



792 Buckhorn Dr.
Rifle, CO 81650

Lundgren

Centralized E&P Facility

Annual Report

Colorado Operations

Piceance Basin
Garfield County, CO
February 2014 – Rev #0



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HRL COMPLIANCE SOLUTIONS, INC.

Prepared by:
HRL Compliance Solutions, Inc.
2385 F ½ Road
Grand Junction, CO 8150

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ATTACHMENTS

- ATTACHMENT A: Lundgren Centralized Facility As-Built Exhibit**
- ATTACHMENT B: Ground Water Well Analytical Data**

1.0 Introduction

This *Annual Report* was prepared in order to present information and data regarding the efficient, safe, and environmentally compliant operation of the Ursa Operating Company, LLC (Ursa) Lundgren Centralized E&P Facility, hereafter referred to as the *facility*, in accordance with Colorado Oil & Gas Conservation Commission (COGCC) Rule 908.f, *Annual Permit Review for Centralized E&P Waste Management Facilities*. It specifically provides information pertaining only to updates and changes to the operation of the facility which may have occurred in the calendar year 2013, and may include the following:

- Operator and contact information; surface owner information; legal description of the site; topographic, geological, and hydrogeological description of the site, including immediate adjacent land uses;
- Centralized facility siting requirements;
- Facility design and engineering;
- Ground water monitoring;
- Permit approval;
- Proposed facility closure

2.0 Permit Status

On December 20, 2005, Antero Resources Piceance Corporation (Antero), operator number 10079, permitted the Lundgren production pit via Form 15, and was assigned a Facility ID # (282224) on December 23, 2005 by the COGCC. The following year it was decided by Antero that the pit would be utilized as a Centralized E&P Facility and a Form 28 was submitted on February 2, 2006. It was permitted and approved by the COGCC as the *Lundgren Frac/Flowback Pit* and issued a facility ID # (149019). Ursa acquired the pit/facility from Antero in May, 2013. The facility is located in a remote area in Garfield County, approximately 3 miles northeast of Rifle, Colorado. The entire site occupies 1 acre of a 598.3 acre parcel and is located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 32, Township 5 South, Range 93 West in the 6th Prime Meridian. The facility was designed to store fluids that originate from oil and gas operations in Garfield County, Colorado and used at a later time when water demand was high and additional water was needed during drilling and frac operations. No changes to topographic, geological, and hydrogeological description of the site, including immediate adjacent land uses has occurred, nor has the pit been used for storage of any liquids during the 2013 year. A facility as built diagram is presented in Attachment A of this report.

3.0 Centralized Facility Siting Requirements Update

No new changes to the *Facility Siting Requirements* have been implemented for the calendar year 2013. The facility was not used to store any liquids, aside from accumulation of precipitation, since 2009 when drilling operations were being conducted by the previous owner and operator (Antero).

4.0 Waste Profile

No waste was transported to the facility during 2013; therefore no waste profiles were required.

5.0 Facility Design and Engineering Update

No updates to the facility design or engineering plans were performed in 2013.

6.0 Operating Plan Update

No changes have been made to the operating plan that Antero submitted with the Form 28 on February 6, 2007.

6.1 Inspection and Maintenance Update

On March 13, 2013, Ursa performed a site inspection on the pit and surrounding facility. No production water was observed within the pit, only water from precipitation over the winter. A tear in the pit liner was observed in the southwest corner at a position centered vertically on the pit wall. Precipitation accumulation levels were well below the tear. The pit is scheduled for closure during the 2014 calendar year, at which time the liner will be removed and soils surrounding the area where the tear was discovered will be tested and samples submitted for analytical confirmation.

6.2 Site Security Update

New locks were placed on the gate entrance to include new combinations applicable to Ursa. Fencing was reinforced around the facility to ensure facility security was adequate and effective.

7.0 Ground Water Monitoring Update

On December 5, 2013 Ursa collected water samples from the groundwater monitoring well, located approximately 75ft southwest of the pit. The water was analyzed for the following constituents;

- BTEX (mg/L)
- Chloride (mg/L)
- Diesel Range Organics (DRO)
- Gasoline Range Organics (GRO)
- Sulfides/Sulfates (mg/L)
- Total Dissolved Solids (TDS)
- pH

Results indicated concentrations below regulatory threshold values and that no impacts are present downgradient of the facility. Analytical results can be viewed in Attachment B.

8.0 Surface Water Monitoring Update

No surface water analysis was completed in 2013, and there were no requests from the Director to do so.

9.0 Contingency Plan Update

No changes have been made to the facility regarding a *Contingency Plan* for the calendar year 2013. Normal operating procedures as outlined in the permit are in effect.

10.0 Permit Approval Update

The permit for the facility was approved by the Director on February 6, 2007. This report presents information for the *Annual Permit Review* and is *not* being submitted to the Director for a new facility permit.

11.0 Financial Assurance Update

No changes have been made to the facility regarding the *Financial Assurance* of the facility for the calendar year 2013, with the exception of the ownership transfer from the previous operator to Ursa.

12.0 Facility Modifications

No facility modifications have been made, nor are any future modifications anticipated.

13.0 Annual permit review

No additional annual permitting review will be necessary after 2014 as the pit is scheduled for closure.

14.0 Closure

The Lundgren Pit/Centralized E&P Facility is scheduled for closure during the spring/summer of 2014. A Site Characterization and Remediation Workplan (Form 27) will be completed and submitted to the COGCC in February 2014 to allow for the 60 day grace period prior to closure as outlined in Rule 908.G(2).

15.0 Local Requirements, Notices, Permits, or Other Similar Types of Notifications

No revised or amended requirements, notices, permits or notifications were required during 2013.

15.1 Ursa Spill Prevention and Management Plan Update

In April 2013 a *Spill Prevention and Management Plan* for Ursa Colorado Operations was completed. This plan complements the Ursa EH&S policy and will be used in conjunction with the company ERPS (SSERPs). The plan can be reviewed at the Ursa office in Rifle, Colorado or upon request from the director.

15.3 Ursa Stormwater Plan Update

In July 2013 a *Site Specific Stormwater Maintenance Plan* was prepared for Ursa for the facility. The stormwater plan can be viewed at the Ursa office in Rifle, Colorado.

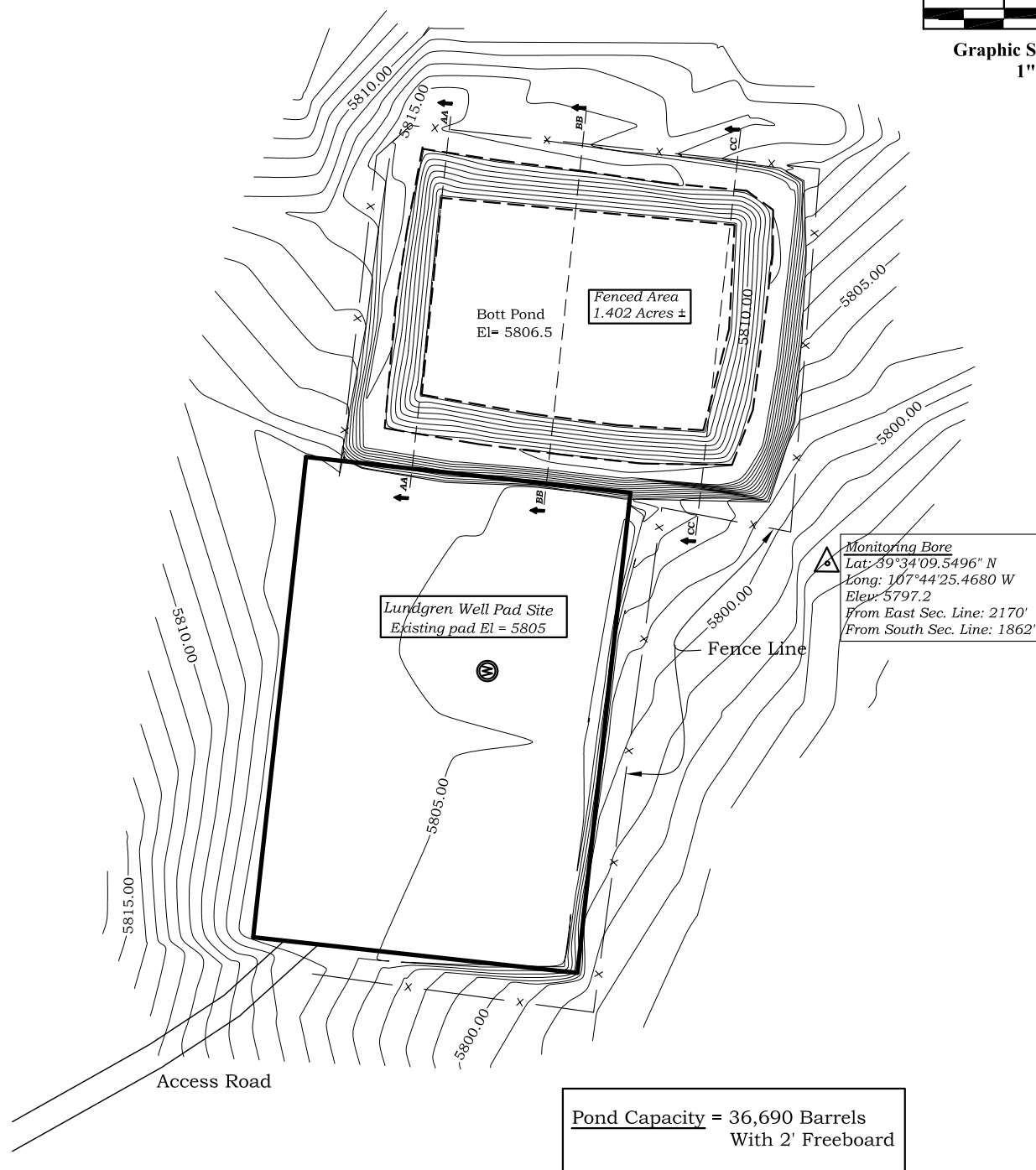
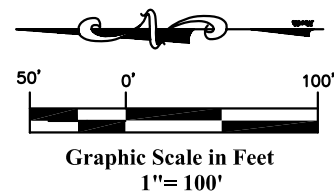
15.4 Ursa Waste Management Update

In April 2013 a *Waste Management Plan* was prepared for all Ursa Piceance Basin operations, including the facility. All waste handled at the facility utilizes the guidelines established in the Ursa Waste Management Plan. The Ursa Waste Management Plan can be viewed at the Ursa office in Rifle, Colorado.

16.0 Conclusion

As mentioned throughout this report, the Lundgren Centralized E&P Facility is tentatively scheduled for closure during the spring/summer of 2014. A Site Investigation & Remediation Plan (Form 27) will be submitted 60 days prior to closure activities begin, outlining the steps necessary for successful closure of the pit.

Lundgren Centralized Facility As-Built Exhibit



River Valley Survey, Inc.
110 East 3rd. Street, Suite 207
Rifle, Colorado 81650
Ph: 970-379-7846

Project: Lundgren Facility

Proj. No. 06001-05

Field Date: 05-12-06

Scale: 1"= 100'

Date: 01-24-07

Sheet: 1 of 3

**Fracture Pit Facility
Prepared For Antero Resources**

Situate In: The SE¼ Sec. 32,
Township 5 S., Range 92 W.





18-Dec-2013

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

Re: **URSA Lundgren Monitoring Well 12.5.13**

Work Order: **1312430**

Dear Mark,

ALS Environmental received 2 samples on 09-Dec-2013 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

RIGHT SOLUTIONS RIGHT PARTNER

Client: HRL Compliance Solutions
Project: URSA Lundgren Monitoring Well 12.5.13
Work Order: 1312430

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>
1312430-01	Downgradient Monitoring Well #1	Water		12/5/2013 13:30	12/9/2013 09:30	<input type="checkbox"/>
1312430-02	Trip Blank	Water		12/5/2013	12/9/2013 09:30	<input type="checkbox"/>

ALS Group USA, Corp

Date: 18-Dec-13

Client: HRL Compliance Solutions
Project: URSA Lundgren Monitoring Well 12.5.13
Work Order: 1312430

Case Narrative

Batch R132049 sample 1312430-01 for pH was received after the holding time had expired. It was analyzed at the request of the client. Results should be considered estimated.

Client: HRL Compliance Solutions
Project: URSA Lundgren Monitoring Well 12.5.13
WorkOrder: 1312430

QUALIFIERS, ACRONYMS, UNITS

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

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

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
s.u.	Standard Units

ALS Group USA, Corp

Date: 18-Dec-13

Client: HRL Compliance Solutions
Project: URSA Lundgren Monitoring Well 12.5.13
Sample ID: Downgradient Monitoring Well #1
Collection Date: 12/5/2013 01:30 PM

Work Order: 1312430
Lab ID: 1312430-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep Date: 12/11/2013	Analyst: IT
DRO (C10-C28)	ND		0.10	mg/L	1	12/11/2013 08:45 PM
Surr: 4-Terphenyl-d14	55.4		21-90	%REC	1	12/11/2013 08:45 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015			Analyst: IT
GRO (C6-C10)	ND		0.20	mg/L	1	12/11/2013 11:03 PM
Surr: Toluene-d8	104		70-130	%REC	1	12/11/2013 11:03 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260			Analyst: RS
Benzene	ND		1.0	µg/L	1	12/12/2013 08:06 AM
Ethylbenzene	ND		1.0	µg/L	1	12/12/2013 08:06 AM
m,p-Xylene	ND		2.0	µg/L	1	12/12/2013 08:06 AM
o-Xylene	ND		1.0	µg/L	1	12/12/2013 08:06 AM
Toluene	ND		1.0	µg/L	1	12/12/2013 08:06 AM
Xylenes, Total	ND		3.0	µg/L	1	12/12/2013 08:06 AM
Surr: 1,2-Dichloroethane-d4	108		70-120	%REC	1	12/12/2013 08:06 AM
Surr: 4-Bromofluorobenzene	90.8		75-120	%REC	1	12/12/2013 08:06 AM
Surr: Dibromofluoromethane	99.6		85-115	%REC	1	12/12/2013 08:06 AM
Surr: Toluene-d8	93.8		85-120	%REC	1	12/12/2013 08:06 AM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056			Analyst: ED
Chloride	310		100	mg/L	100	12/16/2013 10:42 AM
Sulfate	1,400		100	mg/L	100	12/16/2013 10:42 AM
PH						
			SW9040			Analyst: JB
pH (laboratory)	8.12	H		s.u.	1	12/9/2013 11:00 AM
SULFIDE						
			SW9030			Analyst: EE
Sulfide	ND		1.0	mg/L	1	12/12/2013 08:45 AM
TOTAL DISSOLVED SOLIDS						
			A2540 C-97		Prep Date: 12/10/2013	Analyst: YM
Total Dissolved Solids	2,400		10	mg/L	1	12/10/2013 10:50 AM

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

ALS Group USA, Corp**Date:** 18-Dec-13**Client:** HRL Compliance Solutions**Project:** URSA Lundgren Monitoring Well 12.5.13**Work Order:** 1312430**Sample ID:** Trip Blank**Lab ID:** 1312430-02**Collection Date:** 12/5/2013**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	12/12/2013 01:14 AM
Ethylbenzene	ND		1.0	µg/L	1	12/12/2013 01:14 AM
m,p-Xylene	ND		2.0	µg/L	1	12/12/2013 01:14 AM
o-Xylene	ND		1.0	µg/L	1	12/12/2013 01:14 AM
Toluene	ND		1.0	µg/L	1	12/12/2013 01:14 AM
Xylenes, Total	ND		3.0	µg/L	1	12/12/2013 01:14 AM
Surr: 1,2-Dichloroethane-d4	99.1		70-120	%REC	1	12/12/2013 01:14 AM
Surr: 4-Bromofluorobenzene	97.1		75-120	%REC	1	12/12/2013 01:14 AM
Surr: Dibromofluoromethane	96.1		85-115	%REC	1	12/12/2013 01:14 AM
Surr: Toluene-d8	96.2		85-120	%REC	1	12/12/2013 01:14 AM

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

ALS Group USA, Corp

Date: 18-Dec-13

Client: HRL Compliance Solutions

Work Order: 1312430

Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **54047**

Instrument ID **GC8**

Method: **SW8015M**

MBLK		Sample ID: DBLKW1-54047-54047				Units: mg/L		Analysis Date: 12/11/2013 06:45 PM		
Client ID:		Run ID: GC8_131211B				SeqNo: 2576105		Prep Date: 12/11/2013		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	0.07945	0	0.1143	0	69.5	21-90	0			

LCS		Sample ID: DLCSW1-54047-54047				Units: mg/L		Analysis Date: 12/11/2013 07:15 PM		
Client ID:		Run ID: GC8_131211B				SeqNo: 2576106		Prep Date: 12/11/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	9.012	0.10	11.43	0	78.9	44-116	0			
Surr: 4-Terphenyl-d14	0.07831	0	0.1143	0	68.5	21-90	0			

MS		Sample ID: 1312430-01B MS				Units: mg/L		Analysis Date: 12/11/2013 07:45 PM		
Client ID: Downgradient Monitoring Well #1		Run ID: GC8_131211B				SeqNo: 2576107		Prep Date: 12/11/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	32.56	0.35	40	0	81.4	44-116	0			
Surr: 4-Terphenyl-d14	0.27	0	0.4	0	67.5	21-90	0			

MSD		Sample ID: 1312430-01B MSD				Units: mg/L		Analysis Date: 12/11/2013 08:15 PM		
Client ID: Downgradient Monitoring Well #1		Run ID: GC8_131211B				SeqNo: 2576108		Prep Date: 12/11/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	28.27	0.35	40	0	70.7	44-116	32.56	14.1	30	
Surr: 4-Terphenyl-d14	0.2729	0	0.4	0	68.2	21-90	0.27	1.06	30	

The following samples were analyzed in this batch: | 1312430-01B |

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

Client: HRL Compliance Solutions
 Work Order: 1312430
 Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **R132315** Instrument ID **GC10** Method: **SW8015**

MBLK		Sample ID: GBLKW1-131211-R132315				Units: µg/L		Analysis Date: 12/11/2013 09:28 PM		
Client ID:		Run ID: GC10_131211B				SeqNo: 2576479		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	104.6	0	100	0	105	70-130	0			

LCS		Sample ID: GLCSW1-131211-R132315				Units: µg/L		Analysis Date: 12/11/2013 09:05 PM		
Client ID:		Run ID: GC10_131211B				SeqNo: 2576478		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)	9779	200	10000	0	97.8	70-130	0			
Surr: Toluene-d8	108.1	0	100	0	108	70-130	0			

MS		Sample ID: 1312473-01A MS				Units: µg/L		Analysis Date: 12/12/2013 02:34 AM		
Client ID:		Run ID: GC10_131211B				SeqNo: 2576485		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)	17960	200	10000	8841	91.2	70-130	0			
Surr: Toluene-d8	107.3	0	100	0	107	70-130	0			

MSD		Sample ID: 1312473-01A MSD				Units: µg/L		Analysis Date: 12/12/2013 02:58 AM		
Client ID:		Run ID: GC10_131211B				SeqNo: 2576486		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)	17580	200	10000	8841	87.4	70-130	17960	2.11	30	
Surr: Toluene-d8	106.4	0	100	0	106	70-130	107.3	0.795	30	

The following samples were analyzed in this batch:

1312430-01A

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

Client: HRL Compliance Solutions
 Work Order: 1312430
 Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **R132258A** Instrument ID **VMS9** Method: **SW8260**

MBLK					Sample ID: VBLKW2-131211-R132258A			Units: µg/L		Analysis Date: 12/12/2013 12:49 PM	
Client ID:			Run ID: VMS9_131211B			SeqNo: 2575770		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	20.32	0	20	0	102	70-120	0				
Surr: 4-Bromofluorobenzene	19.39	0	20	0	97	75-120	0				
Surr: Dibromofluoromethane	19.55	0	20	0	97.8	85-115	0				
Surr: Toluene-d8	19.23	0	20	0	96.2	85-120	0				

LCS				Sample ID: VLCSW3-131211-R132258A				Units: µg/L		Analysis Date: 12/11/2013 11:37 PM	
Client ID:		Run ID: VMS9_131211B				SeqNo: 2575757		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.15	1.0	20	0	106	80-120	0				
Ethylbenzene	21.89	1.0	20	0	109	75-125	0				
m,p-Xylene	43.45	2.0	40	0	109	75-130	0				
o-Xylene	22.59	1.0	20	0	113	80-120	0				
Toluene	21.3	1.0	20	0	106	75-120	0				
Xylenes, Total	66.04	3.0	60	0	110	75-130	0				
Surr: 1,2-Dichloroethane-d4	19.61	0	20	0	98	70-120	0				
Surr: 4-Bromofluorobenzene	20.71	0	20	0	104	75-120	0				
Surr: Dibromofluoromethane	19.47	0	20	0	97.4	85-115	0				
Surr: Toluene-d8	19.5	0	20	0	97.5	85-120	0				

MS				Sample ID: 1312430-01A MS			Units: µg/L		Analysis Date: 12/12/2013 09:18 AM		
Client ID: Downgradient Monitoring Well #1			Run ID: VMS9_131211B			SeqNo: 2575768		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.52	1.0	20	0	108	80-120	0				
Ethylbenzene	22.02	1.0	20	0	110	75-125	0				
m,p-Xylene	42.8	2.0	40	0	107	75-130	0				
o-Xylene	22.07	1.0	20	0	110	80-120	0				
Toluene	20.84	1.0	20	0	104	75-120	0				
Xylenes, Total	64.87	3.0	60	0	108	75-130	0				
Surr: 1,2-Dichloroethane-d4	20.34	0	20	0	102	70-120	0				
Surr: 4-Bromofluorobenzene	20.67	0	20	0	103	75-120	0				
Surr: Dibromofluoromethane	19.6	0	20	0	98	85-115	0				
Surr: Toluene-d8	19.52	0	20	0	97.6	85-120	0				

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

Client: HRL Compliance Solutions
Work Order: 1312430
Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **R132258A** Instrument ID **VMS9** Method: **SW8260**

MSD				Sample ID: 1312430-01A MSD			Units: µg/L		Analysis Date: 12/12/2013 09:42 AM	
Client ID: Downgradient Monitoring Well #1				Run ID: VMS9_131211B			SeqNo: 2575769		Prep Date:	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.13	1.0	20	0	101	80-120	21.52	6.67	30	
Ethylbenzene	20.17	1.0	20	0	101	75-125	22.02	8.77	30	
m,p-Xylene	40.13	2.0	40	0	100	75-130	42.8	6.44	30	
o-Xylene	20.57	1.0	20	0	103	80-120	22.07	7.04	30	
Toluene	19.68	1.0	20	0	98.4	75-120	20.84	5.73	30	
Xylenes, Total	60.7	3.0	60	0	101	75-130	64.87	6.64	30	
Surr: 1,2-Dichloroethane-d4	19.92	0	20	0	99.6	70-120	20.34	2.09	30	
Surr: 4-Bromofluorobenzene	20.38	0	20	0	102	75-120	20.67	1.41	30	
Surr: Dibromofluoromethane	19.63	0	20	0	98.2	85-115	19.6	0.153	30	
Surr: Toluene-d8	19.55	0	20	0	97.8	85-120	19.52	0.154	30	

The following samples were analyzed in this batch: 1312430-01A 1312430-02A

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

Client: HRL Compliance Solutions
Work Order: 1312430
Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **54024** Instrument ID **TDS** Method: **A2540 C-97**

MBLK				Sample ID: MBLK-54024-54024				Units: mg/L			Analysis Date: 12/10/2013 10:50 AM			
Client ID:				Run ID: TDS_131210A				SeqNo: 2573659			Prep Date: 12/10/2013		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

LCS				Sample ID: LCS-54024-54024				Units: mg/L				Analysis Date: 12/10/2013 10:50 AM					
Client ID:				Run ID: TDS_131210A				SeqNo: 2573658				Prep Date: 12/10/2013				DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual						

Total Dissolved Solids 464 10 495 0 93.7 80-120 0

DUP				Sample ID: 1312338-01A DUP				Units: mg/L			Analysis Date: 12/10/2013 10:50 AM			
Client ID:				Run ID: TDS_131210A				SeqNo: 2573646			Prep Date: 12/10/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				

Total Dissolved Solids 1988 10 0 0 0 0-0 1960 1.42 20

DUP		Sample ID: 1312363-01A DUP				Units: mg/L		Analysis Date: 12/10/2013 10:50 AM		
Client ID:		Run ID: TDS_131210A		SeqNo: 2573650		Prep Date: 12/10/2013		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 429 10 0 0 0 0-0 423 1.41 20

The following samples were analyzed in this batch:

1312430-01D

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

Client: HRL Compliance Solutions
Work Order: 1312430
Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **R132049** Instrument ID **WETCHEM** Method: **SW9040**

LCS				Sample ID: WLCSW1-131209-R132049				Units: s.u.		Analysis Date: 12/9/2013 11:00 AM			
Client ID:				Run ID: WETCHEM_131209Q				SeqNo: 2571535		Prep Date:		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH (laboratory)				3.9	0	4	0	97.5	90-110	0			

DUP				Sample ID: 1312075-04A DUP				Units: s.u.		Analysis Date: 12/9/2013 11:00 AM			
Client ID:				Run ID: WETCHEM_131209Q				SeqNo: 2571537		Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
pH (laboratory)		5.69	0	0	0	0	0-0	5.68	0.176	20			

DUP				Sample ID: 1312357-05A DUP				Units: s.u.		Analysis Date: 12/9/2013 11:00 AM	
Client ID:			Run ID: WETCHEM_131209Q			SeqNo: 2571545		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH (laboratory)	12.03	0	0	0	0	0-0	12.01	0.166	20	H	

The following samples were analyzed in this batch:

1312430-01C

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

Client: HRL Compliance Solutions
Work Order: 1312430
Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **R132266** Instrument ID **WETCHEM** Method: **SW9030**

MBLK		Sample ID: WBLKW1-121213-R132266				Units: mg/L		Analysis Date: 12/12/2013 08:45 AM		
Client ID:		Run ID: WETCHEM_131212A			SeqNo: 2575507		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	ND	1.0								

LCS				Sample ID: WLCSW1-121213-R132266				Units: mg/L			Analysis Date: 12/12/2013 08:45 AM			
Client ID:				Run ID: WETCHEM_131212A				SeqNo: 2575508			Prep Date:		DF: 1	
Analyte				Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sulfide				7.92	1.0	10.75	0	73.7	60-140	0				

The following samples were analyzed in this batch:

1312430-01D

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

Client: HRL Compliance Solutions
Work Order: 1312430
Project: URSA Lundgren Monitoring Well 12.5.13

QC BATCH REPORT

Batch ID: **R132513** Instrument ID **IC4** Method: **SW9056**

MBLK		Sample ID: CCB/MBLK-R132513				Units: mg/L		Analysis Date: 12/16/2013 08:40 AM		
Client ID:		Run ID: IC4_131216A				SeqNo: 2582263		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	0.2124	1.0								J
Sulfate	ND	1.0								

LCS		Sample ID: LCS-R132513				Units: mg/L		Analysis Date: 12/16/2013 09:00 AM		
Client ID:		Run ID: IC4_131216A				SeqNo: 2582264		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.629	1.0	10	0	96.3	88-107	0			
Sulfate	9.918	1.0	10	0	99.2	85-110	0			

MS		Sample ID: 1312503-05A MS				Units: mg/L		Analysis Date: 12/16/2013 01:03 PM		
Client ID:		Run ID: IC4_131216A				SeqNo: 2582271		Prep Date:		DF: 40
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	628.5	40	200	416.7	106	75-125	0			
Sulfate	292.5	40	200	93.6	99.4	75-125	0			

MSD		Sample ID: 1312503-05A MSD				Units: mg/L		Analysis Date: 12/16/2013 01:23 PM		
Client ID:		Run ID: IC4_131216A				SeqNo: 2582272		Prep Date:		DF: 40
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	625.9	40	200	416.7	105	75-125	628.5	0.418	20	
Sulfate	288.2	40	200	93.6	97.3	75-125	292.5	1.47	20	

The following samples were analyzed in this batch:

1312430-01D



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 #

PAGE

DISPOSAL

1 of 1
By Lab or Return to Client

PROJECT NAME		SAMPLER		DATE		TURNAROUND	
URSA Lundgren Monitoring		Reed Wold		12/5/13		5 Day	
PROJECT No.		SITE ID		BTEX		Chloride	
Water Well		Kundgren A		DRO/GRO		Sulfides/Sulfates	
COMPANY NAME		EDD FORMAT		TDS		PH	
HRL Compliance							
SEND REPORT TO		PURCHASE ORDER					
Mark Mumby							
ADDRESS		BILL TO COMPANY					
2385 F 1/2 Rd							
CITY / STATE / ZIP		INVOICE ATTN TO					
Grand Junction, CO 81506							
PHONE		ADDRESS					
970-243-3271							
FAX		CITY / STATE / ZIP					
970-243-3280							
E-MAIL		PHONE					
mmumby@hrlcomp.com							
rwold@hrlcomp.com		E-MAIL					
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC
01	Downgradient Monitoring	W	12/5/13	1:30	10	1,8	
	Well #1						
	02 Sup Blank						

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

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
3.000	X LEVEL II (Standard QC)
W	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
Reed Wold	Reed Wold	12/6/13	3:00
		12-5	3:00
		12-5	3:00
Ashley Barel	Ashley Barel	12/4/13	0930

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **09-Dec-13 09:30**

Work Order: **1312430**

Received by: **AB**

Checklist completed by *Ashley Beard*
eSignature

09-Dec-13
Date

Reviewed by: *Lee Arnold*
eSignature

10-Dec-13
Date

Matrices: **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): 5.0

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 12/9/2013 2:38:11 PM

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: RLA



Ship Date: 05DEC13
ActWgt: 50.0 LB
CAD: 103823480/INET3438
Dims: 25 X 14 X 15 IN

Delivery Address Bar Code



Ref # 1001-120513-3
Invoice #
PO #
Dept #

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

BILL RECIPIENT

HOLLAND, MI 49424

FRI - 06 DEC AA
STANDARD OVERNIGHT

TRKG 7973 2718 9416
0201

49424
MI-US
GRR

XX GRRR



51AG460DS7AGE

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