COLORADO OFFICE
10758 W. CENTENNIAL RD., STE. 200
LITTLETON, CO 80127
TEL: (866) 981-4588
FAX: (720) 981-5643

WYOMING OFFICE
5880 ENTERPRISE DR., STE. 200
CASPER, WY 82609
TEL: (307) 265-2373
FAX: (307) 265-2801

LOST CREEK ISR, LLC

July 28, 2016

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

RE: Quarterly Report for 2nd 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 second 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 submittal 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

2nd 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

July 28, 2016

Contents

Tables

Figures

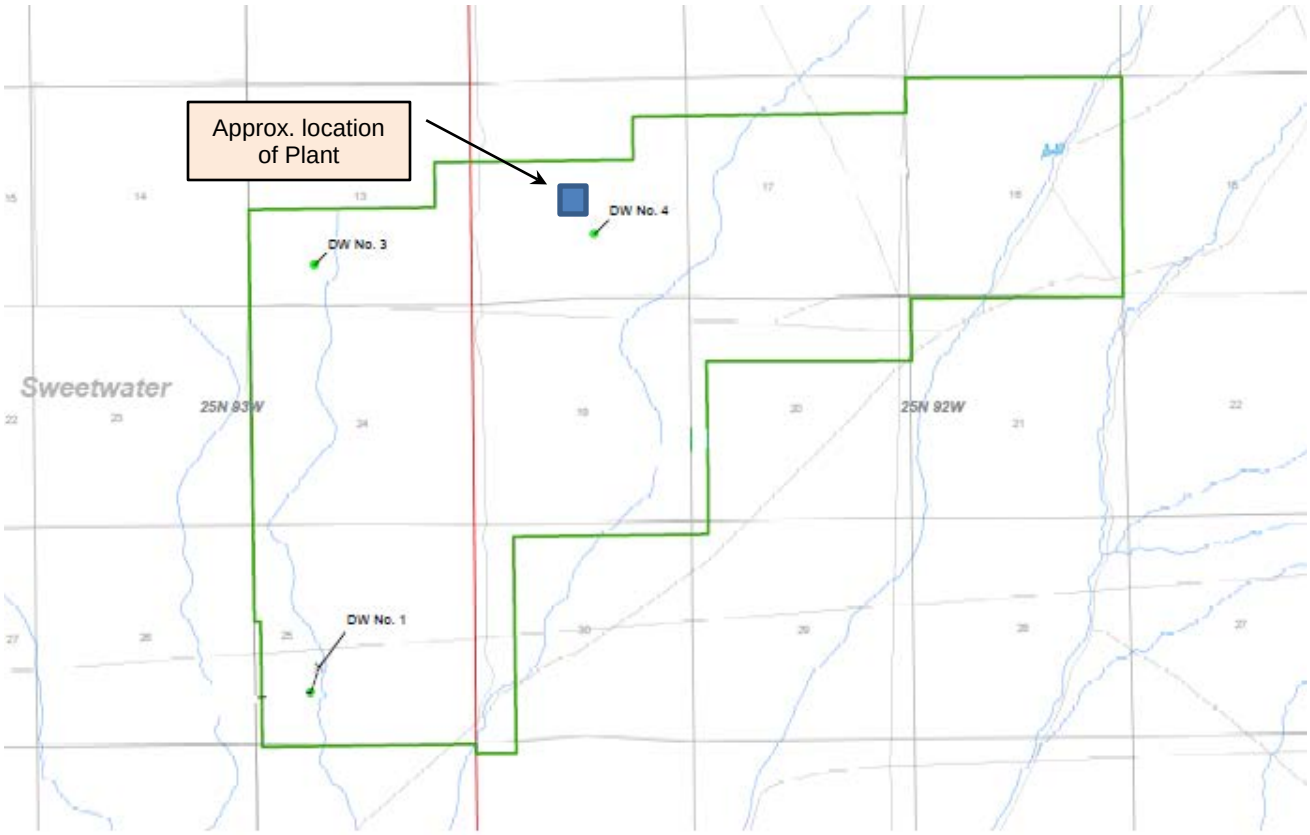
Appendices

1.0 Introduction

The period covered by this report is the second calendar quarter of 2016 from April 1 to June 30, 2016.

Three Class I 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			
		April 2016	May 2016	June 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	294	295	295	295
Annulus Pressure Average	psig	299	295	295	296
Annulus Pressure Maximum	psig	304	295	295	298
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			
		April 2016	May 2016	June 2016	Quarterly Total/Avg
Operation Time	min	31,698	29,528	30,305	91,532
% Run Time	%	73%	68%	70%	71%
Injection Rate Minimum Instantaneous	gpm	0	0	0	0
Injection Rate Average (TWA)	gpm	12	13	12	12
Injection Rate Maximum Instantaneous	gpm	16	13	26	18
Injection Rate Maximum Permit Limit	gpm	**50**			**50**
Injection Pressure Daily Minimum	psig	767	0	0	256
Injection Pressure Daily Average	psig	858	861	866	862
Injection Pressure Daily Maximum	psig	916	919	924	920
Injection Pressure Permit Limit (LSIP)	psig	**915**			**915**
Injection Pressure Automatic Kill	psig	**910**			**910**
Injection Volume	gal	394,426	380,026	353,006	1,127,459
Injection Volume	bbl	9,391	9,048	8,405	26,844
Annulus Pressure Minimum	psig	264	256	259	260
Annulus Pressure Average	psig	282	270	269	273
Annulus Pressure Maximum	psig	289	280	279	283
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			
		April 2016	May 2016	June 2016	Quarterly Total/Avg
Operation Time	min	36,467	42,801	42,129	121,396
% Run Time	%	84%	96%	94%	92%
Injection Rate Minimum Instantaneous	gpm	0	0	0	0
Injection Rate Average (TWA)	gpm	11	12	11	11
Injection Rate Maximum Instantaneous	gpm	28	13	13	18
Injection Rate Maximum Permit Limit	gpm	**50**			**50**
Injection Pressure Daily Minimum	psig	0	691	683	458
Injection Pressure Daily Average	psig	767	790	794	784
Injection Pressure Daily Maximum	psig	815	843	844	834
Injection Pressure Permit Limit (LSIP)	psig	**838**			**838**
Injection Pressure Automatic Kill	psig	**830**			**830**
Injection Volume	gal	415,509	495,828	455,344	1,366,681
Injection Volume	bbl	9,893	11,805	10,842	32,540
Annulus Pressure Minimum	psig	281	270	289	280
Annulus Pressure Average	psig	299	299	315	304
Annulus Pressure Maximum	psig	318	307	343	323
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 1st Quarter	bbl	0	26,819	29,839
2016 2nd Quarter	bbl	0	26,844	32,540
CUMULATIVE TOTAL TO DATE	**bbl**	60,869	192,015	339,543

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 over the scale limit (>19,900 uS/cm) for the field meter so the Energy Lab result was used. A duplicate sample was collected. 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: 5/12/2016				
Lab Analyte or Parameter	**Method Used**	**Results**	**Duplicate Results**	**Units**
pH, field	*SM4500-H$^+$B*	6.38	---	s.u.
Specific Cond. at 25°C, lab*	*120.1*	70,700	70,500	uS/cm
Temperature, field	*SM2550B*	18.5	---	°C
Specific Gravity	*n/a*	1.033	1.032	---
Total Dissolved Solids	*SM2540C*	49,900	48,400	mg/L
Bicarbonate	*SM2320B*	296	297	mg/L
Carbonate	*SM2320B*	ND(5)	ND(5)	mg/L
Chloride, total	*300.0*	35,000	30,400	mg/L
Sulfate, total	*300.0*	1,400	1,380	mg/L
Sulfide (as hydrogen sulfide)	*A4500-S F*	ND(1)	ND(1)	mg/L
Arsenic, dissolved	*200.8*	0.052	0.045	mg/L
Selenium, dissolved	*200.8*	0.602	0.602	mg/L
Vanadium, dissolved	*200.8*	0.03	0.03	mg/L
Uranium, total	*200.7*	16.9	17.7	mg/L
Radium-226, total	*E903.0*	2,530	1,390	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 measured value for pH of 6.38 was within the limit.

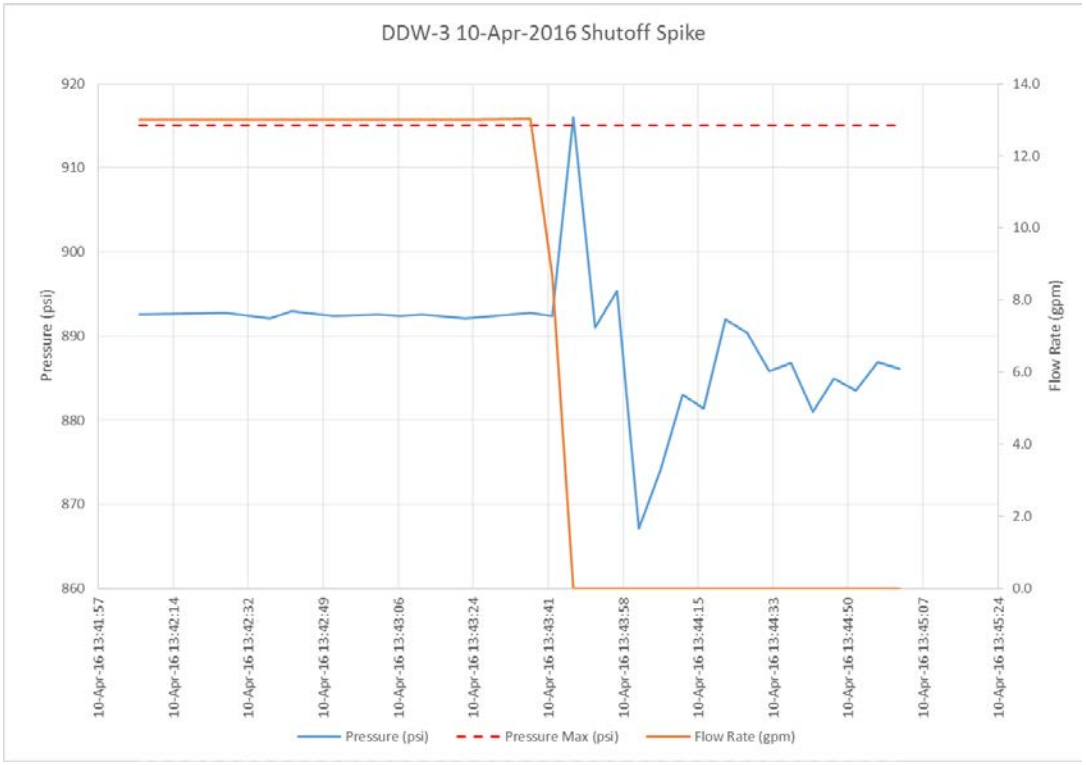
4.0 Permit Exceedances

No operational exceedances of Permit-defined limits occurred during the quarter, however, the following qualified exceedances occurred as shown on **Table 4** below.

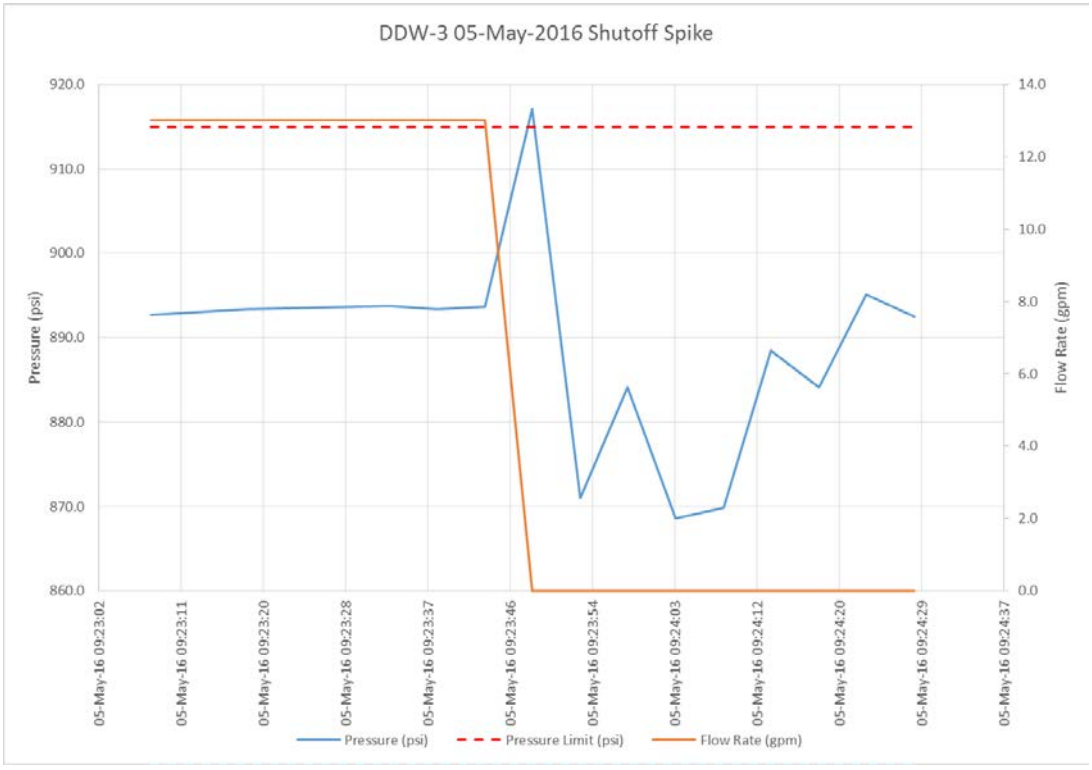
Table 4: Summary of Exceedances

Event	Well	Date	Limit Exceeded	Peak Value	Permit Limit	Comment
1	DDW-3	4/10/2016	Injection Pressure	916.3	915	Instantaneous pressure spike during shutoff
2	DDW-3	5/5/2016	Injection Pressure	917.1	915	Instantaneous pressure spike during shutoff
3	DDW-3	5/9/2016	Injection Pressure	915.4	915	Instantaneous pressure spike during shutoff
4	DDW-3	5/11/2016	Injection Pressure	917.9	915	Instantaneous pressure spike during shutoff
5	DDW-3	5/19/2016	Injection Pressure	918.6	915	Instantaneous pressure spike during shutoff
6	DDW-3	5/28/2016	Injection Pressure	915.3	915	Instantaneous pressure spike during shutoff
7	DDW-3	6/2/2016	Injection Pressure	918.4	915	Instantaneous pressure spike during shutoff
8	DDW-3	6/5/2016	Injection Pressure	920.7	915	Instantaneous pressure spike during shutoff
9	DDW-3	6/12/2016	Injection Pressure	919.8	915	Instantaneous pressure spike during shutoff
10	DDW-3	6/13/2016	Injection Pressure	919.8	915	Instantaneous pressure spike during shutoff
11	DDW-3	6/22/2016	Injection Pressure	923.6	915	Instantaneous pressure spike during shutoff
12	DDW-3	6/24/2016	Injection Pressure	921.8	915	Instantaneous pressure spike during shutoff
13	DDW-3	6/27/2016	Injection Pressure	922.5	915	Instantaneous pressure spike during shutoff
14	DDW-3	6/27/2016	Injection Pressure	919.9	915	Instantaneous pressure spike during shutoff
15	DDW-3	6/28/2016	Injection Pressure	924.2	915	Instantaneous pressure spike during shutoff
16	DDW-4	5/31/2016	Injection Pressure	842.9	838	Instantaneous pressure spike during shutoff
17	DDW-4	6/4/2016	Injection Pressure	843.3	838	Instantaneous spike. Unknown cause.
18	DDW-4	6/14/2016	Injection Pressure	843.5	838	Instantaneous pressure spike during shutoff

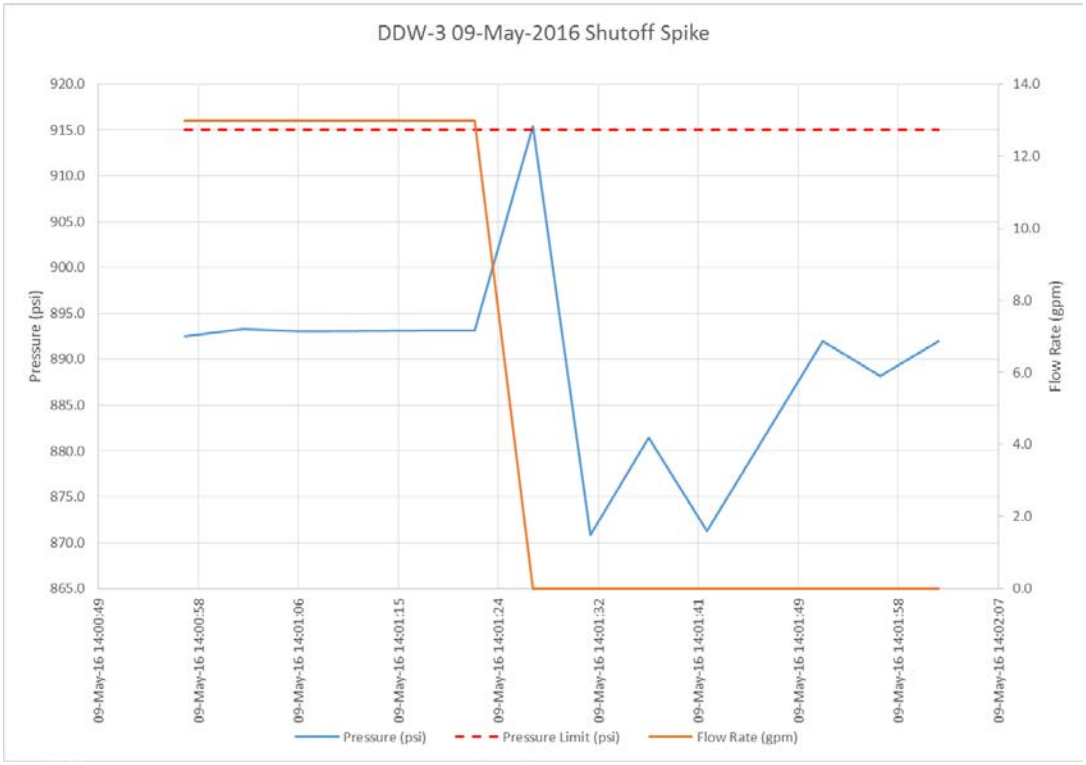
Event 1:



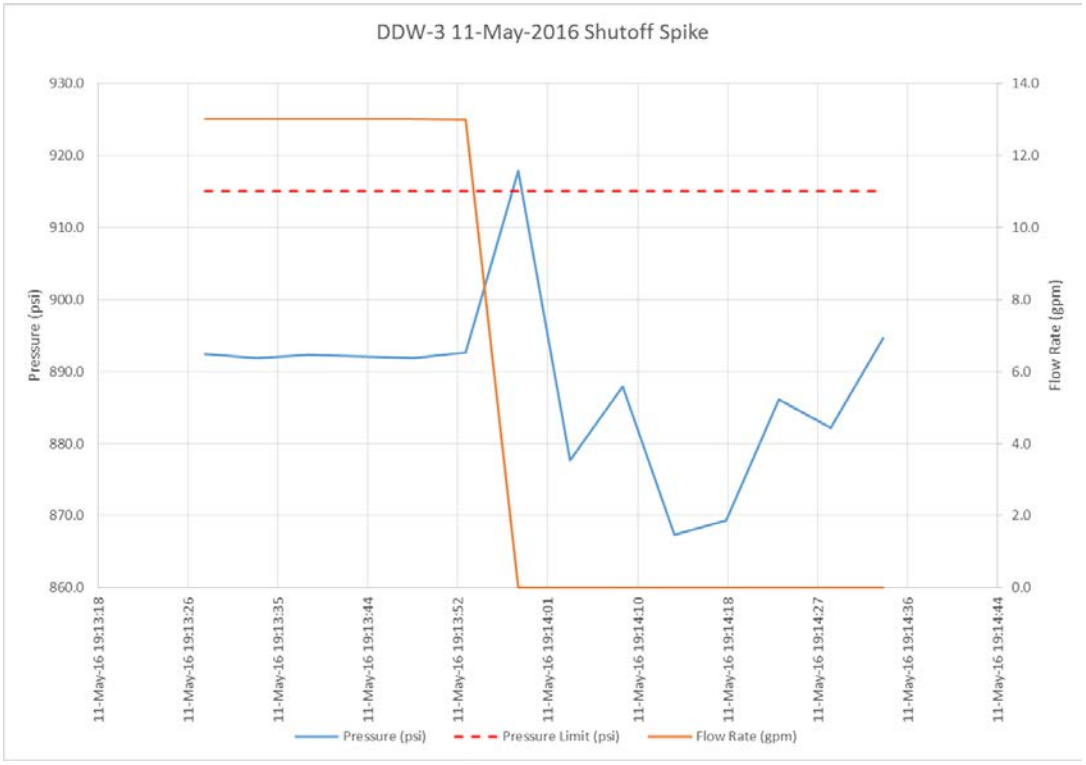
Event 2:



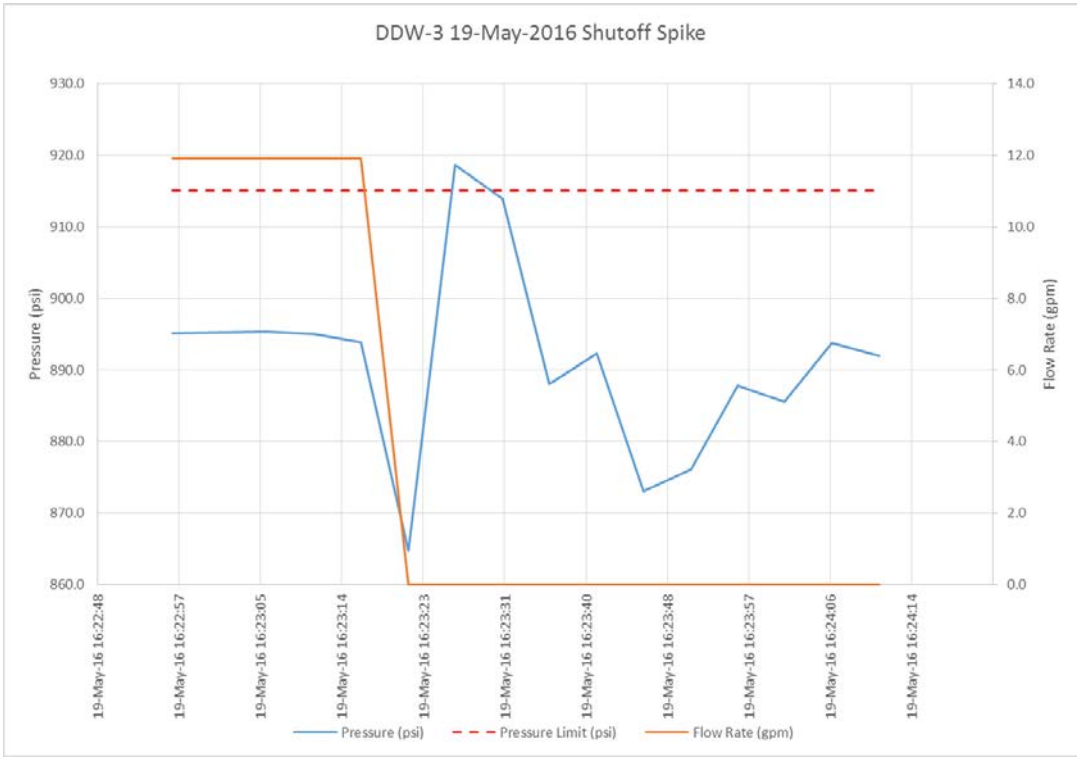
Event 3:



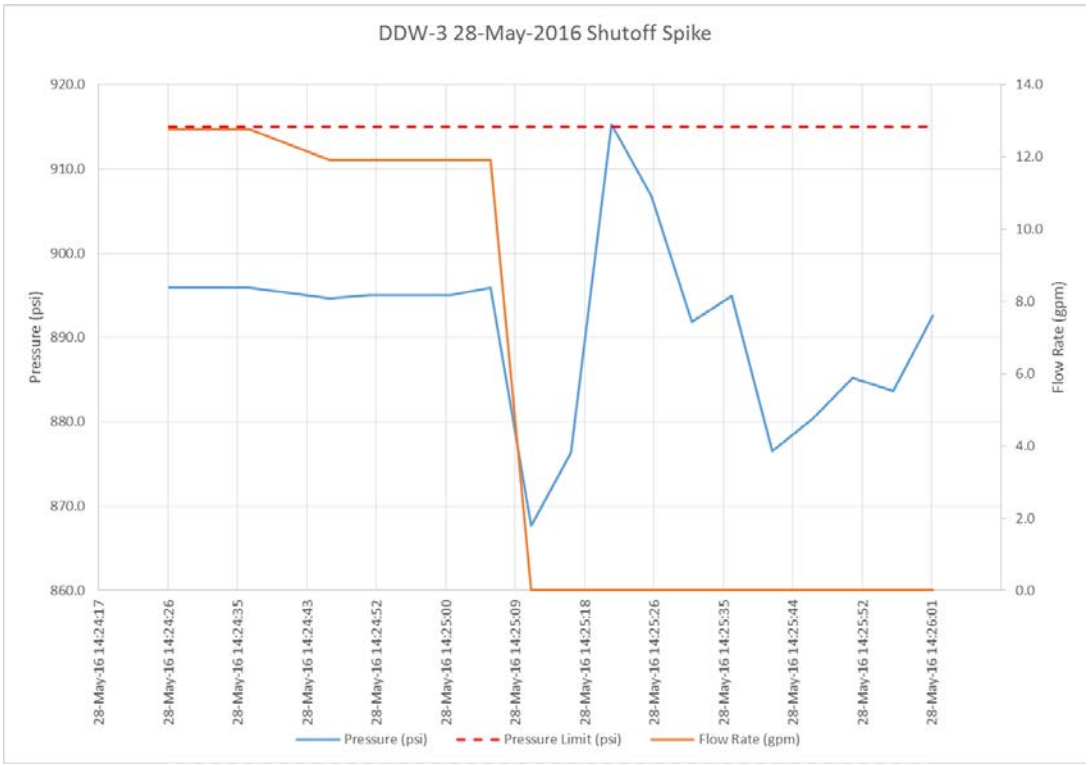
Event 4:



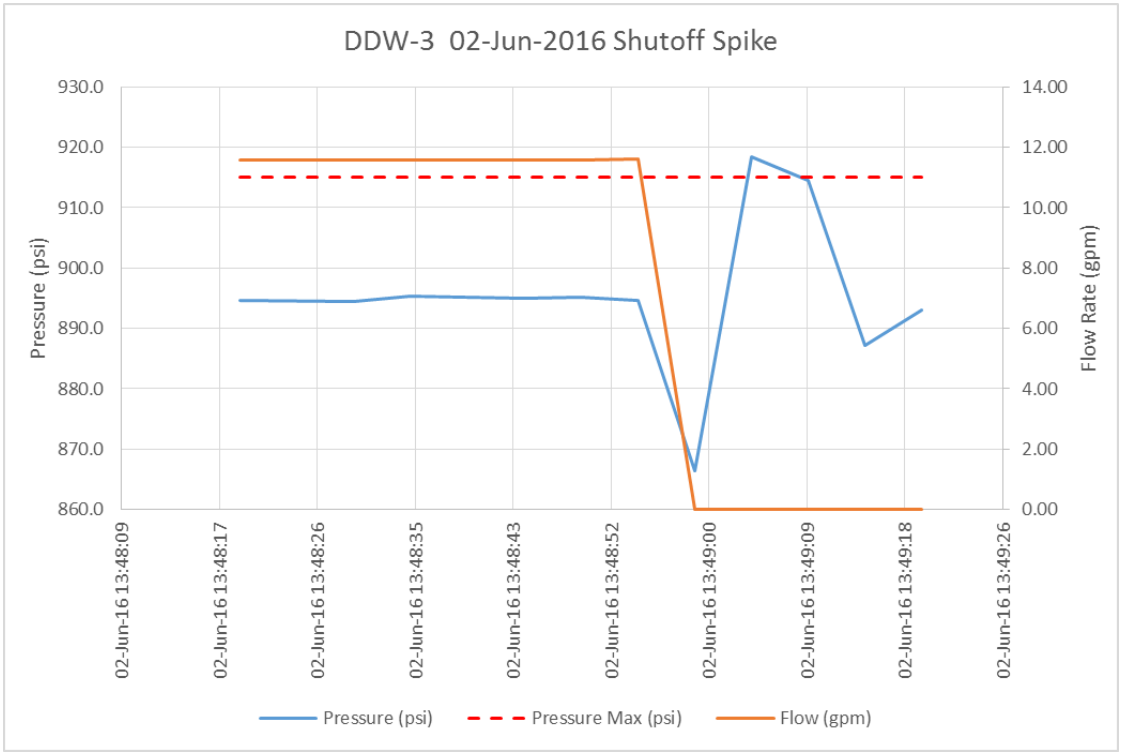
Event 5:



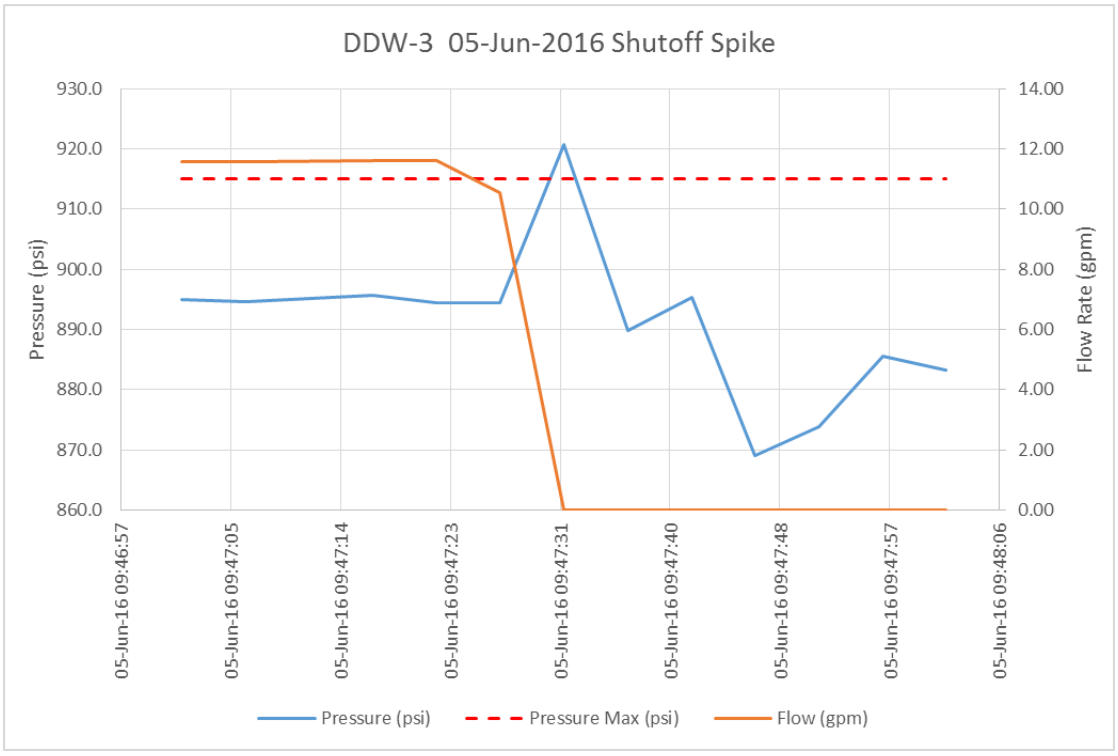
Event 6:



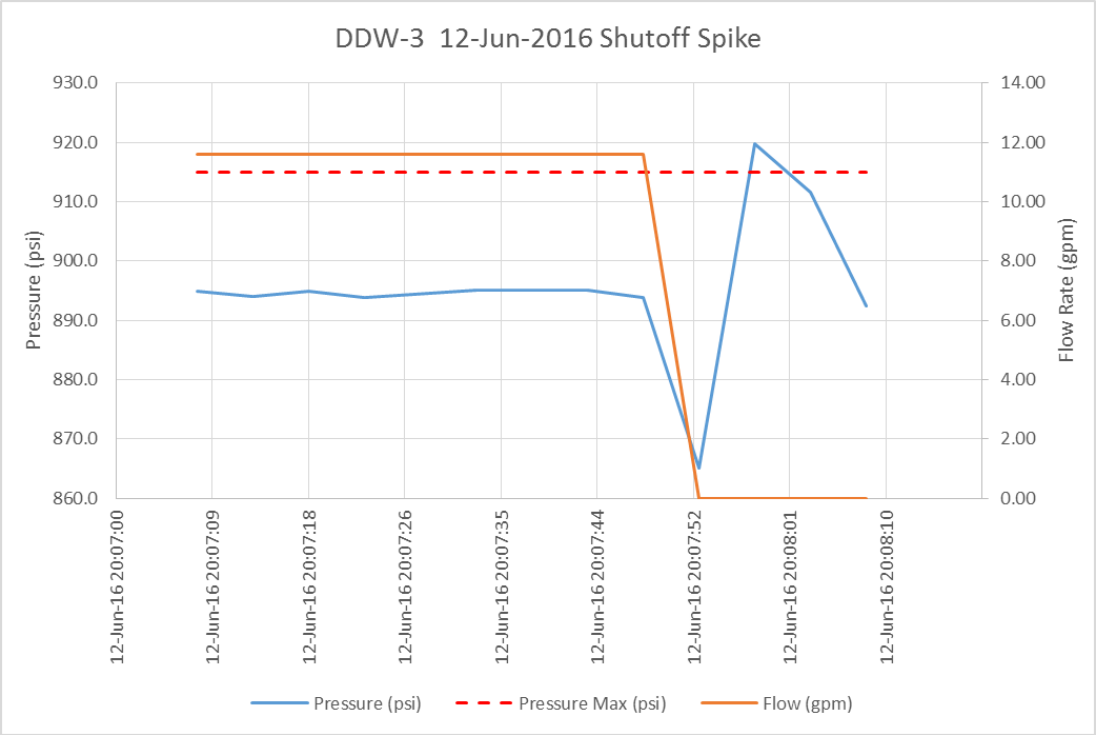
Event 7:



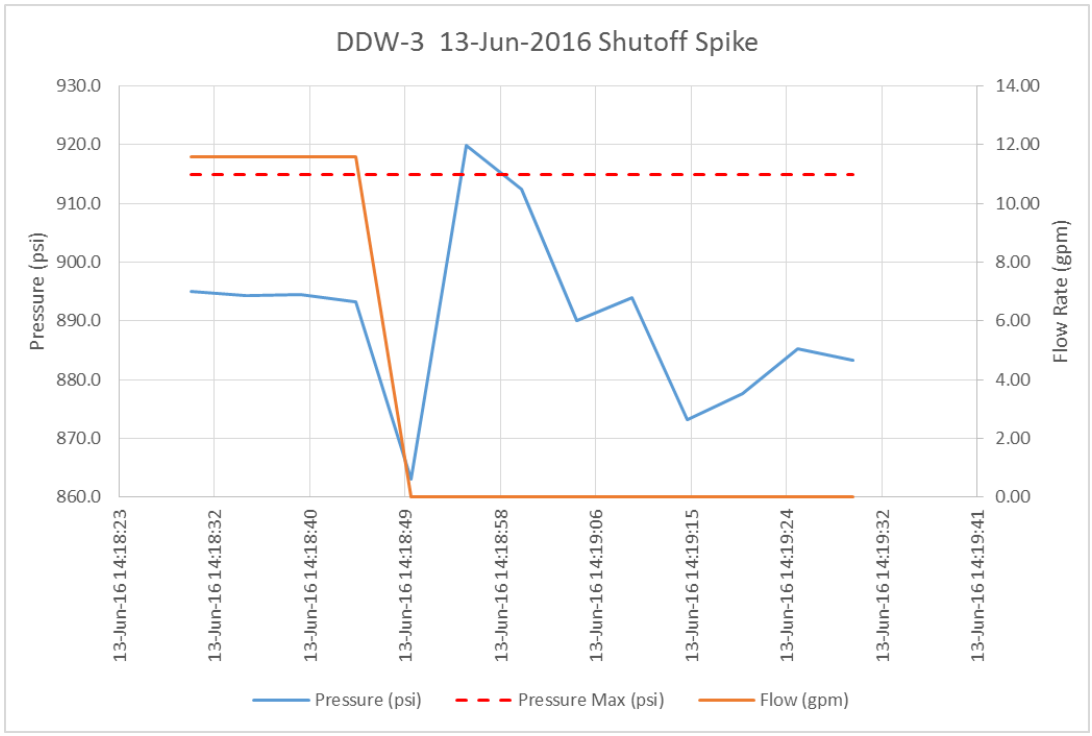
Event 8:



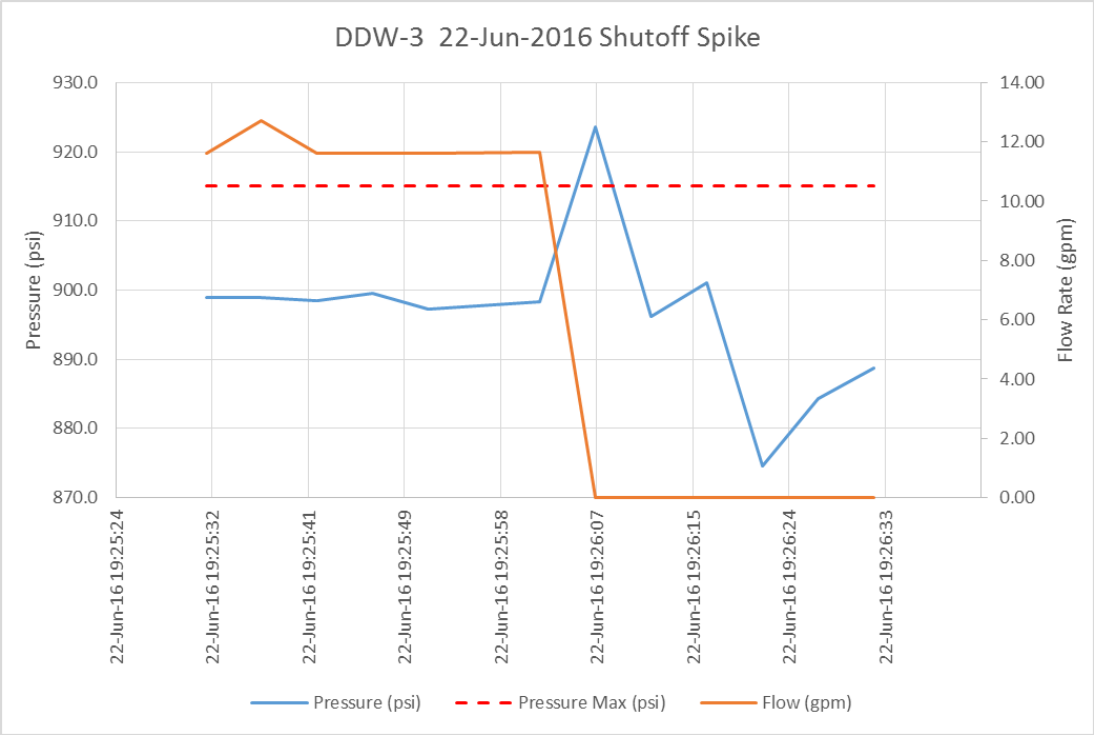
Event 9:



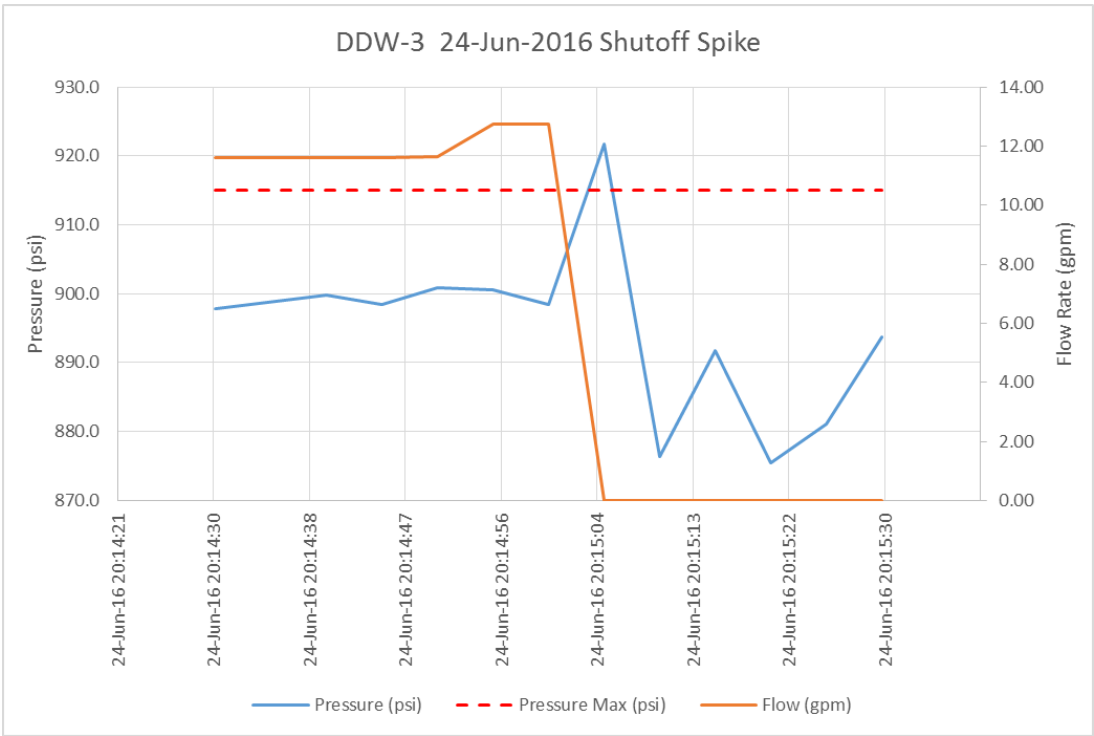
Event 10:



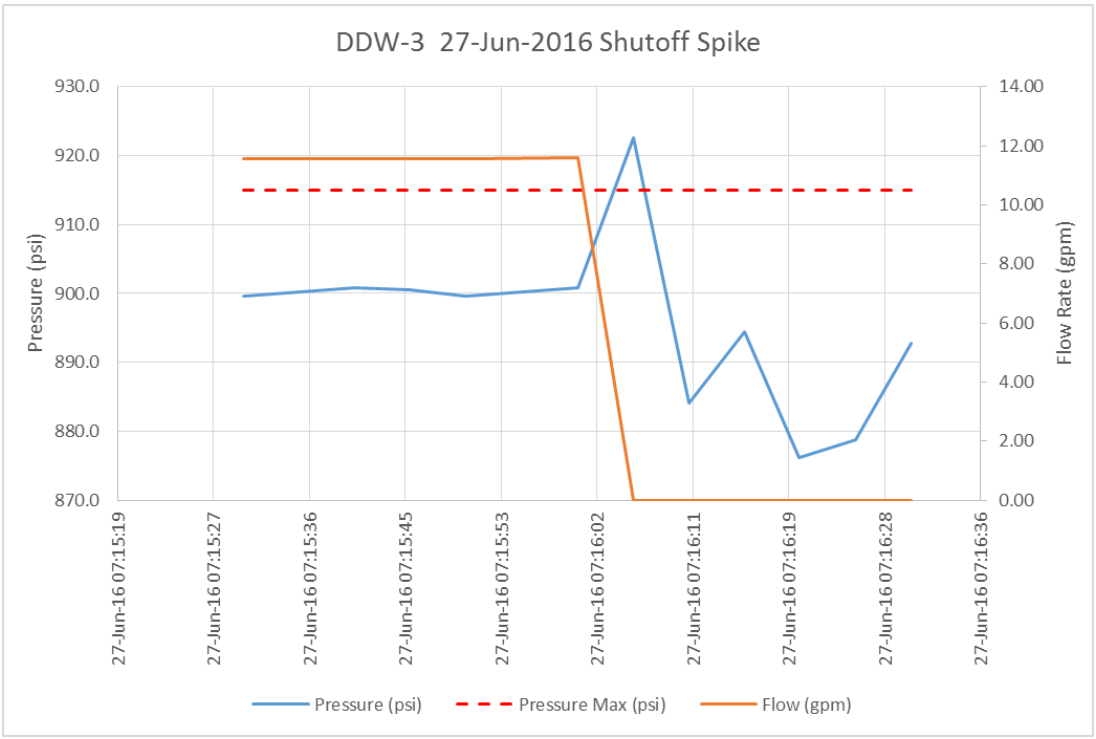
Event 11:



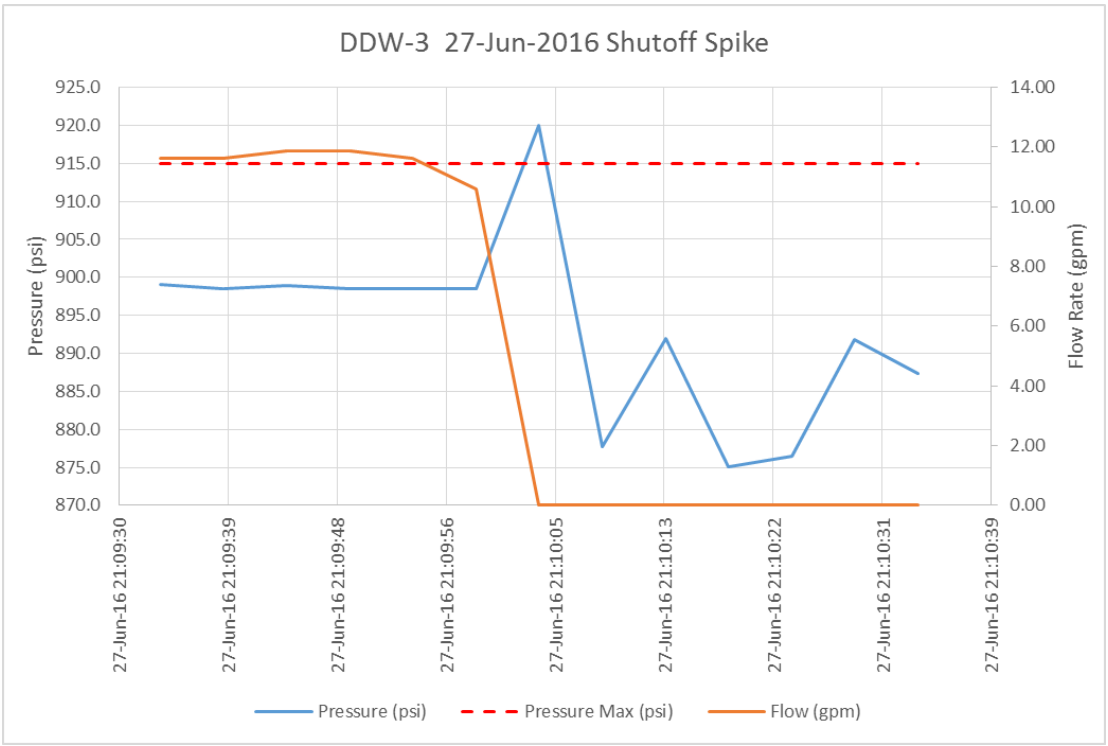
Event 12:



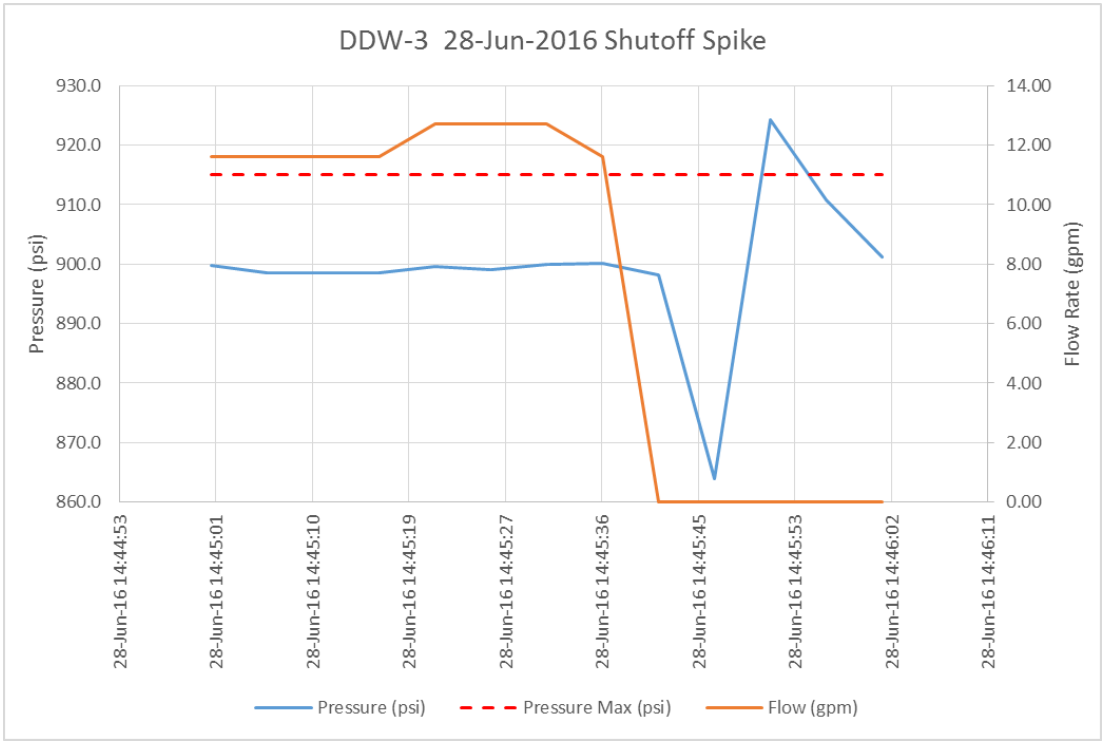
Event 13:



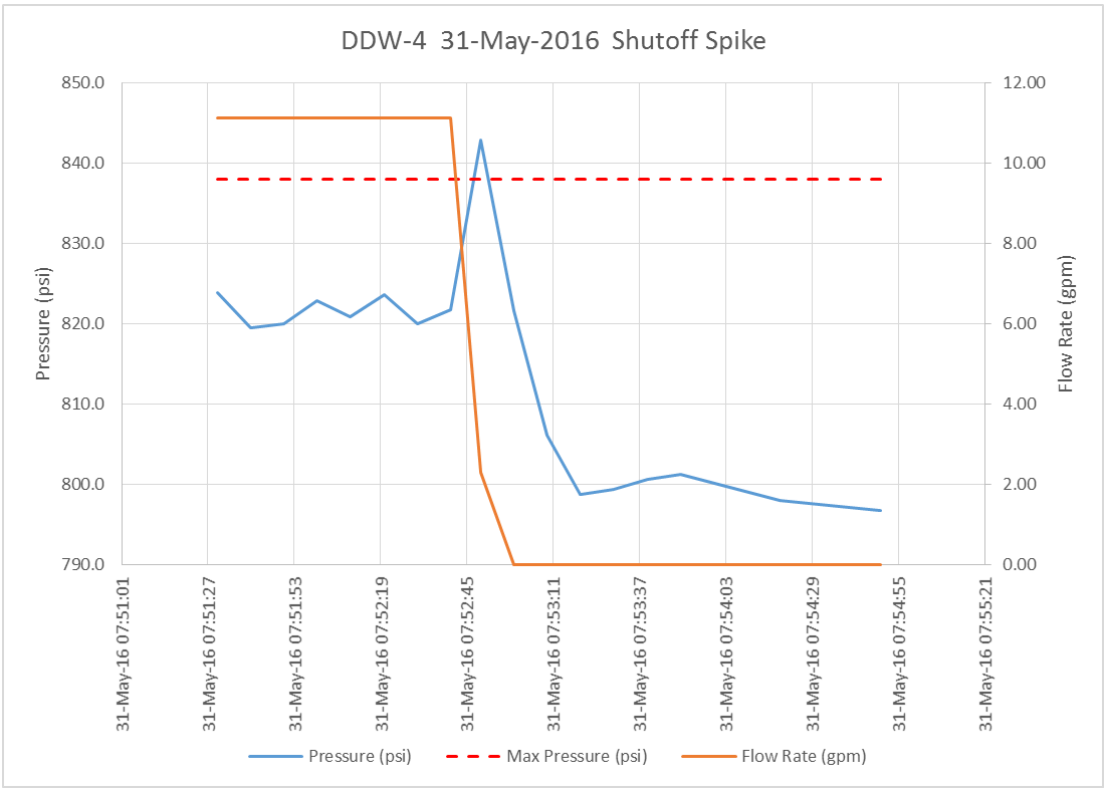
Event 14:



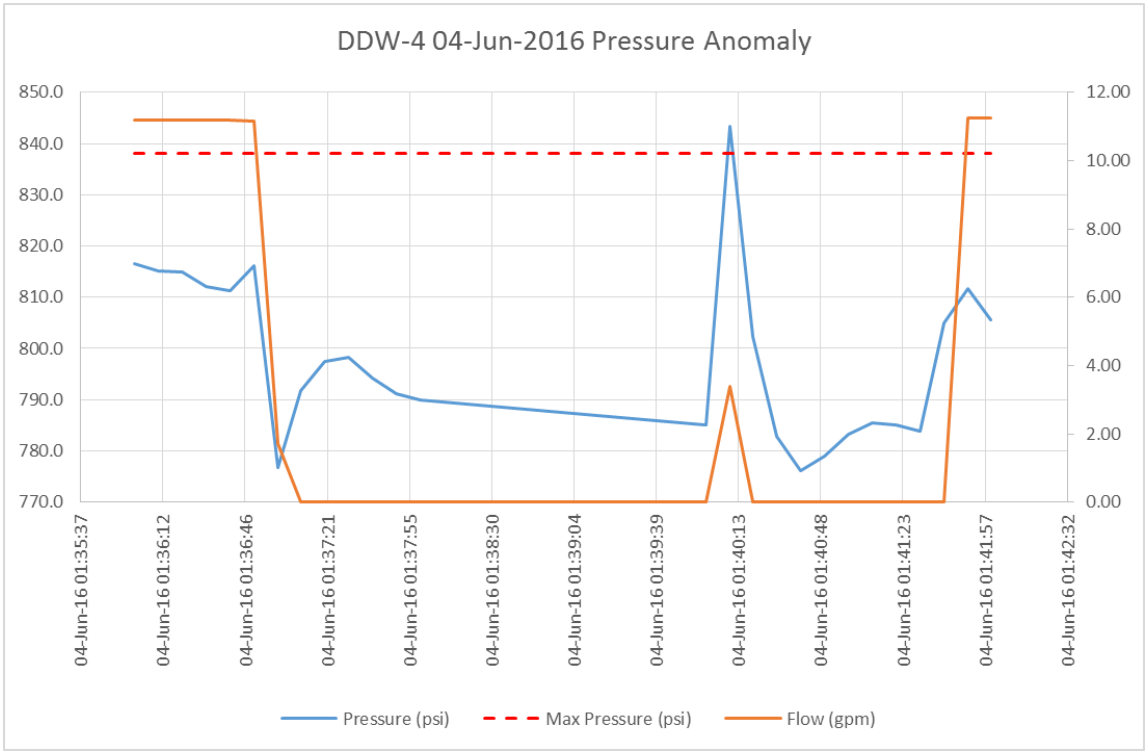
Event 15:



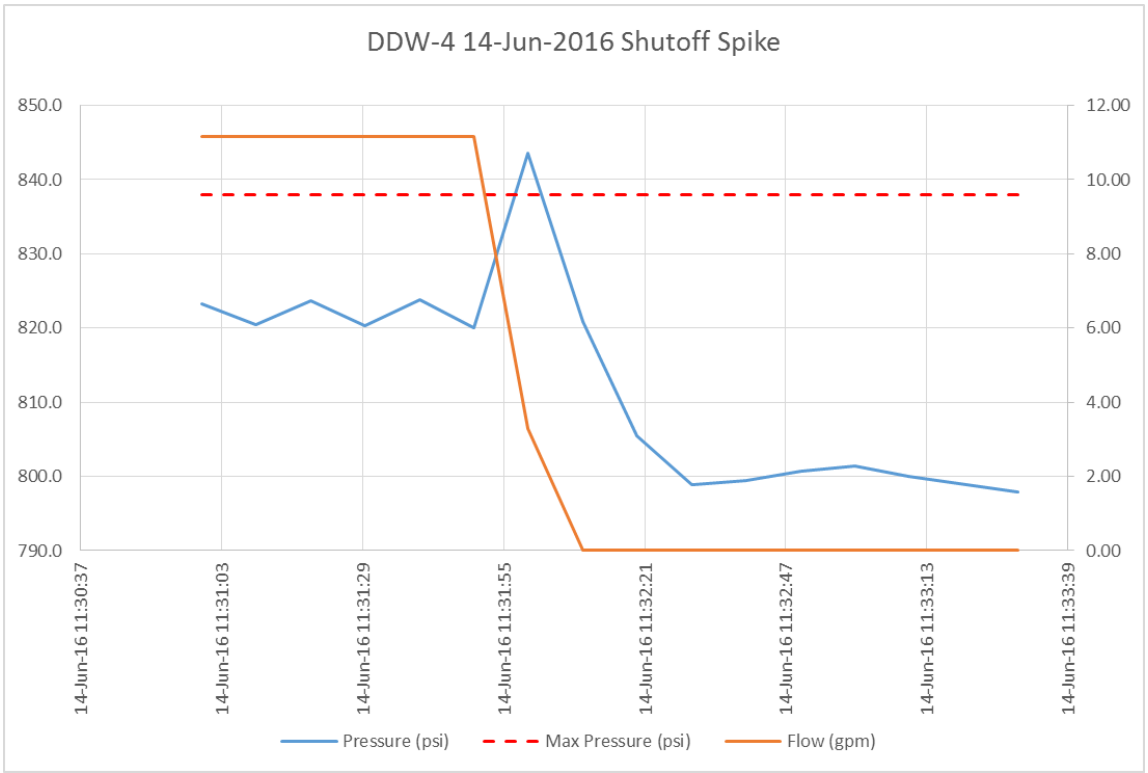
Event 16:



Event 17:



Event 18:



5.0 Alarms, Shut-Downs, and Corrective Actions

Voluntary shutdowns occurred during the quarter:

- DDW-1: 4/1 – 6/30/2016. Well shut in for pump repairs. Injection pump had not yet been replaced.

Maintenance activities completed during the quarter included:

- Some piping in the pump houses was replaced with flexible pipe to absorb operational vibration to prevent leakage and damage to components.
- Stainless steel piping in the pump houses was replaced with PVC to prevent leakage.

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 April and June. 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	4/4/2016	900	900	910	910
DDW-3	915	6/4/2016	900	900	911	911
DDW-4	838	4/4/2016	825	825	828	828
DDW-4	838	6/4/2016	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 2nd 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
4/1/2016	0	0	0	600	609	Shut down for pump repair
4/2/2016	0	0	0	600	609	
4/3/2016	0	0	0	600	609	
4/4/2016	0	0	0	600	609	
4/5/2016	0	0	0	600	609	
4/6/2016	0	0	0	600	609	
4/7/2016	0	0	0	600	609	
4/8/2016	0	0	0	600	609	
4/9/2016	0	0	0	600	609	
4/10/2016	0	0	0	600	609	
4/11/2016	0	0	0	600	609	
4/12/2016	0	0	0	600	609	
4/13/2016	0	0	0	600	609	
4/14/2016	0	0	0	600	609	
4/15/2016	0	0	0	600	609	
4/16/2016	0	0	0	600	609	
4/17/2016	0	0	0	600	609	
4/18/2016	0	0	0	600	609	
4/19/2016	0	0	0	600	609	
4/20/2016	0	0	0	600	609	
4/21/2016	0	0	0	600	609	
4/22/2016	0	0	0	600	609	
4/23/2016	0	0	0	600	609	
4/24/2016	0	0	0	600	609	
4/25/2016	0	0	0	600	609	
4/26/2016	0	0	0	600	609	
4/27/2016	0	0	0	600	609	
4/28/2016	0	0	0	600	609	
4/29/2016	0	0	0	600	609	
4/30/2016	0	0	0	600	609	
5/1/2016	0	0	0	600	609	
5/2/2016	0	0	0	600	609	
5/3/2016	0	0	0	600	609	
5/4/2016	0	0	0	600	609	
5/5/2016	0	0	0	600	609	
5/6/2016	0	0	0	600	609	
5/7/2016	0	0	0	600	609	
5/8/2016	0	0	0	600	609	
5/9/2016	0	0	0	600	609	
5/10/2016	0	0	0	600	609	
5/11/2016	0	0	0	600	609	
5/12/2016	0	0	0	600	609	

APPENDIX 1: Daily Injection Pressures
DDW-1 2nd Quarter 2016
Lost Creek ISR Project 13-409

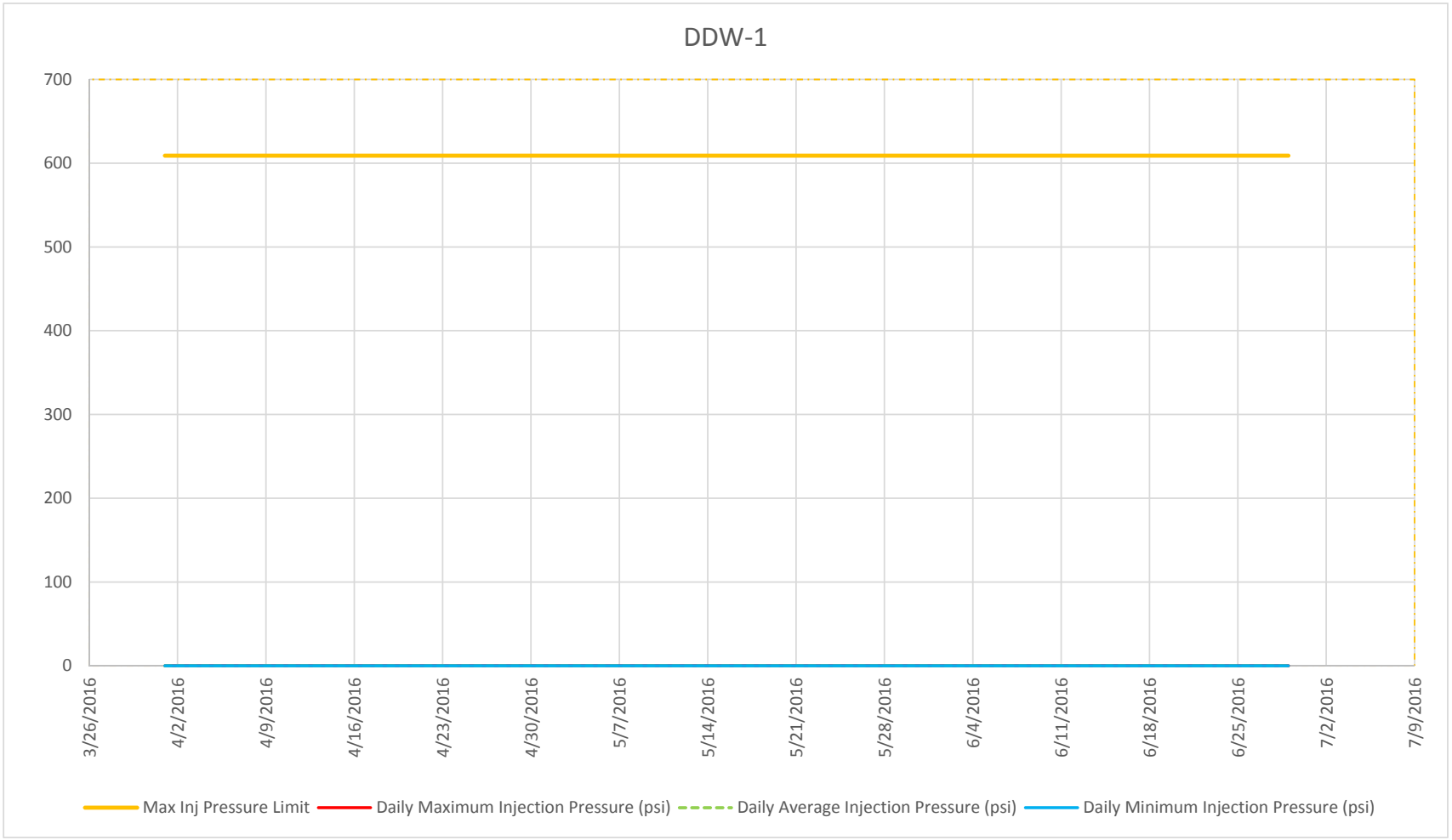
Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
5/13/2016	0	0	0	600	609	
5/14/2016	0	0	0	600	609	
5/15/2016	0	0	0	600	609	
5/16/2016	0	0	0	600	609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

APPENDIX 1: Daily Injection Pressures
DDW-1 2nd 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
6/24/2016	0	0	0	600	609	
6/25/2016	0	0	0	600	609	
6/26/2016	0	0	0	600	609	
6/27/2016	0	0	0	600	609	
6/28/2016	0	0	0	600	609	
6/29/2016	0	0	0	600	609	
6/30/2016	0	0	0	600	609	

psi: pounds per square inch

APPENDIX 1: Daily Injection Pressures
DDW-1 2nd Quarter 2016
Lost Creek ISR Project 13-409



APPENDIX 1: Daily Injection Pressures
DDW-3 2nd 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
4/1/2016	813	845	876	910	915	
4/2/2016	767	799	829	910	915	
4/3/2016	828	869	900	910	915	
4/4/2016	804	854	900	900	915	
4/5/2016	785	809	862	900	915	
4/6/2016	844	875	912	900	915	
4/7/2016	829	864	903	900	915	
4/8/2016	846	876	911	900	915	
4/9/2016	828	859	901	900	915	
4/10/2016	832	875	***916***	900	915	Shutoff spike
4/11/2016	834	851	880	900	915	
4/12/2016	820	832	866	900	915	
4/13/2016	851	877	893	900	915	
4/14/2016	846	870	911	900	915	
4/15/2016	849	870	905	900	915	
4/16/2016	840	862	892	900	915	
4/17/2016	844	851	862	900	915	
4/18/2016	818	863	902	900	915	
4/19/2016	833	863	903	900	915	
4/20/2016	846	853	864	900	915	
4/21/2016	843	875	910	900	915	
4/22/2016	843	864	905	900	915	
4/23/2016	834	855	868	900	915	
4/24/2016	866	873	890	900	915	
4/25/2016	838	870	910	900	915	
4/26/2016	842	861	896	900	915	
4/27/2016	833	863	889	900	915	
4/28/2016	846	875	906	900	915	
4/29/2016	807	826	847	900	915	
4/30/2016	836	848	876	900	915	
5/1/2016	842	873	904	900	915	
5/2/2016	833	863	898	900	915	
5/3/2016	819	836	866	900	915	
5/4/2016	824	853	869	900	915	
5/5/2016	842	870	***917***	900	915	Shutoff spike
5/6/2016	838	863	897	900	915	
5/7/2016	838	860	915	900	915	
5/8/2016	842	862	907	900	915	
5/9/2016	814	867	***915***	900	915	Shutoff spike
5/10/2016	853	877	887	900	915	
5/11/2016	818	859	***918***	900	915	Shutoff spike
5/12/2016	-1	802	873	900	915	

APPENDIX 1: Daily Injection Pressures
DDW-3 2nd Quarter 2016
Lost Creek ISR Project 13-409

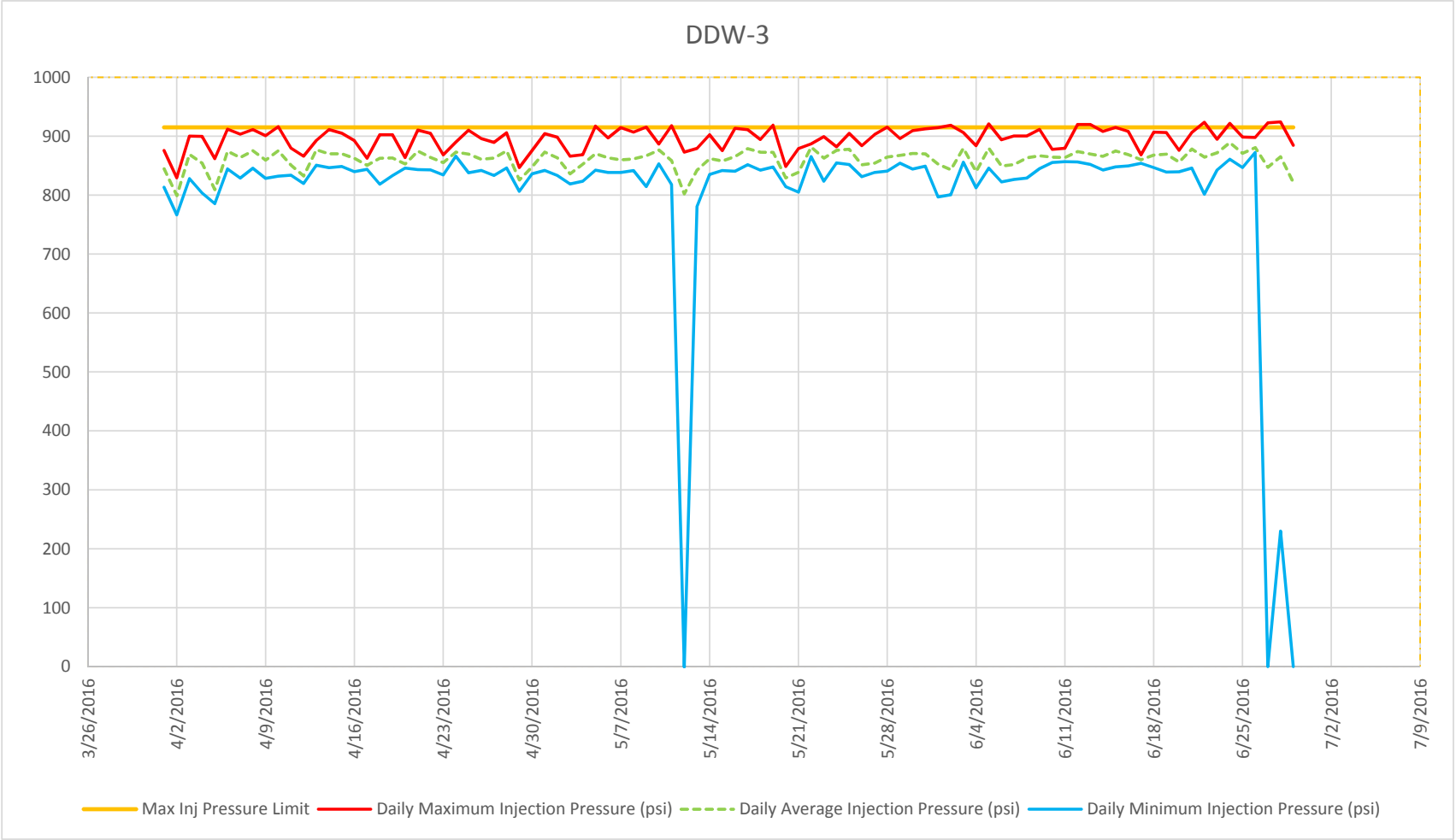
Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Automatic Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
5/13/2016	781	842	879	900	915	
5/14/2016	835	862	903	900	915	
5/15/2016	842	858	875	900	915	
5/16/2016	841	866	913	900	915	
5/17/2016	852	879	911	900	915	
5/18/2016	842	873	894	900	915	
5/19/2016	848	873	***919***	900	915	Shutoff spike
5/20/2016	814	829	849	900	915	
5/21/2016	805	839	879	900	915	
5/22/2016	865	882	887	900	915	
5/23/2016	824	863	899	900	915	
5/24/2016	855	876	882	900	915	
5/25/2016	852	878	905	900	915	
5/26/2016	831	852	884	900	915	
5/27/2016	838	854	903	900	915	
5/28/2016	841	865	***915***	900	915	Shutoff spike
5/29/2016	854	868	896	900	915	
5/30/2016	844	871	909	900	915	
5/31/2016	849	870	913	900	915	
6/1/2016	797	853	914	900	915	
6/2/2016	801	843	***918***	900	915	Shutoff spike
6/3/2016	856	880	906	900	915	
6/4/2016	812	840	884	900	915	
6/5/2016	846	880	***921***	900	915	Shutoff spike
6/6/2016	823	849	894	900	915	
6/7/2016	827	852	900	900	915	
6/8/2016	829	863	900	900	915	
6/9/2016	845	867	912	900	915	
6/10/2016	855	865	878	900	915	
6/11/2016	857	864	879	900	915	
6/12/2016	856	874	***920***	900	915	Shutoff spike
6/13/2016	852	870	***920***	900	915	Shutoff spike
6/14/2016	843	866	908	900	915	
6/15/2016	848	875	915	900	915	
6/16/2016	850	869	908	900	915	
6/17/2016	854	860	868	900	915	
6/18/2016	847	868	907	900	915	
6/19/2016	839	870	906	900	915	
6/20/2016	840	856	876	900	915	
6/21/2016	846	878	906	900	915	
6/22/2016	801	864	***924***	900	915	Shutoff spike
6/23/2016	843	872	895	900	915	

APPENDIX 1: Daily Injection Pressures
DDW-3 2nd 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
6/24/2016	861	889	***922***	900	915	Shutoff spike
6/25/2016	847	871	898	900	915	
6/26/2016	872	881	898	900	915	
6/27/2016	0	847	***923***	900	915	Shutoff spike
6/28/2016	230	865	***924***	900	915	Shutoff spike
6/29/2016	0	822	885	900	915	
6/30/2016	855	892	900	900	915	

psi: pounds per square inch

APPENDIX 1: Daily Injection Pressures
DDW-3 2nd Quarter 2016
Lost Creek ISR Project 13-409



APPENDIX 1: Daily Injection Pressures
DDW-4 2nd 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
4/1/2016	720	747	782	820	838	
4/2/2016	720	741	786	820	838	
4/3/2016	745	790	810	820	838	
4/4/2016	736	767	776	825	838	
4/5/2016	745	789	800	825	838	
4/6/2016	769	797	806	825	838	
4/7/2016	797	801	808	825	838	
4/8/2016	797	801	807	825	838	
4/9/2016	797	803	812	825	838	
4/10/2016	759	797	806	825	838	
4/11/2016	730	753	783	825	838	
4/12/2016	724	748	792	825	838	
4/13/2016	774	778	792	825	838	
4/14/2016	746	761	792	825	838	
4/15/2016	743	775	785	825	838	
4/16/2016	698	744	776	825	838	
4/17/2016	680	725	742	825	838	
4/18/2016	0	240	759	825	838	
4/19/2016	0	0	0	825	838	
4/20/2016	0	0	0	825	838	
4/21/2016	0	0	0	825	838	
4/22/2016	0	375	703	825	838	
4/23/2016	700	714	729	825	838	
4/24/2016	647	707	740	825	838	
4/25/2016	737	758	772	825	838	
4/26/2016	728	745	779	825	838	
4/27/2016	734	763	784	825	838	
4/28/2016	777	783	797	825	838	
4/29/2016	792	806	815	825	838	
4/30/2016	749	764	800	825	838	
5/1/2016	786	798	804	825	838	
5/2/2016	761	801	823	825	838	
5/3/2016	729	742	764	825	838	
5/4/2016	748	761	782	825	838	
5/5/2016	779	803	817	825	838	
5/6/2016	808	812	821	825	838	
5/7/2016	765	778	819	825	838	
5/8/2016	750	794	824	825	838	
5/9/2016	808	815	824	825	838	
5/10/2016	750	787	818	825	838	
5/11/2016	702	778	807	825	838	
5/12/2016	700	742	755	825	838	

APPENDIX 1: Daily Injection Pressures
DDW-4 2nd Quarter 2016
Lost Creek ISR Project 13-409

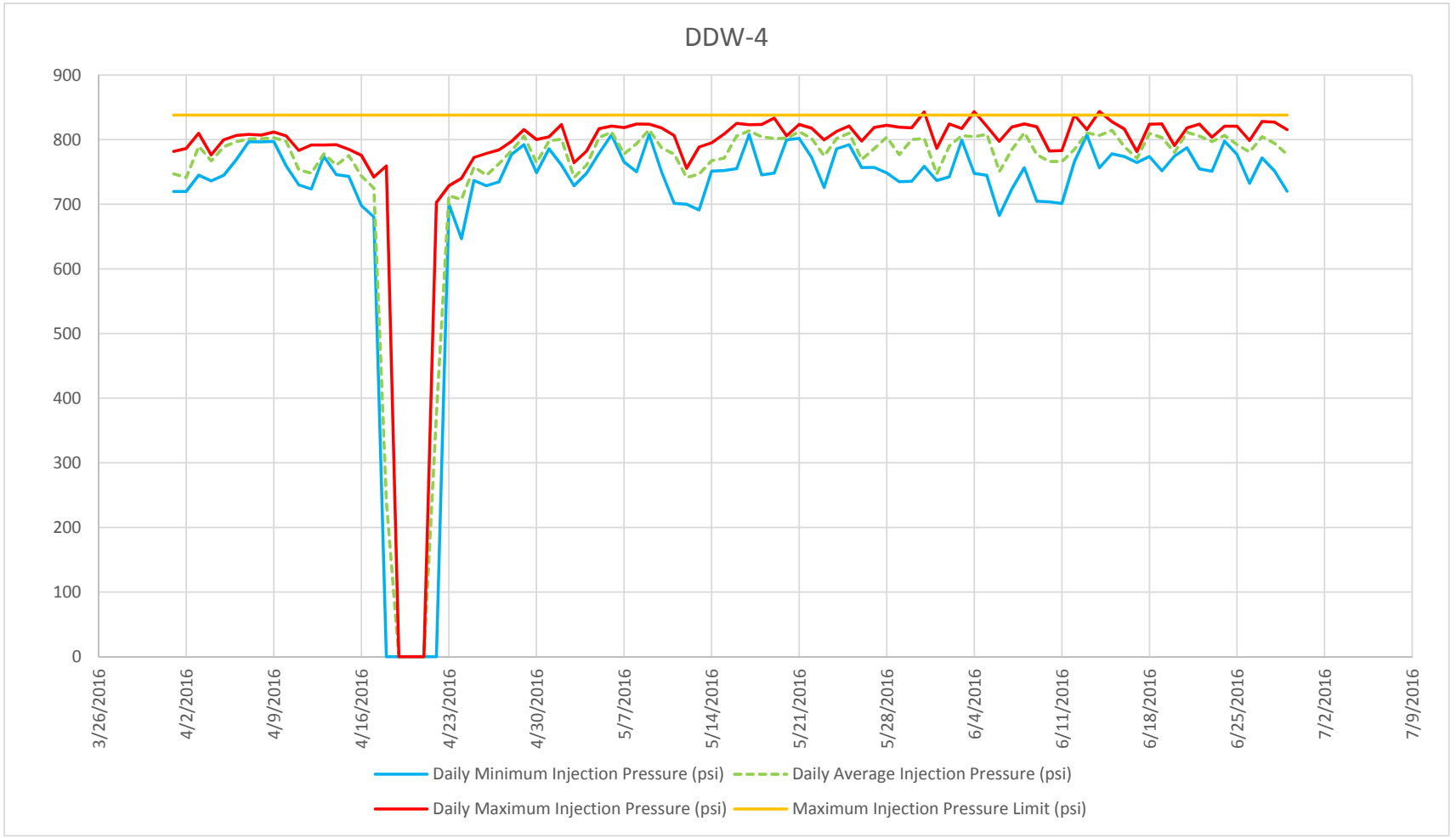
Date	Daily Minimum Injection Pressure (psi)	Daily Average Injection Pressure (psi)	Daily Maximum Injection Pressure (psi)	Shutdown Pressure (psi)	Maximum Injection Pressure Limit (psi)	Comments
5/13/2016	691	747	788	825	838	
5/14/2016	751	768	795	825	838	
5/15/2016	752	771	809	825	838	
5/16/2016	755	806	825	825	838	
5/17/2016	808	814	823	825	838	
5/18/2016	745	804	823	825	838	
5/19/2016	748	802	833	825	838	
5/20/2016	800	802	806	825	838	
5/21/2016	802	812	824	825	838	
5/22/2016	772	802	818	825	838	
5/23/2016	726	775	800	825	838	
5/24/2016	786	802	813	825	838	
5/25/2016	792	810	821	825	838	
5/26/2016	757	770	798	825	838	
5/27/2016	757	786	819	825	838	
5/28/2016	749	804	822	825	838	
5/29/2016	735	777	819	825	838	
5/30/2016	735	800	818	825	838	
5/31/2016	759	802	***843***	825	838	Shutoff spike
6/1/2016	737	747	786	825	838	
6/2/2016	742	790	824	825	838	
6/3/2016	799	806	817	825	838	
6/4/2016	748	805	***843***	825	838	Spike anomaly
6/5/2016	745	808	821	825	838	
6/6/2016	683	751	797	825	838	
6/7/2016	724	785	820	825	838	
6/8/2016	756	811	824	825	838	
6/9/2016	705	777	820	825	838	
6/10/2016	704	766	782	825	838	
6/11/2016	701	766	783	825	838	
6/12/2016	766	785	838	825	838	
6/13/2016	807	811	815	825	838	
6/14/2016	756	806	***844***	825	838	Shutoff spike
6/15/2016	778	815	828	825	838	
6/16/2016	774	789	816	825	838	
6/17/2016	765	771	781	825	838	
6/18/2016	774	810	824	825	838	
6/19/2016	752	803	824	825	838	
6/20/2016	774	780	791	825	838	
6/21/2016	788	812	818	825	838	
6/22/2016	755	806	824	825	838	
6/23/2016	751	797	804	825	838	

APPENDIX 1: Daily Injection Pressures
DDW-4 2nd 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
6/24/2016	798	807	821	825	838	
6/25/2016	777	793	821	825	838	
6/26/2016	732	781	799	825	838	
6/27/2016	772	805	828	825	838	
6/28/2016	752	794	827	825	838	
6/29/2016	720	777	815	825	838	
6/30/2016	785	801	814	825	838	

psi: pounds per square inch

APPENDIX 1: Daily Injection Pressures
DDW-4 2nd Quarter 2016
Lost Creek ISR Project 13-409



APPENDIX 2

ANALYTICAL SUMMARY REPORT

May 25, 2016

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

Work Order: C16050480

Project Name: Lost Creek Waste Water

Energy Laboratories, Inc. Casper WY received the following 2 samples for UR Energy USA Inc on 5/12/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16050480-001	DW-Injectate	05/12/16 09:10	05/12/16	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
C16050480-002	DW-Injectate 2	05/12/16 09:15	05/12/16	Aqueous	Same As Above

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: C16050480-001
Client Sample ID: DW-Injectate

Report Date: 05/25/16
Collection Date: 05/12/16 09:10
DateReceived: 05/12/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO3	ND	mg/L		5		A2320 B	05/17/16 23:34 / wc
Bicarbonate as HCO3	296	mg/L		5		A2320 B	05/17/16 23:34 / wc
Chloride	35000	mg/L	D	100		E300.0	05/18/16 20:17 / wc
Sulfate	1400	mg/L	D	400		E300.0	05/18/16 20:17 / wc
NON-METALS							
Sulfide	ND	mg/L		1		A4500-S F	05/17/16 11:46 / ljl
- Sample contains an oxidizer which interferes with the sulfide preservation and detection.							
PHYSICAL PROPERTIES							
Conductivity @ 25 C	70700	umhos/cm	E	5		A2510 B	05/18/16 12:47 / mag
pH	6.89	s.u.	H	0.01		A4500-H B	05/18/16 12:47 / mag
Solids, Total Dissolved TDS @ 180 C	49900	mg/L		500		A2540 C	05/16/16 11:44 / mag
Specific Gravity 60/60F	1.033	unitless				Calculation	05/24/16 12:56 / smm
METALS - TOTAL							
Arsenic	0.052	mg/L	D	0.004		E200.8	05/23/16 19:16 / sf
Selenium	0.602	mg/L	D	0.003		E200.8	05/23/16 19:16 / sf
Uranium	16.9	mg/L	D	0.0008		E200.8	05/23/16 19:16 / sf
Vanadium	0.03	mg/L		0.01		E200.8	05/23/16 19:16 / sf
RADIONUCLIDES - TOTAL							
Radium 226	2530	pCi/L				E903.0	05/24/16 07:08 / dmf
Radium 226 precision (±)	474	pCi/L				E903.0	05/24/16 07:08 / dmf
Radium 226 MDC	0.23	pCi/L				E903.0	05/24/16 07:08 / 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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Project: Lost Creek Waste Water
Lab ID: C16050480-002
Client Sample ID: DW-Injectate 2

Report Date: 05/25/16
Collection Date: 05/12/16 09:15
DateReceived: 05/12/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO3	ND	mg/L		5		A2320 B	05/17/16 23:41 / wc
Bicarbonate as HCO3	297	mg/L		5		A2320 B	05/17/16 23:41 / wc
Chloride	30400	mg/L	D	100		E300.0	05/18/16 21:10 / wc
Sulfate	1380	mg/L	D	400		E300.0	05/18/16 21:10 / wc
NON-METALS							
Sulfide	ND	mg/L		1		A4500-S F	05/17/16 11:55 / ljl
- Sample contains an oxidizer which interferes with the sulfide preservation and detection.							
PHYSICAL PROPERTIES							
Conductivity @ 25 C	70500	umhos/cm	E	5		A2510 B	05/18/16 12:50 / mag
pH	6.75	s.u.	H	0.01		A4500-H B	05/18/16 12:50 / mag
Solids, Total Dissolved TDS @ 180 C	48400	mg/L	H	500		A2540 C	05/19/16 13:20 / mag
Specific Gravity 60/60F	1.032	unitless				Calculation	05/24/16 12:56 / smm
- H-Original analysis was done within hold time. Data is from recheck analysis.							
METALS - TOTAL							
Arsenic	0.045	mg/L	D	0.004		E200.8	05/23/16 19:22 / sf
Selenium	0.602	mg/L	D	0.003		E200.8	05/23/16 19:22 / sf
Uranium	17.7	mg/L	D	0.0008		E200.8	05/23/16 19:22 / sf
Vanadium	0.03	mg/L		0.01		E200.8	05/23/16 19:22 / sf
RADIONUCLIDES - TOTAL							
Radium 226	1390	pCi/L				E903.0	05/24/16 07:08 / dmf
Radium 226 precision (±)	260	pCi/L				E903.0	05/24/16 07:08 / dmf
Radium 226 MDC	0.23	pCi/L				E903.0	05/24/16 07:08 / 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
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B										Batch: R211793
Lab ID: MBLK	2	Method Blank				Run: MANTECH_160518A			05/17/16 15:39	
Carbonate as CO3		ND	mg/L	1						
Bicarbonate as HCO3		3	mg/L	1						
Lab ID: C16050426-006ADUP	2	Sample Duplicate				Run: MANTECH_160518A			05/17/16 17:28	
Carbonate as CO3		1890	mg/L	5.0				2.2	10	
Bicarbonate as HCO3		ND	mg/L	5.0					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
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B										Batch: R211786
Lab ID: SC 100		Initial Calibration Verification Standard				Run: PHSC_101-C_160518A				05/18/16 10:46
Conductivity @ 25 C		100	umhos/cm	5.0	100	90	110			
Lab ID: SC 2ND 1413		Laboratory Control Sample				Run: PHSC_101-C_160518A				05/18/16 10:58
Conductivity @ 25 C		1400	umhos/cm	5.0	99	90	110			
Lab ID: MBLK		Method Blank				Run: PHSC_101-C_160518A				05/18/16 12:38
Conductivity @ 25 C		ND	umhos/cm	4						
Lab ID: C16050476-001ADUP		Sample Duplicate				Run: PHSC_101-C_160518A				05/18/16 12:44
Conductivity @ 25 C		2400	umhos/cm	5.0				0.8	10	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS160516C
Lab ID: MB-1_160516C		Method Blank				Run: BAL-18_160516D				05/16/16 11:32
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	8						
Lab ID: LCS-2_160516C		Laboratory Control Sample				Run: BAL-18_160516D				05/16/16 11:33
Solids, Total Dissolved TDS @ 180 C		1080	mg/L	11	98	90	110			
Lab ID: C16050464-001A DUP		Sample Duplicate				Run: BAL-18_160516D				05/16/16 11:34
Solids, Total Dissolved TDS @ 180 C		1660	mg/L	20				0.1	5	
Method: A2540 C										Batch: TDS160519C
Lab ID: MB-1_160519C		Method Blank				Run: BAL-18_160519C				05/19/16 13:01
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	8						
Lab ID: LCS-2_160519C		Laboratory Control Sample				Run: BAL-18_160519C				05/19/16 13:02
Solids, Total Dissolved TDS @ 180 C		1070	mg/L	11	96	90	110			
Lab ID: C16050587-001A DUP		Sample Duplicate				Run: BAL-18_160519C				05/19/16 13:03
Solids, Total Dissolved TDS @ 180 C		2710	mg/L	39				0.4	5	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-H B**									Analytical Run: PHSC_101-C_160518A	
Lab ID: **pH 6.86**		Initial Calibration Verification Standard							05/18/16 10:43	
pH		6.87	s.u.	0.010	100	98	102			
Method: **A4500-H B**									Batch: R211786	
Lab ID: **C16050476-001ADUP**		Sample Duplicate				Run: PHSC_101-C_160518A			05/18/16 12:44	
pH		7.49	s.u.	0.010				0.0	3	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-S F**									Analytical Run: TITRATION_160517A	
Lab ID: **ICV**		Initial Calibration Verification Standard							05/17/16 11:39	
Sulfide		118	mg/L	1.0	100	80	120			
Method: **A4500-S F**									Batch: 160517-SULFIDE-TTR-W	
Lab ID: **MBLK7-160517**		Method Blank				Run: TITRATION_160517A			05/17/16 11:36	
Sulfide		ND	mg/L	0.4						
Lab ID: **C16050480-002CMS**		Sample Matrix Spike				Run: TITRATION_160517A			05/17/16 12:00	
Sulfide		21.8	mg/L	1.0	92	80	120			
Lab ID: **C16050480-002CMSD**		Sample Matrix Spike Duplicate				Run: TITRATION_160517A			05/17/16 12:06	
Sulfide		21.4	mg/L	1.0	90	80	120	1.8	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
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 47514
Lab ID: MB-47514	4	Method Blank				Run: ICPMS4-C_160520A				05/21/16 00:27
Arsenic		ND	mg/L	4E-05						
Selenium		ND	mg/L	2E-05						
Uranium		0.0002	mg/L	4E-06						
Vanadium		ND	mg/L	5E-05						
Lab ID: LCS3-47514	4	Laboratory Control Sample				Run: ICPMS4-C_160520A				05/21/16 00:33
Arsenic		0.523	mg/L	0.0010	105	85	115			
Selenium		0.511	mg/L	0.0010	102	85	115			
Uranium		0.498	mg/L	0.00030	100	85	115			
Vanadium		0.484	mg/L	0.010	97	85	115			
Lab ID: C16050475-022BMS3	4	Sample Matrix Spike				Run: ICPMS4-C_160520A				05/21/16 01:24
Arsenic		0.532	mg/L	0.0010	106	70	130			
Selenium		0.541	mg/L	0.0010	108	70	130			
Uranium		0.565	mg/L	0.00030	108	70	130			
Vanadium		0.572	mg/L	0.010	114	70	130			
Lab ID: C16050475-022BMSD	4	Sample Matrix Spike Duplicate				Run: ICPMS4-C_160520A				05/21/16 01:31
Arsenic		0.526	mg/L	0.0010	105	70	130	1.2	20	
Selenium		0.522	mg/L	0.0010	104	70	130	3.6	20	
Uranium		0.578	mg/L	0.00030	111	70	130	2.3	20	
Vanadium		0.564	mg/L	0.010	113	70	130	1.4	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
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS4-C_160523A	
Lab ID: ICV	4	Initial Calibration Verification Standard							05/23/16 15:38	
Arsenic		0.0497	mg/L	0.0010	99	90	110			
Selenium		0.0505	mg/L	0.0010	101	90	110			
Uranium		0.0502	mg/L	0.00030	100	90	110			
Vanadium		0.0489	mg/L	0.0010	98	90	110			
Lab ID: ICV	4	Initial Calibration Verification Standard							05/24/16 13:15	
Arsenic		0.0501	mg/L	0.0010	100	90	110			
Selenium		0.0504	mg/L	0.0010	101	90	110			
Uranium		0.0487	mg/L	0.00030	97	90	110			
Vanadium		0.0489	mg/L	0.0010	98	90	110			
Lab ID: ICV	4	Initial Calibration Verification Standard							05/24/16 20:19	
Arsenic		0.0491	mg/L	0.0010	98	90	110			
Selenium		0.0490	mg/L	0.0010	98	90	110			
Uranium		0.0485	mg/L	0.00030	97	90	110			
Vanadium		0.0490	mg/L	0.0010	98	90	110			
Method: E200.8									Batch: 47514	
Lab ID: MB-47514	4	Method Blank				Run: ICPMS4-C_160523A			05/24/16 21:27	
Arsenic		ND	mg/L	4E-05						
Selenium		0.0009	mg/L	2E-05						
Uranium		0.0002	mg/L	4E-06						
Vanadium		ND	mg/L	5E-05						
Lab ID: LCS3-47514	4	Laboratory Control Sample				Run: ICPMS4-C_160523A			05/24/16 21:34	
Arsenic		0.516	mg/L	0.0010	103	85	115			
Selenium		0.515	mg/L	0.0010	103	85	115			
Uranium		0.465	mg/L	0.00030	93	85	115			
Vanadium		0.535	mg/L	0.010	107	85	115			

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
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: IC1-C_160518A	
Lab ID: ICV	2	Initial Calibration Verification Standard							05/18/16 17:58	
Chloride		9.94	mg/L	1.0	99	90	110			
Sulfate		40.0	mg/L	1.0	100	90	110			
Lab ID: CCV-160519-1	2	Continuing Calibration Verification Standard							05/18/16 18:50	
Chloride		9.80	mg/L	1.0	98	90	110			
Sulfate		39.6	mg/L	1.0	99	90	110			
Method: E300.0									Batch: R211852	
Lab ID: ICB	2	Method Blank				Run: IC1-C_160518A			05/18/16 18:15	
Chloride		ND	mg/L	0.01						
Sulfate		0.10	mg/L	0.06						
Lab ID: LFB-160519-1	2	Laboratory Fortified Blank				Run: IC1-C_160518A			05/18/16 18:33	
Chloride		9.22	mg/L	1.0	92	90	110			
Sulfate		37.5	mg/L	1.0	94	90	110			
Lab ID: C16050480-001AMS	2	Sample Matrix Spike				Run: IC1-C_160518A			05/18/16 20:35	
Chloride		40700	mg/L	100	57	90	110			S
Sulfate		41200	mg/L	420	99	90	110			
- Matrix spike recoveries outside the acceptance range are considered matrix-related.										
Lab ID: C16050480-001AMSD	2	Sample Matrix Spike Duplicate				Run: IC1-C_160518A			05/18/16 20:52	
Chloride		40700	mg/L	100	57	90	110	0.0	20	S
Sulfate		40900	mg/L	420	99	90	110	0.6	20	
- Matrix spike recoveries outside the acceptance range are considered matrix-related.										
Lab ID: LFB-160519-2	2	Laboratory Fortified Blank				Run: IC1-C_160518A			05/19/16 08:30	
Chloride		10.5	mg/L	1.0	105	90	110			
Sulfate		43.0	mg/L	1.0	107	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: UR Energy USA Inc
Report Date: 05/25/16
Project: Lost Creek Waste Water
Work Order: C16050480

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-8109
Lab ID: LCS-RA226-8109		Laboratory Control Sample				Run: G5000W_160518B				05/24/16 07:07
Radium 226		10	pCi/L		97	80	120			
Lab ID: MB-RA226-8109	3	Method Blank				Run: G5000W_160518B				05/24/16 07:07
Radium 226		0.2	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C16050566-005DMS		Sample Matrix Spike				Run: G5000W_160518B				05/24/16 08:42
Radium 226		3400	pCi/L		354	70	130			S
Lab ID: C16050566-005DMSD		Sample Matrix Spike Duplicate				Run: G5000W_160518B				05/24/16 08:42
Radium 226		3600	pCi/L		1170	70	130	5.5	47.4	S

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

Work Order Receipt Checklist

UR Energy USA Inc

C16050480

Login completed by: Dorian Quis
Date Received: 5/12/2016

Reviewed by: BL2000\dblaida
Received by: res

Reviewed Date: 5/16/2016
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all 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? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	11.7°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

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

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: UR-ENERGY	Project Name, PWS, Permit, Etc.: LOST CREEK WASTE WATER	Sample Origin State: WY	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address (Required): 5880 ENTERPRISE SUITE 200 CASPER WY 82609 ❑ No Hard Copy Email:	Contact Name: MIKE GAITHER Phone/Fax: (307) 265-2373 X321 Cell:		Sampler: (Please Print) MKG.
	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:

Invoice Address (Required): ❑ No Hard Copy Email:

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format:
☐ State: ☐ LEVEL IV
☐ Other: ☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

ANALYSIS REQUESTED

Standard Turnaround (TAT) ☑

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Hand
Cooler ID(s):
Receipt Temp 12.04 / 11.7 °C
On Ice: 5/12/16
Custody Seal On Bottle Y (N) On Cooler Y (N)
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	A	H / cond.	Bicarb / carb.	Chloride	Sulfate	Hardness as CaCO3	Specific Gravity	Total Diss Solids	As, Se, V, U (comb)	Ra-226 (comb)	SEE ATTACHED	Standard TAT	RUSH	Comments
1	DW - INJECTATE	5/12/2016	0910	W	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
2	DW - INJECTATE 2	5/12/2016	0915	W	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
3																		C1605 0480
4																		
5																		
6																		
7																		
8																		
9																		
10																		

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print): M. GAITHER	Date/Time: 5/12/2016 1639	Signature:	
Relinquished by (print):	Date/Time:	Signature:	
Sample Disposal: Return to Client:	Lab Disposal:		
Received by (print):	Date/Time:	Signature:	
Received by (print):	Date/Time:	Signature:	
Received by Laboratory:	Date/Time: 5/12/16 16:37	Signature: Ralph Stanley	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.