*

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**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 4.18.14

**Work Order:** 14041040

### **Case Narrative**

---

Batch R139326 sample CO River UG MSD recovery for Benzene was above control limits. Both the MS recovery and RPD met quality control criteria. No data requires qualification.

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 4.18.14  
**WorkOrder:** 14041040

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 22-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.18.14

Sample ID: CO River UG

Collection Date: 4/18/2014 10:43 AM

Work Order: 14041040

Lab ID: 14041040-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 04:58 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 04:58 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 04:58 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 04:58 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 04:58 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 04:58 PM
Surr: 1,2-Dichloroethane-d4	101		70-120	%REC	1	4/21/2014 04:58 PM
Surr: 4-Bromofluorobenzene	99.6		75-120	%REC	1	4/21/2014 04:58 PM
Surr: Dibromofluoromethane	97.7		85-115	%REC	1	4/21/2014 04:58 PM
Surr: Toluene-d8	93.8		85-120	%REC	1	4/21/2014 04:58 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	75		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	73		10	mg/L	10	4/21/2014 03:44 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	340		10	mg/L	1	4/22/2014 08:25 AM

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

**ALS Group USA, Corp**

Date: 22-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.18.14

Sample ID: CO River DG

Collection Date: 4/18/2014 10:52 AM

Work Order: 14041040

Lab ID: 14041040-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 05:23 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 05:23 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 05:23 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 05:23 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 05:23 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 05:23 PM
Surr: 1,2-Dichloroethane-d4	95.8		70-120	%REC	1	4/21/2014 05:23 PM
Surr: 4-Bromofluorobenzene	99.2		75-120	%REC	1	4/21/2014 05:23 PM
Surr: Dibromofluoromethane	93.7		85-115	%REC	1	4/21/2014 05:23 PM
Surr: Toluene-d8	95.8		85-120	%REC	1	4/21/2014 05:23 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	80		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	72		10	mg/L	10	4/21/2014 04:05 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	350		10	mg/L	1	4/22/2014 08:25 AM

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

# ALS Group USA, Corp

Date: 22-Apr-14

**Client:** HRL Compliance Solutions, Inc

**Project:** WPX PA 31-36 SW 4.18.14

**Sample ID:** Spring 01

**Collection Date:** 4/18/2014 11:08 AM

**Work Order:** 14041040

**Lab ID:** 14041040-03

**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 05:49 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 05:49 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 05:49 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 05:49 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 05:49 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 05:49 PM
Surr: 1,2-Dichloroethane-d4	98.0		70-120	%REC	1	4/21/2014 05:49 PM
Surr: 4-Bromofluorobenzene	99.7		75-120	%REC	1	4/21/2014 05:49 PM
Surr: Dibromofluoromethane	96.2		85-115	%REC	1	4/21/2014 05:49 PM
Surr: Toluene-d8	94.4		85-120	%REC	1	4/21/2014 05:49 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	4/21/2014 04:25 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		10	mg/L	1	4/22/2014 08:25 AM

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

# ALS Group USA, Corp

Date: 22-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.18.14

Sample ID: Spring 02

Collection Date: 4/18/2014 11:14 AM

Work Order: 14041040

Lab ID: 14041040-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 06:15 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 06:15 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 06:15 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 06:15 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 06:15 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 06:15 PM
Surr: 1,2-Dichloroethane-d4	97.0		70-120	%REC	1	4/21/2014 06:15 PM
Surr: 4-Bromofluorobenzene	99.1		75-120	%REC	1	4/21/2014 06:15 PM
Surr: Dibromofluoromethane	93.8		85-115	%REC	1	4/21/2014 06:15 PM
Surr: Toluene-d8	95.0		85-120	%REC	1	4/21/2014 06:15 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		4.0	mg/L	4	4/21/2014 04:45 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	420		10	mg/L	1	4/22/2014 08:25 AM

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



**ALS Group USA, Corp**

Date: 22-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.18.14

Sample ID: Culvert 01

Collection Date: 4/18/2014 11:01 AM

Work Order: 14041040

Lab ID: 14041040-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 06:41 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 06:41 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 06:41 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 06:41 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 06:41 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 06:41 PM
Surr: 1,2-Dichloroethane-d4	100		70-120	%REC	1	4/21/2014 06:41 PM
Surr: 4-Bromofluorobenzene	98.2		75-120	%REC	1	4/21/2014 06:41 PM
Surr: Dibromofluoromethane	99.3		85-115	%REC	1	4/21/2014 06:41 PM
Surr: Toluene-d8	95.9		85-120	%REC	1	4/21/2014 06:41 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	54		4.0	mg/L	4	4/21/2014 05:05 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	380		10	mg/L	1	4/22/2014 08:25 AM

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

**ALS Group USA, Corp**

Date: 22-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.18.14**Sample ID:** Pond 01**Collection Date:** 4/18/2014 11:30 AM**Work Order:** 14041040**Lab ID:** 14041040-06**Matrix:** SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 07:06 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 07:06 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 07:06 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 07:06 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 07:06 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 07:06 PM
Surr: 1,2-Dichloroethane-d4	96.4		70-120	%REC	1	4/21/2014 07:06 PM
Surr: 4-Bromofluorobenzene	99.0		75-120	%REC	1	4/21/2014 07:06 PM
Surr: Dibromofluoromethane	91.8		85-115	%REC	1	4/21/2014 07:06 PM
Surr: Toluene-d8	97.2		85-120	%REC	1	4/21/2014 07:06 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	13		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	38		4.0	mg/L	4	4/21/2014 05:25 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	320		10	mg/L	1	4/22/2014 08:25 AM

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

# ALS Group USA, Corp

Date: 22-Apr-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 4.18.14

Sample ID: Spring UG

Collection Date: 4/18/2014 11:45 AM

Work Order: 14041040

Lab ID: 14041040-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 07:32 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 07:32 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 07:32 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 07:32 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 07:32 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 07:32 PM
Surr: 1,2-Dichloroethane-d4	98.4		70-120	%REC	1	4/21/2014 07:32 PM
Surr: 4-Bromofluorobenzene	100		75-120	%REC	1	4/21/2014 07:32 PM
Surr: Dibromofluoromethane	94.2		85-115	%REC	1	4/21/2014 07:32 PM
Surr: Toluene-d8	93.7		85-120	%REC	1	4/21/2014 07:32 PM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	15		3.0	mg/L	1	4/22/2014 08:40 AM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	4/21/2014 05:46 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 4/22/14	Analyst: <b>YM</b>
Total Dissolved Solids	330		10	mg/L	1	4/22/2014 08:25 AM

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

**ALS Group USA, Corp**

Date: 22-Apr-14

**Client:** HRL Compliance Solutions, Inc**Project:** WPX PA 31-36 SW 4.18.14**Work Order:** 14041040**Sample ID:** Trip Blank**Lab ID:** 14041040-08**Collection Date:** 4/18/2014**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>BG</b>
Benzene	ND		1.0	µg/L	1	4/21/2014 04:32 PM
Ethylbenzene	ND		1.0	µg/L	1	4/21/2014 04:32 PM
m,p-Xylene	ND		2.0	µg/L	1	4/21/2014 04:32 PM
o-Xylene	ND		1.0	µg/L	1	4/21/2014 04:32 PM
Toluene	ND		1.0	µg/L	1	4/21/2014 04:32 PM
Xylenes, Total	ND		3.0	µg/L	1	4/21/2014 04:32 PM
Surr: 1,2-Dichloroethane-d4	97.3		70-120	%REC	1	4/21/2014 04:32 PM
Surr: 4-Bromofluorobenzene	99.6		75-120	%REC	1	4/21/2014 04:32 PM
Surr: Dibromofluoromethane	93.2		85-115	%REC	1	4/21/2014 04:32 PM
Surr: Toluene-d8	94.0		85-120	%REC	1	4/21/2014 04:32 PM

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

# ALS Group USA, Corp

Date: 22-Apr-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14041040  
**Project:** WPX PA 31-36 SW 4.18.14

## QC BATCH REPORT

Batch ID: **R139326** Instrument ID **VMS6** Method: **SW8260**

<b>MBLK</b>		Sample ID: <b>VBKWK1-140421-R139326</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/21/2014 03:40 PM</b>		
Client ID:		Run ID: <b>VMS6_140421A</b>				SeqNo: <b>2724879</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.81</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>70-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.93</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.6</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.59</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>18.93</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.6</i>	<i>85-120</i>	<i>0</i>			

<b>LCS</b>		Sample ID: <b>VLCSW1-140421-R139326</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/21/2014 02:49 PM</b>		
Client ID:		Run ID: <b>VMS6_140421A</b>				SeqNo: <b>2724877</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	23.14	1.0	20	0	116	80-120	0			
Ethylbenzene	21.79	1.0	20	0	109	75-125	0			
m,p-Xylene	42.95	2.0	40	0	107	75-130	0			
o-Xylene	21.14	1.0	20	0	106	80-120	0			
Toluene	21.5	1.0	20	0	108	75-120	0			
Xylenes, Total	64.09	3.0	60	0	107	75-130	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.32</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.6</i>	<i>70-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.31</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.17</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>85-120</i>	<i>0</i>			

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

Client: HRL Compliance Solutions, Inc  
 Work Order: 14041040  
 Project: WPX PA 31-36 SW 4.18.14

## QC BATCH REPORT

Batch ID: **R139326** Instrument ID **VMS6** Method: **SW8260**

MS				Sample ID: 14041040-01A MS				Units: µg/L		Analysis Date: 4/22/2014 12:39 PM	
Client ID: CO River UG				Run ID: VMS6_140421A				SeqNo: 2724915		Prep Date:	
										DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	23.15	1.0	20	0	116	80-120	0				
Ethylbenzene	21.35	1.0	20	0	107	75-125	0				
m,p-Xylene	42.45	2.0	40	0	106	75-130	0				
o-Xylene	20.59	1.0	20	0	103	80-120	0				
Toluene	21.17	1.0	20	0	106	75-120	0				
Xylenes, Total	63.04	3.0	60	0	105	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.43	0	20	0	97.2	70-120	0				
Surr: 4-Bromofluorobenzene	20.4	0	20	0	102	75-120	0				
Surr: Dibromofluoromethane	20.14	0	20	0	101	85-115	0				
Surr: Toluene-d8	18.85	0	20	0	94.2	85-120	0				

MSD				Sample ID: 14041040-01A MSD				Units: µg/L		Analysis Date: 4/22/2014 01:05 AM	
Client ID: CO River UG				Run ID: VMS6_140421A				SeqNo: 2724913		Prep Date:	
										DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	25.13	1.0	20	0	126	80-120	23.15	8.2	30	S	
Ethylbenzene	24.09	1.0	20	0	120	75-125	21.35	12.1	30		
m,p-Xylene	48.18	2.0	40	0	120	75-130	42.45	12.6	30		
o-Xylene	24	1.0	20	0	120	80-120	20.59	15.3	30		
Toluene	23.57	1.0	20	0	118	75-120	21.17	10.7	30		
Xylenes, Total	72.18	3.0	60	0	120	75-130	63.04	13.5	30		
Surr: 1,2-Dichloroethane-d4	18.78	0	20	0	93.9	70-120	19.43	3.4	30		
Surr: 4-Bromofluorobenzene	20.64	0	20	0	103	75-120	20.4	1.17	30		
Surr: Dibromofluoromethane	20.22	0	20	0	101	85-115	20.14	0.396	30		
Surr: Toluene-d8	19.36	0	20	0	96.8	85-120	18.85	2.67	30		

The following samples were analyzed in this batch:

14041040-01A	14041040-02A	14041040-03A
14041040-04A	14041040-05A	14041040-06A
14041040-07A	14041040-08A	

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14041040  
**Project:** WPX PA 31-36 SW 4.18.14

## QC BATCH REPORT

Batch ID: **57815**      Instrument ID **TDS**      Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-57815-57815</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:25 AM</b>		
Client ID:		Run ID: <b>TDS_140422A</b>				SeqNo: <b>2725128</b>		Prep Date: <b>4/22/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      ND      10

<b>LCS</b>		Sample ID: <b>LCS-57815-57815</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:25 AM</b>		
Client ID:		Run ID: <b>TDS_140422A</b>				SeqNo: <b>2725127</b>		Prep Date: <b>4/22/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      466      10      495      0      94.1      80-120      0

<b>DUP</b>		Sample ID: <b>14041016-02A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:25 AM</b>		
Client ID:		Run ID: <b>TDS_140422A</b>				SeqNo: <b>2725080</b>		Prep Date: <b>4/22/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      2592      40      0      0      0      0-0      2612      0.769      20

<b>DUP</b>		Sample ID: <b>1404960-01A DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:25 AM</b>		
Client ID:		Run ID: <b>TDS_140422A</b>				SeqNo: <b>2725106</b>		Prep Date: <b>4/22/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids      1166      10      0      0      0      0-0      1174      0.684      20

The following samples were analyzed in this batch:

14041040-01B	14041040-02B	14041040-03B
14041040-04B	14041040-05B	14041040-06B
14041040-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14041040  
**Project:** WPX PA 31-36 SW 4.18.14

## QC BATCH REPORT

Batch ID: **R139365**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140422-R139365</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140422B</b>				SeqNo: <b>2724729</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140422-R139365</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140422B</b>				SeqNo: <b>2724730</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      53.98      3.0      50      0      108      80-120      0

<b>MS</b>		Sample ID: <b>1404998-02A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140422B</b>				SeqNo: <b>2724746</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      150      3.0      50      105      90      75-125      0

<b>MSD</b>		Sample ID: <b>1404998-02A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/22/2014 08:40 AM</b>		
Client ID:		Run ID: <b>WETCHEM_140422B</b>				SeqNo: <b>2724747</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      150      3.0      50      105      90      75-125      150      0      20

The following samples were analyzed in this batch:

14041040-01B	14041040-02B	14041040-03B
14041040-04B	14041040-05B	14041040-06B
14041040-07B		

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



**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 14041040  
**Project:** WPX PA 31-36 SW 4.18.14

## QC BATCH REPORT

Batch ID: **R139371**      Instrument ID **IC3**      Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R139371</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/21/2014 03:04 PM</b>		
Client ID:		Run ID: <b>IC3_140421B</b>				SeqNo: <b>2724882</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      ND      1.0

<b>LCS</b>		Sample ID: <b>LCS-R139371</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/21/2014 03:24 PM</b>		
Client ID:		Run ID: <b>IC3_140421B</b>				SeqNo: <b>2724884</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      9.327      1.0      10      0      93.3      85-110      0

<b>MS</b>		Sample ID: <b>14041040-07B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/21/2014 06:06 PM</b>		
Client ID: <b>Spring UG</b>		Run ID: <b>IC3_140421B</b>				SeqNo: <b>2724898</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      55.66      4.0      20      32.62      115      75-125      0

<b>MSD</b>		Sample ID: <b>14041040-07B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/21/2014 06:26 PM</b>		
Client ID: <b>Spring UG</b>		Run ID: <b>IC3_140421B</b>				SeqNo: <b>2724900</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate      56.21      4.0      20      32.62      118      75-125      55.66      0.993      20

The following samples were analyzed in this batch:

14041040-01B	14041040-02B	14041040-03B
14041040-04B	14041040-05B	14041040-06B
14041040-07B		


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





14041040

PROJECT NAME		SAMPLER		DATE		PAGE	
PROJECT No.		SITE ID		TURNAROUND		DISPOSAL	
COMPANY NAME		BILL TO COMPANY		INVOICE ATTN TO		By Lab or Return to Client	
SEND REPORT TO		ADDRESS		CITY / STATE / ZIP		PHONE	
FAX		E-MAIL		BTEX		TDS	
Chlorides		Sulfates		Bottles		Pres.	
QC		Sample Date		Sample Time		#	
Lab ID		Field ID		Matrix		Bottles	
1	CO River UG	SW	4-18-14	1043	4	1.8	
2	CO River DG	SW		1052	4	1.8	
3	Spring 01	SW		1108	4	1.8	
4	Spring 02	SW		1114	4	1.8	
5	Culvert 01	SW		1101	4	1.8	
6	Pond 01	SW		1130	4	1.8	
7	Spring UG	SW		1145	4	1.8	
8	TRIP BLANK						

\*Time Zone (Circle): EST CST **AST** 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.**

<b>Comments:</b> <div style="text-align: center; font-size: 2em;">2.8</div> 	<b>QC PACKAGE (check below)</b>	
	<input 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"/>	
<b>Preservative Key:</b> 1-HCl   2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH   5-NaHSO <sub>4</sub> 7-Other   8-4 degrees C   9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Casey Richardson	4-18-14	1240
RECEIVED BY		N.M.	4-18-14	1240
RELINQUISHED BY		N.M.	4-18-14	1250
RECEIVED BY		Dione F. She	4/19/14	1000
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: HRL

Date/Time Received: 19-Apr-14 10:00

Work Order: 14041040

Received by: DS

Checklist completed by Diane Shaw 19-Apr-14  
eSignature Date

Reviewed by: Ann Preston 21-Apr-14  
eSignature Date

Matrices: Surface Water

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 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/19/2014 11:10 AM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

From: (816) 395-5070  
 Sample Receiving  
 ALS Laboratory Group  
 3352 128th Avenue  
 Holland, MI 49424

Origin ID: GRRA



Ship Date: 18APR14  
 ActWgt: 42.0 LB  
 CAD: 22648409NET3490

Dim: 24 X 15 X 15 IN

SHIP TO: (816) 395-5070  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

HOLLAND, MI 49424

BILL RENDER

Delivery Address Bar Code



Ref # 041814-1  
 Invoice #  
 PO # Parachute  
 Dept #

SATURDAY 12:00P  
 PRIORITY OVERNIGHT

TRK# 7885 9540 9180

6291

49424

MLLN

GRR

68 GRRA



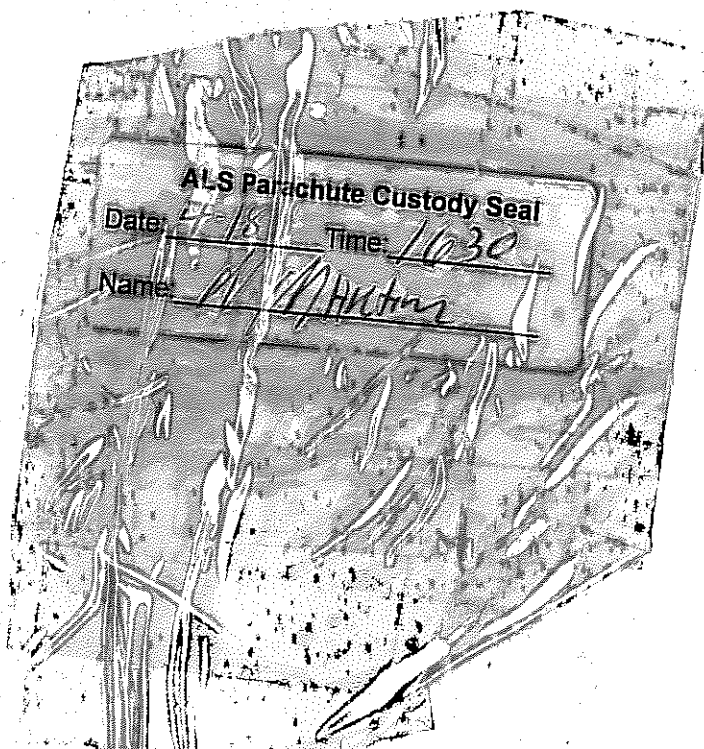
52231718APR14

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](http://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.





12-May-2014

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

Re: **WPX PA 31-36 SW 5.5.14**

Work Order: **1405219**

Dear Mark,

ALS Environmental received 8 samples on 06-May-2014 09:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 21.

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

Sincerely,

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

Electronically approved by: Ann Preston

Ann Preston  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

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

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

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

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 5.5.14  
**Work Order:** 1405219

**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>
1405219-01	CO River UG	Surface Water		5/5/2014 10:27	5/6/2014 09:30	<input type="checkbox"/>
1405219-02	CO River DG	Surface Water		5/5/2014 10:38	5/6/2014 09:30	<input type="checkbox"/>
1405219-03	Spring 01	Surface Water		5/5/2014 11:00	5/6/2014 09:30	<input type="checkbox"/>
1405219-04	Spring 02	Surface Water		5/5/2014 11:06	5/6/2014 09:30	<input type="checkbox"/>
1405219-05	Culvert 01	Surface Water		5/5/2014 10:46	5/6/2014 09:30	<input type="checkbox"/>
1405219-06	Pond 01	Surface Water		5/5/2014 11:19	5/6/2014 09:30	<input type="checkbox"/>
1405219-07	Spring UG	Surface Water		5/5/2014 11:33	5/6/2014 09:30	<input type="checkbox"/>
1405219-08	Trip Blank	Water		5/5/2014	5/6/2014 09:30	<input type="checkbox"/>

**Client:** HRL Compliance Solutions, Inc  
**Project:** WPX PA 31-36 SW 5.5.14  
**WorkOrder:** 1405219

## **QUALIFIERS, ACRONYMS, UNITS**

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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

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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

# ALS Group USA, Corp

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: CO River UG

Collection Date: 5/5/2014 10:27 AM

Work Order: 1405219

Lab ID: 1405219-01

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/8/2014 05:23 AM
Ethylbenzene	ND		1.0	µg/L	1	5/8/2014 05:23 AM
m,p-Xylene	ND		2.0	µg/L	1	5/8/2014 05:23 AM
o-Xylene	ND		1.0	µg/L	1	5/8/2014 05:23 AM
Toluene	ND		1.0	µg/L	1	5/8/2014 05:23 AM
Xylenes, Total	ND		3.0	µg/L	1	5/8/2014 05:23 AM
Surr: 1,2-Dichloroethane-d4	94.2		75-120	%REC	1	5/8/2014 05:23 AM
Surr: 4-Bromofluorobenzene	95.6		80-110	%REC	1	5/8/2014 05:23 AM
Surr: Dibromofluoromethane	92.8		85-115	%REC	1	5/8/2014 05:23 AM
Surr: Toluene-d8	98.4		85-110	%REC	1	5/8/2014 05:23 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	45		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	52		10	mg/L	10	5/9/2014 10:21 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	280		20	mg/L	1	5/8/2014 08:21 AM

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



**ALS Group USA, Corp**

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: CO River DG

Collection Date: 5/5/2014 10:38 AM

Work Order: 1405219

Lab ID: 1405219-02

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/8/2014 05:49 AM
Ethylbenzene	ND		1.0	µg/L	1	5/8/2014 05:49 AM
m,p-Xylene	ND		2.0	µg/L	1	5/8/2014 05:49 AM
o-Xylene	ND		1.0	µg/L	1	5/8/2014 05:49 AM
Toluene	ND		1.0	µg/L	1	5/8/2014 05:49 AM
Xylenes, Total	ND		3.0	µg/L	1	5/8/2014 05:49 AM
Surr: 1,2-Dichloroethane-d4	94.0		75-120	%REC	1	5/8/2014 05:49 AM
Surr: 4-Bromofluorobenzene	96.6		80-110	%REC	1	5/8/2014 05:49 AM
Surr: Dibromofluoromethane	93.5		85-115	%REC	1	5/8/2014 05:49 AM
Surr: Toluene-d8	97.6		85-110	%REC	1	5/8/2014 05:49 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	950		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	51		10	mg/L	10	5/9/2014 10:42 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	250		20	mg/L	1	5/8/2014 08:21 AM

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

# ALS Group USA, Corp

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: Spring 01

Collection Date: 5/5/2014 11:00 AM

Work Order: 1405219

Lab ID: 1405219-03

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/8/2014 06:15 AM
Ethylbenzene	ND		1.0	µg/L	1	5/8/2014 06:15 AM
m,p-Xylene	ND		2.0	µg/L	1	5/8/2014 06:15 AM
o-Xylene	ND		1.0	µg/L	1	5/8/2014 06:15 AM
Toluene	ND		1.0	µg/L	1	5/8/2014 06:15 AM
Xylenes, Total	ND		3.0	µg/L	1	5/8/2014 06:15 AM
Surr: 1,2-Dichloroethane-d4	93.7		75-120	%REC	1	5/8/2014 06:15 AM
Surr: 4-Bromofluorobenzene	96.6		80-110	%REC	1	5/8/2014 06:15 AM
Surr: Dibromofluoromethane	93.0		85-115	%REC	1	5/8/2014 06:15 AM
Surr: Toluene-d8	98.6		85-110	%REC	1	5/8/2014 06:15 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	14		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	33		4.0	mg/L	4	5/9/2014 11:02 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	390		20	mg/L	1	5/8/2014 08:21 AM

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

# ALS Group USA, Corp

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: Spring 02

Collection Date: 5/5/2014 11:06 AM

Work Order: 1405219

Lab ID: 1405219-04

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/8/2014 06:41 AM
Ethylbenzene	ND		1.0	µg/L	1	5/8/2014 06:41 AM
m,p-Xylene	ND		2.0	µg/L	1	5/8/2014 06:41 AM
o-Xylene	ND		1.0	µg/L	1	5/8/2014 06:41 AM
Toluene	ND		1.0	µg/L	1	5/8/2014 06:41 AM
Xylenes, Total	ND		3.0	µg/L	1	5/8/2014 06:41 AM
Surr: 1,2-Dichloroethane-d4	92.2		75-120	%REC	1	5/8/2014 06:41 AM
Surr: 4-Bromofluorobenzene	97.8		80-110	%REC	1	5/8/2014 06:41 AM
Surr: Dibromofluoromethane	92.3		85-115	%REC	1	5/8/2014 06:41 AM
Surr: Toluene-d8	98.0		85-110	%REC	1	5/8/2014 06:41 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	13		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	35		4.0	mg/L	4	5/9/2014 11:22 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	450		20	mg/L	1	5/8/2014 08:21 AM

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

# ALS Group USA, Corp

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: Culvert 01

Collection Date: 5/5/2014 10:46 AM

Work Order: 1405219

Lab ID: 1405219-05

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/9/2014 03:55 AM
Ethylbenzene	ND		1.0	µg/L	1	5/9/2014 03:55 AM
m,p-Xylene	ND		2.0	µg/L	1	5/9/2014 03:55 AM
o-Xylene	ND		1.0	µg/L	1	5/9/2014 03:55 AM
Toluene	ND		1.0	µg/L	1	5/9/2014 03:55 AM
Xylenes, Total	ND		3.0	µg/L	1	5/9/2014 03:55 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	1	5/9/2014 03:55 AM
Surr: 4-Bromofluorobenzene	86.8		80-110	%REC	1	5/9/2014 03:55 AM
Surr: Dibromofluoromethane	112		85-115	%REC	1	5/9/2014 03:55 AM
Surr: Toluene-d8	94.5		85-110	%REC	1	5/9/2014 03:55 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	14		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	55		4.0	mg/L	4	5/9/2014 11:42 AM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	410		20	mg/L	1	5/8/2014 08:21 AM

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

**ALS Group USA, Corp**

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: Pond 01

Collection Date: 5/5/2014 11:19 AM

Work Order: 1405219

Lab ID: 1405219-06

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/9/2014 04:19 AM
Ethylbenzene	ND		1.0	µg/L	1	5/9/2014 04:19 AM
m,p-Xylene	ND		2.0	µg/L	1	5/9/2014 04:19 AM
o-Xylene	ND		1.0	µg/L	1	5/9/2014 04:19 AM
Toluene	ND		1.0	µg/L	1	5/9/2014 04:19 AM
Xylenes, Total	ND		3.0	µg/L	1	5/9/2014 04:19 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	1	5/9/2014 04:19 AM
Surr: 4-Bromofluorobenzene	87.2		80-110	%REC	1	5/9/2014 04:19 AM
Surr: Dibromofluoromethane	108		85-115	%REC	1	5/9/2014 04:19 AM
Surr: Toluene-d8	96.4		85-110	%REC	1	5/9/2014 04:19 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	10		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	36		4.0	mg/L	4	5/9/2014 01:23 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	350		20	mg/L	1	5/8/2014 08:21 AM

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

**ALS Group USA, Corp**

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Sample ID: Spring UG

Collection Date: 5/5/2014 11:33 AM

Work Order: 1405219

Lab ID: 1405219-07

Matrix: SURFACE WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/9/2014 04:44 AM
Ethylbenzene	ND		1.0	µg/L	1	5/9/2014 04:44 AM
m,p-Xylene	ND		2.0	µg/L	1	5/9/2014 04:44 AM
o-Xylene	ND		1.0	µg/L	1	5/9/2014 04:44 AM
Toluene	ND		1.0	µg/L	1	5/9/2014 04:44 AM
Xylenes, Total	ND		3.0	µg/L	1	5/9/2014 04:44 AM
Surr: 1,2-Dichloroethane-d4	112		75-120	%REC	1	5/9/2014 04:44 AM
Surr: 4-Bromofluorobenzene	85.6		80-110	%REC	1	5/9/2014 04:44 AM
Surr: Dibromofluoromethane	107		85-115	%REC	1	5/9/2014 04:44 AM
Surr: Toluene-d8	95.0		85-110	%REC	1	5/9/2014 04:44 AM
<b>CHLORIDE</b>			<b>A4500-CL C-97</b>			Analyst: <b>JB</b>
Chloride	12		3.0	mg/L	1	5/9/2014 01:45 PM
<b>ANIONS BY ION CHROMATOGRAPHY</b>			<b>SW9056</b>			Analyst: <b>ED</b>
Sulfate	32		4.0	mg/L	4	5/9/2014 01:44 PM
<b>TOTAL DISSOLVED SOLIDS</b>			<b>A2540 C-97</b>		Prep: Water Ext. / 5/8/14	Analyst: <b>YM</b>
Total Dissolved Solids	440		20	mg/L	1	5/8/2014 08:21 AM

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

**ALS Group USA, Corp**

Date: 12-May-14

Client: HRL Compliance Solutions, Inc

Project: WPX PA 31-36 SW 5.5.14

Work Order: 1405219

Sample ID: Trip Blank

Lab ID: 1405219-08

Collection Date: 5/5/2014

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260</b>			Analyst: <b>RS</b>
Benzene	ND		1.0	µg/L	1	5/9/2014 01:28 AM
Ethylbenzene	ND		1.0	µg/L	1	5/9/2014 01:28 AM
m,p-Xylene	ND		2.0	µg/L	1	5/9/2014 01:28 AM
o-Xylene	ND		1.0	µg/L	1	5/9/2014 01:28 AM
Toluene	ND		1.0	µg/L	1	5/9/2014 01:28 AM
Xylenes, Total	ND		3.0	µg/L	1	5/9/2014 01:28 AM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1	5/9/2014 01:28 AM
Surr: 4-Bromofluorobenzene	86.9		80-110	%REC	1	5/9/2014 01:28 AM
Surr: Dibromofluoromethane	104		85-115	%REC	1	5/9/2014 01:28 AM
Surr: Toluene-d8	96.5		85-110	%REC	1	5/9/2014 01:28 AM

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

# ALS Group USA, Corp

Date: 12-May-14

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1405219  
**Project:** WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **R140356** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: <b>VBK2-140507-R140356</b>				Units: <b>µg/L</b>		Analysis Date: <b>5/8/2014 12:37 PM</b>		
Client ID:		Run ID: <b>VMS6_140507B</b>				SeqNo: <b>2750303</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	18.89	0	20	0	94.4	75-120	0			
Surr: 4-Bromofluorobenzene	19.69	0	20	0	98.4	80-110	0			
Surr: Dibromofluoromethane	19.09	0	20	0	95.4	85-115	0			
Surr: Toluene-d8	19.62	0	20	0	98.1	85-110	0			

LCS		Sample ID: <b>VLCSW2-140507-R140356</b>				Units: <b>µg/L</b>		Analysis Date: <b>5/7/2014 11:45 PM</b>		
Client ID:		Run ID: <b>VMS6_140507B</b>				SeqNo: <b>2750281</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.99	1.0	20	0	100	85-125	0			
Ethylbenzene	20.27	1.0	20	0	101	85-125	0			
m,p-Xylene	40.05	2.0	40	0	100	75-130	0			
o-Xylene	19.81	1.0	20	0	99	80-125	0			
Toluene	19.98	1.0	20	0	99.9	85-125	0			
Xylenes, Total	59.86	3.0	60	0	99.8	80-126	0			
Surr: 1,2-Dichloroethane-d4	18.04	0	20	0	90.2	75-120	0			
Surr: 4-Bromofluorobenzene	19.63	0	20	0	98.2	80-110	0			
Surr: Dibromofluoromethane	19.07	0	20	0	95.4	85-115	0			
Surr: Toluene-d8	19.6	0	20	0	98	85-110	0			

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



Client: HRL Compliance Solutions, Inc  
 Work Order: 1405219  
 Project: WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **R140356** Instrument ID **VMS6** Method: **SW8260**

MS					Sample ID: 1405219-03A MS			Units: µg/L		Analysis Date: 5/8/2014 09:43 AM	
Client ID: Spring 01			Run ID: VMS6_140507B			SeqNo: 2750301		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.76	1.0	20	0	98.8	85-125	0				
Ethylbenzene	19.89	1.0	20	0	99.4	85-125	0				
m,p-Xylene	39.48	2.0	40	0	98.7	75-130	0				
o-Xylene	19.43	1.0	20	0	97.2	80-125	0				
Toluene	19.49	1.0	20	0	97.4	85-125	0				
Xylenes, Total	58.91	3.0	60	0	98.2	80-126	0				
Surr: 1,2-Dichloroethane-d4	18.02	0	20	0	90.1	75-120	0				
Surr: 4-Bromofluorobenzene	19.69	0	20	0	98.4	80-110	0				
Surr: Dibromofluoromethane	19.14	0	20	0	95.7	85-115	0				
Surr: Toluene-d8	19.59	0	20	0	98	85-110	0				

MSD				Sample ID: 1405219-03A MSD			Units: µg/L		Analysis Date: 5/8/2014 10:08 AM		
Client ID: Spring 01			Run ID: VMS6_140507B			SeqNo: 2750302		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.41	1.0	20	0	97	85-125	19.76	1.79	30		
Ethylbenzene	19.92	1.0	20	0	99.6	85-125	19.89	0.151	30		
m,p-Xylene	39.33	2.0	40	0	98.3	75-130	39.48	0.381	30		
o-Xylene	19.32	1.0	20	0	96.6	80-125	19.43	0.568	30		
Toluene	19.29	1.0	20	0	96.4	85-125	19.49	1.03	30		
Xylenes, Total	58.65	3.0	60	0	97.8	80-126	58.91	0.442	30		
Surr: 1,2-Dichloroethane-d4	18.12	0	20	0	90.6	75-120	18.02	0.553	30		
Surr: 4-Bromofluorobenzene	19.9	0	20	0	99.5	80-110	19.69	1.06	30		
Surr: Dibromofluoromethane	18.42	0	20	0	92.1	85-115	19.14	3.83	30		
Surr: Toluene-d8	19.51	0	20	0	97.6	85-110	19.59	0.409	30		

The following samples were analyzed in this batch:

1405219-01A	1405219-02A	1405219-03A
1405219-04A		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1405219  
**Project:** WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **R140419A**      Instrument ID **VMS9**      Method: **SW8260**

MBLK				Sample ID: VBLKW2-140508-R140419A				Units: µg/L		Analysis Date: 5/9/2014 01:03 AM	
Client ID:			Run ID: VMS9_140508B			SeqNo: 2752581		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	1.0									
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	2.0									
o-Xylene	ND	1.0									
Toluene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 1,2-Dichloroethane-d4	21.19	0	20	0	106	75-120		0			
Surr: 4-Bromofluorobenzene	17.81	0	20	0	89	80-110		0			
Surr: Dibromofluoromethane	20.92	0	20	0	105	85-115		0			
Surr: Toluene-d8	19.33	0	20	0	96.6	85-110		0			

LCS				Sample ID: VLCSW2-140508-R140419A				Units: µg/L		Analysis Date: 5/8/2014 11:50 PM	
Client ID:			Run ID: VMS9_140508B			SeqNo: 2752579		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.15	1.0	20	0	101	85-125	0				
Ethylbenzene	21.09	1.0	20	0	105	85-125	0				
m,p-Xylene	43.58	2.0	40	0	109	75-130	0				
o-Xylene	21.46	1.0	20	0	107	80-125	0				
Toluene	20.36	1.0	20	0	102	85-125	0				
Xylenes, Total	65.04	3.0	60	0	108	80-126	0				
Surr: 1,2-Dichloroethane-d4	19.86	0	20	0	99.3	75-120	0				
Surr: 4-Bromofluorobenzene	20.71	0	20	0	104	80-110	0				
Surr: Dibromofluoromethane	20.09	0	20	0	100	85-115	0				
Surr: Toluene-d8	20.07	0	20	0	100	85-110	0				

MS					Sample ID: 1405360-02A MS			Units: µg/L		Analysis Date: 5/9/2014 09:38 AM	
Client ID:			Run ID: VMS9_140508B			SeqNo: 2752606		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.92	1.0	20	0	105	85-125	0				
Ethylbenzene	20.48	1.0	20	0	102	85-125	0				
m,p-Xylene	42.7	2.0	40	0	107	75-130	0				
o-Xylene	20.43	1.0	20	0	102	80-125	0				
Toluene	20.22	1.0	20	0	101	85-125	0				
Xylenes, Total	63.13	3.0	60	0	105	80-126	0				
Surr: 1,2-Dichloroethane-d4	20.73	0	20	0	104	75-120	0				
Surr: 4-Bromofluorobenzene	20.26	0	20	0	101	80-110	0				
Surr: Dibromofluoromethane	21.11	0	20	0	106	85-115	0				
Surr: Toluene-d8	20.14	0	20	0	101	85-110	0				

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1405219  
**Project:** WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **R140419A**      Instrument ID **VMS9**      Method: **SW8260**

MSD				Sample ID: 1405360-02A MSD			Units: µg/L		Analysis Date: 5/9/2014 10:02 AM		
Client ID:			Run ID: VMS9_140508B			SeqNo: 2752607		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	20.58	1.0	20	0	103	85-125	20.92	1.64	30		
Ethylbenzene	20.62	1.0	20	0	103	85-125	20.48	0.681	30		
m,p-Xylene	42.53	2.0	40	0	106	75-130	42.7	0.399	30		
o-Xylene	20.77	1.0	20	0	104	80-125	20.43	1.65	30		
Toluene	19.8	1.0	20	0	99	85-125	20.22	2.1	30		
Xylenes, Total	63.3	3.0	60	0	106	80-126	63.13	0.269	30		
Surr: 1,2-Dichloroethane-d4	20.58	0	20	0	103	75-120	20.73	0.726	30		
Surr: 4-Bromofluorobenzene	20.63	0	20	0	103	80-110	20.26	1.81	30		
Surr: Dibromofluoromethane	20.69	0	20	0	103	85-115	21.11	2.01	30		
Surr: Toluene-d8	20.03	0	20	0	100	85-110	20.14	0.548	30		

The following samples were analyzed in this batch:

1405219-05A	1405219-06A	1405219-07A
1405219-08A		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1405219  
**Project:** WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **58356** Instrument ID **TDS** Method: **A2540 C-97**

<b>MBLK</b>		Sample ID: <b>MBLK-58356-58356</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/8/2014 08:21 AM</b>		
Client ID:		Run ID: <b>TDS_140508A</b>				SeqNo: <b>2750860</b>		Prep Date: <b>5/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids ND 10

<b>LCS</b>		Sample ID: <b>LCS-58356-58356</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/8/2014 08:21 AM</b>		
Client ID:		Run ID: <b>TDS_140508A</b>				SeqNo: <b>2750857</b>		Prep Date: <b>5/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 477 10 495 0 96.4 80-120 0

<b>DUP</b>		Sample ID: <b>1405219-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/8/2014 08:21 AM</b>		
Client ID: <b>CO River UG</b>		Run ID: <b>TDS_140508A</b>				SeqNo: <b>2750844</b>		Prep Date: <b>5/8/2014</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 264 20 0 0 0 0-0 280 5.88 20

The following samples were analyzed in this batch:

1405219-01B	1405219-02B	1405219-03B
1405219-04B	1405219-05B	1405219-06B
1405219-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1405219  
**Project:** WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **R140469**      Instrument ID **WETCHEM**      Method: **A4500-CI C-97**

<b>MBLK</b>		Sample ID: <b>WBLKW1-140509-R140469</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 01:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140509F</b>				SeqNo: <b>2753451</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      ND      3.0

<b>LCS</b>		Sample ID: <b>WLCSW1-140509-R140469</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 01:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140509F</b>				SeqNo: <b>2753452</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      48.98      3.0      50      0      98      80-120      0

<b>MS</b>		Sample ID: <b>1405288-01A MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 01:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140509F</b>				SeqNo: <b>2753468</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      92.47      3.0      50      44.98      95      75-125      0

<b>MSD</b>		Sample ID: <b>1405288-01A MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 01:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_140509F</b>				SeqNo: <b>2753469</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride      94.97      3.0      50      44.98      100      75-125      92.47      2.67      20

The following samples were analyzed in this batch:

1405219-01B	1405219-02B	1405219-03B
1405219-04B	1405219-05B	1405219-06B
1405219-07B		

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

**Client:** HRL Compliance Solutions, Inc  
**Work Order:** 1405219  
**Project:** WPX PA 31-36 SW 5.5.14

## QC BATCH REPORT

Batch ID: **R140526** Instrument ID **IC4** Method: **SW9056**

<b>MBLK</b>		Sample ID: <b>CCB/MBLK-R140526</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 08:40 AM</b>		
Client ID:		Run ID: <b>IC4_140509A</b>				SeqNo: <b>2754907</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate ND 1.0

<b>LCS</b>		Sample ID: <b>LCS-R140526</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 09:00 AM</b>		
Client ID:		Run ID: <b>IC4_140509A</b>				SeqNo: <b>2754908</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 10.2 1.0 10 0 102 85-110 0

<b>MS</b>		Sample ID: <b>1405219-05B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 12:03 PM</b>		
Client ID: <b>Culvert 01</b>		Run ID: <b>IC4_140509A</b>				SeqNo: <b>2754917</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 67.06 4.0 10 55.15 119 75-125 0 O

<b>MSD</b>		Sample ID: <b>1405219-05B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>5/9/2014 12:23 PM</b>		
Client ID: <b>Culvert 01</b>		Run ID: <b>IC4_140509A</b>				SeqNo: <b>2754918</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfate 67.57 4.0 10 55.15 124 75-125 67.06 0.756 20 O

The following samples were analyzed in this batch:

1405219-01B	1405219-02B	1405219-03B
1405219-04B	1405219-05B	1405219-06B
1405219-07B		

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



# ALS Laboratory Group

3352 128th Ave. Holland, MI 49424  
TF: (800) 443-1511 PH: (616) 399-6070 FX: (616) 399-6185

## Chain-of-Custody

Form 202r6

WORKORDER #

1405219

PROJECT NAME		WPX PA 31-38 SW 5-5-14		SAMPLER		Casey Richardson		DATE		5-5-14		PAGE		1 of 1	
PROJECT No.				SITE ID		PA 31-38 Surface Water		TURNAROUND		2+ Hour 5 Day		DISPOSAL		By Lab or Return to Client	
COMPANY NAME		HCSI		EDD FORMAT											
SEND REPORT TO		Mark Mumby		PURCHASE ORDER											
ADDRESS		2385 F 1/2 Road		BILL TO COMPANY		WPX Energy									
CITY/STATE/ZIP		Grand Junction, CO. 81505		INVOICE ATTN TO		Karolina Blaney									
PHONE		970-243-3271		ADDRESS		1058 County Road 215									
FAX		970-243-3280		CITY/STATE/ZIP		Parachute, CO 81635									
E-MAIL		mmumby@hrcorp.com		PHONE		970-683-2295									
				FAX		970-285-9573									
				E-MAIL		karolina.blaney@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	BTEX	TDS	Chlorides	Sulfates				
-01	CO River UG	SW	5-5-14	1027	4	1.8		x	x	x	x				
-02	CO River DG	SW		1038	4	1.8		x	x	x	x				
-03	Spring 01	SW		1100	4	1.8		x	x	x	x				
-04	Spring 02	SW		1106	4	1.8		x	x	x	x				
-05	Culvert 01	SW		1046	4	1.8		x	x	x	x				
-06	Pond 01	SW		1119	4	1.8		x	x	x	x				
-07	Spring UG	SW		1133	4	1.8		x	x	x	x				
-08	TRIP BLANK							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)
4.8'	<input checked="" type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Casey Richardson	5-5-14	1300
RECEIVED BY	N. M. Martin	5-5-14	1300
RELINQUISHED BY	N. M. Martin	5-5-14	1330
RECEIVED BY	Diane F. She	5/6/14	0930
RELINQUISHED BY			
RECEIVED BY			

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **06-May-14 09:30**

Work Order: **1405219**

Received by: **DS**

Checklist completed by <u>Diane Shaw</u>	06-May-14	Reviewed by: <u>Ann Preston</u>	07-May-14
eSignature	Date	eSignature	Date

Matrices: **Surface Water**

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>4.8 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/6/2014 2:16:18 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:			

Login Notes:

-----

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



From: (616) 399-6070  
 Sample Receiving  
 ALS Laboratory Group  
 3352 128th Avenue  
 Holland, MI 49424

Origin ID: GRRA



Ship Date: 05MAY14  
 ActWgt: 70.0 LB  
 CAD: 2284840/NET3480

Dim: 24 X 15 X 15 IN

SHIP TO: (616) 399-6070  
 sample receiving  
 ALS Laboratory Group  
 3352 128TH AVE

HOLLAND, MI 49424

BILL BENDER

Delivery Address Bar Code



Ref # 050514-1  
 Invoice #  
 PO # Parachute  
 Dept #

TUE - 06 MAY AA  
 STANDARD OVERNIGHT

TRK# 7987 5976 1630  
 8261

68 GRRA

49424  
 MI-US  
 GRR



522018203F220

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

ALS Parachute Custody Seal  
 Date 5-5-14  
 Time 10:00  
 Name N. M. K. K.