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LOST CREEK ISR, LLC

April 28, 2016

UIC Program Supervisor
WDEQ – Water Quality Division
Herschler Building – 4W
122 W. 25th Street
Cheyenne, WY 82002

RE: Quarterly Report for 1st Quarter 2016
UIC Class I Permit 13-409
UIC Class V Permit 15-081
Lost Creek ISR Project, Sweetwater County, WY

Dear Program Supervisor,

The attached Quarterly Report for the Lost Creek ISR Project has been submitted in accordance with the requirements of Class I Underground Injection Control (UIC) Permit 13-409 Section K. The reporting period for this Quarterly Report is the first calendar quarter of 2016.

A quarterly report is also required as per Class V UIC Permit 15-081 Section 9b. However, the Class V system is not yet in operation and therefore no report will be submitted with the exception of the online report on the agencies GEM website.

If you have any questions regarding this submittal, please contact me at the Casper Office.

Regards,

Michael Gaither
Manager EHS and Regulatory Affairs
Ur-Energy USA, Inc.

Attachments: UIC Class I Quarterly Report

Cc: Theresa Horne, Ur-Energy, Littleton Office (via e-mail)
Brian Wood, WDEQ-LQD, Lander (via e-mail)
John Saxton, NRC Project Manager (via e-mail)

**UIC CLASS I QUARTERLY REPORT
for the
LOST CREEK ISR PROJECT
1st Quarter 2016**



**LOST CREEK ISR, LLC
SWEETWATER COUNTY, WY**

UIC PERMIT 13-409

**Prepared by Ur-Energy for
Wyoming Department of Environmental Quality -
Water Quality Division – Underground Injection Control**

April 28, 2016



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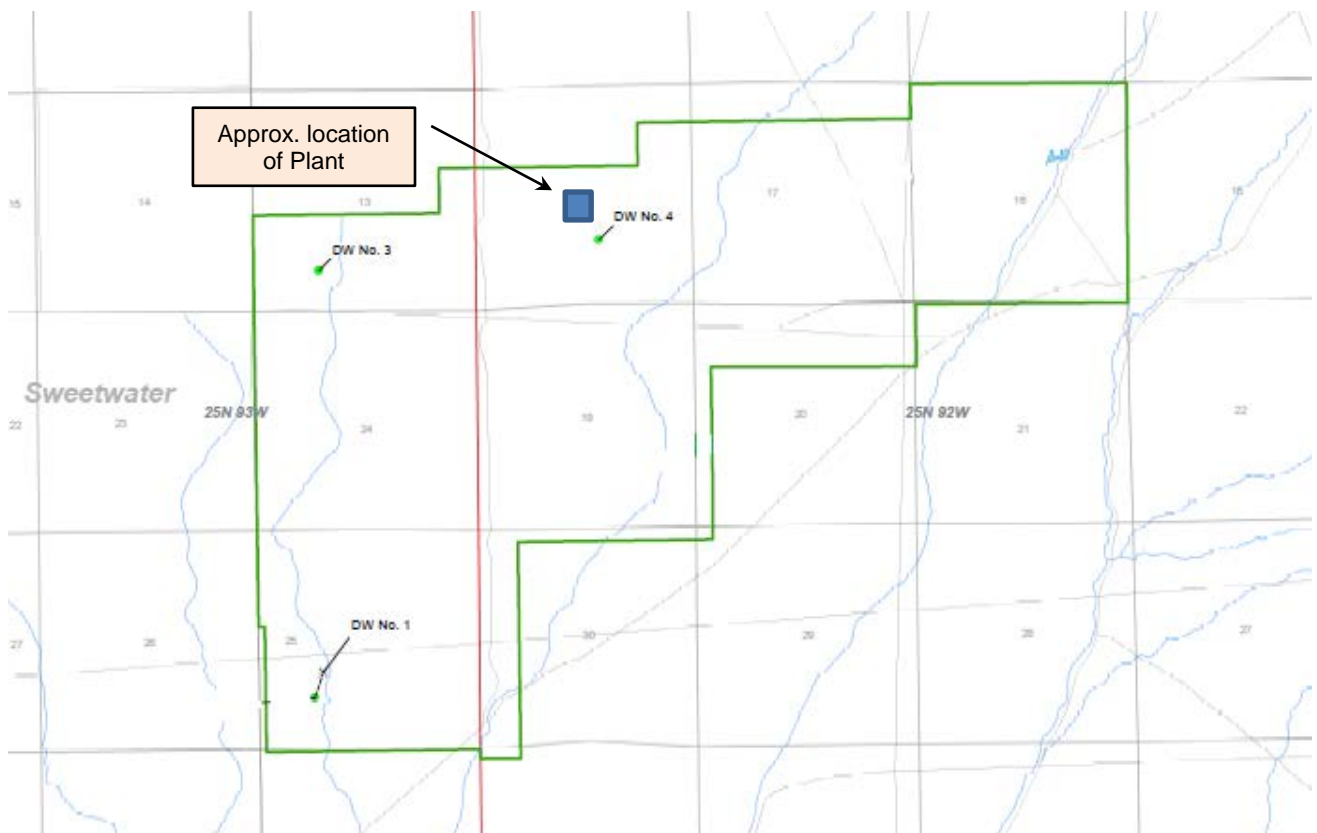


1.0 Introduction

The period covered by this report is the first calendar quarter of 2016 from January 1 to March 31, 2016.

Three disposal wells were operational during the reporting period: LC DW No. 1 (“DDW-1”), LC DW No. 3 (“DDW-3”), and LC DW No. 4 (“DDW-4”). Well locations (labeled) are shown below in relation to the Permit to Mine boundary (green line):

FIGURE 1: Well Locations



DDW-3 and DDW-4 were operated intermittently during the quarter. DDW-1 was shut in for the duration of the quarter. Operational data was monitored and recorded electronically with redundant data logging.

As per permit requirements, the following elements from Section K(6) of the UIC Permit have been included in this report:

- a.** *Minimum, volume-weighted average, and maximum instantaneous injection rates for each well for each month*



- b. Minimum, average, and maximum daily injection pressures for each well for each month*
- c. Total injection volume in barrels (bbl) for each well for each month, total for the quarter, and cumulative volume of waste injected to date.*
- d. Maximum and minimum annulus pressures for each month with alarm/kill pressure value*
- e. Quarterly analytical results*
- f. Permit exceedances during the quarter*
- g. Any alarms or shutdowns and corrective actions*
- h. Summary of well tests or workovers*

2.0 Summary Data

Tables 1A, 1B, 1C, and 2 below provide a data summary for above items **a**, **c**, and **d** above. Data for item **b** above is provided in **Appendix 1** including tables and charts of the daily injection pressure values.

Table 1A: Operational Data Summary for DDW-1

PARAMETER	UNITS	LC DW No. 1			
		January 2016	February 2016	March 2016	Quarterly Total/Avg
Operation Time	min	0	0	0	0
% Run Time	%	0%	0%	0%	0
Injection Rate Minimum Instantaneous	gpm	0	0	0	0
Injection Rate Average (TWA)	gpm	0	0	0	0
Injection Rate Maximum Instantaneous	gpm	0	0	0	0
Injection Rate Maximum Permit Limit	gpm	50			50
Injection Pressure Daily Minimum	psig	0	0	0	0
Injection Pressure Daily Average	psig	0	0	0	0
Injection Pressure Daily Maximum	psig	0	0	0	0
Injection Pressure Permit Limit (LSIP)	psig	609			609
Injection Pressure Automatic Kill	psig	600			600
Injection Volume	gal	0	0	0	0
Injection Volume	bbl	0	0	0	0
Annulus Pressure Minimum	psig	288	291	300	293
Annulus Pressure Average	psig	299	298	304	300
Annulus Pressure Maximum	psig	306	307	312	309
Annulus Pressure Permit Limit	psig	200-800			200-800
Annulus Pressure Automatic Kill	psig	N/A			N/A



Table 1B: Operational Data Summary for DDW-3

PARAMETER	UNITS	LC DW No. 3			
		January 2016	February 2016	March 2016	Quarterly Total/Avg
Operation Time	min	28,469	26,167	32,649	87,286
% Run Time	%	64%	63%	73%	67%
Injection Rate Minimum Instantaneous	gpm	0	0	0	0
Injection Rate Average (TWA)	gpm	13	13	13	13
Injection Rate Maximum Instantaneous	gpm	18	14	21	17
Injection Rate Maximum Permit Limit	gpm	50			50
Injection Pressure Daily Minimum	psig	0	724	746	490
Injection Pressure Daily Average	psig	768	819	836	808
Injection Pressure Daily Maximum	psig	910	899	909	906
Injection Pressure Permit Limit (LSIP)	psig	915			915
Injection Pressure Automatic Kill	psig	910			910
Injection Volume	gal	381,762	329,748	414,868	1,126,379
Injection Volume	bbl	9,090	7,851	9,878	26,819
Annulus Pressure Minimum	psig	293	296	275	288
Annulus Pressure Average	psig	296	297	286	293
Annulus Pressure Maximum	psig	300	300	293	298
Annulus Pressure Permit Limit	psig	200-800			200-800
Annulus Pressure Automatic Kill	psig	N/A			N/A



Table 1C: Operational Data Summary for DDW-4

PARAMETER	UNITS	LC DW No. 4			
		January 2016	February 2016	March 2016	Quarterly Total/Avg
Operation Time	min	39,113	37,320	40,602	117,035
% Run Time	%	88%	89%	91%	89%
Injection Rate Minimum Instantaneous	gpm	0	0	0	0
Injection Rate Average (TWA)	gpm	11	10	11	11
Injection Rate Maximum Instantaneous	gpm	22	20	12	18
Injection Rate Maximum Permit Limit	gpm	50			50
Injection Pressure Daily Minimum	psig	604	633	607	615
Injection Pressure Daily Average	psig	741	758	738	746
Injection Pressure Daily Maximum	psig	801	814	807	807
Injection Pressure Permit Limit (LSIP)	psig	838			838
Injection Pressure Automatic Kill	psig	830			830
Injection Volume	gal	423,575	383,438	446,237	1,253,251
Injection Volume	bbl	10,085	9,129	10,625	29,839
Annulus Pressure Minimum	psig	284	283	283	283
Annulus Pressure Average	psig	295	295	297	296
Annulus Pressure Maximum	psig	309	313	311	311
Annulus Pressure Permit Limit	psig	200-800			200-800
Annulus Pressure Automatic Kill	psig	N/A			N/A

Table 2: Cumulative Injection Volumes to Date

TIME PERIOD	UNITS	LC DW No. 1	LC DW No. 3	LC DW No. 4
2013	bbl	14,625	N/A	6,471
2014	bbl	31,278	8,239	164,694
2015	bbl	14,966	130,113	105,999
2016 1 st Quarter	bbl	0	26,819	29,839
CUMULATIVE TOTAL TO DATE	bbl	60,869	165,170	307,003



3.0 Analytical Results

A quarterly grab sample of the injectate was collected from the Plant waste water line upstream of the branch points to each individual well. Sample parameters pH, conductivity, and temperature were measured with a field meter at the sampling site and other applicable parameters were analyzed by Energy Laboratories in Casper, WY. The conductivity reading was off the scale (>19,900 uS/cm) for the field meter so the Energy Lab result was used. Results of the sample analyses are summarized in **Table 3** below and the associated lab report is included as **Appendix 2**.

Table 3: Analytical Results Summary

Sample ID: DW-Injectate			
Sample Date: 2/25/2016			
Lab Analyte or Parameter	Method Used	Results	Units
pH, field	SM4500-H ⁺ B	6.54	s.u.
Specific Cond. at 25°C, lab*	120.1	50,400	uS/cm
Temperature, field	SM2550B	15.9	°C
Specific Gravity	n/a	1.023	--
Total Dissolved Solids	SM2540C	31,600	mg/L
Bicarbonate	SM2320B	367	mg/L
Carbonate	SM2320B	ND(5)	mg/L
Chloride, total	300.0	22,300	mg/L
Sulfate, total	300.0	1,020	mg/L
Sulfide (as hydrogen sulfide)	A4500-S F	ND(1)	mg/L
Arsenic, dissolved	200.8	0.039	mg/L
Selenium, dissolved	200.8	0.365	mg/L
Vanadium, dissolved	200.8	0.03	mg/L
Uranium, total	200.7	24.8	mg/L
Radium-226, total	E903.0	2,970	pCi/L

*The conductivity was off the scale for the field meter. Lab results used.

The only constituent with a defined Permit limit is pH which must have a value between 2.0 and 12.5. The determined value for pH of 6.54 was within the limit.

4.0 Permit Exceedances

There were no exceedances of Permit-defined limits for any of the Class I disposal wells.



Table 4: Summary of Exceedances

Event	Well	Date	Limit Exceeded	Peak Value	Permit Limit	Comment
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5.0 Alarms, Shut-Downs, and Corrective Actions

Voluntary shutdowns or other issues occurred during the quarter:

- DDW-1: 1/1 – 3/31/2016. Well shut in for pump repairs. Injection pump was being rebuilt.

Other shutdowns either automatically or manually occur frequently due to pressure increases or due to maintenance activity such as changing inline filters or program changes. Intermittent operation of the injection systems is typical.

Testing of the pressure switches to determine actual automatic shutdown pressures, both digital and analog, occurred in January and March. Results of the testing are summarized on **Table 5**:

TABLE 5: Summary of Automatic Pressure Shutoff Testing

Well	Pressure Limit (psi)	Test Date	Digital Automatic Pressure Shutoff At (psi)	Digital Shutoff Reset To (psi)	Manual Pressure Switch Shutoff At (psi)	Manual Shutoff Reset To (psi)
DDW-1	609	N/A*	N/A*	N/A*	N/A*	N/A*
DDW-3	915	1/12/2016	900	900	910	910
DDW-3	915	3/4/2016	900	900	910	910
DDW-4	838	3/4/2016	825	825	828	828

*Well offline

6.0 Summary of Well Tests or Workovers

No testing or workovers occurred during the quarter.



APPENDIX 1

**APPENDIX 1: Daily Injection Pressures
DDW-1 1st Quarter 2016
Lost Creek ISR Project 13-409**

Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
1/1/2016	0	0	0	600	609	Shut down for pump repair
1/2/2016	0	0	0	600	609	
1/3/2016	0	0	0	600	609	
1/4/2016	0	0	0	600	609	
1/5/2016	0	0	0	600	609	
1/6/2016	0	0	0	600	609	
1/7/2016	0	0	0	600	609	
1/8/2016	0	0	0	600	609	
1/9/2016	0	0	0	600	609	
1/10/2016	0	0	0	600	609	
1/11/2016	0	0	0	600	609	
1/12/2016	0	0	0	600	609	
1/13/2016	0	0	0	600	609	
1/14/2016	0	0	0	600	609	
1/15/2016	0	0	0	600	609	
1/16/2016	0	0	0	600	609	
1/17/2016	0	0	0	600	609	
1/18/2016	0	0	0	600	609	
1/19/2016	0	0	0	600	609	
1/20/2016	0	0	0	600	609	
1/21/2016	0	0	0	600	609	
1/22/2016	0	0	0	600	609	
1/23/2016	0	0	0	600	609	
1/24/2016	0	0	0	600	609	
1/25/2016	0	0	0	600	609	
1/26/2016	0	0	0	600	609	
1/27/2016	0	0	0	600	609	
1/28/2016	0	0	0	600	609	
1/29/2016	0	0	0	600	609	
1/30/2016	0	0	0	600	609	
1/31/2016	0	0	0	600	609	
2/1/2016	0	0	0	600	609	
2/2/2016	0	0	0	600	609	
2/3/2016	0	0	0	600	609	
2/4/2016	0	0	0	600	609	
2/5/2016	0	0	0	600	609	
2/6/2016	0	0	0	600	609	
2/7/2016	0	0	0	600	609	
2/8/2016	0	0	0	600	609	
2/9/2016	0	0	0	600	609	
2/10/2016	0	0	0	600	609	
2/11/2016	0	0	0	600	609	

APPENDIX 1: Daily Injection Pressures
DDW-1 1st Quarter 2016
Lost Creek ISR Project 13-409

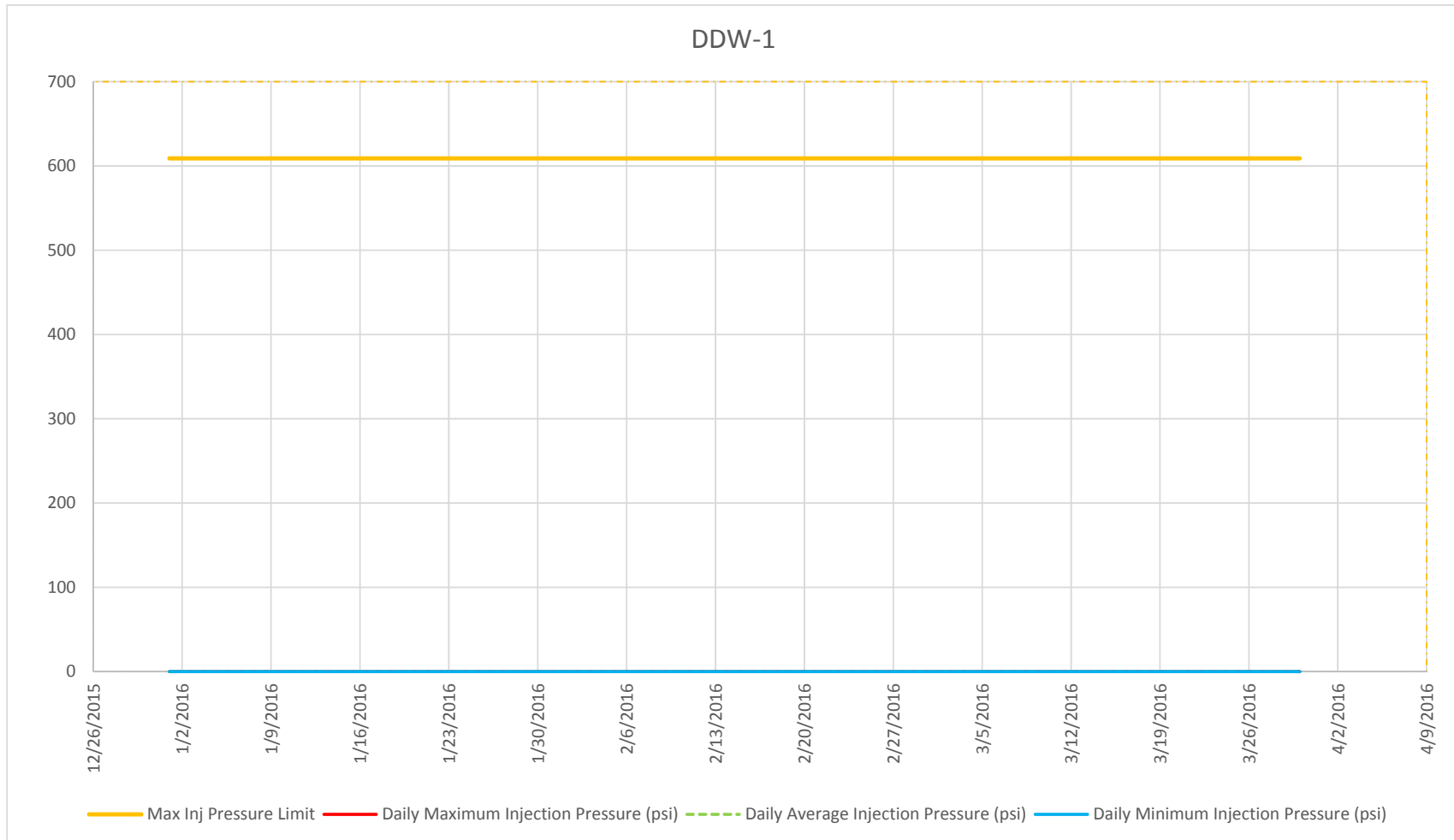
Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
2/12/2016	0	0	0	600	609	
2/13/2016	0	0	0	600	609	
2/14/2016	0	0	0	600	609	
2/15/2016	0	0	0	600	609	
2/16/2016	0	0	0	600	609	
2/17/2016	0	0	0	600	609	
2/18/2016	0	0	0	600	609	
2/19/2016	0	0	0	600	609	
2/20/2016	0	0	0	600	609	
2/21/2016	0	0	0	600	609	
2/22/2016	0	0	0	600	609	
2/23/2016	0	0	0	600	609	
2/24/2016	0	0	0	600	609	
2/25/2016	0	0	0	600	609	
2/26/2016	0	0	0	600	609	
2/27/2016	0	0	0	600	609	
2/28/2016	0	0	0	600	609	
2/29/2016	0	0	0	600	609	
3/1/2016	0	0	0	600	609	
3/2/2016	0	0	0	600	609	
3/3/2016	0	0	0	600	609	
3/4/2016	0	0	0	600	609	
3/5/2016	0	0	0	600	609	
3/6/2016	0	0	0	600	609	
3/7/2016	0	0	0	600	609	
3/8/2016	0	0	0	600	609	
3/9/2016	0	0	0	600	609	
3/10/2016	0	0	0	600	609	
3/11/2016	0	0	0	600	609	
3/12/2016	0	0	0	600	609	
3/13/2016	0	0	0	600	609	
3/14/2016	0	0	0	600	609	
3/15/2016	0	0	0	600	609	
3/16/2016	0	0	0	600	609	
3/17/2016	0	0	0	600	609	
3/18/2016	0	0	0	600	609	
3/19/2016	0	0	0	600	609	
3/20/2016	0	0	0	600	609	
3/21/2016	0	0	0	600	609	
3/22/2016	0	0	0	600	609	
3/23/2016	0	0	0	600	609	
3/24/2016	0	0	0	600	609	

**APPENDIX 1: Daily Injection Pressures
DDW-1 1st Quarter 2016
Lost Creek ISR Project 13-409**

Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
3/25/2016	0	0	0	600	609	
3/26/2016	0	0	0	600	609	
3/27/2016	0	0	0	600	609	
3/28/2016	0	0	0	600	609	
3/29/2016	0	0	0	600	609	
3/30/2016	0	0	0	600	609	
3/31/2016	0	0	0	600	609	

psi: pounds per square inch

APPENDIX 1: Daily Injection Pressures
DDW-1 1st Quarter 2016
Lost Creek ISR Project 13-409



**APPENDIX 1: Daily Injection Pressures
DDW-3 1st Quarter 2016
Lost Creek ISR Project 13-409**

Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
1/1/2016	830	868	910	910	915	
1/2/2016	776	814	840	910	915	
1/3/2016	808	856	894	910	915	
1/4/2016	754	806	854	910	915	
1/5/2016	0	775	822	910	915	
1/6/2016	725	796	865	910	915	
1/7/2016	785	839	874	910	915	
1/8/2016	826	865	897	910	915	
1/9/2016	852	868	886	910	915	
1/10/2016	775	836	877	910	915	
1/11/2016	770	800	845	910	915	
1/12/2016	738	794	866	910	915	
1/13/2016	750	793	859	910	915	
1/14/2016	731	754	778	910	915	
1/15/2016	774	805	840	910	915	
1/16/2016	754	806	868	910	915	
1/17/2016	839	865	883	910	915	
1/18/2016	839	860	902	910	915	
1/19/2016	830	866	893	910	915	
1/20/2016	785	846	888	910	915	
1/21/2016	770	798	845	910	915	
1/22/2016	778	841	883	910	915	
1/23/2016	793	821	893	910	915	
1/24/2016	774	802	848	910	915	
1/25/2016	820	844	881	910	915	
1/26/2016	821	848	892	910	915	
1/27/2016	784	806	836	910	915	
1/28/2016	767	821	878	910	915	
1/29/2016	758	817	870	910	915	
1/30/2016	738	768	811	910	915	
1/31/2016	737	761	806	910	915	
2/1/2016	782	825	868	910	915	
2/2/2016	842	869	881	910	915	
2/3/2016	828	867	882	910	915	
2/4/2016	809	848	871	910	915	
2/5/2016	794	818	878	910	915	
2/6/2016	779	811	876	910	915	
2/7/2016	804	835	862	910	915	
2/8/2016	742	798	837	910	915	
2/9/2016	729	757	802	910	915	
2/10/2016	728	768	868	910	915	
2/11/2016	786	799	822	910	915	

**APPENDIX 1: Daily Injection Pressures
DDW-3 1st Quarter 2016
Lost Creek ISR Project 13-409**

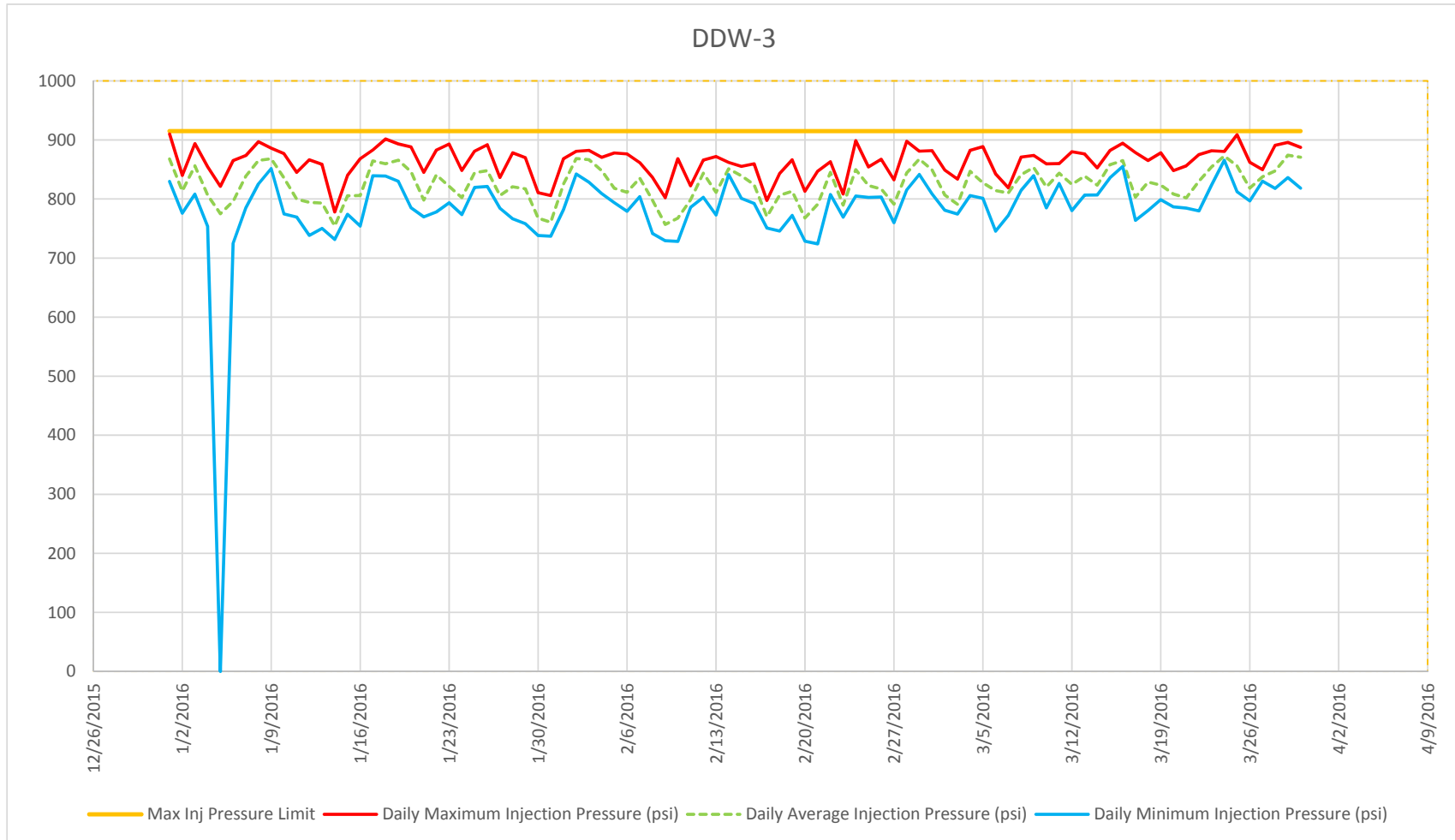
Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
2/12/2016	803	844	866	910	915	
2/13/2016	773	811	872	910	915	
2/14/2016	841	851	862	910	915	
2/15/2016	801	839	855	910	915	
2/16/2016	792	824	860	910	915	
2/17/2016	751	770	798	910	915	
2/18/2016	746	806	843	910	915	
2/19/2016	772	813	866	910	915	
2/20/2016	729	768	813	910	915	
2/21/2016	724	791	847	910	915	
2/22/2016	807	845	863	910	915	
2/23/2016	769	790	808	910	915	
2/24/2016	805	850	899	910	915	
2/25/2016	803	823	854	910	915	
2/26/2016	803	817	867	910	915	
2/27/2016	760	791	833	910	915	
2/28/2016	815	844	898	910	915	
2/29/2016	842	868	881	910	915	
3/1/2016	809	850	882	910	915	
3/2/2016	781	807	849	910	915	
3/3/2016	775	791	834	910	915	
3/4/2016	806	847	882	910	915	
3/5/2016	801	828	889	910	915	
3/6/2016	746	814	842	910	915	
3/7/2016	772	810	819	910	915	
3/8/2016	815	841	871	910	915	
3/9/2016	839	853	874	910	915	
3/10/2016	785	821	859	910	915	
3/11/2016	826	844	860	910	915	
3/12/2016	780	825	880	910	915	
3/13/2016	807	839	876	910	915	
3/14/2016	807	824	853	910	915	
3/15/2016	836	858	882	910	915	
3/16/2016	855	865	895	910	915	
3/17/2016	764	803	879	910	915	
3/18/2016	781	829	865	910	915	
3/19/2016	799	824	878	910	915	
3/20/2016	787	808	848	910	915	
3/21/2016	785	802	856	910	915	
3/22/2016	780	830	875	910	915	
3/23/2016	824	854	882	910	915	
3/24/2016	866	873	881	910	915	

**APPENDIX 1: Daily Injection Pressures
DDW-3 1st Quarter 2016
Lost Creek ISR Project 13-409**

Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
3/25/2016	812	856	909	910	915	
3/26/2016	797	818	862	910	915	
3/27/2016	830	838	850	910	915	
3/28/2016	818	848	891	910	915	
3/29/2016	836	874	896	910	915	
3/30/2016	818	871	887	910	915	
3/31/2016	795	816	851	910	915	

psi: pounds per square inch

APPENDIX 1: Daily Injection Pressures
DDW-3 1st Quarter 2016
Lost Creek ISR Project 13-409



**APPENDIX 1: Daily Injection Pressures
DDW-4 1st Quarter 2016
Lost Creek ISR Project 13-409**

Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
1/1/2016	676	733	760	820	838	
1/2/2016	706	725	740	820	838	
1/3/2016	696	755	783	820	838	
1/4/2016	622	690	732	820	838	
1/5/2016	604	676	742	820	838	
1/6/2016	698	742	764	820	838	
1/7/2016	658	708	746	820	838	
1/8/2016	641	689	733	820	838	
1/9/2016	733	746	758	820	838	
1/10/2016	691	702	743	820	838	
1/11/2016	700	739	770	820	838	
1/12/2016	730	766	775	820	838	
1/13/2016	658	703	736	820	838	
1/14/2016	634	685	707	820	838	
1/15/2016	615	668	716	820	838	
1/16/2016	716	749	777	820	838	
1/17/2016	733	753	779	820	838	
1/18/2016	737	763	787	820	838	
1/19/2016	749	788	795	820	838	
1/20/2016	657	723	778	820	838	
1/21/2016	703	732	751	820	838	
1/22/2016	712	763	785	820	838	
1/23/2016	760	762	769	820	838	
1/24/2016	766	768	775	820	838	
1/25/2016	719	745	789	820	838	
1/26/2016	720	757	791	820	838	
1/27/2016	715	767	801	820	838	
1/28/2016	748	779	798	820	838	
1/29/2016	633	707	756	820	838	
1/30/2016	604	642	703	820	838	
1/31/2016	700	733	775	820	838	
2/1/2016	776	785	799	820	838	
2/2/2016	718	769	801	820	838	
2/3/2016	768	775	787	820	838	
2/4/2016	775	783	797	820	838	
2/5/2016	786	794	807	820	838	
2/6/2016	725	775	810	820	838	
2/7/2016	742	785	804	820	838	
2/8/2016	633	691	744	820	838	
2/9/2016	682	713	756	820	838	
2/10/2016	753	767	784	820	838	
2/11/2016	706	738	762	820	838	

**APPENDIX 1: Daily Injection Pressures
DDW-4 1st Quarter 2016
Lost Creek ISR Project 13-409**

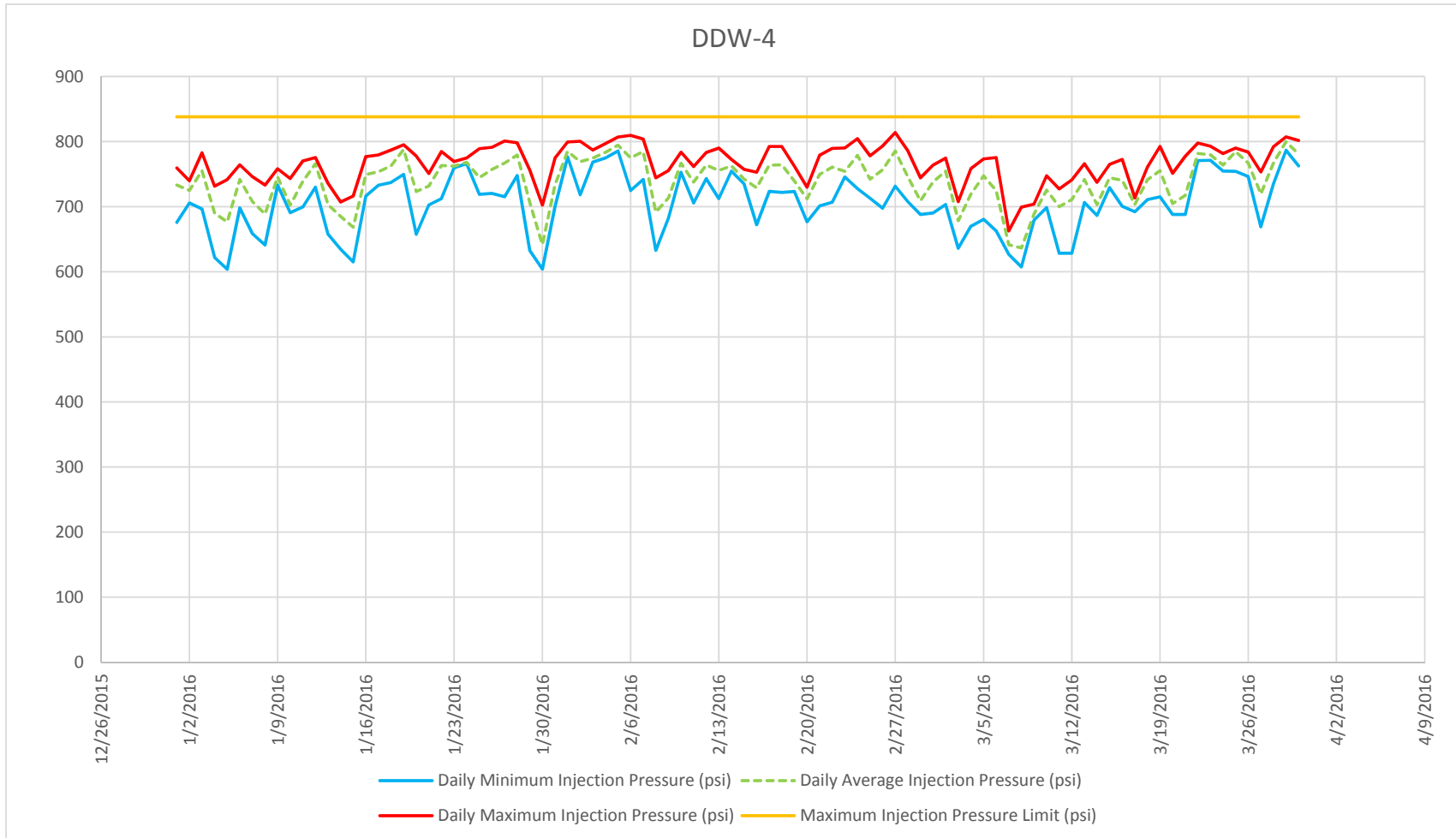
Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
2/12/2016	743	764	783	820	838	
2/13/2016	712	756	790	820	838	
2/14/2016	755	763	773	820	838	
2/15/2016	735	742	757	820	838	
2/16/2016	672	729	753	820	838	
2/17/2016	723	764	792	820	838	
2/18/2016	722	764	792	820	838	
2/19/2016	723	739	762	820	838	
2/20/2016	677	712	730	820	838	
2/21/2016	701	749	779	820	838	
2/22/2016	707	761	790	820	838	
2/23/2016	746	754	790	820	838	
2/24/2016	728	779	804	820	838	
2/25/2016	713	742	778	820	838	
2/26/2016	698	757	793	820	838	
2/27/2016	731	785	814	820	838	
2/28/2016	708	746	786	820	838	
2/29/2016	688	709	744	820	838	
3/1/2016	690	738	764	820	838	
3/2/2016	703	755	774	820	838	
3/3/2016	636	678	708	820	838	
3/4/2016	670	719	758	820	838	
3/5/2016	680	747	773	820	838	
3/6/2016	663	725	775	820	838	
3/7/2016	627	641	663	820	838	
3/8/2016	607	636	699	820	838	
3/9/2016	679	689	704	820	838	
3/10/2016	699	725	747	820	838	
3/11/2016	628	700	727	820	838	
3/12/2016	628	711	741	820	838	
3/13/2016	707	742	766	820	838	
3/14/2016	686	703	737	820	838	
3/15/2016	729	745	765	820	838	
3/16/2016	700	740	772	820	838	
3/17/2016	692	703	713	820	838	
3/18/2016	711	741	761	820	838	
3/19/2016	715	755	792	820	838	
3/20/2016	688	705	751	820	838	
3/21/2016	688	717	777	820	838	
3/22/2016	771	782	798	820	838	
3/23/2016	771	780	793	820	838	
3/24/2016	755	764	782	820	838	

**APPENDIX 1: Daily Injection Pressures
DDW-4 1st Quarter 2016
Lost Creek ISR Project 13-409**

Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
3/25/2016	754	785	790	820	838	
3/26/2016	746	767	784	820	838	
3/27/2016	669	719	753	820	838	
3/28/2016	735	767	792	820	838	
3/29/2016	787	800	807	820	838	
3/30/2016	763	781	802	820	838	
3/31/2016	722	769	790	820	838	

psi: pounds per square inch

APPENDIX 1: Daily Injection Pressures
DDW-4 1st Quarter 2016
Lost Creek ISR Project 13-409





APPENDIX 2



ANALYTICAL SUMMARY REPORT

March 11, 2016

UR Energy USA Inc
10758 W Centennial Rd Ste 200
Ken Caryl Ranch, CO 80127

Work Order: C16020722

Project Name: Lost Creek Waste Water

Energy Laboratories, Inc. Casper WY received the following 1 sample for UR Energy USA Inc on 2/26/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16020722-001	DW - Injectate	02/25/16 8:15	02/26/16	Aqueous	Metals by ICP/ICPMS, Total Alkalinity Conductivity Specific Gravity E300.0 Anions pH Metals Preparation by EPA 200.2 Radium 226, Total Solids, Total Dissolved Sulfide, Iodine Titrimetric

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water
Lab ID: C16020722-001
Client Sample ID: DW - Injectate

Report Date: 03/11/16
Collection Date: 02/25/16 08:15
Date Received: 02/26/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO ₃	ND	mg/L		5		A2320 B	02/29/16 19:43 / wc
Bicarbonate as HCO ₃	367	mg/L		5		A2320 B	02/29/16 19:43 / wc
Chloride	22300	mg/L	D	50		E300.0	02/27/16 06:19 / wc
Sulfate	1020	mg/L	D	200		E300.0	02/27/16 06:19 / wc
NON-METALS							
Sulfide	ND	mg/L		1		A4500-S F	02/28/16 17:03 / ljl
Sulfide as Hydrogen Sulfide (H ₂ S)	ND	mg/L		1		A4500-S F	02/28/16 17:03 / ljl
PHYSICAL PROPERTIES							
Specific Gravity 60/60F	1.023	unitless				D1429	02/29/16 14:45 / eli-b
Conductivity @ 25 C	50400	umhos/cm	E	5		A2510 B	02/26/16 14:45 / mag
pH	6.72	s.u.	H	0.01		A4500-H B	02/26/16 14:45 / mag
Solids, Total Dissolved TDS @ 180 C	31600	mg/L		500		A2540 C	02/26/16 15:27 / mag
METALS - TOTAL							
Arsenic	0.039	mg/L		0.001		E200.8	03/03/16 00:11 / sf
Selenium	0.365	mg/L		0.001		E200.8	03/03/16 00:11 / sf
Uranium	24.8	mg/L		0.0003		E200.8	03/03/16 00:11 / sf
Vanadium	0.03	mg/L		0.01		E200.8	03/03/16 00:11 / sf
RADIONUCLIDES - TOTAL							
Radium 226	2970	pCi/L				E903.0	03/10/16 11:46 / dmf
Radium 226 precision (±)	556	pCi/L				E903.0	03/10/16 11:46 / dmf
Radium 226 MDC	0.17	pCi/L				E903.0	03/10/16 11:46 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 MDC - Minimum detectable concentration
 E - Estimated value. Result exceeds the instrument upper quantitation limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix.
 H - Analysis performed past recommended holding time.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B Batch: R209469										
Lab ID: MBLK	3	Method Blank								
Alkalinity, Total as CaCO3		ND	mg/L	1						Run: MANTECH_160229A 02/29/16 16:30
Carbonate as CO3		ND	mg/L	1						
Bicarbonate as HCO3		1	mg/L	1						
Lab ID: LCS_15917		Laboratory Control Sample								Run: MANTECH_160229A 02/29/16 16:44
Alkalinity, Total as CaCO3		240	mg/L	5.0	96	90	110			
Lab ID: C16020692-001BDUP	3	Sample Duplicate								Run: MANTECH_160229A 02/29/16 16:59
Alkalinity, Total as CaCO3		196	mg/L	5.0				0.7	10	
Carbonate as CO3		ND	mg/L	5.0					10	
Bicarbonate as HCO3		239	mg/L	5.0				0.7	10	
Lab ID: C16020692-003BMS		Sample Matrix Spike								Run: MANTECH_160229A 02/29/16 17:15
Alkalinity, Total as CaCO3		285	mg/L	5.2	95	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B								Analytical Run: PHSC_101-C_160226A		
Lab ID: CCV - SC 1413	Continuing Calibration Verification Standard									02/26/16 14:13
Conductivity @ 25 C		1420	umhos/cm	5.0	100	90	110			
Method: A2510 B								Batch: R209385		
Lab ID: SC 100	Initial Calibration Verification Standard							Run: PHSC_101-C_160226A		02/26/16 10:48
Conductivity @ 25 C		100	umhos/cm	5.0	100	90	110			
Lab ID: SC 2ND 1413	Laboratory Control Sample							Run: PHSC_101-C_160226A		02/26/16 11:00
Conductivity @ 25 C		1410	umhos/cm	5.0	100	90	110			
Lab ID: MBLK	Method Blank							Run: PHSC_101-C_160226A		02/26/16 12:17
Conductivity @ 25 C		ND	umhos/cm	4						
Lab ID: C16020722-001ADUP	Sample Duplicate							Run: PHSC_101-C_160226A		02/26/16 14:49
Conductivity @ 25 C		50300	umhos/cm	5.0			0.3	10		

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: TDS160226C		
Lab ID: MB-1_160226C		Method Blank					Run: BAL-18_160226D		02/26/16 15:21	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	8						
Lab ID: LCS-2_160226C		Laboratory Control Sample					Run: BAL-18_160226D		02/26/16 15:22	
Solids, Total Dissolved TDS @ 180 C		1110	mg/L	11	99	90	110			
Lab ID: C16020713-001A DUP		Sample Duplicate					Run: BAL-18_160226D		02/26/16 15:23	
Solids, Total Dissolved TDS @ 180 C		209	mg/L	9.9				2.9	5	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Analytical Run: PHSC_101-C_160226A		
Lab ID: pH 6.86		Initial Calibration Verification Standard								02/26/16 10:45
pH		6.90	s.u.	0.010	101	98	102			
Lab ID: CCV - pH 7		Continuing Calibration Verification Standard								02/26/16 14:10
pH		7.02	s.u.	0.010	100	98	102			
Lab ID: pH 6.86		Initial Calibration Verification Standard								02/26/16 14:39
pH		6.90	s.u.	0.010	101	98	102			
Method: A4500-H B								Batch: R209385		
Lab ID: C16020722-001ADUP		Sample Duplicate								02/26/16 14:49
pH		6.71	s.u.	0.010				0.1	3	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-S F								Analytical Run: TITRATION_160228A		
Lab ID: ICV	2	Initial Calibration Verification Standard								02/28/16 15:59
Sulfide		120	mg/L	1.0	97	80	120			
Sulfide as Hydrogen Sulfide (H2S)		127	mg/L	1.1		80	120			
Method: A4500-S F								Batch: 160228-SULFIDE-TTR-W		
Lab ID: MBLK7-160228	2	Method Blank						Run: TITRATION_160228A		02/28/16 15:54
Sulfide		ND	mg/L	0.4						
Sulfide as Hydrogen Sulfide (H2S)		ND	mg/L	0.4						
Lab ID: C16020722-001BMS		Sample Matrix Spike						Run: TITRATION_160228A		02/28/16 17:07
Sulfide		23.4	mg/L	1.0	95	80	120			
Lab ID: C16020722-001BMSD		Sample Matrix Spike Duplicate						Run: TITRATION_160228A		02/28/16 17:11
Sulfide		23.6	mg/L	1.0	96	80	120	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E200.8								Analytical Run: ICPMS4-C_160302A			
Lab ID: ICV	4	Initial Calibration Verification Standard								03/02/16 17:40	
Arsenic		0.0507	mg/L	0.0010	101	90	110				
Selenium		0.0496	mg/L	0.0010	99	90	110				
Uranium		0.0466	mg/L	0.00030	93	90	110				
Vanadium		0.0491	mg/L	0.0010	98	90	110				
Method: E200.8								Batch: 46921			
Lab ID: MB-46921	4	Method Blank						Run: ICPMS4-C_160302A		03/02/16 23:55	
Arsenic		5E-05	mg/L	2E-05							
Selenium		ND	mg/L	2E-05							
Uranium		ND	mg/L	4E-06							
Vanadium		0.0007	mg/L	5E-05							
Lab ID: LCS3-46921	4	Laboratory Control Sample						Run: ICPMS4-C_160302A		03/03/16 00:01	
Arsenic		0.508	mg/L	0.0010	101	85	115				
Selenium		0.498	mg/L	0.0010	100	85	115				
Uranium		0.493	mg/L	0.00030	99	85	115				
Vanadium		0.508	mg/L	0.010	102	85	115				
Lab ID: C16020743-001BMS3	4	Sample Matrix Spike						Run: ICPMS4-C_160302A		03/03/16 00:22	
Arsenic		0.512	mg/L	0.0010	102	70	130				
Selenium		0.518	mg/L	0.0010	94	70	130				
Uranium		0.619	mg/L	0.00030	97	70	130				
Vanadium		0.521	mg/L	0.010	104	70	130				
Lab ID: C16020743-001BMSD	4	Sample Matrix Spike Duplicate						Run: ICPMS4-C_160302A		03/03/16 00:27	
Arsenic		0.512	mg/L	0.0010	102	70	130	0.1	20		
Selenium		0.528	mg/L	0.0010	96	70	130	1.8	20		
Uranium		0.627	mg/L	0.00030	99	70	130	1.3	20		
Vanadium		0.522	mg/L	0.010	104	70	130	0.1	20		

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E300.0 Analytical Run: IC2-C_160226A											
Lab ID: ICB	2	Initial Calibration Verification Standard									02/26/16 13:00
Chloride		10.0	mg/L	1.0	100	90	110				
Sulfate		40.0	mg/L	1.0	100	90	110				
Lab ID: CCV-160226-4	2	Continuing Calibration Verification Standard									02/27/16 02:54
Chloride		10.6	mg/L	1.0	106	90	110				
Sulfate		41.7	mg/L	1.0	104	90	110				
Method: E300.0 Batch: R209415											
Lab ID: ICB	2	Method Blank									Run: IC2-C_160226A 02/26/16 13:18
Chloride		ND	mg/L	0.01							
Sulfate		ND	mg/L	0.03							
Lab ID: LFB-160226-1	2	Laboratory Fortified Blank									Run: IC2-C_160226A 02/26/16 13:37
Chloride		10.6	mg/L	1.0	106	90	110				
Sulfate		42.6	mg/L	1.0	106	90	110				
Lab ID: C16020713-003AMS	2	Sample Matrix Spike									Run: IC2-C_160226A 02/27/16 03:50
Chloride		10.5	mg/L	1.0	102	90	110				
Sulfate		40.7	mg/L	1.0	102	90	110				
Lab ID: C16020713-003AMSD	2	Sample Matrix Spike Duplicate									Run: IC2-C_160226A 02/27/16 04:08
Chloride		10.6	mg/L	1.0	103	90	110	0.2	20		
Sulfate		40.7	mg/L	1.0	102	90	110	0.0	20		
Lab ID: LFB-160226-2	2	Laboratory Fortified Blank									Run: IC2-C_160226A 02/27/16 07:52
Chloride		10.3	mg/L	1.0	103	90	110				
Sulfate		40.7	mg/L	1.0	102	90	110				
Lab ID: C16020727-001AMS	2	Sample Matrix Spike									Run: IC2-C_160226A 02/27/16 08:48
Chloride		16.3	mg/L	1.0	106	90	110				
Sulfate		55.4	mg/L	1.0	105	90	110				
Lab ID: C16020727-001AMSD	2	Sample Matrix Spike Duplicate									Run: IC2-C_160226A 02/27/16 09:06
Chloride		16.4	mg/L	1.0	107	90	110	0.5	20		
Sulfate		55.8	mg/L	1.0	106	90	110	0.7	20		

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water

Report Date: 03/11/16
Work Order: C16020722

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0 Batch: RA226-8022										
Lab ID: LCS-RA226-8022	Laboratory Control Sample			Run: G5000W_160303A			03/10/16 11:46			
Radium 226	9.7	pCi/L	93	80	120					
Lab ID: LCS-RA226-8022DUP	Laboratory Control Sample Duplicate			Run: G5000W_160303A			03/10/16 11:46			
Radium 226	9.4	pCi/L	90	80	120	3.1	20			
Lab ID: MB-RA226-8022	3 Method Blank			Run: G5000W_160303A			03/10/16 11:46			
Radium 226	0.2	pCi/L								
Radium 226 precision (±)	0.1	pCi/L								
Radium 226 MDC	0.2	pCi/L								

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



Work Order Receipt Checklist

UR Energy USA Inc

C16020722

Login completed by: Ralph Stanley

Date Received: 2/26/2016

Reviewed by: Dave Blaida

Received by: dcq

Reviewed Date: 2/26/2016

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all 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? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Container/Temp Blank temperature:	9.6°C On Ice		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None



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Billings, MT 800.735.4489 • Casper, WY 866.235.0515
College Station, TX 888.690.2216 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711



BOTTLE ORDER 48226

SHIPPED TO: UR Energy USA Inc

Contact: Mike Gaither
5880 Enterprise Dr Ste 200
Casper WY 82609-
Phone: (303) 265-2373
Project: Lost Creek Waste Water

Order Created by: Corinne Wagner
Shipped From: Casper, WY
Ship Date: 1/9/2016
VIA: PickUp

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
1 Liter Plastic	1	A2540 C Gravimetri c	Solids, Total Dissolved Gravimetric Tests			ALK = HCO3 & CO3	1
		E300.0	E300.0 Anions				
		A2320 B	Alkalinity				
		A2510 B	Conductivity				
		A4500-H B	pH	0.25 hrs			
250 mL Plastic	1	A4500-S F	Sulfide, Iodine Titrimetric		<input checked="" type="checkbox"/> ZnAc	Zero Headspace	1
		A4500-S F	Sulfide, Iodine Titrimetric		<input checked="" type="checkbox"/> NaOH		
250 mL Plastic	1	E200.7_8	Metals by ICP/CPMS, Total		<input checked="" type="checkbox"/> HNO3	Total As, Se, V & U	1
2 Liter Plastic	2	E903.0	Radium 226, Total		<input checked="" type="checkbox"/> HNO3		1

We strongly suggest that the samples are shipped the same day as they are collected.

- HNO3 - Nitric Acid
- H2SO4 - Sulfuric Acid
- NaOH - Sodium Hydroxide
- ZnAc - Zinc Acetate
- HCl - Hydrochloric Acid
- H3PO4 - Phosphoric Acid
- Acid

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets