



WPX Energy Rocky Mountain, LLC
1058 CR 215
PO Box 370
Parachute, CO 81635-0370
Office: (970) 263-2769
Fax: (970) 285-9573

September 5, 2013

Mr. Arthur Koepsell
Location Specialist
Oil and Gas Conservation Commission
707 Wapiti Ct. Suite 204
Rifle, CO 81650

**Re: Sampling and Analysis Summary 2013
Battlement Mesa/Parachute Surface Water Supply Area
317B Public Water System Protection**

Dear Mr. Koepsell,

WPX Energy Rocky Mountain, LLC (WPX) is submitting the 317B Sampling and Analysis Summary (SAS) to comply with the requirements for surface water data collection from surface waters within the specified 317B Buffer Zone in the Battlement Mesa/Parachute Surface Water Supply Area (BMPSWSA).

Should you have any questions or concerns in regards to the SAS, please do not hesitate to contact me at the above listed number.

Best Regards,

Brandon Danforth
Environmental Specialist
brandon.danforth@wpxenergy.com

cc *file*
Maurice Foye (HCSI)
Finn Whiting (HCSI)



SAMPLING AND ANALYSIS SUMMARY

Battlement Mesa/Parachute Surface Water Supply Area

August 2013

HRL COMPLIANCE SOLUTIONS, INC.
2385 F ½ Road
Grand Junction, CO 81505

Table of Contents

1.0	Introduction.....	1
2.0	Sample Locations.....	1
	Table 1: Surface Water Sampling Events.....	1
3.0	Field Sample Methods and Procedures.....	1
4.0	Equipment Decontamination	2
5.0	Project-Derived Waste	2
6.	Sampling Analysis	2
7.0	Analytical Laboratory	2
8.0	Results.....	2
	Table 2 – Battlement Mesa/Parachute Surface Water Supply Area Analytical Results 2013.....	3
	Attachment A Map of DCPS and Sampling Locations	4
	Attachment B Laboratory Results.....	6

1.0 Introduction

HRL Compliance Solutions, Inc. (HCSI) was contracted by WPX Energy Rocky Mountain, LLC (WPX) to conduct surface water sampling in the Battlement Mesa/Parachute Surface Water Supply Area (BMPSWSA). The 2013 sample event was conducted on May 14, 2013; surface water from one (1) sample point was collected based on post drilling events since the last SAS submittal.

The BMPSWSA has been designated a 317B Public Water System Protection Area (PWSPA) according to the new and revised Colorado Oil and Gas Conservation Commission (COGCC) regulations.

This report serves as a follow up for surface water sampling representing pre and post drilling for the GV 80-4. The information contained herein pertains specifically to sampling events conducted in the spring of 2013. For additional information please refer to the 2010, 2011, and 2012 submittal.

2.0 Sample Locations

A surface water sample was collected on May 14, 2013 from sample location BM 11 associated with the WPX GV 80-4 well pad. The water sample was collected from a diverted irrigation ditch associated with Battlement Creek. Site conditions entailed clear skies and temperatures near 75°F.

Please refer to Attachment A for a visual reference.

Table 1: Surface Water Sampling Events

Surface Water Sampling Events 2012				
Sample ID/Sample Location	Sample Location Latitude/Longitude	Date Collected/Visited	DCPS Locations Associated with Sample	Remarks/Rationale
BM 11	39.46353°N, -108.00852°W	5/14/13	GV 80-4	Sample collected from specified location. Post drilling sample.

3.0 Field Sample Methods and Procedures

The surface water sample was collected from an irrigation ditch. The method used to obtain samples was the grab/transfer method. Samples were collected approximately six inches (6") below the surface. This depth ensured a more representative sample of the water column. Field parameters were collected utilizing an YSI 556 (YSI) water quality instrument. The YSI was calibrated per the manufacturer's specifications prior to collection of any surface water samples.

4.0 Equipment Decontamination

Laboratory supplied sampling containers were used to collect surface water samples; therefore, containers did not need to be decontaminated prior to use. To prevent potential cross-contamination, the sampling containers remained sealed before use. Upon completion of sample activities at each site, sampling equipment was thoroughly cleaned and decontaminated.

5.0 Project-Derived Waste

No project derived waste was generated.

6. Sampling Analysis

All surface water samples were analyzed for the entire COGCC 317B.f.1.A constituents:

- pH
- Alkalinity Specific conductance
- Major cations/anions (chloride, fluoride, sulfate, sodium
- Total dissolved solids
- BTEX/GRO/DRO
- TPH
- PAH's (including benzo(a)pyrene); and
- Metals

EPA-approved analytical methods for drinking water were used.

7.0 Analytical Laboratory

All surface water samples were submitted to ALS Environmental, a NELAC accredited analytical laboratory.

8.0 Results

Analytical results for the surface water sample collected from the BMPSWSA are presented in Table 2 and hard copies from the respective analytical laboratory has been included in **Attachment B**.



Table 2 – Battlement Mesa/Parachute Surface Water Supply Area Analytical Results 2013

Location ID	Parameter	Result	Units	ALS Lab Reporting Limit (RL)	EPA’s Max Contaminant Levels (MCLs) ug/L	COGCC Table 910-1 Reporting Limit (RL)	Collected	Time
BM #11	DRO (C10-C28)	ND	mg/L	0.10 mg/L		Below detection level	5/14/2013	12:15
BM #11	GRO (C6-C10)	ND	mg/L	0.20 mg/L		Below detection level	5/14/2013	12:15
BM #11	Benzene	ND	ug/L	1.0 ug/L		5 ug/l ³	5/14/2013	12:15
BM #11	Toluene	ND	ug/L	1.0 ug/L		560-1,000 ug/l ³	5/14/2013	12:15
BM #11	Ethylbenzene	ND	ug/L	1.0 ug/L		700 ug/l ³	5/14/2013	12:15
BM #11	Xylenes (total)	ND	ug/L	3.0 ug/L		1,400-10,000 ug/l ³	5/14/2013	12:15
BM #11	Alkalinity, Total as CaCO3	100	mg/L	12 mg/L			5/14/2013	12:15
BM #11	Fluoride	0.25	mg/L	.20 mg/L	2,000 ug/L		5/14/2013	12:15
BM #11	Chromium, Hexavalent (b)	ND	mg/L	0.0050 mg/L			5/14/2013	12:15
BM #11	Specific Conductivity	620	umhos/cm	5.0 umhos/cm			5/14/2013	12:15
BM #11	Chromium, Trivalent (a)	.0053	mg/L				5/14/2013	12:15
BM #11	Solids, Total Dissolved	320	mg/L	10 mg/L		< 1.25 x background ³	5/14/2013	12:15
BM #11	pH	7.82	s.u.				5/14/2013	12:15
BM #11	Chloride	72	mg/L	5.0 mg/L	50-200 ug/L	< 1.25 x background ³	5/14/2013	12:15
BM #11	Sulfate	68	mg/L	5.0 mg/L	250 mg/L	< 1.25 x background ³	5/14/2013	12:15
BM #11	Arsenic	ND	mg/L	0.0050 mg/L	10 ug/L		5/14/2013	12:15
BM #11	Barium	0.096	mg/L	0.0050 mg/L	2,000 ug/L		5/14/2013	12:15
BM #11	Cadmium	ND	mg/L	0.0020 mg/L	5 ug/L		5/14/2013	12:15
BM #11	Chromium	.0053	mg/L	0.0050 mg/L			5/14/2013	12:15
BM #11	Iron	4.2	mg/L	0.080 mg/L	300 ug/L		5/14/2013	12:15
BM #11	Lead	.0055	mg/L	0.0050 mg/L			5/14/2013	12:15
BM #11	Magnesium	12	mg/l	0.20 mg/L			5/14/2013	12:15
BM #11	Mercury	ND	mg/L	0.00020 mg/L			5/14/2013	12:15
BM #11	Selenium	ND	mg/L	0.0050 mg/L	50 ug/L		5/14/2013	12:15
BM #11	Silver	ND	mg/L	0.00020 mg/L	100 ug/L		5/14/2013	12:15
BM #11	Sodium	52	mg/L	0.20 mg/L			5/14/2013	12:15
BM #11	Acenaphthene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Acenaphthylene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Anthracene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Benzo(a)anthracene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Benzo(a)pyrene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Benzo(b)fluoranthene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Benzo(g,h,i)perylene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Benzo(k)fluoranthene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Chrysene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Dibenzo(a,h)anthracene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Fluoranthene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Fluorene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Indeno(1,2,3-cd)pyrene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Naphthalene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Phenanthrene	ND	ug/l	5.0 ug/L			5/14/2013	12:15
BM #11	Pyrene	ND	ug/l	5.0 ug/L			5/14/2013	12:15

³ Concentrations taken from CDPHE-WQCC Regulation 41- The Basic Standards for Ground Water.

Attachment A

2013 Maps of DCPS and Sample Locations

Attachment B

ALS Environmental Analytical Results



25-May-2013

Ashlee Lane

HRL Compliance Solutions
2385 F 1/2 Road

Grand Junction, CO 81505

Re: **WPX Parachute 317B-5/14/13**

Work Order: **1305626**

Dear Ashlee,

ALS Environmental received 2 samples on 16-May-2013 08:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 29.

Mr. James Milne
August, 2013



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

Sincerely,

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

Part of the ALS Group An ALS Limited Company

ALS GROUP USA, CORP

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Group USA, Corp

Date: 25-May-13

Client: HRL Compliance Solutions
Project: WPX Parachute 317B-5/14/13
Work Order: 1305626

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>
1305626-01	BM #11	Water		5/14/2013 12:15	5/16/2013 08:00	<input type="checkbox"/>
1305626-02	Trip Blank	Water		5/14/2013	5/16/2013 08:00	

Mr. James Milne
August, 2013



Sample Summary Page 1 of 1

Client: HRL Compliance Solutions
Project: WPX Parachute 317B-5/14/13
Work Order: 1305626

Case Narrative

Batch 48532 sample BN#11 MS/MSD recoveries for Sodium were outside of the control limits; however, the result in the parent sample was greater than 4x the spiked amount. No qualification is required for Sodium.

Batch 48561 The LCS recovery for Naphthalene was below the lower control limit and is considered a Sporadic Marginal Exceedence allowed by the SOP. The LCS recoveries for Chrysene and Fluorene were above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for Chrysene or Fluorene. The MS/MSD data for PAHs is not related to this project's samples. No data requires qualification.

Batch R120874 sample 1305626-01 for Hexavalent Chromium was received after the hold time had expired. Results should be considered estimated.

Batch R121248 MS/MSD data for GRO is not related to this project's samples. No data requires qualification.

Client: HRL Compliance Solutions
Project: WPX Parachute 317B-5/14/13
WorkOrder: 1305626

QUALIFIERS, ACRONYMS, UNITS

Qualifier Description

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

Acronym Description

DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported Description

µg/L	Micrograms per Liter
µmhos/cm	Micromhos per Centimeter
mg/L	Milligrams per Liter
s.u.	Standard Units

Client: HRL Compliance Solutions

Project: WPX Parachute 317B-5/14/13

Work Order: 1305626

Sample ID: BM #11

Lab ID: 1305626-01

Collection Date: 5/14/2013 12:15 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 5/16/2013	Analyst: CW
DRO (C10-C28)	ND		0.10	mg/L	1	5/17/2013 05:14 AM
Surr: 4-Terphenyl-d14	61.9		21-90	%REC	1	5/17/2013 05:14 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: RD
GRO (C6-C10)	ND		0.20	mg/L	1	5/23/2013 11:46 AM
Surr: Toluene-d8	106		70-130	%REC	1	5/23/2013 11:46 AM
MERCURY BY CVAA						
			SW7470		Prep Date: 5/20/2013	Analyst: LR
Mercury	ND		0.00020	mg/L	1	5/20/2013 03:38 PM
METALS BY ICP-MS						
			SW6020A		Prep Date: 5/20/2013	Analyst: RH
Arsenic	ND		0.0050	mg/L	1	5/21/2013 02:27 AM
Barium	0.096		0.0050	mg/L	1	5/21/2013 02:27 AM
Cadmium	ND		0.0020	mg/L	1	5/21/2013 02:27 AM
Chromium	0.0053		0.0050	mg/L	1	5/21/2013 02:27 AM
Iron	4.2		0.080	mg/L	1	5/21/2013 02:27 AM
Lead	0.0055		0.0050	mg/L	1	5/21/2013 02:27 AM
Magnesium	12		0.20	mg/L	1	5/21/2013 02:27 AM
Selenium	ND		0.0050	mg/L	1	5/21/2013 02:27 AM
Silver	ND		0.0050	mg/L	1	5/21/2013 02:27 AM
Sodium	52		0.20	mg/L	1	5/21/2013 02:27 AM
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW8270		Prep Date: 5/21/2013	Analyst: HL
1-Methylnaphthalene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
2-Chloronaphthalene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
2-Methylnaphthalene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
Acenaphthene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
Acenaphthylene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
Anthracene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
Benzo(a)anthracene	ND		5.0	µg/L	1	5/22/2013 05:49 PM
Benzo(a)pyrene	ND		5.0	µg/L	1	5/22/2013 05:49 PM

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

Benzo(b)fluoranthene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Benzo(g,h,i)perylene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Benzo(k)fluoranthene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Chrysene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Dibenzo(a,h)anthracene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Fluoranthene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Fluorene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Naphthalene	ND	5.0	µg/L	1	5/22/2013 05:49 PM
Phenanthrene	ND	5.0	µg/L	1	5/22/2013 05:49 PM

ALS Group USA, Corp

Date: 25-May-13

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

Client: HRL Compliance Solutions
Project: WPX Parachute 317B-5/14/13
Sample ID: BM #11
Collection Date: 5/14/2013 12:15 PM

Work Order
Lab ID
Matrix

Analyses	Result	Qual	Report Limit	Units	Dilution Factor
Pyrene	ND		5.0	µg/L	
Surr: 2-Fluorobiphenyl	107		20-122	%REC	
Surr: 4-Terphenyl-d14	135		22-172	%REC	
Surr: Nitrobenzene-d5	120	S	8-115	%REC	
VOLATILE ORGANIC COMPOUNDS			SW8260		
Benzene	ND		1.0	µg/L	
Ethylbenzene	ND		1.0	µg/L	
m,p-Xylene	ND		2.0	µg/L	
o-Xylene	ND		1.0	µg/L	
Toluene	ND		1.0	µg/L	
Xylenes, Total	ND		3.0	µg/L	
Surr: 1,2-Dichloroethane-d4	120		70-120	%REC	
Surr: 4-Bromofluorobenzene	101		75-120	%REC	
Surr: Dibromofluoromethane	106		85-115	%REC	
Surr: Toluene-d8	101		85-120	%REC	
ALKALINITY (AS CaCO3)			A2320 B		
Alkalinity, Bicarbonate (as CaCO3)	100		10	mg/L	
Alkalinity, Carbonate (as CaCO3)	ND		10	mg/L	
Alkalinity, Total (as CaCO3)	100		12	mg/L	
CHROMIUM, TRIVALENT			CALCULATION		
Chromium, Trivalent	0.0053				mg/L
CHROMIUM, HEXAVALENT			SW7196A		
Chromium, Hexavalent	ND	H	0.0050		mg/L
ANIONS BY ION CHROMATOGRAPHY			SW9056		Analyst: ED
Chloride	72	5.0	mg/L	5	5/23/2013 12:44 PM
Fluoride	0.25	0.20	mg/L	2	5/23/2013 04:17 PM
Sulfate	68	5.0	mg/L	5	5/23/2013 12:44 PM
PH			SW9040		Analyst: JB
pH	7.82		s.u.	1	5/16/2013 09:45 AM
SPECIFIC CONDUCTANCE			A2510		Analyst: JB
Specific Conductance	620	5.0	µmhos/cm	1	5/17/2013 04:00 PM
TOTAL DISSOLVED SOLIDS			A2540 C		Analyst: YM
Total Dissolved Solids	320	10	mg/L	1	5/20/2013 02:00 PM

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

Client: HRL Compliance Solutions

Project: WPX Parachute 317B-5/14/13

Work Order: 1305626

Sample ID: Trip Blank

Lab ID: 1305626-02

Collection Date: 5/14/2013

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS
Benzene	ND		1.0	µg/L	1	5/16/2013 10:59 PM
Ethylbenzene	ND		1.0	µg/L	1	5/16/2013 10:59 PM
m,p-Xylene	ND		2.0	µg/L	1	5/16/2013 10:59 PM
o-Xylene	ND		1.0	µg/L	1	5/16/2013 10:59 PM
Toluene	ND		1.0	µg/L	1	5/16/2013 10:59 PM
Xylenes, Total	ND		3.0	µg/L	1	5/16/2013 10:59 PM
Surr: 1,2-Dichloroethane-d4	113		70-120	%REC	1	5/16/2013 10:59 PM
Surr: 4-Bromofluorobenzene	99.0		75-120	%REC	1	5/16/2013 10:59 PM
Surr: Dibromofluoromethane	107		85-115	%REC	1	5/16/2013 10:59 PM
Surr: Toluene-d8	100		85-120	%REC	1	5/16/2013 10:59 PM

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Project: WPX Parachute 317B-5/14/13

Batch ID: 48465 Instrument ID GC8 Method: SW8015M

MBLK		Sample ID: DBLKW1-48465-48465				Units: mg/L		Analysis Date: 5/16/2013 06:04 PM		
Client ID:		Run ID: GC8_130516A				SeqNo: 2322601		Prep Date: 5/16/2013		DF: 1
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	0.07847	0	0.1143	0	68.7	21-90	0			

LCS		Sample ID: BLCSW1-48465-48465				Units: mg/L		Analysis Date: 5/16/2013 06:34 PM		
Client ID:		Run ID: GC8_130516A				SeqNo: 2322602		Prep Date: 5/16/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	6.151	0.10	11.43	0	53.8	44-116	0			
Surr: 4-Terphenyl-d14	0.08546	0	0.1143	0	74.8	21-90	0			

MS		Sample ID: 1305618-01B MS				Units: mg/L		Analysis Date: 5/16/2013 07:04 PM		
Client ID:		Run ID: GC8_130516A				SeqNo: 2322603		Prep Date: 5/16/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	22.57	0.35	40	0	56.4	44-116	0			
Surr: 4-Terphenyl-d14	0.2998	0	0.4	0	74.9	21-90	0			

MSD		Sample ID: 1305618-01B MSD				Units: mg/L		Analysis Date: 5/16/2013 07:35 PM		
Client ID:		Run ID: GC8_130516A				SeqNo: 2322604		Prep Date: 5/16/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	21.86	0.35	40	0	54.6	44-116	22.57	3.21	30	
Surr: 4-Terphenyl-d14	0.302	0		0	75.5	21-90	0.2998	0.744	30	

0.4

The following samples were analyzed in this batch: 1305626-01D

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R121248

Instrument ID GC10

Method: SW8015

MBLK	Sample ID: GBLK1-130523-R121248				Units: µg/L		Analysis Date: 5/23/2013 11:21 AM			
Client ID:	Run ID: GC10_130523A				SeqNo: 2329974		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	ND	200								
Surr: Toluene-d8	110.6	0	100	0	111	70-130	0			

LCS	Sample ID: GLCS1-130523-R121248				Units: µg/L		Analysis Date: 5/23/2013 10:57 AM			
Client ID:	Run ID: GC10_130523A				SeqNo: 2329968		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	8055	200	10000	0	80.6	70-130	0			
Surr: Toluene-d8	121.8	0	100	0	122	70-130	0			

MS	Sample ID: 1305819-13A MS				Units: µg/L		Analysis Date: 5/23/2013 08:29 PM			
Client ID:	Run ID: GC10_130523A				SeqNo: 2330857		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	6755	200	10000	388.6	63.7	70-130	0			S
Surr: Toluene-d8	111.7	0	100	0	112	70-130	0			

MSD	Sample ID: 1305819-13A MSD				Units: µg/L		Analysis Date: 5/23/2013 08:54 PM			
Client ID:	Run ID: GC10_130523A				SeqNo: 2330859		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	6261	200	10000	388.6	58.7	70-130	6755	7.6	30	S
Surr: Toluene-d8	112.8	0	100	0	113	70-130	111.7	0.998	30	

The following samples were analyzed in this batch:

1305626-01C

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48534 Instrument ID HG1 Method: SW7470

MBLK	Sample ID: MBLK-48534-48534	Units: mg/L	Analysis Date: 5/20/2013 03:26 PM
Client ID:	Run ID: HG1_130520A	SeqNo: 2325490	Prep Date: 5/20/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Mercury	ND	0.00020							

LCS	Sample ID: LCS-48534-48534	Units: mg/L	Analysis Date: 5/20/2013 03:28 PM
Client ID:	Run ID: HG1_130520A	SeqNo: 2325491	Prep Date: 5/20/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Mercury	0.001994	0.00020	0.002	0	99.7	80-120	0		

MS	Sample ID: 1305515-01AMS	Units: mg/L	Analysis Date: 5/20/2013 03:32 PM
Client ID:	Run ID: HG1_130520A	SeqNo: 2325493	Prep Date: 5/20/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Mercury	0.02056	0.0020	0.02	0.00023	102	75-125	0		

MSD	Sample ID: 1305515-01AMSD	Units: mg/L	Analysis Date: 5/20/2013 03:34 PM
Client ID:	Run ID: HG1_130520A	SeqNo: 2325494	Prep Date: 5/20/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Mercury	0.02051	0.0020	0.02	0.00023	101	75-125	0.02056	0.243	20

The following samples were analyzed in this batch: 1305626-01B

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48532 Instrument ID ICPMS2 Method: SW6020A

MBLK	Sample ID: MBLK-48532-48532	Units: mg/L	Analysis Date: 5/21/2013 01:24 PM
Client ID:	Run ID: ICPMS2_130521A	SeqNo: 2326782	Prep Date: 5/20/2013
		DF: 1	
	SPK Ref	Control	RPD Ref
			RPD

Analyte	Result	PQL	SPK Val	Value	%REC	Limit	Value	%RPD	Limit	Qual
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Cadmium	ND	0.0020								
Chromium	ND	0.0050								
Iron	ND	0.080								
Lead	ND	0.0050								
Selenium	ND	0.0050								
Silver	ND	0.0050								
Sodium	0.2579	0.20								

MBLK Client ID:	Sample ID: MBLK-48532-48532					Units: mg/L	Analysis Date: 5/21/2013 03:08 PM			
	Run ID: ICPMS2_130521A					SeqNo: 2326932	Prep Date: 5/20/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Magnesium	ND	0.20								

LCS	Sample ID: LCS-48532-48532				Units: mg/L		Analysis Date: 5/21/2013 02:05 AM			
Client ID:	Run ID: ICPMS2_130520A				SeqNo: 2326012		Prep Date: 5/20/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1033	0.0050	0.1	0	103	80-120	0			
Barium	0.103	0.0050	0.1	0	103	80-120	0			
Cadmium	0.1032	0.0020	0.1	0	103	80-120	0			
Chromium	0.1008	0.0050	0.1	0	101	80-120	0			
Iron	10.11	0.080	10	0	101	80-120	0			
Lead	0.1009	0.0050	0.1	0	101	80-120	0			
Magnesium	10.16	0.20	10	0	102	80-120	0			
Selenium	0.1011	0.0050	0.1	0	101	80-120	0			
Silver	0.09975	0.0050	0.1	0	99.8	80-120	0			
Sodium	10.41	0.20	10	0	104	80-120	0			

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48532

Instrument ID ICPMS2

Method: SW6020A

MS				Sample ID: 1305626-01BMS		Units: mg/L		Analysis Date: 5/21/2013 02:32 AM		
Client ID: BM #11				Run ID: ICPMS2_130520A		SeqNo: 2326020		Prep Date: 5/20/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1048	0.0050	0.1	0.002345	102	75-125	0			
Barium	0.2075	0.0050	0.1	0.09572	112	75-125	0			
Cadmium	0.1019	0.0020	0.1	0.000219	102	75-125	0			
Chromium	0.1062	0.0050	0.1	0.005348	101	75-125	0			
Iron	14.4	0.080	10	4.203	102	75-125	0			
Lead	0.1053	0.0050	0.1	0.005541	99.8	75-125	0			
Magnesium	21.74	0.20	10	11.94	98	75-125	0			
Selenium	0.09775	0.0050	0.1	0.001083	96.7	75-125	0			
Silver	0.09418	0.0050	0.1	0.00003585	94.1	75-125	0			
Sodium	57.2	0.20	10	51.89	53.1	75-125	0			SO
MSD				Sample ID: 1305626-01BMSD		Units: mg/L		Analysis Date: 5/21/2013 03:58 AM		

Client ID: BM #11

Run ID: ICPMS2_130520A

SeqNo: 2326046

Prep Date: 5/20/2013

DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1067	0.0050	0.1	0.002345	104	75-125	0.1048	1.8	20	
Barium	0.2095	0.0050	0.1	0.09572	114	75-125	0.2075	0.959	20	
Cadmium	0.102	0.0020	0.1	0.000219	102	75-125	0.1019	0.0981	20	
Chromium	0.1088	0.0050	0.1	0.005348	103	75-125	0.1062	2.42	20	
Iron	14.83	0.080	10	4.203	106	75-125	14.4	2.94	20	
Lead	0.1092	0.0050	0.1	0.005541	104	75-125	0.1053	3.64	20	
Magnesium	22.66	0.20	10	11.94	107	75-125	21.74	4.14	20	
Selenium	0.1021	0.0050	0.1	0.001083	101	75-125	0.09775	4.35	20	
Silver	0.09425	0.0050	0.1	0.00003585	94.2	75-125	0.09418	0.0743	20	
Sodium	58.45	0.20	10	51.89	65.6	75-125	57.2	2.16	20	SO

The following samples were analyzed in this batch:

1305626-01B

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48561

Instrument ID SVMS4

Method: SW8270

MBLK	Sample ID: SBLKW1-48561-48561	Units: µg/L	Analysis Date: 5/22/2013 05:09 PM
Client ID:	Run ID: SVMS4_130522A	SeqNo: 2328856	Prep Date: 5/21/2013
			DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1-Methylnaphthalene	ND	5.0								
2-Chloronaphthalene	ND	5.0								
2-Methylnaphthalene	ND	5.0								
Acenaphthene	ND	5.0								
Acenaphthylene	ND	5.0								
Anthracene	ND	5.0								
Benzo(a)anthracene	ND	5.0								
Benzo(a)pyrene	ND	5.0								
Benzo(b)fluoranthene	ND	5.0								
Benzo(g,h,i)perylene	ND	5.0								
Benzo(k)fluoranthene	ND	5.0								
Chrysene	ND	5.0								
Dibenzo(a,h)anthracene	ND	5.0								
Fluoranthene	ND	5.0								
Fluorene	ND	5.0								
Indeno(1,2,3-cd)pyrene	ND	5.0								
Naphthalene	ND	5.0								
Phenanthrene	ND	5.0								
Pyrene	ND	5.0								
Surr: 2-Fluorobiphenyl	108	0	114	0	94.7	20-122	0			
Surr: 4-Terphenyl-d14	152.6	0	114	0	134	22-172	0			
Surr: Nitrobenzene-d5	133.7	0	114	0	117	8-115	0			S

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48561

Instrument ID SVMS4

Method: SW8270

LCS	Sample ID: SLCSW1-48561-48561	Units: µg/L	Analysis Date: 5/22/2013 02:30 PM
Client ID:	Run ID: SVMS4_130522A	SeqNo: 2328852	Prep Date: 5/21/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1-Methylnaphthalene	30.86	5.0	45.7	0	67.5	60-140	0			
2-Chloronaphthalene	43.43	5.0	45.7	0	95	60-140	0			
2-Methylnaphthalene	29.71	5.0	45.7	0	65	60-140	0			
Acenaphthene	56	5.0	45.7	0	123	60-140	0			
Acenaphthylene	57.71	5.0	45.7	0	126	60-140	0			
Anthracene	52.57	5.0	45.7	0	115	60-140	0			
Benzo(a)anthracene	45.14	5.0	45.7	0	98.8	60-140	0			
Benzo(a)pyrene	53.71	5.0	45.7	0	118	60-140	0			
Benzo(b)fluoranthene	59.43	5.0	45.7	0	130	60-140	0			
Benzo(g,h,i)perylene	54.29	5.0	45.7	0	119	60-140	0			
Benzo(k)fluoranthene	50.86	5.0	45.7	0	111	60-140	0			
Chrysene	69.14	5.0	45.7	0	151	60-140	0			S
Dibenzo(a,h)anthracene	56.57	5.0	45.7	0	124	60-140	0			
Fluoranthene	56	5.0	45.7	0	123	60-140	0			
Fluorene	68	5.0	45.7	0	149	60-140	0			S
Indeno(1,2,3-cd)pyrene	56.57	5.0	45.7	0	124	60-140	0			
Naphthalene	26.29	5.0	45.7	0	57.5	60-140	0			S
Phenanthrene	53.71	5.0	45.7	0	118	60-140	0			
Pyrene	59.43	5.0	45.7	0	130	60-140	0			
Surr: 2-Fluorobiphenyl	104.6	0	114	0	91.7	20-122	0			
Surr: 4-Terphenyl-d14	144.6	0	114	0	127	22-172	0			
Surr: Nitrobenzene-d5	132	0	114	0	116	8-115	0			S

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48561

Instrument ID SVMS4

Method: SW8270

MS		Sample ID: 1305719-01B MS		Units: µg/L	Analysis Date: 5/22/2013 03:10 PM
Client ID:	Run ID: SVMS4_130522A	SeqNo: 2328853	Prep Date: 5/21/2013	DF: 1	

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1-Methylnaphthalene	98	18	160	0	61.3	60-140	0			
2-Chloronaphthalene	144	18	160	0	90	60-140	0			
2-Methylnaphthalene	98	18	160	0	61.3	60-140	0			
Acenaphthene	188	18	160	0	118	60-140	0			
Acenaphthylene	212	18	160	0	133	60-140	0			
Anthracene	196	18	160	0	123	60-140	0			
Benzo(a)anthracene	174	18	160	0	109	60-140	0			
Benzo(a)pyrene	198	18	160	0	124	60-140	0			
Benzo(b)fluoranthene	162	18	160	0	101	60-140	0			
Benzo(g,h,i)perylene	202	18	160	0	126	60-140	0			
Benzo(k)fluoranthene	238	18	160	0	149	60-140	0			S
Chrysene	260	18	160	0	163	60-140	0			S
Dibenzo(a,h)anthracene	208	18	160	0	130	60-140	0			
Fluoranthene	204	18	160	0	128	60-140	0			
Fluorene	232	18	160	0	145	60-140	0			S
Indeno(1,2,3-cd)pyrene	210	18	160	0	131	60-140	0			
Naphthalene	76	18	160	0	47.5	60-140	0			S
Phenanthrene	202	18	160	0	126	60-140	0			
Pyrene	216	18	160	0	135	60-140	0			
Surr: 2-Fluorobiphenyl	298	0	399	0	74.7	20-122	0			
Surr: 4-Terphenyl-d14	480	0	399	0	120	22-172	0			
Surr: Nitrobenzene-d5	444	0	399	0	111	8-115	0			

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: 48561

Instrument ID SVMS4

Method: SW8270

MSD	Sample ID: 1305719-01B MSD	Units: µg/L	Analysis Date: 5/22/2013 03:50 PM
Client ID:	Run ID: SVMS4_130522A	SeqNo: 2328854	Prep Date: 5/21/2013 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1-Methylnaphthalene	96	18	160	0	60	60-140	98	2.06	30	
2-Chloronaphthalene	138	18	160	0	86.3	60-140	144	4.26	30	
2-Methylnaphthalene	94	18	160	0	58.8	60-140	98	4.17	30	S
Acenaphthene	182	18	160	0	114	60-140	188	3.24	30	
Acenaphthylene	198	18	160	0	124	60-140	212	6.83	30	
Anthracene	186	18	160	0	116	60-140	196	5.24	30	
Benzo(a)anthracene	166	18	160	0	104	60-140	174	4.71	30	
Benzo(a)pyrene	190	18	160	0	119	60-140	198	4.12	30	
Benzo(b)fluoranthene	152	18	160	0	95	60-140	162	6.37	30	
Benzo(g,h,i)perylene	192	18	160	0	120	60-140	202	5.08	30	
Benzo(k)fluoranthene	236	18	160	0	148	60-140	238	0.844	30	S
Chrysene	248	18	160	0	155	60-140	260	4.72	30	S
Dibenzo(a,h)anthracene	198	18	160	0	124	60-140	208	4.93	30	
Fluoranthene	200	18	160	0	125	60-140	204	1.98	30	
Fluorene	218	18	160	0	136	60-140	232	6.22	30	
Indeno(1,2,3-cd)pyrene	200	18	160	0	125	60-140	210	4.88	30	
Naphthalene	74	18	160	0	46.3	60-140	76	2.67	30	S
Phenanthrene	192	18	160	0	120	60-140	202	5.08	30	
Pyrene	206	18	160	0	129	60-140	216	4.74	30	
Surr: 2-Fluorobiphenyl	296	0	399	0	74.2	20-122	298	0.673	30	
Surr: 4-Terphenyl-d14	452	0	399	0	113	22-172	480	6.01	30	
Surr: Nitrobenzene-d5	418	0	399	0	105	8-115	444	6.03	30	

The following samples were analyzed in this batch:

1305626-01D

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R120893A

Instrument ID VMS9

Method: SW8260

MBLK	Sample ID: VBLKW2-130516-R120893A	Units: µg/L	Analysis Date: 5/16/2013 10:15 PM
Client ID:	Run ID: VMS9_130516B	SeqNo: 2322359	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	22.72	0	20	0	114	70-120	0			
Surr: 4-Bromofluorobenzene	19.97	0	20	0	99.8	75-120	0			
Surr: Dibromofluoromethane	21.22	0	20	0	106	85-115	0			
Surr: Toluene-d8	20.05	0	20	0	100	85-120	0			

LCS Sample ID: VLCSW2-130516-R120893A

Units: µg/L

Analysis Date: 5/16/2013 09:32 PM

Client ID: Run ID: VMS9_130516B SeqNo: 2322358 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.86	1.0	20	0	109	80-120	0			
Ethylbenzene	22.99	1.0	20	0	115	75-125	0			
m,p-Xylene	43.31	2.0	40	0	108	75-130	0			
o-Xylene	23.17	1.0	20	0	116	80-120	0			
Toluene	22.28	1.0	20	0	111	75-120	0			
Xylenes, Total	66.48	3.0	60	0	111	75-130	0			
Surr: 1,2-Dichloroethane-d4	21.61	0	20	0	108	70-120	0			
Surr: 4-Bromofluorobenzene	21.55	0	20	0	108	75-120	0			
Surr: Dibromofluoromethane	21.6	0	20	0	108	85-115	0			
Surr: Toluene-d8	20.55	0	20	0	103	85-120	0			

The following samples were analyzed in this batch:

1305626-01C 1305626-02A

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R120874 Instrument ID WETCHEM Method: SW7196A

MBLK	Sample ID: WBLKW1-130516-R120874	Units: mg/L	Analysis Date: 5/16/2013 01:00 PM
Client ID:	Run ID: WETCHEM_130516I	SeqNo: 2321555	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Chromium, Hexavalent	ND	0.0050							

LCS	Sample ID: WLCSW1-130516-R120874	Units: mg/L	Analysis Date: 5/16/2013 01:00 PM
Client ID:	Run ID: WETCHEM_130516I	SeqNo: 2321556	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Chromium, Hexavalent	0.1983	0.0050	0.2	0	99.2	80-120	0		

MS	Sample ID: 1305613-07AMS	Units: mg/L	Analysis Date: 5/16/2013 01:00 PM
Client ID:	Run ID: WETCHEM_130516I	SeqNo: 2321562	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Chromium, Hexavalent	0.2082	0.0050	0.2	0.0009	104	75-125	0		

MS	Sample ID: 1305641-01C MS	Units: mg/L	Analysis Date: 5/16/2013 01:00 PM
Client ID:	Run ID: WETCHEM_130516I	SeqNo: 2321570	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Chromium, Hexavalent	0.207	0.0050	0.2	0.0034	102	75-125	0		

MSD	Sample ID: 1305613-07AMSD	Units: mg/L	Analysis Date: 5/16/2013 01:00 PM
Client ID:	Run ID: WETCHEM_130516I	SeqNo: 2321563	Prep Date: DF: 1

Analyte	Result
---------	--------

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

		SP K Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.2082	0.0050	0.2	0.0009	104	75-125	0.2082	0	30

MSD	Sample ID: 1305641-01C MSD				Units: mg/L		Analysis Date: 5/16/2013 01:00 PM		
Client ID:	Run ID: WETCHEM_130516I				SeqNo: 2321571		Prep Date:		DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.2132	0.0050	0.2	0.0034	105	75-125	0.207	2.95	30	

The following samples were analyzed in this batch:

1305626-01A

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R120890 Instrument ID WETCHEM Method: SW9045D

LCS Sample ID: WLCSS1-130516-R120890 Units: s.u. Analysis Date: 5/16/2013 09:45 AM

Client ID: Run ID: WETCHEM_130516M SeqNo: 2321809 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
---------	--------	-----	---------	---------------	------	---------------	---------------	------	-----------	------

pH	4.2	0	95.5	90-110	0					
----	-----	---	------	--------	---	--	--	--	--	--

	0									
	4.									
	4									
	LCS									

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

SeqNo: 2321812

DF: 1

PQL

Analyt
e

Result

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

QC BATCH REPORT

SPK Ref
Value

%REC

QC Report Page: 15 of 17

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626



Control Limit	RPD Ref Value	%RPD
---------------	------------------	------

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

RPD Limit	Qual		
	Sample ID: WLCSW1-130516-R120890	Analysis Date:	5/16/2013 09:45 AM
	Run ID: WETCHEM_130516M	Prep Date:	

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

Client: HRL Compliance Solutions

QC BATCH REPORT

pH
Work Order: 1305626 4.2 0 4.4 0 95.5 90-110 0

DUP Sample ID: 1305500-06A DUP Units: s.u. Analysis Date: 5/16/2013 09:45 AM

Client ID: Run ID: WETCHEM_130516M SeqNo: 2321811 Prep Date: DF: 1

Analyte	Result	SPK Val	SPK Ref Value	Control Limit	RPD Ref Value	RPD Limit	Qual
		PQL		%REC		%RPD	
pH	8.56	0	0	0	0	0-0	8.56 0 20

DUP Sample ID: 1305626-01A DUP Units: s.u. Analysis Date: 5/16/2013 09:45 AM

Client ID: BM #11 Run ID: WETCHEM_130516M SeqNo: 2321814 Prep Date: DF: 1

Analyte	Result	SPK Val	SPK Ref Value	Control Limit	RPD Ref Value	RPD Limit	Qual
		PQL		%REC		%RPD	
pH	7.82	0	0	0	0	0-0	7.82 0 20

The following samples were analyzed in this batch: 1305626-01A

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R120891 Instrument ID Titrator 1 Method: A2320 B

MBLK	Sample ID: WBLKW1-130516-R120891				Units: mg/L		Analysis Date: 5/16/2013 04:14 PM			
Client ID:	Run ID: TITRATOR 1_130516A			SeqNo: 2321815		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)										
Alkalinity, Carbonate (as CaCO3)	ND	10								
Alkalinity, Total (as CaCO3)	ND	10								
	ND	12								

MBLK		Sample ID: WBLKW1-130516-R120891			Units: mg/L		Analysis Date: 5/16/2013 04:14 PM			
Client ID:		Run ID: TITRATOR 1_130516A			SeqNo: 2321821		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	ND	10								
Alkalinity, Carbonate (as CaCO3)	ND	10								
Alkalinity, Total (as CaCO3)	ND	12								

LCS	Sample ID: WLCSW1-130516-R120891					Units: mg/L		Analysis Date: 5/16/2013 04:14 PM		
Client ID:	Run ID: TITRATOR 1_130516A				SeqNo: 2321816		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (as CaCO3)	946	10	925	0	102	70-130	0			
Alkalinity, Total (as CaCO3)	970.3	12	1000	0	97	90-106	0			

LCS	Sample ID: WLCSW1-130516-R120891					Units: mg/L		Analysis Date: 5/16/2013 04:14 PM		
Client ID:			Run ID: TITRATOR 1_130516A			SeqNo: 2321822		Prep Date:		DF: 1
				SPK Ref Value		Control Limit		RPD Ref Value		RPD Limit
Analyte	Result	PQL	SPK Val	%REC				%RPD		Qual
Alkalinity, Carbonate (as CaCO3)	946	10	925	0	102	70-130		0		
Alkalinity, Total (as CaCO3)	970.3	12	1000	0	97	94-104		0		

DUP	Sample ID: 1305599-01A DUP				Units: mg/L		Analysis Date: 5/16/2013 04:14 PM		
------------	-----------------------------------	--	--	--	--------------------	--	------------------------------------------	--	--

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Client ID: Run ID: TITRATOR 1_130516A SeqNo: 2321818 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	161.8	10	0	0	0	162.5	0.444	20	
Alkalinity, Carbonate (as CaCO3)	ND	10	0	0	0	0	0	20	
Alkalinity, Total (as CaCO3)	161.8	12	0	0	0	162.5	0.444	20	

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R120891 Instrument ID Titrator 1 Method: A2320 B

DUP	Sample ID: 1305505-08C DUP	Units: mg/L	Analysis Date: 5/16/2013 04:14 PM
Client ID:	Run ID: TITRATOR 1_130516A	SeqNo: 2321824	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	279.1	10	0	0	0		276.3	0.983	20	
Alkalinity, Carbonate (as CaCO3)	ND	10	0	0	0		0	0	20	
Alkalinity, Total (as CaCO3)	279.1	12	0	0	0		276.3	0.983	20	

DUP Sample ID: 1305505-14C DUP Units: mg/L Analysis Date: 5/16/2013 04:14 PM

Client ID: Run ID: TITRATOR 1_130516A SeqNo: 2321828 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	224.7	10	0	0	0		224.1	0.281	20	
Alkalinity, Carbonate (as CaCO3)	ND	10	0	0	0		0	0	20	
Alkalinity, Total (as CaCO3)	224.7	12	0	0	0		224.1	0.281	20	

The following samples were analyzed in this batch:

1305626-01A

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: **R120947** Instrument ID **WETCHEM** Method: **A2510**

MBLK	Sample ID: WBLKW1-130517-R120947		Units: µmhos/cm	Analysis Date: 5/17/2013 04:00 PM
Client ID:	Run ID: WETCHEM_130517H	SeqNo: 2323217	Prep Date:	DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	ND	5.0								

MBLK	Sample ID: WBLKW1-130517-R120947	Units: µmhos/cm	Analysis Date: 5/17/2013 04:00 PM	
Client ID:	Run ID: WETCHEM_130517H	SeqNo: 2323225	Prep Date:	DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	ND	2.0								

DUP	Sample ID: 1305562-09B DUP	Units: µmhos/cm	Analysis Date: 5/17/2013 04:00 PM
Client ID:	Run ID: WETCHEM_130517H	SeqNo: 2323220	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	94.6	5.0	0	0	0	0-0	94.5	0.106	5	

LCS1	Sample ID: WLCS1W1-130517-R120947	Units: µmhos/cm	Analysis Date: 5/17/2013 04:00 PM	
Client ID:	Run ID: WETCHEM_130517H	SeqNo: 2323218	Prep Date:	DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
---------	--------	-----	---------	---------------	------	---------------	---------------	------	-----------	------

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Specific Conductance 1305626 14.26 5.0 14.9 0 95.7 85-107 0

Work Order:

LCS1		Sample ID: WLCS1W1-130517-R120947		Units: µmhos/cm		Analysis Date: 5/17/2013 04:00 PM	
------	--	------------------------------------------	--	------------------------	--	------------------------------------------	--

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	14.26	2.0	14.9	0	95.7	85-107	0			

LCS2		Sample ID: WLCS2W1-130517-R120947		Units: μmhos/cm		Analysis Date: 5/17/2013 04:00 PM			
Client ID:		Run ID: WETCHEM_130517H		SeqNo: 2323223		Prep Date:		DF: 1	

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	619	5.0	592	0	105	85-107	0			

LCS2		Sample ID: WLCS2W1-130517-R120947		Units: μmhos/cm		Analysis Date: 5/17/2013 04:00 PM			
Client ID:		Run ID: WETCHEM_130517H		SeqNo: 2323228		Prep Date:		DF: 1	

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	619	2.0	592	0	105	85-107	0			

The following samples were analyzed in this batch:

1305626-01A

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R121082 Instrument ID TDS Method: A2540 C

MBLK	Sample ID: MBLK-R121082	Units: mg/L	Analysis Date: 5/20/2013 02:00 PM
Client ID:	Run ID: TDS_130520A	SeqNo: 2326458	Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Total Dissolved Solids	ND	10							
LCS Sample ID: LCS-R121082 Units: mg/L Analysis Date: 5/20/2013 02:00 PM									
Client ID:	Run ID: TDS_130520A			SeqNo: 2326457		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD Limit	Qual
Total Dissolved Solids	476	10	495	0	96.2	80-120	0		

DUP	Sample ID: 1305626-01A DUP				Units: mg/L		Analysis Date: 5/20/2013 02:00 PM			
Client ID: BM #11			Run ID: TDS_130520A		SeqNo: 2326436		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	325	10	0	0	0	0-0	325	0	20	

DUP	Sample ID: 1305765-10C DUP				Units: mg/L		Analysis Date: 5/20/2013 02:00 PM			
Client ID:					SeqNo: 2326450		Prep Date:			
				Run ID: TDS_130520A				DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids	695	10	0	0	0	0-0	688	1.01	20	

The following samples were analyzed in this batch: 1305626-01A

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order: 1305626

Batch ID: R121282 Instrument ID IC3 Method: SW9056

MBLK Sample ID: MBLK-R121282 Units: mg/L Analysis Date: 5/23/2013 07:51 AM

Client ID: Run ID: IC3_130523A SeqNo: 2330803 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
---------	--------	-----	---------	---------------	------	---------------	---------------	------	-----------	------

Chloride	ND	1.0								
Fluoride	ND	0.10								
Sulfate	ND	1.0								

LCS Sample ID: LCS-R121282 Units: mg/L Analysis Date: 5/23/2013 07:31 AM

Client ID: Run ID: IC3_130523A SeqNo: 2330802 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
---------	--------	-----	---------	---------------	------	---------------	---------------	------	-----------	------

Chloride										
Fluoride	9.653	1.0	10	0	96.5	88-107	0			
Sulfate	1.875	0.10	2	0	93.7	86-111	0			
	9.844	1.0	10	0	98.4	85-110	0			

MS Sample ID: 1305719-01D MS Units: mg/L Analysis Date: 5/23/2013 05:38 PM

Client ID: Run ID: IC3_130523A SeqNo: 2330827 Prep Date: DF: 10

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
---------	--------	-----	---------	---------------	------	---------------	---------------	------	-----------	------

Chloride	107.2	10	50	55.39	104	75-125	0			
Fluoride	9.977	1.1	10	0	99.8	75-125	0			
Sulfate	169.8	10	50	115	109	75-125	0			

MSD Sample ID: 1305719-01D MSD Units: mg/L Analysis Date: 5/23/2013 05:58 PM

Client ID: Run ID: IC3_130523A SeqNo: 2330828 Prep Date: DF: 10

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
---------	--------	-----	---------	---------------	------	---------------	---------------	------	-----------	------

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

Client: HRL Compliance Solutions

QC BATCH REPORT

Work Order:	1305626	104.9	10	50	55.39	99.1	75-125	107.2	2.18	20
Chloride		9.812	1.0	10	0	98.1	75-125	9.977	1.67	20
Sulfate		168.5	10	50	115	107	75-125	169.8	0.772	20

The following samples were analyzed in this batch: 1305626-01A

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

ALS Laboratory Group

Chain-of-Custody

225 Commerce Drive, Fort Collins, Colorado 80524

TF: (800) 443-1511 PH: (970) 49Q-1511 FX: (970) 490-1522

ALS

'PRO ECT,NAME Spring 2013 3178 Water Sampling

HRL Compliance

Ashlee Lane

2385 F1/2 Rd

Grand Junction, CO 81506

970-243-3271

970-683-2295

-g

970-243-3271

10

- E:fiiAIL,

Jason.raley@wpenergy.com

al

rwold@hrlcomp.com

1

(7)

WOR . o .

1305626

Form 202r8

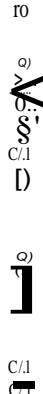
" < , , , ,

5/14/2013

1 of

or

Return to Client

Sample Location	Analyte Class	Analysis	EPA Approved Analytical Methods	EPA's Max Contaminant Levels (MCLs)* (J.Lg/L)	COGCC Table 910-1 Concentration Levels	Holding Time	Container
	Organics	TVPH(GRO)	SW8015 mod			14 days	2-40 ml vials
		TEPH(DRO)				7 days	1-1 L amber/1-125 ml
		Benzene	SW8021		5J.Lg/L	14 days	2-40 ml vials
		Toluene			1,000J.Lg/L		
		Ethylbenzene			700 J.Lg/L		
		Xylenes (total)			10,000 J.Lg/L		
		Acenaphthene	SW8270	<i>Please note:</i> all boxes left blank in this column have not yet been designated a MCL by the EPA. COGCC has been contacted; awaiting further guidance.		14 days	2-1 L amber
		Anthracene					
		Benzo (A) anthracene					
		Benzo (B) flouranthene					
		Benzo (K) fluoranthene					
		Benzo (A) pyrene					
		Chrysene					
		Dibenzo (A,H) anthracene					
		Fluoranthene					
		Fluorene					
		Indeno (1,2,3-C,D) pyrene					
		Naphthalene					
		Pyrene					

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Origin ID: RILA
From: (970) 424-4749
Lab Hub, LLC
Ship Date: 14MAY13
Dims: 25 X 14X 151N
Adl>gt 45.0 LB
CAD: 103923490/INET3370

127 E First Street

owe IT
1635
-PARAc-HurE,co s

SHIP TO: (616) 399-6070 "BILL RECIPIENT" Ref# 1001-051413-1

Sample recieViJ!Q Invoice#

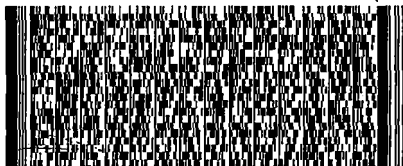
ALS Holland Po#

3352128TH AVE Dept#

HOLLAND, MI 49424 WED -15 MAY 3:00P

STANDARD OVERNIGHT

j: 1 7997 6166 5146"



XXGRRRA

49424

MILUS

GRR



516Gi9983 93AEI

-After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or Inkjet printer.
2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.


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

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx is not 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, and

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 Environmental 3352 128th Avenue Holland, Michigan 49424 Tel: +1 616 399 6070 Fax: +1 616 399 6185	CUSTOMER SEAL		Seal Broken By:
	Date: _____ Name: _____ Company: _____	_____ _____ _____	Date: _____