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LOST CREEK ISR, LLC

April 28, 2017

Brian Wood
State of Wyoming Department of Environmental Quality
Land Quality Division
510 Meadowview Drive
Lander, WY 82520

**Re: 1st Quarter 2017 Report for the Lost Creek ISR Project
Permit #788 (BLM WYW-166318)**

Dear Mr. Wood,

This Quarterly Report for the 1st calendar quarter of 2017 for the Lost Creek ISR Project has been submitted pursuant to Wyoming Department of Environmental Quality - Land Quality Division (LQD) Rules and Regulations Chapter 11 Section 15(b) to provide a summary of:

- *Mechanical Integrity Testing (Ch11 Sect 15(b)(ii)).*
- *Wellfield Monitoring and Water Quality (Ch11 Sect 14).*

Mechanical Integrity Testing

A total of 13 Mechanical Integrity Tests (MIT) were performed on a total of 13 wells in accordance with the approved Permit Operations Plan Section 3.4. Results are summarized on **Attachment 1**. The MITs resulted in 13 successful tests with no failures. The MITs for the quarter were 5-year retests.

Wellfield Monitoring

Wellfield injection and production in Mine Unit 1 (MU1) continued throughout the quarter with thirteen (13) header houses in operation as of the end of the quarter. Lixiviant was generated by the addition of carbon dioxide (CO₂), and oxygen (O₂) to the injection stream. In February, peroxide was tested as a substituted for oxygen in the HH1-13 area wells. The test proved ineffective in increasing the uranium concentration in production fluid and was discontinued. The use of peroxide as an oxidizing agent is approved for use by the Permit.

The injection rates and pressures for each header house manifold are provided on **Attachment 2**. Additionally, production flow (PC), injection flow (IC), bleed values, and number of wells injecting are also represented. The bleed rate percentage is calculated by dividing the bleed rate by the production rate and multiplying by 100. Main bleed is diverted in a metered line directly from the injection circuit line. Additional bleed is determined by accounting for the swab water generated from the wellfield and converting the volume to a flow rate equivalent. Bleed water is either recycled for Plant process use or is sent directly to the waste water stream.

Groundwater level data collected from Mine Unit 1 (MU1) and regional monitoring wells is included in **Attachment 3**. Water levels for MU1 were measured semi-monthly in conjunction with routine excursion groundwater sampling for the ring, overlying, and underlying monitor wells. Quarterly water levels were collected from regional wells (“LC” and “MB” wells). The wells experienced typical fluctuation in water levels for most “MO” wells and no significant changes occurred for “MU” wells. Fluctuations are typical for the “M” wells but more pronounced since they are more directly affected by water balance in the wellfield.

More pronounced changes in water level occurred in some MO wells as a result of additional pumping for restoring nominal water quality in MO-108 and vicinity. The recompleted well 11284 had been pumped to restore nominal water quality in the area likely as a result of the failed MIT (as described in previous quarterly report). The groundwater level was allowed to recover in the area during the time Header House 1-6 (HH1-6) was off. The water levels were allowed to equilibrate so that upon restart of HH1-6 observations could be made to determine if the back-plugging of wells 11181 and 11284 was effective in preventing leakage into the FG horizon. No significant effects on water levels was observed following the restart of HH1-6 in February and nominal operation of HH1-6 was eventually restored near the end of February.

Water quality and quality control (QC) results from routine groundwater quality monitoring, as described in the Permit Operations Plan Section 3.6.4, is included as **Attachment 4**. Excursion monitoring parameters include alkalinity, chloride, and specific conductance for which associated Upper Control Limits (UCLs) have been established by well group (i.e. ring, overlying, and underlying wells).

No analytical results exceeded the associated UCL during the quarter. Samples were not collected from MO-108 for most of the quarter during aquifer equilibration. A sample was not collected from M-106 for the first sampling event in March since the well was not accessible due to snowmelt runoff. Samples were not collected from the regional DE horizon wells LC29M and MB-10 due to lack of water in the wells.

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

Sincerely,



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

- Attachments: **Attachment 1: Mechanical Integrity Testing**
Attachment 2: Operational Flow Summary
Attachment 3: Groundwater Level Measurement Data
Attachment 4: MU1 Water Quality Data

Cc: Mr. Mark Newman, BLM Rawlins Field Office
Mr. John Saxton, NRC (via e-mail)
Ms. Theresa Horne, Ur-Energy, Littleton Office (via e-mail)

**Attachment 1: Mechanical Integrity Testing
1st Quarter 2017
Lost Creek ISR Project PT788**

	Well ID	Well Type	MIT ⁽¹⁾ Date	P/F	P&A ⁽²⁾ Date	Comments
1	MP112	I	3/29/2017	Pass	N/A	5 year MIT
2	1I114	I	3/27/2017	Pass	N/A	5 year MIT
3	1I128	I	3/28/2017	Pass	N/A	5 year MIT
4	1I135	I	3/28/2017	Pass	N/A	5 year MIT
5	1I121	I	3/29/2017	Pass	N/A	5 year MIT
6	1I115	I	3/29/2017	Pass	N/A	5 year MIT
7	1I104	I	3/24/2017	Pass	N/A	5 year MIT
8	1I125	I	3/22/2017	Pass	N/A	5 year MIT
9	1I126	I	3/28/2017	Pass	N/A	5 year MIT
10	1I124	I	3/22/2017	Pass	N/A	5 year MIT
11	1I127	I	3/28/2017	Pass	N/A	5 year MIT
12	1I112	I	3/30/2017	Pass	N/A	5 year MIT
13	1I116	I	3/30/2017	Pass	N/A	5 year MIT

13 Total MITs
13 Pass
0 Fails
13 Wells Tested
0 Net Failed Wells

(1) MIT method for "Monitoring Wells" as described in WDEQ Permit #788 Operations Plan Section 3.4. Test performed by using packer(s) to isolate casing and then pressurize well.

(2) Plugging and abandonment (P&A) according to WDEQ Permit #788 Reclamation Plan Section 3.1

I: Class III Injection Well

P: Production Well

M: Monitor Well

**Attachment 2: Plant Operational Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Production Flow Rate (avg gpm)	Injection Flow Rate (avg gpm)	Main Bleed Flow Rate (avg gpm)	Alternate Bleed* (equiv. gpm)	Total Bleed Rate (%)	Comments
1/1/2017	2283	2270	12.7	---	0.56%	
1/2/2017	2269	2256	12.7	---	0.56%	
1/3/2017	2238	2226	12.6	---	0.56%	
1/4/2017	2288	2275	12.7	---	0.56%	
1/5/2017	2315	2301	12.9	---	0.56%	
1/6/2017	2308	2293	13.0	---	0.56%	
1/7/2017	2297	2283	12.9	---	0.56%	
1/8/2017	2297	2283	12.8	---	0.56%	
1/9/2017	2291	2275	13.0	---	0.57%	
1/10/2017	2291	2277	12.9	---	0.56%	
1/11/2017	2279	2266	12.8	---	0.56%	
1/12/2017	2299	2286	12.8	---	0.56%	
1/13/2017	2296	2283	12.8	---	0.56%	
1/14/2017	2280	2270	12.8	---	0.56%	
1/15/2017	2269	2261	12.7	---	0.56%	
1/16/2017	2294	2283	12.7	---	0.55%	
1/17/2017	2260	2245	13.0	---	0.57%	
1/18/2017	2296	2281	12.8	---	0.56%	
1/19/2017	2298	2283	12.8	---	0.56%	
1/20/2017	2334	2317	13.1	---	0.56%	
1/21/2017	2328	2313	13.3	---	0.57%	
1/22/2017	2304	2289	13.3	---	0.58%	
1/23/2017	2374	2361	13.1	---	0.55%	
1/24/2017	2414	2402	13.3	---	0.55%	
1/25/2017	2429	2416	13.4	---	0.55%	
1/26/2017	2468	2457	13.9	---	0.56%	
1/27/2017	2488	2479	14.0	---	0.56%	
1/28/2017	2488	2478	13.9	---	0.56%	
1/29/2017	2480	2469	14.0	---	0.56%	
1/30/2017	2502	2488	13.9	---	0.56%	
1/31/2017	2506	2487	14.0	---	0.56%	
2/1/2017	2459	2445	13.6	---	0.55%	
2/2/2017	2546	2534	9.8	6.8	0.65%	
2/3/2017	2522	2509	13.5	1.2	0.58%	
2/4/2017	2491	2478	14.0	---	0.56%	
2/5/2017	2431	2416	13.9	---	0.57%	
2/6/2017	2244	2229	13.7	---	0.61%	
2/7/2017	1599	1591	9.9	---	0.62%	
2/8/2017	1705	1731	10.6	---	0.62%	
2/9/2017	2461	2453	10.7	4.7	0.62%	
2/10/2017	2411	2400	13.0	---	0.54%	
2/11/2017	2432	2420	13.5	---	0.55%	
2/12/2017	2424	2413	13.5	---	0.56%	
2/13/2017	2439	2431	10.3	5.1	0.63%	
2/14/2017	2489	2480	12.7	1.9	0.59%	
2/15/2017	2482	2470	12.6	1.8	0.58%	
2/16/2017	2471	2459	12.1	2.4	0.59%	
2/17/2017	2464	2451	13.8	---	0.56%	
2/18/2017	2456	2443	13.7	---	0.56%	
2/19/2017	2375	2363	13.4	---	0.56%	

Attachment 2: Plant Operational Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788

Date	Production Flow Rate (avg gpm)	Injection Flow Rate (avg gpm)	Main Bleed Flow Rate (avg gpm)	Alternate Bleed* (equiv. gpm)	Total Bleed Rate (%)	Comments
2/20/2017	2418	2406	12.5	1.8	0.59%	
2/21/2017	2436	2424	12.0	2.5	0.60%	
2/22/2017	2473	2463	12.4	2.2	0.59%	
2/23/2017	2498	2486	14.2	---	0.57%	
2/24/2017	2487	2475	13.9	---	0.56%	
2/25/2017	2475	2462	13.8	---	0.56%	
2/26/2017	2497	2487	13.8	---	0.55%	
2/27/2017	2502	2493	13.2	1.3	0.58%	
2/28/2017	2487	2479	14.0	---	0.56%	
3/1/2017	2464	2455	13.9	---	0.57%	
3/2/2017	2447	2440	13.7	---	0.56%	
3/3/2017	2457	2449	13.7	---	0.56%	
3/4/2017	2465	2456	13.6	---	0.55%	
3/5/2017	2471	2461	13.7	---	0.55%	
3/6/2017	2463	2454	13.6	---	0.55%	
3/7/2017	2465	2458	13.0	---	0.53%	
3/8/2017	2458	2448	14.0	---	0.57%	
3/9/2017	2452	2444	12.4	2.2	0.60%	
3/10/2017	2496	2487	12.2	2.4	0.59%	
3/11/2017	2388	2379	13.4	---	0.56%	
3/12/2017	2486	2476	13.9	---	0.56%	
3/13/2017	2491	2485	10.6	5.0	0.63%	
3/14/2017	2474	2468	10.5	4.9	0.62%	
3/15/2017	2462	2447	14.0	---	0.57%	
3/16/2017	2453	2436	14.0	---	0.57%	
3/17/2017	2448	2430	13.7	---	0.56%	
3/18/2017	2433	2416	13.8	---	0.57%	
3/19/2017	2411	2394	13.8	---	0.57%	
3/20/2017	2402	2384	13.7	---	0.57%	
3/21/2017	2394	2377	13.6	---	0.57%	
3/22/2017	2408	2392	12.6	1.3	0.58%	
3/23/2017	2389	2372	13.3	---	0.56%	
3/24/2017	2376	2359	13.3	---	0.56%	
3/25/2017	2356	2339	13.4	---	0.57%	
3/26/2017	2344	2327	13.2	---	0.56%	
3/27/2017	2301	2284	13.1	---	0.57%	
3/28/2017	2323	2310	9.6	4.8	0.62%	
3/29/2017	2360	2344	12.1	8.7	0.88%	
3/30/2017	2375	2359	12.8	---	0.54%	
3/31/2017	2377	2359	15.5	---	0.65%	

NOTE: Flow rates are normalized to a 24 hr period.

gpm: gallons per minute

*Wellfield swab water discharge to ponds - volume converted to equivalent flow rate

**Attachment 2: HH1-1 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	10	83	16	2	1	
1/2/2017	10	79	17	2	1	
1/3/2017	10	79	17	2	1	
1/4/2017	10	82	16	2	1	
1/5/2017	10	81	17	2	1	
1/6/2017	10	86	16	2	1	
1/7/2017	10	87	16	2	1	
1/8/2017	10	86	16	2	1	
1/9/2017	10	87	15	2	1	
1/10/2017	10	86	16	2	1	
1/11/2017	10	89	15	2	1	
1/12/2017	10	87	15	2	1	
1/13/2017	10	87	15	2	1	
1/14/2017	10	86	15	2	1	
1/15/2017	10	86	15	2	1	
1/16/2017	10	87	15	2	1	
1/17/2017	10	77	16	2	1	
1/18/2017	10	91	15	2	1	
1/19/2017	10	94	15	2	1	
1/20/2017	10	94	15	2	1	
1/21/2017	10	121	13	2	1	
1/22/2017	13	129	10	3	1	
1/23/2017	13	129	10	3	1	
1/24/2017	13	130	10	3	1	
1/25/2017	13	130	10	3	1	
1/26/2017	13	130	10	3	1	
1/27/2017	13	130	10	3	1	
1/28/2017	13	130	10	3	1	
1/29/2017	13	130	10	3	1	
1/30/2017	13	130	10	3	1	
1/31/2017	15	124	12	3	1	
2/1/2017	15	123	12	3	1	
2/2/2017	15	124	12	3	1	
2/3/2017	15	124	13	3	1	
2/4/2017	15	125	13	3	1	
2/5/2017	15	125	13	3	1	
2/6/2017	15	125	13	3	1	
2/7/2017	15	125	13	3	1	
2/8/2017	15	120	14	3	1	
2/9/2017	15	120	14	3	1	
2/10/2017	15	120	14	3	1	
2/11/2017	15	125	14	3	1	
2/12/2017	15	125	14	3	1	
2/13/2017	15	125	14	3	1	
2/14/2017	14	124	14	3	1	
2/15/2017	14	124	14	3	1	
2/16/2017	14	124	14	3	1	
2/17/2017	14	124	14	3	1	
2/18/2017	14	124	14	3	1	
2/19/2017	14	124	14	3	1	

**Attachment 2: HH1-1 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	14	125	13	3	1	
2/21/2017	13	129	12	3	1	
2/22/2017	14	125	12	3	1	
2/23/2017	14	125	12	3	1	
2/24/2017	14	124	12	3	1	
2/25/2017	14	124	12	3	1	
2/26/2017	14	124	12	3	1	
2/27/2017	14	124	12	3	1	
2/28/2017	14	125	12	3	1	
3/1/2017	14	125	12	3	1	
3/2/2017	12	125	12	3	1	
3/3/2017	12	124	12	3	1	
3/4/2017	12	124	12	3	1	
3/5/2017	12	125	12	3	1	
3/6/2017	12	125	13	3	1	
3/7/2017	12	125	13	3	1	
3/8/2017	12	125	13	3	1	
3/9/2017	12	125	13	3	1	
3/10/2017	12	125	13	3	1	
3/11/2017	12	125	13	3	1	
3/12/2017	12	125	13	3	1	
3/13/2017	12	125	13	3	1	
3/14/2017	12	125	13	3	1	
3/15/2017	12	125	13	3	1	
3/16/2017	12	125	13	3	1	
3/17/2017	12	125	13	3	1	
3/18/2017	12	125	13	3	1	
3/19/2017	12	125	13	3	1	
3/20/2017	12	125	13	3	1	
3/21/2017	12	125	13	3	1	
3/22/2017	12	125	13	3	1	
3/23/2017	12	125	13	5	1	
3/24/2017	12	125	13	5	1	
3/25/2017	12	125	13	5	1	
3/26/2017	12	125	13	5	1	
3/27/2017	12	125	13	5	1	
3/28/2017	12	125	13	5	1	
3/29/2017	12	125	13	5	1	
3/30/2017	12	125	13	5	1	
3/31/2017	12	125	13	5	1	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated fracture pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-2 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	0	128	25	0	2	
1/2/2017	0	128	25	0	2	
1/3/2017	0	48	25	0	2	
1/4/2017	0	48	25	0	2	
1/5/2017	0	123	25	0	2	
1/6/2017	0	122	25	0	2	
1/7/2017	0	123	25	0	2	
1/8/2017	0	123	25	0	2	
1/9/2017	0	123	25	0	2	
1/10/2017	0	118	25	0	2	
1/11/2017	0	120	25	0	2	
1/12/2017	0	120	25	0	2	
1/13/2017	0	121	25	0	2	
1/14/2017	0	121	25	0	2	
1/15/2017	0	121	25	0	2	
1/16/2017	0	121	25	0	2	
1/17/2017	0	123	25	0	3	
1/18/2017	0	121	25	0	2	
1/19/2017	0	123	25	0	2	
1/20/2017	0	123	25	0	2	
1/21/2017	30	125	24	10	2	
1/22/2017	30	125	24	10	2	
1/23/2017	30	125	24	11	2	
1/24/2017	36	125	23	15	2	
1/25/2017	36	125	23	15	2	
1/26/2017	36	118	25	15	2	
1/27/2017	36	122	25	15	2	
1/28/2017	39	121	25	18	4	
1/29/2017	38	121	25	18	4	
1/30/2017	38	121	25	18	4	
1/31/2017	38	121	25	18	3	
2/1/2017	37	122	25	18	3	
2/2/2017	37	121	25	18	3	
2/3/2017	37	127	25	18	3	
2/4/2017	37	122	25	18	3	
2/5/2017	37	122	25	18	3	
2/6/2017	37	121	25	18	3	
2/7/2017	37	119	25	18	3	
2/8/2017	38	129	28	17	2	
2/9/2017	38	129	28	17	2	
2/10/2017	37	128	29	17	2	
2/11/2017	39	126	26	18	2	
2/12/2017	38	122	26	18	2	
2/13/2017	38	121	27	18	2	
2/14/2017	38	126	26	18	2	
2/15/2017	38	122	27	18	2	
2/16/2017	37	122	27	18	2	
2/17/2017	37	122	26	18	2	
2/18/2017	37	122	26	18	2	
2/19/2017	37	122	25	18	2	

**Attachment 2: HH1-2 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	37	127	32	18	3	
2/21/2017	36	120	31	18	3	
2/22/2017	36	122	30	18	3	
2/23/2017	36	121	30	18	3	
2/24/2017	36	121	30	18	3	
2/25/2017	35	121	30	18	3	
2/26/2017	36	121	30	18	3	
2/27/2017	36	123	30	21	3	
2/28/2017	46	124	30	21	3	
3/1/2017	45	122	27	21	3	
3/2/2017	44	122	28	21	3	
3/3/2017	44	122	28	21	3	
3/4/2017	44	122	29	21	3	
3/5/2017	44	122	29	21	3	
3/6/2017	44	122	28	21	3	
3/7/2017	44	122	28	21	3	
3/8/2017	43	122	28	21	3	
3/9/2017	43	122	28	22	3	
3/10/2017	44	123	27	27	3	
3/11/2017	59	122	29	27	3	
3/12/2017	58	122	29	26	3	
3/13/2017	58	122	29	27	3	
3/14/2017	57	122	29	27	3	
3/15/2017	57	123	29	27	3	
3/16/2017	55	124	28	27	3	
3/17/2017	56	123	29	27	3	
3/18/2017	54	123	30	27	3	
3/19/2017	54	123	29	26	3	
3/20/2017	54	124	30	26	3	
3/21/2017	54	124	30	26	3	
3/22/2017	54	124	29	26	3	
3/23/2017	54	123	29	26	3	
3/24/2017	53	123	29	26	3	
3/25/2017	53	123	28	26	3	
3/26/2017	53	123	28	26	3	
3/27/2017	53	123	28	26	3	
3/28/2017	52	121	28	26	3	
3/29/2017	52	121	27	26	3	
3/30/2017	52	121	28	26	3	
3/31/2017	52	121	28	26	3	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-3 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	113	123	88	35	4	
1/2/2017	113	123	90	35	4	
1/3/2017	113	123	90	35	4	
1/4/2017	113	122	88	35	4	
1/5/2017	113	123	89	35	4	
1/6/2017	114	122	85	35	4	
1/7/2017	115	123	84	35	4	
1/8/2017	115	122	84	35	4	
1/9/2017	115	122	83	35	4	
1/10/2017	115	122	84	35	4	
1/11/2017	115	122	83	35	4	
1/12/2017	115	123	84	35	4	
1/13/2017	115	123	83	35	4	
1/14/2017	115	123	84	35	4	
1/15/2017	115	123	84	35	4	
1/16/2017	115	123	83	35	4	
1/17/2017	114	122	89	35	6	
1/18/2017	114	123	82	36	4	
1/19/2017	118	123	81	35	4	
1/20/2017	118	123	82	36	4	
1/21/2017	125	125	83	36	4	
1/22/2017	118	125	81	36	4	
1/23/2017	118	125	82	36	4	
1/24/2017	118	125	81	36	4	
1/25/2017	117	125	80	36	4	
1/26/2017	116	123	80	36	4	
1/27/2017	121	123	80	36	4	
1/28/2017	122	122	85	36	4	
1/29/2017	123	122	83	36	4	
1/30/2017	122	123	85	36	4	
1/31/2017	122	123	85	36	4	
2/1/2017	122	123	85	36	4	
2/2/2017	121	123	84	36	4	
2/3/2017	126	129	85	36	4	
2/4/2017	122	123	85	36	4	
2/5/2017	122	124	84	36	4	
2/6/2017	121	123	83	36	4	
2/7/2017	119	121	82	36	4	
2/8/2017	131	121	89	37	4	
2/9/2017	130	118	90	36	4	
2/10/2017	129	118	91	36	6	
2/11/2017	129	118	100	36	6	
2/12/2017	125	123	113	34	6	
2/13/2017	117	123	112	31	6	
2/14/2017	118	123	108	32	6	
2/15/2017	117	123	110	31	6	
2/16/2017	117	123	110	31	6	
2/17/2017	116	123	109	31	6	
2/18/2017	117	123	105	30	6	
2/19/2017	117	123	104	30	6	

**Attachment 2: HH1-3 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	118	123	104	32	6	
2/21/2017	118	123	102	32	6	
2/22/2017	117	123	101	31	6	
2/23/2017	117	123	101	31	6	
2/24/2017	116	123	101	31	6	
2/25/2017	116	123	100	31	6	
2/26/2017	116	123	102	31	6	
2/27/2017	116	122	102	32	6	
2/28/2017	117	122	100	31	6	
3/1/2017	116	122	95	30	6	
3/2/2017	117	123	97	31	6	
3/3/2017	117	123	95	32	6	
3/4/2017	117	123	97	32	6	
3/5/2017	117	123	98	31	6	
3/6/2017	117	123	96	30	6	
3/7/2017	117	123	96	33	6	
3/8/2017	119	123	96	34	6	
3/9/2017	120	122	96	32	6	
3/10/2017	121	122	94	36	6	
3/11/2017	120	123	97	36	6	
3/12/2017	120	123	97	36	6	
3/13/2017	120	123	98	36	6	
3/14/2017	120	123	98	35	6	
3/15/2017	115	124	95	35	7	
3/16/2017	114	124	104	35	7	
3/17/2017	114	125	107	35	7	
3/18/2017	114	124	107	36	7	
3/19/2017	114	125	107	35	7	
3/20/2017	113	125	108	35	7	
3/21/2017	113	125	109	35	7	
3/22/2017	113	125	106	35	7	
3/23/2017	113	124	107	35	7	
3/24/2017	112	123	106	35	7	
3/25/2017	112	123	104	35	7	
3/26/2017	112	123	104	35	7	
3/27/2017	111	123	104	34	7	
3/28/2017	102	124	101	30	7	
3/29/2017	101	124	101	28	7	
3/30/2017	101	123	102	27	7	
3/31/2017	101	123	102	26	7	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-4 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	102	121	90	31	4	
1/2/2017	98	122	72	31	3	
1/3/2017	98	123	94	32	3	
1/4/2017	101	121	89	32	4	
1/5/2017	101	122	88	32	4	
1/6/2017	101	121	103	32	4	
1/7/2017	101	122	104	32	4	
1/8/2017	100	122	87	31	4	
1/9/2017	100	122	84	31	4	
1/10/2017	99	122	86	31	4	
1/11/2017	97	123	87	31	4	
1/12/2017	95	123	106	30	3	
1/13/2017	94	123	107	31	3	
1/14/2017	94	124	88	31	3	
1/15/2017	94	123	105	31	3	
1/16/2017	94	123	105	31	3	
1/17/2017	93	123	115	31	8	
1/18/2017	92	124	96	35	6	
1/19/2017	129	120	149	35	6	
1/20/2017	125	121	150	35	6	
1/21/2017	127	124	151	35	6	
1/22/2017	127	125	152	35	6	
1/23/2017	115	115	145	35	6	
1/24/2017	126	109	140	35	6	
1/25/2017	126	109	140	37	8	
1/26/2017	141	118	175	40	8	
1/27/2017	160	125	177	40	8	
1/28/2017	159	124	184	40	8	
1/29/2017	157	124	183	38	8	
1/30/2017	155	124	185	38	8	
1/31/2017	153	125	184	37	8	
2/1/2017	152	126	182	37	8	
2/2/2017	120	131	175	38	8	
2/3/2017	115	128	176	38	8	
2/4/2017	122	127	164	41	8	
2/5/2017	122	123	178	38	8	
2/6/2017	120	124	172	39	8	
2/7/2017	118	122	170	39	8	
2/8/2017	118	124	129	27	5	
2/9/2017	116	123	130	27	5	
2/10/2017	115	123	131	28	6	
2/11/2017	127	118	125	28	6	
2/12/2017	134	123	145	30	6	
2/13/2017	129	125	129	29	6	
2/14/2017	132	124	147	28	6	
2/15/2017	133	123	149	30	6	
2/16/2017	128	125	129	30	6	
2/17/2017	132	124	146	30	6	
2/18/2017	131	124	143	30	6	
2/19/2017	130	124	142	28	6	

**Attachment 2: HH1-4 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	128	123	139	27	6	
2/21/2017	125	124	134	26	6	
2/22/2017	124	125	139	26	6	
2/23/2017	126	124	141	29	6	
2/24/2017	123	124	144	29	6	
2/25/2017	126	124	141	29	6	
2/26/2017	125	124	139	29	6	
2/27/2017	125	124	143	29	6	
2/28/2017	123	125	123	29	7	
3/1/2017	125	124	135	28	6	
3/2/2017	125	124	137	28	6	
3/3/2017	125	125	123	28	5	
3/4/2017	122	125	108	28	5	
3/5/2017	124	125	126	28	5	
3/6/2017	124	125	124	28	5	
3/7/2017	124	125	124	28	5	
3/8/2017	121	122	125	28	5	
3/9/2017	120	123	125	28	5	
3/10/2017	118	124	124	27	5	
3/11/2017	118	124	125	27	5	
3/12/2017	117	124	124	27	5	
3/13/2017	116	124	128	27	5	
3/14/2017	117	124	126	27	5	
3/15/2017	116	125	124	38	5	
3/16/2017	115	124	104	39	5	
3/17/2017	117	124	125	39	5	
3/18/2017	117	124	126	39	5	
3/19/2017	117	124	124	39	5	
3/20/2017	115	125	126	39	5	
3/21/2017	115	125	125	39	5	
3/22/2017	114	126	124	38	5	
3/23/2017	114	125	125	38	5	
3/24/2017	114	123	125	39	5	
3/25/2017	113	124	123	39	5	
3/26/2017	113	124	122	39	5	
3/27/2017	112	122	123	39	5	
3/28/2017	110	121	123	38	5	
3/29/2017	110	120	121	38	5	
3/30/2017	110	121	119	38	5	
3/31/2017	110	121	116	38	5	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-5 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	69	71	22	14	1	
1/2/2017	68	71	23	14	1	
1/3/2017	67	73	23	14	1	
1/4/2017	67	72	22	14	3	
1/5/2017	79	99	64	14	6	
1/6/2017	104	105	126	13	6	
1/7/2017	95	107	123	12	6	
1/8/2017	95	108	124	13	6	
1/9/2017	95	108	123	13	6	
1/10/2017	95	108	124	13	6	
1/11/2017	99	106	122	13	6	
1/12/2017	102	105	123	12	6	
1/13/2017	99	106	124	11	6	
1/14/2017	102	104	125	12	6	
1/15/2017	102	104	125	12	6	
1/16/2017	102	105	123	11	6	
1/17/2017	95	108	132	10	6	
1/18/2017	93	110	121	11	6	
1/19/2017	100	107	120	14	6	
1/20/2017	104	105	121	15	6	
1/21/2017	110	108	121	15	6	
1/22/2017	106	105	120	15	6	
1/23/2017	106	106	121	15	6	
1/24/2017	106	106	118	15	6	
1/25/2017	110	106	117	13	6	
1/26/2017	106	103	120	13	6	
1/27/2017	106	98	120	14	6	
1/28/2017	106	122	120	14	6	
1/29/2017	106	123	120	14	6	
1/30/2017	106	124	120	14	6	
1/31/2017	106	124	120	14	6	
2/1/2017	106	125	120	14	6	
2/2/2017	106	125	120	14	6	
2/3/2017	106	128	120	14	6	
2/4/2017	106	125	120	14	6	
2/5/2017	106	126	120	14	6	
2/6/2017	106	125	120	14	6	
2/7/2017	106	124	120	14	6	
2/8/2017	119	121	104	15	5	
2/9/2017	117	123	105	18	5	
2/10/2017	121	121	107	21	5	
2/11/2017	127	120	102	22	5	
2/12/2017	125	120	101	22	5	
2/13/2017	121	122	101	22	5	
2/14/2017	121	121	101	22	5	
2/15/2017	122	120	102	22	5	
2/16/2017	121	121	102	22	5	
2/17/2017	120	121	101	22	5	
2/18/2017	119	121	122	22	5	
2/19/2017	119	122	122	22	5	

**Attachment 2: HH1-5 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	107	120	123	21	5	
2/21/2017	107	120	119	21	5	
2/22/2017	105	121	118	20	5	
2/23/2017	101	120	117	18	5	
2/24/2017	100	121	117	18	5	
2/25/2017	99	121	117	18	5	
2/26/2017	99	121	118	18	5	
2/27/2017	98	121	118	18	6	
2/28/2017	104	117	138	18	7	
3/1/2017	105	120	155	18	7	
3/2/2017	102	123	159	20	7	
3/3/2017	101	118	159	18	7	
3/4/2017	99	119	162	18	7	
3/5/2017	99	119	162	18	7	
3/6/2017	99	119	160	18	7	
3/7/2017	99	119	159	18	7	
3/8/2017	98	119	159	19	7	
3/9/2017	98	119	159	19	7	
3/10/2017	96	121	156	22	7	
3/11/2017	112	121	163	21	7	
3/12/2017	112	121	163	20	7	
3/13/2017	112	121	165	20	7	
3/14/2017	111	121	164	20	7	
3/15/2017	110	121	161	21	7	
3/16/2017	113	125	158	21	7	
3/17/2017	111	125	163	21	7	
3/18/2017	113	125	163	21	7	
3/19/2017	112	125	162	21	7	
3/20/2017	112	125	164	21	7	
3/21/2017	112	125	164	21	7	
3/22/2017	111	125	161	21	7	
3/23/2017	111	125	162	21	7	
3/24/2017	111	125	160	21	7	
3/25/2017	111	125	159	21	7	
3/26/2017	110	126	159	21	7	
3/27/2017	110	126	159	21	7	
3/28/2017	109	124	158	22	7	
3/29/2017	127	116	158	22	7	
3/30/2017	128	116	158	22	7	
3/31/2017	127	116	159	22	7	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-6 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	0	0	0	0	0	
1/2/2017	0	0	0	0	0	
1/3/2017	0	0	0	0	0	
1/4/2017	0	0	0	0	0	
1/5/2017	0	0	0	0	0	
1/6/2017	0	0	0	0	0	
1/7/2017	0	0	0	0	0	
1/8/2017	0	0	0	0	0	
1/9/2017	0	0	0	0	0	
1/10/2017	0	0	0	0	0	
1/11/2017	0	0	0	0	0	
1/12/2017	0	0	0	0	0	
1/13/2017	0	0	0	0	0	
1/14/2017	0	0	0	0	0	
1/15/2017	0	0	0	0	0	
1/16/2017	0	0	0	7	2	
1/17/2017	55	126	77	7	11	
1/18/2017	0	89	0	0	0	
1/19/2017	0	3	0	0	0	
1/20/2017	0	1	0	0	0	
1/21/2017	0	0	0	0	0	
1/22/2017	0	0	0	0	0	
1/23/2017	0	0	0	0	0	
1/24/2017	0	0	0	0	0	
1/25/2017	0	0	0	0	0	
1/26/2017	0	0	0	0	0	
1/27/2017	0	0	0	0	0	
1/28/2017	0	0	0	0	0	
1/29/2017	0	0	0	0	0	
1/30/2017	0	0	0	0	0	
1/31/2017	0	0	0	0	0	
2/1/2017	0	0	0	0	0	
2/2/2017	0	0	0	0	2	
2/3/2017	0	0	0	0	2	
2/4/2017	0	0	7	0	2	
2/5/2017	0	0	3	0	2	
2/6/2017	0	0	2	0	2	
2/7/2017	0	0	5	0	2	
2/8/2017	0	0	15	0	2	
2/9/2017	0	2	2	0	2	
2/10/2017	18	129	32	4	4	
2/11/2017	28	92	73	7	4	
2/12/2017	29	84	72	7	4	
2/13/2017	31	93	69	7	4	
2/14/2017	36	95	72	11	4	
2/15/2017	65	101	99	11	4	
2/16/2017	64	101	100	17	4	
2/17/2017	63	103	97	17	4	
2/18/2017	61	104	94	17	4	
2/19/2017	60	105	94	17	4	

**Attachment 2: HH1-6 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	65	128	72	18	6	
2/21/2017	68	127	108	25	8	
2/22/2017	109	129	150	29	11	
2/23/2017	184	129	207	29	11	
2/24/2017	183	129	207	29	10	
2/25/2017	182	129	207	29	10	
2/26/2017	182	130	208	29	10	
2/27/2017	180	129	209	29	10	
2/28/2017	162	130	202	29	10	
3/1/2017	167	128	195	29	10	
3/2/2017	165	129	155	29	8	
3/3/2017	166	128	156	29	8	
3/4/2017	166	128	159	29	8	
3/5/2017	167	128	158	29	8	
3/6/2017	167	128	157	29	8	
3/7/2017	167	128	157	29	8	
3/8/2017	165	128	155	29	7	
3/9/2017	164	128	154	29	7	
3/10/2017	163	128	152	29	7	
3/11/2017	162	127	155	29	7	
3/12/2017	162	127	154	29	7	
3/13/2017	162	127	155	29	7	
3/14/2017	158	129	154	29	7	
3/15/2017	152	130	152	29	8	
3/16/2017	150	130	149	29	8	
3/17/2017	157	129	155	29	8	
3/18/2017	156	129	156	29	8	
3/19/2017	157	129	156	29	5	
3/20/2017	155	129	157	29	5	
3/21/2017	155	129	158	29	4	
3/22/2017	154	129	152	29	4	
3/23/2017	153	129	154	29	4	
3/24/2017	155	129	153	29	8	
3/25/2017	157	129	152	29	8	
3/26/2017	153	129	151	29	8	
3/27/2017	156	129	151	29	8	
3/28/2017	157	127	152	29	10	
3/29/2017	174	124	187	29	10	
3/30/2017	174	123	189	29	10	
3/31/2017	168	125	190	28	10	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-7 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	208	125	209	42	10	
1/2/2017	208	125	214	42	10	
1/3/2017	204	125	213	42	10	
1/4/2017	198	125	208	42	10	
1/5/2017	201	125	210	42	10	
1/6/2017	199	125	204	42	10	
1/7/2017	200	125	201	42	10	
1/8/2017	200	125	202	42	10	
1/9/2017	201	125	201	42	10	
1/10/2017	200	125	201	42	10	
1/11/2017	192	126	199	42	10	
1/12/2017	193	126	201	42	10	
1/13/2017	202	126	201	42	10	
1/14/2017	199	126	202	42	10	
1/15/2017	198	125	202	42	10	
1/16/2017	199	126	200	42	10	
1/17/2017	203	125	231	41	10	
1/18/2017	202	126	212	42	10	
1/19/2017	205	127	211	42	10	
1/20/2017	198	127	213	42	10	
1/21/2017	193	124	213	42	10	
1/22/2017	191	125	210	42	10	
1/23/2017	193	125	212	42	10	
1/24/2017	202	125	245	42	10	
1/25/2017	200	125	242	36	10	
1/26/2017	199	130	242	38	10	
1/27/2017	174	131	233	40	10	
1/28/2017	190	130	241	40	10	
1/29/2017	182	130	239	40	10	
1/30/2017	186	130	241	40	10	
1/31/2017	184	130	240	40	10	
2/1/2017	184	131	239	40	10	
2/2/2017	182	130	237	40	10	
2/3/2017	190	137	242	40	10	
2/4/2017	181	130	236	40	10	
2/5/2017	180	131	228	40	10	
2/6/2017	174	131	223	40	10	
2/7/2017	171	129	222	40	10	
2/8/2017	163	121	212	36	10	
2/9/2017	162	128	195	38	10	
2/10/2017	159	128	180	38	8	
2/11/2017	156	129	173	39	7	
2/12/2017	157	132	170	39	7	
2/13/2017	155	132	171	38	7	
2/14/2017	176	130	171	39	7	
2/15/2017	173	130	174	39	7	
2/16/2017	171	130	175	39	7	
2/17/2017	168	130	174	39	7	
2/18/2017	167	131	170	39	7	
2/19/2017	167	131	170	39	7	

**Attachment 2: HH1-7 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	166	131	171	39	7	
2/21/2017	164	131	164	39	7	
2/22/2017	164	131	162	38	7	
2/23/2017	163	130	163	38	7	
2/24/2017	164	130	163	38	7	
2/25/2017	163	130	163	38	7	
2/26/2017	164	130	165	37	7	
2/27/2017	164	131	166	38	7	
2/28/2017	157	131	161	37	7	
3/1/2017	157	131	155	37	7	
3/2/2017	154	132	158	37	7	
3/3/2017	155	132	158	37	7	
3/4/2017	155	131	162	37	7	
3/5/2017	155	132	162	37	7	
3/6/2017	155	132	160	37	7	
3/7/2017	153	132	158	37	7	
3/8/2017	151	131	158	37	7	
3/9/2017	152	130	158	37	8	
3/10/2017	169	131	173	37	8	
3/11/2017	183	130	181	36	8	
3/12/2017	176	131	180	36	8	
3/13/2017	174	131	181	36	8	
3/14/2017	171	131	182	36	8	
3/15/2017	168	131	180	40	8	
3/16/2017	159	130	177	38	8	
3/17/2017	157	131	167	38	7	
3/18/2017	150	131	168	37	7	
3/19/2017	150	131	168	36	7	
3/20/2017	149	131	169	36	7	
3/21/2017	149	131	170	36	7	
3/22/2017	149	131	165	36	7	
3/23/2017	149	131	166	36	7	
3/24/2017	148	131	167	36	7	
3/25/2017	147	131	166	36	7	
3/26/2017	146	131	165	36	7	
3/27/2017	145	131	165	36	7	
3/28/2017	142	129	153	35	6	
3/29/2017	141	129	151	35	6	
3/30/2017	141	129	151	35	6	
3/31/2017	141	129	152	36	6	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-8 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	193	123	219	39	11	
1/2/2017	192	123	206	39	11	
1/3/2017	192	122	205	39	10	
1/4/2017	191	122	200	39	10	
1/5/2017	190	122	202	39	10	
1/6/2017	190	122	197	39	10	
1/7/2017	189	122	195	39	10	
1/8/2017	189	122	195	39	10	
1/9/2017	189	122	195	39	10	
1/10/2017	184	122	196	39	10	
1/11/2017	188	122	194	39	10	
1/12/2017	186	123	196	39	10	
1/13/2017	188	122	197	39	10	
1/14/2017	186	123	198	39	10	
1/15/2017	185	123	197	39	10	
1/16/2017	184	123	195	39	10	
1/17/2017	180	123	212	38	10	
1/18/2017	182	123	189	39	10	
1/19/2017	182	123	187	39	10	
1/20/2017	183	123	188	39	10	
1/21/2017	180	125	191	39	10	
1/22/2017	178	125	193	39	10	
1/23/2017	178	125	185	39	10	
1/24/2017	182	120	204	39	10	
1/25/2017	182	120	204	39	10	
1/26/2017	182	122	202	39	10	
1/27/2017	180	122	199	39	10	
1/28/2017	181	122	203	39	10	
1/29/2017	180	122	202	39	10	
1/30/2017	179	122	203	39	10	
1/31/2017	179	122	203	39	10	
2/1/2017	178	122	201	39	10	
2/2/2017	177	122	201	39	10	
2/3/2017	184	128	206	39	10	
2/4/2017	177	122	202	39	10	
2/5/2017	175	123	196	39	10	
2/6/2017	175	123	194	39	10	
2/7/2017	176	124	180	39	9	
2/8/2017	174	125	186	39	9	
2/9/2017	174	123	190	39	9	
2/10/2017	174	123	192	39	9	
2/11/2017	170	123	184	39	9	
2/12/2017	169	123	182	39	9	
2/13/2017	170	124	184	39	9	
2/14/2017	174	123	184	39	9	
2/15/2017	177	122	189	39	9	
2/16/2017	195	119	191	38	9	
2/17/2017	199	118	190	39	9	
2/18/2017	196	119	187	38	9	
2/19/2017	195	119	186	39	9	

**Attachment 2: HH1-8 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	185	121	186	39	9	
2/21/2017	186	121	177	39	9	
2/22/2017	184	122	161	39	8	
2/23/2017	185	122	162	39	8	
2/24/2017	184	122	163	39	8	
2/25/2017	183	122	163	39	8	
2/26/2017	184	122	164	39	8	
2/27/2017	182	122	165	39	9	
2/28/2017	184	122	183	39	10	
3/1/2017	184	122	197	39	10	
3/2/2017	183	123	199	39	10	
3/3/2017	183	123	200	39	10	
3/4/2017	183	122	203	39	10	
3/5/2017	184	122	203	39	10	
3/6/2017	182	123	201	39	10	
3/7/2017	182	123	200	39	10	
3/8/2017	182	123	200	39	10	
3/9/2017	182	123	200	39	10	
3/10/2017	181	123	194	39	10	
3/11/2017	180	123	199	39	10	
3/12/2017	179	123	197	39	10	
3/13/2017	180	123	198	39	10	
3/14/2017	202	119	221	40	12	
3/15/2017	226	114	239	40	12	
3/16/2017	211	123	232	40	12	
3/17/2017	207	123	203	40	10	
3/18/2017	204	124	186	40	9	
3/19/2017	200	122	185	40	9	
3/20/2017	198	123	186	40	9	
3/21/2017	198	123	187	40	10	
3/22/2017	199	123	201	40	10	
3/23/2017	199	122	202	40	10	
3/24/2017	196	122	199	40	10	
3/25/2017	196	122	198	40	10	
3/26/2017	192	122	197	39	10	
3/27/2017	193	122	196	40	10	
3/28/2017	189	121	195	40	10	
3/29/2017	189	121	193	40	10	
3/30/2017	189	121	194	40	10	
3/31/2017	190	121	194	40	10	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-9 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	317	116	266	47	15	
1/2/2017	319	116	304	47	15	
1/3/2017	318	116	299	47	15	
1/4/2017	298	116	287	47	15	
1/5/2017	312	116	294	47	15	
1/6/2017	311	116	269	47	15	
1/7/2017	308	115	262	47	15	
1/8/2017	308	115	275	47	15	
1/9/2017	311	116	281	47	15	
1/10/2017	306	116	262	46	16	
1/11/2017	307	116	277	46	15	
1/12/2017	305	117	261	46	15	
1/13/2017	311	116	267	46	15	
1/14/2017	306	117	279	46	15	
1/15/2017	306	116	268	46	15	
1/16/2017	306	117	260	44	15	
1/17/2017	288	117	52	44	16	
1/18/2017	306	116	267	44	14	
1/19/2017	307	118	245	44	14	
1/20/2017	306	118	262	45	14	
1/21/2017	323	120	266	45	14	
1/22/2017	318	120	258	45	14	
1/23/2017	317	121	260	45	14	
1/24/2017	340	120	258	45	14	
1/25/2017	340	120	337	45	13	
1/26/2017	336	120	254	45	15	
1/27/2017	337	120	257	45	15	
1/28/2017	342	119	284	45	15	
1/29/2017	341	119	260	45	15	
1/30/2017	342	119	261	45	15	
1/31/2017	343	120	279	45	15	
2/1/2017	344	120	278	45	15	
2/2/2017	339	120	257	45	15	
2/3/2017	355	126	283	45	15	
2/4/2017	339	126	282	45	15	
2/5/2017	337	127	278	45	15	
2/6/2017	335	126	273	45	15	
2/7/2017	332	125	272	44	14	
2/8/2017	333	125	284	47	15	
2/9/2017	332	124	281	47	15	
2/10/2017	331	124	278	46	16	
2/11/2017	321	124	273	46	15	
2/12/2017	317	123	283	46	15	
2/13/2017	318	122	287	46	15	
2/14/2017	312	121	284	45	15	
2/15/2017	322	126	291	45	15	
2/16/2017	321	126	294	45	15	
2/17/2017	317	125	292	45	16	
2/18/2017	316	126	286	45	15	
2/19/2017	314	126	285	45	15	

**Attachment 2: HH1-9 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	314	126	285	45	15	
2/21/2017	306	126	275	45	16	
2/22/2017	299	122	274	45	15	
2/23/2017	297	121	273	45	15	
2/24/2017	297	119	273	46	15	
2/25/2017	294	117	272	45	15	
2/26/2017	290	116	266	46	15	
2/27/2017	309	126	271	46	14	
2/28/2017	313	126	266	46	15	
3/1/2017	314	126	272	45	15	
3/2/2017	313	126	273	46	15	
3/3/2017	314	126	273	46	15	
3/4/2017	314	126	278	46	15	
3/5/2017	315	126	277	46	15	
3/6/2017	316	126	273	46	15	
3/7/2017	315	126	272	46	15	
3/8/2017	315	126	273	46	15	
3/9/2017	315	126	273	46	15	
3/10/2017	316	126	287	46	16	
3/11/2017	316	126	293	46	15	
3/12/2017	316	126	292	46	15	
3/13/2017	316	126	280	45	15	
3/14/2017	313	126	263	46	14	
3/15/2017	311	126	261	46	15	
3/16/2017	309	126	248	46	15	
3/17/2017	307	125	266	46	15	
3/18/2017	307	126	267	46	15	
3/19/2017	306	126	266	46	16	
3/20/2017	304	126	268	45	15	
3/21/2017	302	126	271	45	15	
3/22/2017	302	126	265	45	14	
3/23/2017	302	126	266	45	14	
3/24/2017	298	126	264	45	14	
3/25/2017	297	126	260	45	15	
3/26/2017	298	126	258	45	14	
3/27/2017	295	126	258	45	14	
3/28/2017	291	124	256	45	14	
3/29/2017	291	123	255	46	15	
3/30/2017	292	124	255	45	15	
3/31/2017	293	124	256	45	15	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

Attachment 2: HH1-10 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	253	121	253	51	17	
1/2/2017	255	121	257	51	17	
1/3/2017	254	121	247	51	17	
1/4/2017	253	121	263	51	17	
1/5/2017	251	121	266	51	17	
1/6/2017	249	121	258	51	17	
1/7/2017	249	121	255	51	17	
1/8/2017	245	121	231	51	16	
1/9/2017	245	121	237	51	16	
1/10/2017	243	121	238	51	16	
1/11/2017	243	122	224	51	16	
1/12/2017	241	122	240	51	16	
1/13/2017	245	122	239	51	16	
1/14/2017	241	122	242	51	16	
1/15/2017	240	122	237	51	16	
1/16/2017	239	122	227	51	17	
1/17/2017	238	122	267	51	17	
1/18/2017	238	122	235	52	17	
1/19/2017	241	123	246	51	17	
1/20/2017	239	123	230	51	17	
1/21/2017	240	125	246	51	17	
1/22/2017	238	125	235	51	17	
1/23/2017	238	122	227	51	17	
1/24/2017	239	121	233	51	17	
1/25/2017	239	121	233	52	16	
1/26/2017	237	122	233	52	16	
1/27/2017	237	122	228	51	16	
1/28/2017	238	122	224	51	16	
1/29/2017	238	122	232	51	16	
1/30/2017	236	122	233	52	16	
1/31/2017	235	122	231	52	16	
2/1/2017	235	123	235	52	16	
2/2/2017	233	122	231	52	16	
2/3/2017	236	129	237	52	16	
2/4/2017	232	123	232	52	16	
2/5/2017	230	124	238	52	16	
2/6/2017	228	123	234	51	16	
2/7/2017	234	123	229	52	16	
2/8/2017	249	126	243	52	16	
2/9/2017	248	125	244	52	16	
2/10/2017	247	124	236	52	16	
2/11/2017	235	124	234	52	16	
2/12/2017	233	123	210	52	16	
2/13/2017	232	123	228	52	15	
2/14/2017	232	124	221	52	15	
2/15/2017	231	123	212	52	15	
2/16/2017	228	124	228	52	15	
2/17/2017	224	124	209	51	15	
2/18/2017	223	124	208	51	15	
2/19/2017	222	124	215	51	15	

**Attachment 2: HH1-10 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	221	125	216	51	15	
2/21/2017	214	123	212	50	15	
2/22/2017	210	124	211	50	15	
2/23/2017	210	123	212	51	15	
2/24/2017	211	123	211	51	15	
2/25/2017	210	123	211	51	15	
2/26/2017	211	124	213	51	15	
2/27/2017	209	123	215	51	15	
2/28/2017	207	123	212	51	15	
3/1/2017	203	124	203	51	15	
3/2/2017	201	124	195	51	15	
3/3/2017	200	123	205	51	15	
3/4/2017	200	123	210	51	15	
3/5/2017	201	123	198	51	15	
3/6/2017	201	123	207	51	15	
3/7/2017	200	123	208	51	15	
3/8/2017	198	123	198	51	15	
3/9/2017	197	123	198	51	15	
3/10/2017	193	123	204	51	15	
3/11/2017	193	123	206	51	15	
3/12/2017	194	123	204	51	15	
3/13/2017	195	123	205	51	15	
3/14/2017	191	123	205	51	15	
3/15/2017	190	124	198	51	15	
3/16/2017	191	122	206	51	15	
3/17/2017	192	122	210	51	15	
3/18/2017	192	123	209	51	15	
3/19/2017	191	123	208	51	15	
3/20/2017	189	123	183	51	14	
3/21/2017	187	123	188	51	14	
3/22/2017	187	124	192	51	14	
3/23/2017	188	123	194	51	14	
3/24/2017	187	123	192	51	15	
3/25/2017	188	122	203	51	15	
3/26/2017	186	123	202	51	15	
3/27/2017	186	122	202	51	15	
3/28/2017	183	121	191	51	14	
3/29/2017	194	119	191	51	14	
3/30/2017	195	119	194	50	14	
3/31/2017	195	119	195	50	14	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-11 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	261	122	282	51	20	
1/2/2017	262	122	288	51	19	
1/3/2017	257	122	286	51	19	
1/4/2017	258	122	281	51	19	
1/5/2017	264	122	277	50	19	
1/6/2017	260	122	265	50	19	
1/7/2017	261	122	265	50	19	
1/8/2017	259	122	267	50	19	
1/9/2017	259	122	265	50	19	
1/10/2017	258	122	255	50	20	
1/11/2017	259	122	277	50	20	
1/12/2017	258	122	254	50	20	
1/13/2017	261	122	256	50	20	
1/14/2017	256	122	238	50	18	
1/15/2017	254	123	240	50	18	
1/16/2017	253	123	243	50	18	
1/17/2017	240	123	249	50	26	
1/18/2017	239	123	234	50	19	
1/19/2017	230	121	253	50	19	
1/20/2017	253	122	258	50	19	
1/21/2017	247	124	271	50	19	
1/22/2017	251	125	256	50	19	
1/23/2017	251	125	269	50	19	
1/24/2017	280	125	269	50	19	
1/25/2017	278	125	266	49	18	
1/26/2017	278	120	255	50	19	
1/27/2017	268	121	284	50	20	
1/28/2017	274	120	277	50	20	
1/29/2017	272	120	274	50	20	
1/30/2017	275	120	275	50	21	
1/31/2017	312	116	295	50	21	
2/1/2017	309	117	304	50	22	
2/2/2017	318	121	309	50	22	
2/3/2017	363	124	322	50	22	
2/4/2017	349	121	331	50	22	
2/5/2017	341	123	328	50	22	
2/6/2017	328	121	320	50	22	
2/7/2017	312	123	328	50	22	
2/8/2017	311	125	340	49	22	
2/9/2017	306	122	341	51	24	
2/10/2017	342	110	275	50	12	
2/11/2017	342	110	275	50	12	
2/12/2017	342	110	275	50	12	
2/13/2017	342	110	275	50	12	
2/14/2017	342	110	275	50	12	
2/15/2017	342	110	275	51	25	
2/16/2017	286	122	351	49	22	
2/17/2017	284	125	351	49	22	
2/18/2017	282	125	340	49	22	
2/19/2017	281	125	336	49	22	

**Attachment 2: HH1-11 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	279	126	322	49	21	
2/21/2017	279	119	315	50	21	
2/22/2017	286	121	312	50	21	
2/23/2017	295	121	314	49	21	
2/24/2017	293	121	311	49	21	
2/25/2017	291	121	310	49	21	
2/26/2017	292	123	307	49	21	
2/27/2017	291	122	314	50	21	
2/28/2017	295	122	314	49	21	
3/1/2017	288	123	303	49	21	
3/2/2017	280	121	303	49	21	
3/3/2017	274	121	304	50	21	
3/4/2017	296	118	307	49	21	
3/5/2017	294	119	305	49	21	
3/6/2017	292	119	309	49	21	
3/7/2017	290	119	309	49	21	
3/8/2017	301	121	294	49	20	
3/9/2017	299	121	292	50	20	
3/10/2017	305	121	291	50	20	
3/11/2017	299	121	285	50	20	
3/12/2017	299	122	291	50	20	
3/13/2017	298	122	294	50	20	
3/14/2017	298	122	292	50	20	
3/15/2017	297	122	287	50	22	
3/16/2017	291	123	280	50	19	
3/17/2017	291	122	285	50	19	
3/18/2017	282	121	282	49	19	
3/19/2017	282	122	286	49	19	
3/20/2017	278	123	274	49	19	
3/21/2017	277	123	274	49	19	
3/22/2017	275	123	268	49	18	
3/23/2017	272	123	270	49	18	
3/24/2017	258	121	268	50	18	
3/25/2017	251	120	260	49	18	
3/26/2017	246	121	260	49	18	
3/27/2017	246	121	258	48	19	
3/28/2017	246	119	256	48	17	
3/29/2017	243	119	254	48	17	
3/30/2017	243	119	261	49	17	
3/31/2017	263	116	274	49	18	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-12 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	342	122	319	47	18	
1/2/2017	343	122	321	47	17	
1/3/2017	339	120	316	47	17	
1/4/2017	335	120	312	47	18	
1/5/2017	339	122	335	47	19	
1/6/2017	337	122	327	47	19	
1/7/2017	340	122	336	47	19	
1/8/2017	338	122	337	47	19	
1/9/2017	338	122	337	47	19	
1/10/2017	337	122	330	47	19	
1/11/2017	338	122	336	47	19	
1/12/2017	336	122	318	47	18	
1/13/2017	341	122	341	47	19	
1/14/2017	338	122	335	47	19	
1/15/2017	336	122	337	47	19	
1/16/2017	336	123	343	47	19	
1/17/2017	333	122	354	47	22	
1/18/2017	331	122	332	47	19	
1/19/2017	333	123	323	47	19	
1/20/2017	333	122	332	47	20	
1/21/2017	330	125	332	47	20	
1/22/2017	329	122	344	47	20	
1/23/2017	306	107	326	47	20	
1/24/2017	334	123	373	47	20	
1/25/2017	334	123	373	48	19	
1/26/2017	340	123	386	48	19	
1/27/2017	334	123	367	47	18	
1/28/2017	337	123	373	47	18	
1/29/2017	336	123	371	47	18	
1/30/2017	334	123	371	47	18	
1/31/2017	334	123	375	47	18	
2/1/2017	333	123	371	47	18	
2/2/2017	326	123	348	47	17	
2/3/2017	337	130	363	47	17	
2/4/2017	332	122	343	47	17	
2/5/2017	324	124	316	47	16	
2/6/2017	317	122	313	47	16	
2/7/2017	321	123	309	47	16	
2/8/2017	342	126	321	48	18	
2/9/2017	343	124	324	48	18	
2/10/2017	340	124	326	46	18	
2/11/2017	327	120	311	46	18	
2/12/2017	328	118	308	46	18	
2/13/2017	346	132	316	46	18	
2/14/2017	332	120	305	47	18	
2/15/2017	334	122	309	46	18	
2/16/2017	331	122	306	46	18	
2/17/2017	326	122	300	46	19	
2/18/2017	327	123	313	46	19	
2/19/2017	327	123	311	46	19	

**Attachment 2: HH1-12 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	327	123	317	46	19	
2/21/2017	320	122	292	46	18	
2/22/2017	316	123	292	46	18	
2/23/2017	316	121	301	46	18	
2/24/2017	317	121	297	46	18	
2/25/2017	316	121	296	46	18	
2/26/2017	314	120	303	46	18	
2/27/2017	314	120	287	46	18	
2/28/2017	315	121	298	46	18	
3/1/2017	310	122	289	46	18	
3/2/2017	308	123	291	46	18	
3/3/2017	309	122	290	46	18	
3/4/2017	309	122	287	46	18	
3/5/2017	309	122	299	46	18	
3/6/2017	310	124	304	46	18	
3/7/2017	309	124	299	46	18	
3/8/2017	304	121	313	46	19	
3/9/2017	303	121	315	46	19	
3/10/2017	297	122	306	46	19	
3/11/2017	297	122	310	46	19	
3/12/2017	297	122	308	46	19	
3/13/2017	296	122	310	46	19	
3/14/2017	297	122	309	46	19	
3/15/2017	296	122	303	47	19	
3/16/2017	291	120	306	47	19	
3/17/2017	299	120	298	47	18	
3/18/2017	301	122	294	47	18	
3/19/2017	298	121	292	47	18	
3/20/2017	296	121	295	47	18	
3/21/2017	295	121	275	47	18	
3/22/2017	294	121	279	47	17	
3/23/2017	292	121	286	47	17	
3/24/2017	291	121	263	47	16	
3/25/2017	287	120	259	47	16	
3/26/2017	284	121	245	47	15	
3/27/2017	284	121	244	47	16	
3/28/2017	281	119	256	47	16	
3/29/2017	278	119	254	47	16	
3/30/2017	278	119	259	47	16	
3/31/2017	279	119	260	47	16	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 2: HH1-13 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
1/1/2017	401	114	451	45	23	
1/2/2017	400	115	442	45	22	
1/3/2017	401	115	428	45	22	
1/4/2017	397	115	424	45	22	
1/5/2017	400	115	424	45	24	
1/6/2017	398	115	417	45	24	
1/7/2017	398	115	425	45	23	
1/8/2017	396	115	429	45	23	
1/9/2017	396	115	429	45	24	
1/10/2017	395	115	450	45	24	
1/11/2017	404	114	444	45	24	
1/12/2017	401	115	452	45	25	
1/13/2017	407	115	448	45	24	
1/14/2017	404	115	450	45	24	
1/15/2017	400	115	433	45	24	
1/16/2017	396	115	430	45	24	
1/17/2017	381	116	451	45	26	
1/18/2017	377	116	418	45	24	
1/19/2017	381	117	416	45	24	
1/20/2017	381	117	435	45	25	
1/21/2017	407	119	442	45	25	
1/22/2017	407	120	432	45	25	
1/23/2017	404	119	438	45	25	
1/24/2017	408	119	442	45	25	
1/25/2017	432	118	449	44	25	
1/26/2017	428	117	442	44	25	
1/27/2017	445	117	446	44	25	
1/28/2017	448	117	454	44	24	
1/29/2017	444	117	453	44	24	
1/30/2017	444	117	453	44	24	
1/31/2017	442	117	454	44	24	
2/1/2017	441	117	451	44	24	
2/2/2017	435	117	450	46	24	
2/3/2017	446	123	460	46	24	
2/4/2017	458	121	474	46	24	
2/5/2017	454	121	467	46	24	
2/6/2017	448	124	459	46	24	
2/7/2017	443	119	458	46	22	
2/8/2017	443	122	461	46	24	
2/9/2017	442	122	467	46	24	
2/10/2017	469	120	480	46	24	
2/11/2017	439	114	457	46	24	
2/12/2017	451	119	456	46	24	
2/13/2017	439	119	431	46	24	
2/14/2017	442	119	452	46	24	
2/15/2017	447	122	456	46	24	
2/16/2017	444	122	456	47	24	
2/17/2017	446	121	451	47	24	
2/18/2017	444	121	442	47	24	
2/19/2017	446	122	441	47	24	

**Attachment 2: HH1-13 Flow Summary
1st Quarter 2017
Lost Creek ISR Project PT788**

Date	Manifold Injection Flow Rate (gpm)	Manifold Injection Pressure* (psi)	Manifold Production Flow Rate (gpm)	Number of Wells Injecting	Number of Wells Producing	Comments
2/20/2017	446	122	444	47	25	
2/21/2017	442	122	447	46	26	
2/22/2017	435	121	449	46	26	
2/23/2017	434	119	457	46	25	
2/24/2017	430	118	454	46	25	
2/25/2017	426	116	452	46	25	
2/26/2017	440	122	457	46	25	
2/27/2017	440	122	460	46	25	
2/28/2017	437	122	449	46	25	
3/1/2017	433	123	439	46	24	
3/2/2017	427	122	441	46	24	
3/3/2017	425	120	438	46	24	
3/4/2017	410	119	443	46	24	
3/5/2017	430	123	448	46	24	
3/6/2017	430	123	433	46	23	
3/7/2017	428	123	433	46	23	
3/8/2017	430	123	434	46	23	
3/9/2017	427	123	434	46	23	
3/10/2017	423	124	428	46	23	
3/11/2017	423	124	432	46	23	
3/12/2017	424	124	430	46	23	
3/13/2017	422	124	420	46	22	
3/14/2017	415	124	418	47	22	
3/15/2017	393	125	410	47	22	
3/16/2017	393	125	415	46	22	
3/17/2017	396	125	413	46	21	
3/18/2017	397	125	413	46	21	
3/19/2017	397	125	412	46	21	
3/20/2017	391	126	413	46	21	
3/21/2017	392	126	415	46	22	
3/22/2017	389	126	416	46	22	
3/23/2017	416	124	418	46	22	
3/24/2017	408	125	423	46	22	
3/25/2017	405	125	422	46	22	
3/26/2017	407	125	423	46	22	
3/27/2017	403	125	422	46	22	
3/28/2017	398	123	409	45	22	
3/29/2017	399	123	417	45	22	
3/30/2017	419	122	425	45	22	
3/31/2017	418	122	425	45	22	

* Manifold pressure is not indicative of actual well pressures. Flows to wells are throttled on an individual basis at each stub to keep injection pressure below the rated pressure for the well.

gpm: gallons per minute

psi: pounds per square inch

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
M-101	MU1 Ring	1/13/2017	184.66	
M-101	MU1 Ring	1/27/2017	184.84	
M-101	MU1 Ring	2/10/2017	185.86	
M-101	MU1 Ring	2/20/2017	160.40	
M-101	MU1 Ring	3/9/2017	161.14	
M-101	MU1 Ring	3/29/2017	164.03	
M-102	MU1 Ring	1/13/2017	183.60	
M-102	MU1 Ring	1/27/2017	185.23	
M-102	MU1 Ring	2/10/2017	172.12	
M-102	MU1 Ring	2/20/2017	164.11	
M-102	MU1 Ring	3/9/2017	164.22	
M-102	MU1 Ring	3/29/2017	167.63	
M-103A	MU1 Ring	1/13/2017	180.90	
M-103A	MU1 Ring	1/27/2017	182.12	
M-103A	MU1 Ring	2/10/2017	180.12	
M-103A	MU1 Ring	2/20/2017	157.64	
M-103A	MU1 Ring	3/9/2017	157.40	
M-103A	MU1 Ring	3/29/2017	160.81	
M-104	MU1 Ring	1/13/2017	189.98	
M-104	MU1 Ring	1/27/2017	207.87	
M-104	MU1 Ring	2/10/2017	201.00	
M-104	MU1 Ring	2/20/2017	189.07	
M-104	MU1 Ring	3/9/2017	185.33	
M-104	MU1 Ring	3/29/2017	185.53	
M-105	MU1 Ring	1/13/2017	192.37	
M-105	MU1 Ring	1/27/2017	204.68	
M-105	MU1 Ring	2/13/2017	200.58	
M-105	MU1 Ring	2/27/2017	195.25	
M-105	MU1 Ring	3/10/2017	189.05	
M-105	MU1 Ring	3/29/2017	189.92	
M-106	MU1 Ring	1/13/2017	193.03	
M-106	MU1 Ring	1/27/2017	195.22	
M-106	MU1 Ring	2/10/2017	223.61	
M-106	MU1 Ring	3/10/2017	---	Inaccessible due to snow runoff
M-106	MU1 Ring	3/29/2017	184.43	
M-107	MU1 Ring	1/13/2017	189.32	
M-107	MU1 Ring	1/27/2017	196.50	
M-107	MU1 Ring	2/13/2017	218.61	
M-107	MU1 Ring	2/27/2017	189.57	
M-107	MU1 Ring	3/10/2017	188.26	
M-107	MU1 Ring	3/29/2017	189.42	
M-108	MU1 Ring	1/13/2017	190.00	
M-108	MU1 Ring	1/27/2017	192.46	
M-108	MU1 Ring	2/13/2017	232.18	
M-108	MU1 Ring	2/27/2017	191.35	
M-108	MU1 Ring	3/10/2017	187.07	
M-108	MU1 Ring	3/29/2017	188.38	
M-109	MU1 Ring	1/13/2017	181.76	
M-109	MU1 Ring	1/27/2017	193.03	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
M-109	MU1 Ring	2/13/2017	232.12	
M-109	MU1 Ring	2/27/2017	186.38	
M-109	MU1 Ring	3/10/2017	182.10	
M-109	MU1 Ring	3/29/2017	183.62	
M-110	MU1 Ring	1/13/2017	184.13	
M-110	MU1 Ring	1/27/2017	195.28	
M-110	MU1 Ring	2/13/2017	227.43	
M-110	MU1 Ring	2/27/2017	192.63	
M-110	MU1 Ring	3/10/2017	188.20	
M-110	MU1 Ring	3/29/2017	190.45	
M-111	MU1 Ring	1/13/2017	172.41	
M-111	MU1 Ring	1/27/2017	184.00	
M-111	MU1 Ring	2/13/2017	190.81	
M-111	MU1 Ring	2/27/2017	190.81	
M-111	MU1 Ring	3/10/2017	181.00	
M-111	MU1 Ring	3/29/2017	183.79	
M-112	MU1 Ring	1/13/2017	179.27	
M-112	MU1 Ring	1/27/2017	190.64	
M-112	MU1 Ring	2/13/2017	196.64	
M-112	MU1 Ring	2/27/2017	195.39	
M-112	MU1 Ring	3/10/2017	190.20	
M-112	MU1 Ring	3/29/2017	192.74	
M-113	MU1 Ring	1/10/2017	194.48	
M-113	MU1 Ring	1/25/2017	223.67	
M-113	MU1 Ring	2/9/2017	238.08	
M-113	MU1 Ring	2/20/2017	209.90	
M-113	MU1 Ring	3/10/2017	199.30	
M-113	MU1 Ring	3/28/2017	202.02	
M-114A	MU1 Ring	1/10/2017	209.10	
M-114A	MU1 Ring	1/25/2017	215.21	
M-114A	MU1 Ring	2/9/2017	206.25	
M-114A	MU1 Ring	2/20/2017	202.17	
M-114A	MU1 Ring	3/10/2017	205.20	
M-114A	MU1 Ring	3/28/2017	212.15	
M-115A	MU1 Ring	1/10/2017	207.50	
M-115A	MU1 Ring	1/26/2017	221.84	
M-115A	MU1 Ring	2/9/2017	196.97	
M-115A	MU1 Ring	2/20/2017	197.40	
M-115A	MU1 Ring	3/10/2017	209.89	
M-115A	MU1 Ring	3/28/2017	215.04	
M-116A	MU1 Ring	1/10/2017	199.10	
M-116A	MU1 Ring	1/26/2017	197.41	
M-116A	MU1 Ring	2/9/2017	194.98	
M-116A	MU1 Ring	2/20/2017	187.45	
M-116A	MU1 Ring	3/8/2017	202.34	
M-116A	MU1 Ring	3/28/2017	204.57	
M-117	MU1 Ring	1/26/2017	205.47	
M-117	MU1 Ring	2/9/2017	192.30	
M-117	MU1 Ring	2/20/2017	192.38	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
M-117	MU1 Ring	3/8/2017	207.93	
M-117	MU1 Ring	3/28/2017	209.48	
M-118	MU1 Ring	1/11/2017	211.53	
M-118	MU1 Ring	1/26/2017	216.03	
M-118	MU1 Ring	2/9/2017	188.81	
M-118	MU1 Ring	2/20/2017	189.60	
M-118	MU1 Ring	3/8/2017	205.60	
M-118	MU1 Ring	3/28/2017	204.70	
M-119	MU1 Ring	1/11/2017	229.27	
M-119	MU1 Ring	1/26/2017	206.82	
M-119	MU1 Ring	2/9/2017	196.63	
M-119	MU1 Ring	2/20/2017	196.50	
M-119	MU1 Ring	3/8/2017	209.35	
M-119	MU1 Ring	3/28/2017	207.39	
M-120A	MU1 Ring	1/11/2017	201.40	
M-120A	MU1 Ring	1/26/2017	201.27	
M-120A	MU1 Ring	2/9/2017	196.51	
M-120A	MU1 Ring	2/20/2017	187.80	
M-120A	MU1 Ring	3/8/2017	200.58	
M-120A	MU1 Ring	3/28/2017	204.17	
M-121	MU1 Ring	1/11/2017	208.92	
M-121	MU1 Ring	1/26/2017	220.93	
M-121	MU1 Ring	2/9/2017	204.96	
M-121	MU1 Ring	2/20/2017	191.00	
M-121	MU1 Ring	3/8/2017	198.41	
M-121	MU1 Ring	3/28/2017	197.22	
M-122	MU1 Ring	1/11/2017	197.80	
M-122	MU1 Ring	1/26/2017	211.03	
M-122	MU1 Ring	2/9/2017	205.33	
M-122	MU1 Ring	2/20/2017	192.83	
M-122	MU1 Ring	3/8/2017	199.13	
M-122	MU1 Ring	3/28/2017	197.51	
M-123	MU1 Ring	1/11/2017	196.62	
M-123	MU1 Ring	1/26/2017	205.20	
M-123	MU1 Ring	2/10/2017	222.83	
M-123	MU1 Ring	2/21/2017	193.02	
M-123	MU1 Ring	3/8/2017	197.53	
M-123	MU1 Ring	3/28/2017	195.52	
M-124	MU1 Ring	1/13/2017	191.93	
M-124	MU1 Ring	1/26/2017	199.70	
M-124	MU1 Ring	2/10/2017	219.28	
M-124	MU1 Ring	2/21/2017	197.38	
M-124	MU1 Ring	3/8/2017	201.86	
M-124	MU1 Ring	3/28/2017	199.78	
M-125	MU1 Ring	1/13/2017	201.30	
M-125	MU1 Ring	1/26/2017	189.72	
M-125	MU1 Ring	2/10/2017	205.41	
M-125	MU1 Ring	2/21/2017	183.13	
M-125	MU1 Ring	3/9/2017	189.41	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
M-125	MU1 Ring	3/28/2017	187.64	
M-126	MU1 Ring	1/13/2017	191.92	
M-126	MU1 Ring	1/26/2017	190.34	
M-126	MU1 Ring	2/10/2017	208.25	
M-126	MU1 Ring	2/21/2017	185.16	
M-126	MU1 Ring	3/9/2017	189.20	
M-126	MU1 Ring	3/28/2017	187.55	
M-127	MU1 Ring	1/13/2017	191.50	
M-127	MU1 Ring	1/27/2017	205.81	
M-127	MU1 Ring	2/10/2017	192.41	
M-127	MU1 Ring	2/21/2017	169.00	
M-127	MU1 Ring	3/9/2017	169.90	
M-127	MU1 Ring	3/28/2017	169.10	
M-128	MU1 Ring	1/13/2017	188.29	
M-128	MU1 Ring	1/27/2017	183.54	
M-128	MU1 Ring	2/10/2017	190.70	
M-128	MU1 Ring	2/21/2017	164.63	
M-128	MU1 Ring	3/9/2017	165.65	
M-128	MU1 Ring	3/29/2017	166.14	
MO-101	MU1 Ring	1/16/2017	162.02	
MO-101	MU1 Ring	1/30/2017	175.90	
MO-101	MU1 Ring	2/14/2017	185.48	
MO-101	MU1 Ring	2/27/2017	159.76	
MO-101	MU1 Ring	3/13/2017	159.83	
MO-101	MU1 Ring	3/30/2017	161.23	
MO-102	MU1 Ring	1/16/2017	163.96	
MO-102	MU1 Ring	1/30/2017	175.20	
MO-102	MU1 Ring	2/14/2017	174.69	
MO-102	MU1 Ring	2/27/2017	170.65	
MO-102	MU1 Ring	3/13/2017	170.33	
MO-102	MU1 Ring	3/30/2017	171.20	
MO-103	MU1 Ring	1/16/2017	162.23	
MO-103	MU1 Ring	1/30/2017	171.73	
MO-103	MU1 Ring	2/14/2017	169.90	
MO-103	MU1 Ring	2/27/2017	164.90	
MO-103	MU1 Ring	3/13/2017	164.93	
MO-103	MU1 Ring	3/30/2017	164.53	
MO-104	MU1 Ring	1/16/2017	176.85	
MO-104	MU1 Ring	1/30/2017	179.49	
MO-104	MU1 Ring	2/14/2017	183.90	
MO-104	MU1 Ring	2/28/2017	168.20	
MO-104	MU1 Ring	3/13/2017	180.12	
MO-104	MU1 Ring	3/30/2017	179.68	
MO-105	MU1 Ring	1/16/2017	171.90	
MO-105	MU1 Ring	1/30/2017	173.82	
MO-105	MU1 Ring	2/14/2017	180.13	
MO-105	MU1 Ring	2/28/2017	172.60	
MO-105	MU1 Ring	3/13/2017	174.89	
MO-105	MU1 Ring	3/30/2017	172.49	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
MO-106	MU1 Overlying	1/16/2017	172.41	
MO-106	MU1 Overlying	1/30/2017	169.45	
MO-106	MU1 Overlying	2/14/2017	185.70	
MO-106	MU1 Overlying	2/28/2017	168.25	
MO-106	MU1 Overlying	3/13/2017	170.10	
MO-106	MU1 Overlying	3/30/2017	171.84	
MO-107	MU1 Overlying	1/16/2017	177.20	
MO-107	MU1 Overlying	1/30/2017	165.60	
MO-107	MU1 Overlying	2/15/2017	180.23	
MO-107	MU1 Overlying	2/28/2017	164.82	
MO-107	MU1 Overlying	3/13/2017	166.18	
MO-107	MU1 Overlying	3/30/2017	167.14	
MO-108	MU1 Overlying	1/4/2017	210.66	
MO-108	MU1 Overlying	1/16/2017	215.10	
MO-108	MU1 Overlying	1/25/2017	205.52	
MO-108	MU1 Overlying	1/30/2017	166.37	
MO-108	MU1 Overlying	2/15/2017	180.21	
MO-108	MU1 Overlying	2/28/2017	165.59	
MO-108	MU1 Overlying	3/14/2017	---	Not measured, pressure transducer in use
MO-108	MU1 Overlying	3/27/2017	167.05	
MO-109	MU1 Overlying	1/17/2017	174.21	
MO-109	MU1 Overlying	1/31/2017	189.22	
MO-109	MU1 Overlying	2/15/2017	191.23	
MO-109	MU1 Overlying	2/28/2017	199.97	
MO-109	MU1 Overlying	3/14/2017	173.99	
MO-109	MU1 Overlying	3/30/2017	174.61	
MO-110	MU1 Overlying	1/17/2017	174.41	
MO-110	MU1 Overlying	1/31/2017	186.61	
MO-110	MU1 Overlying	2/15/2017	192.54	
MO-110	MU1 Overlying	2/28/2017	174.79	
MO-110	MU1 Overlying	3/14/2017	175.97	
MO-110	MU1 Overlying	3/30/2017	174.95	
MO-111	MU1 Overlying	1/17/2017	175.61	
MO-111	MU1 Overlying	1/31/2017	187.27	
MO-111	MU1 Overlying	2/15/2017	195.46	
MO-111	MU1 Overlying	3/1/2017	174.68	
MO-111	MU1 Overlying	3/14/2017	175.52	
MO-111	MU1 Overlying	3/30/2017	176.03	
MO-112	MU1 Overlying	1/17/2017	175.41	
MO-112	MU1 Overlying	1/31/2017	184.92	
MO-112	MU1 Overlying	2/15/2017	189.79	
MO-112	MU1 Overlying	3/1/2017	173.79	
MO-112	MU1 Overlying	3/14/2017	175.32	
MO-112	MU1 Overlying	3/30/2017	175.62	
MO-113	MU1 Overlying	1/17/2017	180.32	
MO-113	MU1 Overlying	1/31/2017	173.17	
MO-113	MU1 Overlying	2/15/2017	178.62	
MO-113	MU1 Overlying	3/1/2017	174.16	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
MO-113	MU1 Overlying	3/14/2017	168.25	
MO-113	MU1 Overlying	3/31/2017	168.74	
MO-LC0254	MU1 Overlying	1/17/2017	175.62	
MO-LC0254	MU1 Overlying	3/14/2017	176.60	
MO-LC0254	MU1 Overlying	3/31/2017	177.34	
MU-101	MU1 Overlying	1/30/2017	211.51	
MU-101	MU1 Overlying	2/14/2017	225.29	
MU-101	MU1 Overlying	2/27/2017	191.50	
MU-101	MU1 Overlying	3/13/2017	190.85	
MU-101	MU1 Overlying	3/30/2017	190.63	
MU-102	MU1 Overlying	1/16/2017	192.12	
MU-102	MU1 Overlying	1/30/2017	196.48	
MU-102	MU1 Overlying	2/14/2017	196.13	
MU-102	MU1 Overlying	2/27/2017	193.05	
MU-102	MU1 Overlying	3/13/2017	192.41	
MU-102	MU1 Overlying	3/30/2017	191.86	
MU-103	MU1 Overlying	1/16/2017	193.49	
MU-103	MU1 Overlying	1/30/2017	191.66	
MU-103	MU1 Overlying	2/14/2017	189.34	
MU-103	MU1 Overlying	2/27/2017	189.43	
MU-103	MU1 Overlying	3/13/2017	188.40	
MU-103	MU1 Overlying	3/30/2017	188.15	
MU-104B	MU1 Overlying	1/16/2017	196.10	
MU-104B	MU1 Overlying	1/31/2017	196.34	
MU-104B	MU1 Overlying	2/14/2017	203.68	
MU-104B	MU1 Overlying	2/28/2017	196.88	
MU-104B	MU1 Overlying	3/13/2017	196.00	
MU-104B	MU1 Overlying	3/30/2017	195.72	
MU-105	MU1 Overlying	1/16/2017	208.04	
MU-105	MU1 Overlying	1/31/2017	210.47	
MU-105	MU1 Overlying	2/14/2017	215.67	
MU-105	MU1 Overlying	2/28/2017	210.34	
MU-105	MU1 Overlying	3/13/2017	211.48	
MU-105	MU1 Overlying	3/30/2017	209.28	
MU-106	MU1 Overlying	1/16/2017	207.19	
MU-106	MU1 Overlying	1/30/2017	204.47	
MU-106	MU1 Overlying	2/14/2017	214.33	
MU-106	MU1 Overlying	2/28/2017	204.22	
MU-106	MU1 Overlying	3/13/2017	205.27	
MU-106	MU1 Overlying	3/30/2017	203.61	
MU-107	MU1 Overlying	1/16/2017	205.67	
MU-107	MU1 Overlying	1/31/2017	200.17	
MU-107	MU1 Overlying	2/15/2017	200.40	
MU-107	MU1 Overlying	2/28/2017	200.33	
MU-107	MU1 Overlying	3/13/2017	200.94	
MU-107	MU1 Overlying	3/30/2017	201.04	
KPW-2	MU1 Overlying	1/16/2017	219.96	
KPW-2	MU1 Underlying	1/30/2017	200.74	
KPW-2	MU1 Underlying	2/15/2017	211.76	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
KPW-2	MU1 Underlying	2/28/2017	200.99	
KPW-2	MU1 Underlying	3/14/2017	201.00	
KPW-2	MU1 Underlying	3/27/2017	200.42	
MU-109	MU1 Underlying	1/17/2017	202.19	
MU-109	MU1 Underlying	1/31/2017	210.35	
MU-109	MU1 Underlying	2/15/2017	216.97	
MU-109	MU1 Underlying	2/28/2017	199.97	
MU-109	MU1 Underlying	3/14/2017	198.74	
MU-109	MU1 Underlying	3/30/2017	199.29	
MU-110	MU1 Underlying	1/17/2017	203.21	
MU-110	MU1 Underlying	1/31/2017	216.39	
MU-110	MU1 Underlying	2/15/2017	215.35	
MU-110	MU1 Underlying	2/28/2017	206.47	
MU-110	MU1 Underlying	3/14/2017	206.64	
MU-110	MU1 Underlying	3/30/2017	206.10	
MU-111	MU1 Underlying	1/17/2017	204.71	
MU-111	MU1 Underlying	1/31/2017	218.09	
MU-111	MU1 Underlying	2/15/2017	221.23	
MU-111	MU1 Underlying	3/1/2017	203.42	
MU-111	MU1 Underlying	3/14/2017	205.70	
MU-111	MU1 Underlying	3/30/2017	206.34	
MU-112	MU1 Underlying	1/17/2017	207.03	
MU-112	MU1 Underlying	1/31/2017	209.74	
MU-112	MU1 Underlying	2/15/2017	215.53	
MU-112	MU1 Underlying	3/1/2017	204.31	
MU-112	MU1 Underlying	3/14/2017	206.09	
MU-112	MU1 Underlying	3/30/2017	205.89	
MU-113	MU1 Underlying	1/17/2017	203.47	
MU-113	MU1 Underlying	1/31/2017	201.50	
MU-113	MU1 Underlying	2/15/2017	205.10	
MU-113	MU1 Underlying	3/1/2017	201.60	
MU-113	MU1 Underlying	3/14/2017	192.48	
MU-113	MU1 Underlying	3/31/2017	193.89	
LC15M	Regional FG	3/27/2017	162.54	
LC16M	Regional HJ	3/27/2017	170.63	
LC17M	Regional KM	3/27/2017	189.76	
LC18M	Regional FG	3/27/2017	172.96	
LC19M	Regional HJ	3/27/2017	206.69	
LC20M	Regional KM	3/27/2017	210.74	
LC21M	Regional FG	3/27/2017	196.47	
LC22MA	Regional HJ	3/27/2017	211.29	
LC23M	Regional KM	3/27/2017	221.59	
LC24M	Regional KM	3/27/2017	196.30	
LC25MA	Regional FG	3/27/2017	197.97	
LC26M	Regional HJ	3/27/2017	168.96	
LC27M	Regional KM	3/27/2017	195.79	
LC28M	Regional KM	3/27/2017	155.83	
LC29M	Regional DE	3/27/2017	158.50	Insufficient water for sampling
LC30M	Regional DE	3/27/2017	199.16	

**Attachment 3: Groundwater Level Measurement Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Measure Date	Depth to Water (ft-bmp)	Comments
LC31M	Regional DE	3/27/2017	144.68	
MB-01	Regional DE	3/27/2017	238.62	
MB-02	Regional FG	3/27/2017	243.45	
MB-03B	Regional HJ	3/27/2017	268.96	
MB-04	Regional KM	3/27/2017	278.42	
MB-05	Regional FG	3/27/2017	145.29	
MB-06	Regional HJ	3/27/2017	144.21	
MB-07	Regional DE	3/27/2017	162.96	
MB-08	Regional FG	3/27/2017	173.42	
MB-09	Regional HJ	3/27/2017	186.90	
MB-10	Regional DE	3/27/2017	173.12	Insufficient water for sampling

ft-bmp: feet below measuring point

MU1: Mine Unit 1

Attachment 4: MU1 Water Quality Data
1st Quarter 2017
Lost Creek ISR Project PT788

Well ID	Well Type	Collection Date	Days Apart	Alkalinity (mg/L)			Chloride (mg/L)			Specific Conductance @ 25°C (µS/cm)			Comments
				Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	
M-101	MU1 Ring	1/13/2017	---	122	186.2	-34	6.0	20.5	-71	714	1012.4	-29	
M-101	MU1 Ring	1/27/2017	14	120	186.2	-36	4.9	20.5	-76	692	1012.4	-32	
M-101	MU1 Ring	2/10/2017	14	122	186.2	-34	4.8	20.5	-77	699	1012.4	-31	
M-101	MU1 Ring	2/21/2017	11	120	186.2	-36	5.7	20.5	-72	667	1012.4	-34	
M-101	MU1 Ring	3/9/2017	16	117	186.2	-37	6.0	20.5	-71	679	1012.4	-33	
M-101	MU1 Ring	3/29/2017	20	114	186.2	-39	6.1	20.5	-70	679	1012.4	-33	
M-102	MU1 Ring	1/13/2017	---	145	186.2	-22	6.0	20.5	-71	872	1012.4	-14	
M-102	MU1 Ring	1/27/2017	14	131	186.2	-30	5.5	20.5	-73	837	1012.4	-17	
M-102	MU1 Ring	2/10/2017	14	137	186.2	-27	5.2	20.5	-75	839	1012.4	-17	
M-102	MU1 Ring	2/21/2017	11	133	186.2	-29	6.5	20.5	-68	819	1012.4	-19	
M-102	MU1 Ring	3/9/2017	16	137	186.2	-26	7.0	20.5	-66	823	1012.4	-19	
M-102	MU1 Ring	3/29/2017	20	130	186.2	-30	6.3	20.5	-69	812	1012.4	-20	
M-103A	MU1 Ring	1/13/2017	---	141	186.2	-24	7.0	20.5	-66	848	1012.4	-16	
M-103A	MU1 Ring	1/27/2017	14	133	186.2	-29	6.0	20.5	-71	816	1012.4	-19	
M-103A	MU1 Ring	2/10/2017	14	132	186.2	-29	6.0	20.5	-71	820	1012.4	-19	
M-103A	MU1 Ring	2/21/2017	11	129	186.2	-31	6.0	20.5	-71	802	1012.4	-21	
M-103A	MU1 Ring	3/9/2017	16	135	186.2	-27	6.5	20.5	-68	813	1012.4	-20	
M-103A	MU1 Ring	3/29/2017	20	127	186.2	-32	5.6	20.5	-72	812	1012.4	-20	
M-104	MU1 Ring	1/13/2017	---	161	186.2	-14	6.0	20.5	-71	780	1012.4	-23	
M-104	MU1 Ring	1/27/2017	14	134	186.2	-28	6.8	20.5	-67	807	1012.4	-20	
M-104	MU1 Ring	2/10/2017	14	143	186.2	-23	6.6	20.5	-68	829	1012.4	-18	
M-104	MU1 Ring	2/21/2017	11	147	186.2	-21	6.3	20.5	-69	819	1012.4	-19	
M-104	MU1 Ring	3/9/2017	16	139	186.2	-25	6.3	20.5	-69	826	1012.4	-18	
M-104	MU1 Ring	3/29/2017	20	138	186.2	-26	6.2	20.5	-70	832	1012.4	-18	
M-105	MU1 Ring	1/13/2017	---	126	186.2	-32	6.0	20.5	-71	664	1012.4	-34	
M-105	MU1 Ring	1/27/2017	14	111	186.2	-40	5.2	20.5	-74	594	1012.4	-41	
M-105	MU1 Ring	2/13/2017	17	111	186.2	-40	4.9	20.5	-76	569	1012.4	-44	
M-105	MU1 Ring	2/27/2017	14	110	186.2	-41	6.0	20.5	-71	589	1012.4	-42	
M-105	MU1 Ring	3/10/2017	11	117	186.2	-37	5.7	20.5	-72	629	1012.4	-38	
M-105	MU1 Ring	3/29/2017	19	111	186.2	-40	5.9	20.5	-71	630	1012.4	-38	
M-106	MU1 Ring	1/13/2017	---	121	186.2	-35	6.0	20.5	-71	645	1012.4	-36	
M-106	MU1 Ring	1/27/2017	14	121	186.2	-35	4.9	20.5	-76	624	1012.4	-38	
M-106	MU1 Ring	2/13/2017	17	118	186.2	-36	5.0	20.5	-76	605	1012.4	-40	
M-106	MU1 Ring	2/27/2017	14	116	186.2	-37	5.9	20.5	-71	596	1012.4	-41	
M-106	MU1 Ring	3/10/2017	11	---	186.2	---	---	20.5	---	---	1012.4	---	Inaccessible
M-106	MU1 Ring	3/29/2017	19	116	186.2	-38	5.9	20.5	-71	617	1012.4	-39	
M-107	MU1 Ring	1/13/2017	---	126	186.2	-32	6.0	20.5	-71	702	1012.4	-31	
M-107	MU1 Ring	1/27/2017	14	117	186.2	-37	5.8	20.5	-72	681	1012.4	-33	
M-107	MU1 Ring	2/13/2017	17	118	186.2	-37	6.1	20.5	-70	685	1012.4	-32	
M-107	MU1 Ring	2/27/2017	14	114	186.2	-39	5.7	20.5	-72	656	1012.4	-35	
M-107	MU1 Ring	3/13/2017	14	117	186.2	-37	7.0	20.5	-66	659	1012.4	-35	
M-107	MU1 Ring	3/29/2017	16	111	186.2	-41	5.5	20.5	-73	650	1012.4	-36	
M-108	MU1 Ring	1/13/2017	---	116	186.2	-38	6.0	20.5	-71	584	1012.4	-42	
M-108	MU1 Ring	1/27/2017	14	106	186.2	-43	5.5	20.5	-73	573	1012.4	-43	
M-108	MU1 Ring	2/13/2017	17	116	186.2	-38	5.5	20.5	-73	581	1012.4	-43	
M-108	MU1 Ring	2/27/2017	14	110	186.2	-41	5.6	20.5	-73	562	1012.4	-44	
M-108	MU1 Ring	3/13/2017	14	114	186.2	-39	5.8	20.5	-72	566	1012.4	-44	
M-108	MU1 Ring	3/29/2017	16	106	186.2	-43	5.3	20.5	-74	561	1012.4	-45	
M-109	MU1 Ring	1/13/2017	---	110	186.2	-41	6.0	20.5	-71	572	1012.4	-44	
M-109	MU1 Ring	1/27/2017	14	100	186.2	-46	5.4	20.5	-74	565	1012.4	-44	
M-109	MU1 Ring	2/13/2017	17	101	186.2	-46	5.3	20.5	-74	565	1012.4	-44	
M-109	MU1 Ring	2/27/2017	14	103	186.2	-45	6.4	20.5	-69	554	1012.4	-45	
M-109	MU1 Ring	3/13/2017	14	103	186.2	-45	5.5	20.5	-73	563	1012.4	-44	
M-109	MU1 Ring	3/29/2017	16	105	186.2	-44	6.3	20.5	-69	567	1012.4	-44	
M-110	MU1 Ring	1/13/2017	---	121	186.2	-35	8.0	20.5	-61	614	1012.4	-39	
M-110	MU1 Ring	1/27/2017	14	108	186.2	-42	6.5	20.5	-68	599	1012.4	-41	
M-110	MU1 Ring	2/13/2017	17	113	186.2	-39	6.6	20.5	-68	594	1012.4	-41	
M-110	MU1 Ring	2/27/2017	14	106	186.2	-43	6.7	20.5	-67	573	1012.4	-43	
M-110	MU1 Ring	3/13/2017	14	112	186.2	-40	6.7	20.5	-67	563	1012.4	-44	
M-110	MU1 Ring	3/29/2017	16	103	186.2	-45	6.8	20.5	-67	556	1012.4	-45	
M-111	MU1 Ring	1/13/2017	---	119	186.2	-36	6.0	20.5	-71	580	1012.4	-43	
M-111	MU1 Ring	1/27/2017	14	106	186.2	-43	5.5	20.5	-73	568	1012.4	-44	
M-111	MU1 Ring	2/13/2017	17	113	186.2	-39	5.9	20.5	-71	563	1012.4	-44	
M-111	MU1 Ring	2/27/2017	14	109	186.2	-41	5.6	20.5	-73	553	1012.4	-45	
M-111	MU1 Ring	3/13/2017	14	111	186.2	-40	6.6	20.5	-68	556	1012.4	-45	
M-111	MU1 Ring	3/29/2017	16	102	186.2	-45	5.4	20.5	-73	554	1012.4	-45	
M-112	MU1 Ring	1/13/2017	---	117	186.2	-37	5.0	20.5	-76	567	1012.4	-44	

Attachment 4: MU1 Water Quality Data
1st Quarter 2017
Lost Creek ISR Project PT788

Well ID	Well Type	Collection Date	Days Apart	Alkalinity (mg/L)			Chloride (mg/L)			Specific Conductance @ 25°C (µS/cm)			Comments
				Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	
M-112	MU1 Ring	1/27/2017	14	105	186.2	-44	5.7	20.5	-72	550	1012.4	-46	
M-112	MU1 Ring	2/13/2017	17	108	186.2	-42	5.5	20.5	-73	551	1012.4	-46	
M-112	MU1 Ring	2/27/2017	14	109	186.2	-41	6.0	20.5	-71	548	1012.4	-46	
M-112	MU1 Ring	3/13/2017	14	108	186.2	-42	5.9	20.5	-71	548	1012.4	-46	
M-112	MU1 Ring	3/29/2017	16	108	186.2	-42	5.7	20.5	-72	555	1012.4	-45	
M-113	MU1 Ring	1/10/2017	---	120	186.2	-36	5.0	20.5	-76	528	1012.4	-48	
M-113	MU1 Ring	1/25/2017	15	99	186.2	-47	4.8	20.5	-76	519	1012.4	-49	
M-113	MU1 Ring	2/9/2017	15	106	186.2	-43	4.9	20.5	-76	512	1012.4	-49	
M-113	MU1 Ring	2/20/2017	11	99	186.2	-47	6.0	20.5	-71	512	1012.4	-49	
M-113	MU1 Ring	3/8/2017	16	105	186.2	-43	5.2	20.5	-75	515	1012.4	-49	
M-113	MU1 Ring	3/28/2017	20	99	186.2	-47	5.9	20.5	-71	518	1012.4	-49	
M-114A	MU1 Ring	1/10/2017	---	109	186.2	-41	5.0	20.5	-76	533	1012.4	-47	
M-114A	MU1 Ring	1/25/2017	15	100	186.2	-46	4.9	20.5	-76	522	1012.4	-48	
M-114A	MU1 Ring	2/9/2017	15	106	186.2	-43	5.0	20.5	-75	520	1012.4	-49	
M-114A	MU1 Ring	2/20/2017	11	102	186.2	-45	5.4	20.5	-73	520	1012.4	-49	
M-114A	MU1 Ring	3/8/2017	16	105	186.2	-44	6.3	20.5	-69	520	1012.4	-49	
M-114A	MU1 Ring	3/28/2017	20	98	186.2	-47	5.3	20.5	-74	518	1012.4	-49	
M-115A	MU1 Ring	1/10/2017	---	108	186.2	-42	5.0	20.5	-76	499	1012.4	-51	
M-115A	MU1 Ring	1/26/2017	16	97	186.2	-48	5.5	20.5	-73	496	1012.4	-51	
M-115A	MU1 Ring	2/9/2017	14	101	186.2	-46	5.3	20.5	-74	489	1012.4	-52	
M-115A	MU1 Ring	2/20/2017	11	103	186.2	-44	4.9	20.5	-76	485	1012.4	-52	
M-115A	MU1 Ring	3/8/2017	16	100	186.2	-46	6.1	20.5	-70	492	1012.4	-51	
M-115A	MU1 Ring	3/28/2017	20	96	186.2	-49	4.7	20.5	-77	482	1012.4	-52	
M-116A	MU1 Ring	1/10/2017	---	109	186.2	-41	5.0	20.5	-76	508	1012.4	-50	
M-116A	MU1 Ring	1/26/2017	16	100	186.2	-46	5.0	20.5	-75	500	1012.4	-51	
M-116A	MU1 Ring	2/9/2017	14	104	186.2	-44	5.0	20.5	-76	497	1012.4	-51	
M-116A	MU1 Ring	2/20/2017	11	101	186.2	-46	5.9	20.5	-71	489	1012.4	-52	
M-116A	MU1 Ring	3/8/2017	16	106	186.2	-43	5.4	20.5	-73	494	1012.4	-51	
M-116A	MU1 Ring	3/28/2017	20	101	186.2	-46	5.4	20.5	-74	492	1012.4	-51	
M-117	MU1 Ring	1/11/2017	---	107	186.2	-43	5.0	20.5	-76	515	1012.4	-49	
M-117	MU1 Ring	1/26/2017	15	100	186.2	-46	4.7	20.5	-77	505	1012.4	-50	
M-117	MU1 Ring	2/9/2017	14	104	186.2	-44	4.8	20.5	-77	503	1012.4	-50	
M-117	MU1 Ring	2/20/2017	11	98	186.2	-48	5.6	20.5	-73	493	1012.4	-51	
M-117	MU1 Ring	3/8/2017	16	103	186.2	-45	5.1	20.5	-75	497	1012.4	-51	
M-117	MU1 Ring	3/28/2017	20	98	186.2	-47	5.8	20.5	-72	500	1012.4	-51	
M-118	MU1 Ring	1/11/2017	---	102	186.2	-45	5.0	20.5	-76	516	1012.4	-49	
M-118	MU1 Ring	1/26/2017	15	93	186.2	-50	4.9	20.5	-76	512	1012.4	-49	
M-118	MU1 Ring	2/9/2017	14	95	186.2	-49	4.9	20.5	-76	507	1012.4	-50	
M-118	MU1 Ring	2/20/2017	11	93	186.2	-50	5.5	20.5	-73	495	1012.4	-51	
M-118	MU1 Ring	3/8/2017	16	95	186.2	-49	5.8	20.5	-72	502	1012.4	-50	
M-118	MU1 Ring	3/28/2017	20	91	186.2	-51	5.3	20.5	-74	502	1012.4	-50	
M-119	MU1 Ring	1/11/2017	---	118	186.2	-37	5.0	20.5	-76	483	1012.4	-52	
M-119	MU1 Ring	1/26/2017	15	107	186.2	-43	5.8	20.5	-72	475	1012.4	-53	
M-119	MU1 Ring	2/9/2017	14	119	186.2	-36	5.9	20.5	-71	463	1012.4	-54	
M-119	MU1 Ring	2/20/2017	11	109	186.2	-41	5.7	20.5	-72	468	1012.4	-54	
M-119	MU1 Ring	3/8/2017	16	112	186.2	-40	6.4	20.5	-69	468	1012.4	-54	
M-119	MU1 Ring	3/28/2017	20	105	186.2	-44	5.5	20.5	-73	472	1012.4	-53	
M-120A	MU1 Ring	1/11/2017	---	115	186.2	-38	5.0	20.5	-76	488	1012.4	-52	
M-120A	MU1 Ring	1/26/2017	15	107	186.2	-43	5.0	20.5	-76	479	1012.4	-53	
M-120A	MU1 Ring	2/9/2017	14	110	186.2	-41	5.1	20.5	-75	475	1012.4	-53	
M-120A	MU1 Ring	2/20/2017	11	111	186.2	-40	6.4	20.5	-69	475	1012.4	-53	
M-120A	MU1 Ring	3/8/2017	16	117	186.2	-37	5.7	20.5	-72	470	1012.4	-54	
M-120A	MU1 Ring	3/28/2017	20	100	186.2	-46	5.1	20.5	-75	474	1012.4	-53	
M-121	MU1 Ring	1/11/2017	---	112	186.2	-40	5.7	20.5	-72	516	1012.4	-49	
M-121	MU1 Ring	1/26/2017	15	109	186.2	-41	4.9	20.5	-76	517	1012.4	-49	
M-121	MU1 Ring	2/9/2017	14	108	186.2	-42	4.8	20.5	-77	510	1012.4	-50	
M-121	MU1 Ring	2/20/2017	11	112	186.2	-40	6.3	20.5	-69	514	1012.4	-49	
M-121	MU1 Ring	3/8/2017	16	114	186.2	-39	5.1	20.5	-75	510	1012.4	-50	
M-121	MU1 Ring	3/28/2017	20	106	186.2	-43	5.6	20.5	-73	512	1012.4	-49	
M-122	MU1 Ring	1/11/2017	---	127	186.2	-32	5.0	20.5	-76	516	1012.4	-49	
M-122	MU1 Ring	1/26/2017	15	104	186.2	-44	5.3	20.5	-74	505	1012.4	-50	
M-122	MU1 Ring	2/9/2017	14	111	186.2	-40	6.0	20.5	-71	519	1012.4	-49	
M-122	MU1 Ring	2/20/2017	11	110	186.2	-41	5.4	20.5	-74	502	1012.4	-50	
M-122	MU1 Ring	3/8/2017	16	103	186.2	-45	6.0	20.5	-71	507	1012.4	-50	
M-122	MU1 Ring	3/28/2017	20	118	186.2	-37	5.5	20.5	-73	511	1012.4	-50	
M-123	MU1 Ring	1/11/2017	---	120	186.2	-36	5.0	20.5	-76	506	1012.4	-50	
M-123	MU1 Ring	1/26/2017	15	111	186.2	-40	5.6	20.5	-73	495	1012.4	-51	

**Attachment 4: MU1 Water Quality Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Collection Date	Days Apart	Alkalinity (mg/L)			Chloride (mg/L)			Specific Conductance @ 25°C (µS/cm)			Comments
				Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	
M-123	MU1 Ring	2/10/2017	15	115	186.2	-38	5.3	20.5	-74	496	1012.4	-51	
M-123	MU1 Ring	2/21/2017	11	113	186.2	-39	5.6	20.5	-73	491	1012.4	-52	
M-123	MU1 Ring	3/8/2017	15	112	186.2	-40	5.8	20.5	-72	495	1012.4	-51	
M-123	MU1 Ring	3/28/2017	20	107	186.2	-43	5.2	20.5	-75	495	1012.4	-51	
M-124	MU1 Ring	1/13/2017	---	116	186.2	-38	5.0	20.5	-76	477	1012.4	-53	
M-124	MU1 Ring	1/26/2017	13	107	186.2	-43	4.7	20.5	-77	469	1012.4	-54	
M-124	MU1 Ring	2/10/2017	15	108	186.2	-42	4.8	20.5	-76	469	1012.4	-54	
M-124	MU1 Ring	2/21/2017	11	106	186.2	-43	6.5	20.5	-68	469	1012.4	-54	
M-124	MU1 Ring	3/8/2017	15	111	186.2	-40	5.1	20.5	-75	468	1012.4	-54	
M-124	MU1 Ring	3/28/2017	20	106	186.2	-43	4.8	20.5	-77	465	1012.4	-54	
M-125	MU1 Ring	1/13/2017	---	115	186.2	-38	6.0	20.5	-71	559	1012.4	-45	
M-125	MU1 Ring	1/26/2017	13	102	186.2	-45	5.6	20.5	-73	545	1012.4	-46	
M-125	MU1 Ring	2/10/2017	15	110	186.2	-41	6.1	20.5	-70	551	1012.4	-46	
M-125	MU1 Ring	2/21/2017	11	108	186.2	-42	6.6	20.5	-68	542	1012.4	-46	
M-125	MU1 Ring	3/9/2017	16	108	186.2	-42	5.9	20.5	-71	545	1012.4	-46	
M-125	MU1 Ring	3/28/2017	19	103	186.2	-44	6.6	20.5	-68	540	1012.4	-47	
M-126	MU1 Ring	1/13/2017	---	117	186.2	-37	6.0	20.5	-71	558	1012.4	-45	
M-126	MU1 Ring	1/26/2017	13	107	186.2	-42	6.0	20.5	-71	550	1012.4	-46	
M-126	MU1 Ring	2/10/2017	15	108	186.2	-42	5.6	20.5	-73	546	1012.4	-46	
M-126	MU1 Ring	2/21/2017	11	109	186.2	-41	5.9	20.5	-71	550	1012.4	-46	
M-126	MU1 Ring	3/9/2017	16	105	186.2	-43	7.1	20.5	-66	545	1012.4	-46	
M-126	MU1 Ring	3/28/2017	19	102	186.2	-45	6.3	20.5	-69	542	1012.4	-46	
M-127	MU1 Ring	1/13/2017	---	117	186.2	-37	6.0	20.5	-71	568	1012.4	-44	
M-127	MU1 Ring	1/27/2017	14	109	186.2	-41	6.2	20.5	-70	560	1012.4	-45	
M-127	MU1 Ring	2/10/2017	14	112	186.2	-40	5.7	20.5	-72	556	1012.4	-45	
M-127	MU1 Ring	2/21/2017	11	107	186.2	-42	6.8	20.5	-67	551	1012.4	-46	
M-127	MU1 Ring	3/9/2017	16	105	186.2	-44	6.8	20.5	-67	556	1012.4	-45	
M-127	MU1 Ring	3/28/2017	19	107	186.2	-42	5.8	20.5	-72	558	1012.4	-45	
M-128	MU1 Ring	1/13/2017	---	118	186.2	-37	5.0	20.5	-76	584	1012.4	-42	
M-128	MU1 Ring	1/27/2017	14	105	186.2	-43	5.5	20.5	-73	571	1012.4	-44	
M-128	MU1 Ring	2/10/2017	14	115	186.2	-38	6.4	20.5	-69	575	1012.4	-43	
M-128	MU1 Ring	2/21/2017	11	112	186.2	-40	6.9	20.5	-66	573	1012.4	-43	
M-128	MU1 Ring	3/9/2017	16	100	186.2	-46	5.6	20.5	-72	574	1012.4	-43	
M-128	MU1 Ring	3/28/2017	19	109	186.2	-41	5.8	20.5	-72	576	1012.4	-43	
MO-101	MU1 Overlying	1/16/2017	---	114	182.1	-37	7.0	21.4	-67	666	921.7	-28	
MO-101	MU1 Overlying	1/30/2017	14	113	182.1	-38	6.9	21.4	-68	641	921.7	-30	
MO-101	MU1 Overlying	2/14/2017	15	104	182.1	-43	6.6	21.4	-69	637	921.7	-31	
MO-101	MU1 Overlying	2/27/2017	13	103	182.1	-44	7.6	21.4	-64	631	921.7	-32	
MO-101	MU1 Overlying	3/13/2017	14	106	182.1	-42	7.4	21.4	-65	631	921.7	-32	
MO-101	MU1 Overlying	3/30/2017	17	99	182.1	-46	8.4	21.4	-61	642	921.7	-30	
MO-102	MU1 Overlying	1/16/2017	---	107	182.1	-41	7.0	21.4	-67	606	921.7	-34	
MO-102	MU1 Overlying	1/30/2017	14	100	182.1	-45	6.6	21.4	-69	590	921.7	-36	
MO-102	MU1 Overlying	2/14/2017	15	102	182.1	-44	7.0	21.4	-67	600	921.7	-35	
MO-102	MU1 Overlying	2/27/2017	13	99	182.1	-46	6.8	21.4	-68	593	921.7	-36	
MO-102	MU1 Overlying	3/13/2017	14	103	182.1	-44	7.4	21.4	-65	592	921.7	-36	
MO-102	MU1 Overlying	3/30/2017	17	96	182.1	-47	6.5	21.4	-70	592	921.7	-36	
MO-103	MU1 Overlying	1/16/2017	---	108	182.1	-41	8.1	21.4	-62	680	921.7	-26	
MO-103	MU1 Overlying	1/30/2017	14	107	182.1	-41	9.0	21.4	-58	707	921.7	-23	
MO-103	MU1 Overlying	2/14/2017	15	116	182.1	-36	8.1	21.4	-62	712	921.7	-23	
MO-103	MU1 Overlying	2/27/2017	13	116	182.1	-37	10.6	21.4	-50	710	921.7	-23	
MO-103	MU1 Overlying	3/13/2017	14	95	182.1	-48	9.7	21.4	-55	718	921.7	-22	
MO-103	MU1 Overlying	3/30/2017	17	114	182.1	-37	8.0	21.4	-63	721	921.7	-22	
MO-104	MU1 Overlying	1/16/2017	---	121	182.1	-34	9.0	21.4	-58	613	921.7	-33	
MO-104	MU1 Overlying	1/30/2017	14	109	182.1	-40	7.8	21.4	-64	599	921.7	-35	
MO-104	MU1 Overlying	2/14/2017	15	113	182.1	-38	8.6	21.4	-60	606	921.7	-34	
MO-104	MU1 Overlying	2/28/2017	14	111	182.1	-39	8.7	21.4	-59	594	921.7	-36	
MO-104	MU1 Overlying	3/13/2017	13	112	182.1	-39	7.8	21.4	-63	594	921.7	-36	
MO-104	MU1 Overlying	3/30/2017	17	107	182.1	-41	9.4	21.4	-56	593	921.7	-36	
MO-105	MU1 Overlying	1/16/2017	---	120	182.1	-34	6.0	21.4	-72	489	921.7	-47	
MO-105	MU1 Overlying	1/30/2017	14	98	182.1	-46	4.9	21.4	-77	479	921.7	-48	
MO-105	MU1 Overlying	2/14/2017	15	106	182.1	-42	5.5	21.4	-74	481	921.7	-48	
MO-105	MU1 Overlying	2/28/2017	14	100	182.1	-45	5.5	21.4	-74	477	921.7	-48	
MO-105	MU1 Overlying	3/13/2017	13	104	182.1	-43	5.4	21.4	-75	479	921.7	-48	
MO-105	MU1 Overlying	3/30/2017	17	96	182.1	-47	6.1	21.4	-72	479	921.7	-48	
MO-106	MU1 Overlying	1/16/2017	---	107	182.1	-41	6.0	21.4	-72	477	921.7	-48	
MO-106	MU1 Overlying	1/30/2017	14	96	182.1	-47	5.8	21.4	-73	466	921.7	-49	
MO-106	MU1 Overlying	2/14/2017	15	99	182.1	-46	5.4	21.4	-75	469	921.7	-49	

**Attachment 4: MU1 Water Quality Data
1st Quarter 2017
Lost Creek ISR Project PT788**

Well ID	Well Type	Collection Date	Days Apart	Alkalinity (mg/L)			Chloride (mg/L)			Specific Conductance @ 25°C (µS/cm)			Comments
				Assay	UCL†	% Diff	Assay	UCL†	% Diff	Assay	UCL†	% Diff	
MO-106	MU1 Overlying	2/28/2017	14	98	182.1	-46	6.2	21.4	-71	460	921.7	-50	
MO-106	MU1 Overlying	3/13/2017	13	98	182.1	-46	6.7	21.4	-69	465	921.7	-50	
MO-106	MU1 Overlying	3/30/2017	17	96	182.1	-47	5.3	21.4	-75	466	921.7	-49	
MO-107	MU1 Overlying	1/16/2017	---	120	182.1	-34	6.0	21.4	-72	472	921.7	-49	
MO-107	MU1 Overlying	1/30/2017	14	96	182.1	-47	5.3	21.4	-75	467	921.7	-49	
MO-107	MU1 Overlying	2/15/2017	16	99	182.1	-46	4.9	21.4	-77	462	921.7	-50	
MO-107	MU1 Overlying	2/28/2017	13	102	182.1	-44	6.7	21.4	-69	463	921.7	-50	
MO-107	MU1 Overlying	3/13/2017	13	101	182.1	-45	5.6	21.4	-74	465	921.7	-50	
MO-107	MU1 Overlying	3/30/2017	17	98	182.1	-46	4.9	21.4	-77	463	921.7	-50	
MO-108	MU1 Overlying	1/4/2017	---	111	182.1	-39	9.0	21.4	-58	533	921.7	-42	
MO-108	MU1 Overlying	1/16/2017	12	120	182.1	-34	7.0	21.4	-67	506	921.7	-45	
MO-108	MU1 Overlying	1/30/2017	14	---	182.1	---	---	21.4	---	---	921.7	---	Sampling suspended for aquifer testing
MO-108	MU1 Overlying	2/15/2017	16	---	182.1	---	---	21.4	---	---	921.7	---	
MO-108	MU1 Overlying	2/27/2017	12	---	182.1	---	---	21.4	---	---	921.7	---	
MO-108	MU1 Overlying	3/14/2017	15	---	182.1	---	---	21.4	---	---	921.7	---	
MO-108	MU1 Overlying	3/27/2017	13	93	182.1	-49	6.8	21.4	-68	486	921.7	-47	
MO-109	MU1 Overlying	1/17/2017	---	113	182.1	-38	8.0	21.4	-63	517	921.7	-44	
MO-109	MU1 Overlying	1/31/2017	14	103	182.1	-44	6.5	21.4	-69	511	921.7	-45	
MO-109	MU1 Overlying	2/15/2017	15	107	182.1	-41	7.1	21.4	-67	508	921.7	-45	
MO-109	MU1 Overlying	2/28/2017	13	109	182.1	-40	7.5	21.4	-65	506	921.7	-45	
MO-109	MU1 Overlying	3/14/2017	14	112	182.1	-38	6.8	21.4	-68	509	921.7	-45	
MO-109	MU1 Overlying	3/30/2017	16	101	182.1	-45	7.6	21.4	-64	516	921.7	-44	
MO-110	MU1 Overlying	1/17/2017	---	102	182.1	-44	5.0	21.4	-77	442	921.7	-52	
MO-110	MU1 Overlying	1/31/2017	14	94	182.1	-48	4.8	21.4	-77	436	921.7	-53	
MO-110	MU1 Overlying	2/15/2017	15	98	182.1	-46	5.2	21.4	-76	434	921.7	-53	
MO-110	MU1 Overlying	2/28/2017	13	94	182.1	-48	5.8	21.4	-73	434	921.7	-53	
MO-110	MU1 Overlying	3/14/2017	14	96	182.1	-47	5.8	21.4	-73	434	921.7	-53	
MO-110	MU1 Overlying	3/30/2017	16	91	182.1	-50	5.0	21.4	-77	438	921.7	-52	
MO-111	MU1 Overlying	1/17/2017	---	104	182.1	-43	7.0	21.4	-67	442	921.7	-52	
MO-111	MU1 Overlying	1/31/2017	14	94	182.1	-49	7.7	21.4	-64	437	921.7	-53	
MO-111	MU1 Overlying	2/15/2017	15	97	182.1	-47	6.7	21.4	-68	438	921.7	-52	
MO-111	MU1 Overlying	3/1/2017	14	106	182.1	-42	10.1	21.4	-53	452	921.7	-51	
MO-111	MU1 Overlying	3/14/2017	13	100	182.1	-45	10.0	21.4	-53	461	921.7	-50	
MO-111	MU1 Overlying	3/30/2017	16	102	182.1	-44	10.7	21.4	-50	476	921.7	-48	
MO-112	MU1 Overlying	1/17/2017	---	113	182.1	-38	7.0	21.4	-67	434	921.7	-53	
MO-112	MU1 Overlying	1/31/2017	14	102	182.1	-44	6.4	21.4	-70	428	921.7	-54	
MO-112	MU1 Overlying	2/15/2017	15	104	182.1	-43	6.5	21.4	-69	427	921.7	-54	
MO-112	MU1 Overlying	3/1/2017	14	108	182.1	-41	7.0	21.4	-67	422	921.7	-54	
MO-112	MU1 Overlying	3/14/2017	13	107	182.1	-41	7.2	21.4	-66	429	921.7	-53	
MO-112	MU1 Overlying	3/30/2017	16	103	182.1	-43	7.6	21.4	-65	433	921.7	-53	
MO-113	MU1 Overlying	1/17/2017	---	108	182.1	-41	6.0	21.4	-72	457	921.7	-50	
MO-113	MU1 Overlying	1/31/2017	14	99	182.1	-46	5.6	21.4	-74	451	921.7	-51	
MO-113	MU1 Overlying	2/15/2017	15	104	182.1	-43	6.5	21.4	-69	449	921.7	-51	
MO-113	MU1 Overlying	3/1/2017	14	100	182.1	-45	6.5	21.4	-70	447	921.7	-52	
MO-113	MU1 Overlying	3/14/2017	13	106	182.1	-42	6.5	21.4	-70	452	921.7	-51	
MO-113	MU1 Overlying	3/31/2017	17	95	182.1	-48	6.3	21.4	-70	452	921.7	-51	
MU-101	MU1 Overlying	1/16/2017	---	115	182.1	-37	5.0	21.4	-77	556	921.7	-40	
MU-101	MU1 Overlying	1/30/2017	14	110	206.0	-47	5.1	21.3	-76	544	658.9	-17	
MU-101	MU1 Overlying	2/14/2017	15	116	206.0	-44	5.2	21.3	-75	541	658.9	-18	
MU-101	MU1 Overlying	2/27/2017	13	107	206.0	-48	5.8	21.3	-73	553	658.9	-16	
MU-101	MU1 Overlying	3/13/2017	14	109	206.0	-47	5.0	21.3	-76	545	658.9	-17	
MU-101	MU1 Overlying	3/30/2017	17	101	206.0	-51	5.0	21.3	-76	543	658.9	-18	
MU-102	MU1 Overlying	1/16/2017	---	110	206.0	-47	5.0	21.3	-76	436	658.9	-34	
MU-102	MU1 Underlying	1/30/2017	14	100	206.0	-51	5.1	21.3	-76	428	658.9	-35	
MU-102	MU1 Underlying	2/14/2017	15	102	206.0	-50	4.4	21.3	-79	426	658.9	-35	
MU-102	MU1 Underlying	2/27/2017	13	104	206.0	-50	6.1	21.3	-71	424	658.9	-36	
MU-102	MU1 Underlying	3/13/2017	14	103	206.0	-50	4.8	21.3	-77	427	658.9	-35	
MU-102	MU1 Underlying	3/30/2017	17	99	206.0	-52	5.1	21.3	-76	429	658.9	-35	
MU-103	MU1 Underlying	1/16/2017	---	107	206.0	-48	5.0	21.3	-76	431	658.9	-35	
MU-103	MU1 Underlying	1/30/2017	14	98	206.0	-52	4.8	21.3	-78	424	658.9	-36	
MU-103	MU1 Underlying	2/14/2017	15	103	206.0	-50	4.7	21.3	-78	419	658.9	-36	
MU-103	MU1 Underlying	2/27/2017	13	102	206.0	-51	5.5	21.3	-74	420	658.9	-36	
MU-103	MU1 Underlying	3/13/2017	14	105	206.0	-49	5.4	21.3	-75	422	658.9	-36	
MU-103	MU1 Underlying	3/30/2017	17	98	206.0	-53	5.6	21.3	-73	423	658.9	-36	
MU-104B	MU1 Underlying	1/16/2017	---	103	206.0	-50	5.0	21.3	-76	439	658.9	-33	
MU-104B	MU1 Underlying	1/30/2017	14	96	206.0	-54	4.4	21.3	-79	433	658.9	-34	
MU-104B	MU1 Underlying	2/14/2017	15	98	206.0	-52	5.3	21.3	-75	431	658.9	-35	

Attachment 4: MU1 Water Quality Data
1st Quarter 2017
Lost Creek ISR Project PT788

Well ID	Well Type	Collection Date	Days Apart	Alkalinity (mg/L)			Chloride (mg/L)			Specific Conductance @ 25°C (µS/cm)			Comments
				Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	Assay	UCL [†]	% Diff	
MU-104B	MU1 Underlying	2/28/2017	14	96	206.0	-54	5.3	21.3	-75	434	658.9	-34	
MU-104B	MU1 Underlying	3/13/2017	13	100	206.0	-52	5.1	21.3	-76	433	658.9	-34	
MU-104B	MU1 Underlying	3/30/2017	17	92	206.0	-55	4.9	21.3	-77	435	658.9	-34	
MU-105	MU1 Underlying	1/16/2017	---	108	206.0	-48	6.0	21.3	-72	446	658.9	-32	
MU-105	MU1 Underlying	1/30/2017	14	103	206.0	-50	4.9	21.3	-77	443	658.9	-33	
MU-105	MU1 Underlying	2/14/2017	15	101	206.0	-51	4.9	21.3	-77	438	658.9	-34	
MU-105	MU1 Underlying	2/28/2017	14	100	206.0	-52	6.0	21.3	-72	432	658.9	-34	
MU-105	MU1 Underlying	3/13/2017	13	101	206.0	-51	4.8	21.3	-77	436	658.9	-34	
MU-105	MU1 Underlying	3/30/2017	17	105	206.0	-49	4.7	21.3	-78	434	658.9	-34	
MU-106	MU1 Underlying	1/16/2017	---	107	206.0	-48	5.0	21.3	-76	455	658.9	-31	
MU-106	MU1 Underlying	1/30/2017	14	100	206.0	-52	5.6	21.3	-73	428	658.9	-35	
MU-106	MU1 Underlying	2/14/2017	15	101	206.0	-51	4.7	21.3	-78	439	658.9	-33	
MU-106	MU1 Underlying	2/28/2017	14	102	206.0	-50	6.0	21.3	-72	421	658.9	-36	
MU-106	MU1 Underlying	3/13/2017	13	101	206.0	-51	5.3	21.3	-75	419	658.9	-36	
MU-106	MU1 Underlying	3/30/2017	17	96	206.0	-53	5.7	21.3	-73	430	658.9	-35	
MU-107	MU1 Underlying	1/16/2017	---	108	206.0	-48	5.0	21.3	-76	477	658.9	-28	
MU-107	MU1 Underlying	1/30/2017	14	97	206.0	-53	4.8	21.3	-77	474	658.9	-28	
MU-107	MU1 Underlying	2/15/2017	16	104	206.0	-50	4.8	21.3	-78	476	658.9	-28	
MU-107	MU1 Underlying	2/28/2017	13	102	206.0	-51	5.5	21.3	-74	474	658.9	-28	
MU-107	MU1 Underlying	3/13/2017	13	106	206.0	-48	5.8	21.3	-73	478	658.9	-27	
MU-107	MU1 Underlying	3/30/2017	17	98	206.0	-52	5.5	21.3	-74	475	658.9	-28	
KPW-2	MU1 Underlying	1/16/2017	---	113	206.0	-45	8.0	21.3	-62	509	658.9	-23	
KPW-2	MU1 Underlying	1/30/2017	14	106	206.0	-48	8.6	21.3	-59	523	658.9	-21	
KPW-2	MU1 Underlying	2/15/2017	16	104	206.0	-49	7.3	21.3	-66	493	658.9	-25	
KPW-2	MU1 Underlying	2/28/2017	13	103	206.0	-50	9.0	21.3	-58	504	658.9	-24	
KPW-2	MU1 Underlying	3/14/2017	14	105	206.0	-49	8.1	21.3	-62	508	658.9	-23	
KPW-2	MU1 Underlying	3/27/2017	13	106	206.0	-49	10.3	21.3	-52	542	658.9	-18	
MU-109	MU1 Underlying	1/17/2017	---	130	206.0	-37	12.0	21.3	-44	567	658.9	-14	
MU-109	MU1 Underlying	1/31/2017	14	127	206.0	-38	14.1	21.3	-34	515	658.9	-22	
MU-109	MU1 Underlying	2/15/2017	15	124	206.0	-40	12.8	21.3	-40	520	658.9	-21	
MU-109	MU1 Underlying	2/28/2017	13	123	206.0	-40	12.4	21.3	-42	520	658.9	-21	
MU-109	MU1 Underlying	3/14/2017	14	127	206.0	-38	12.3	21.3	-42	520	658.9	-21	
MU-109	MU1 Underlying	3/30/2017	16	125	206.0	-40	14.6	21.3	-31	589	658.9	-11	
MU-110	MU1 Underlying	1/17/2017	---	98	206.0	-52	7.0	21.3	-67	469	658.9	-29	
MU-110	MU1 Underlying	1/31/2017	14	88	206.0	-57	5.7	21.3	-73	467	658.9	-29	
MU-110	MU1 Underlying	2/15/2017	15	96	206.0	-53	5.9	21.3	-72	464	658.9	-30	
MU-110	MU1 Underlying	2/28/2017	13	95	206.0	-54	5.7	21.3	-73	507	658.9	-23	
MU-110	MU1 Underlying	3/14/2017	14	97	206.0	-53	6.7	21.3	-69	468	658.9	-29	
MU-110	MU1 Underlying	3/30/2017	16	91	206.0	-56	6.8	21.3	-68	470	658.9	-29	
MU-111	MU1 Underlying	1/17/2017	---	101	206.0	-51	6.0	21.3	-72	512	658.9	-22	
MU-111	MU1 Underlying	1/31/2017	14	92	206.0	-55	4.7	21.3	-78	508	658.9	-23	
MU-111	MU1 Underlying	2/15/2017	15	96	206.0	-54	4.9	21.3	-77	506	658.9	-23	
MU-111	MU1 Underlying	3/1/2017	14	92	206.0	-55	6.7	21.3	-69	465	658.9	-29	
MU-111	MU1 Underlying	3/14/2017	13	96	206.0	-53	5.5	21.3	-74	511	658.9	-22	
MU-111	MU1 Underlying	3/30/2017	16	91	206.0	-56	4.9	21.3	-77	509	658.9	-23	
MU-112	MU1 Underlying	1/17/2017	---	101	206.0	-51	5.0	21.3	-76	454	658.9	-31	
MU-112	MU1 Underlying	1/31/2017	14	103	206.0	-50	4.8	21.3	-77	449	658.9	-32	
MU-112	MU1 Underlying	2/15/2017	15	94	206.0	-54	5.2	21.3	-75	445	658.9	-32	
MU-112	MU1 Underlying	3/1/2017	14	94	206.0	-55	6.2	21.3	-71	447	658.9	-32	
MU-112	MU1 Underlying	3/14/2017	13	96	206.0	-54	5.0	21.3	-76	451	658.9	-32	
MU-112	MU1 Underlying	3/30/2017	16	89	206.0	-57	4.6	21.3	-78	455	658.9	-31	
MU-113	MU1 Underlying	1/17/2017	---	109	206.0	-47	6.0	21.3	-72	483	658.9	-27	
MU-113	MU1 Underlying	1/31/2017	14	88	206.0	-57	5.5	21.3	-74	483	658.9	-27	
MU-113	MU1 Underlying	2/15/2017	15	91	206.0	-56	5.1	21.3	-76	478	658.9	-27	
MU-113	MU1 Underlying	3/1/2017	14	91	206.0	-56	5.9	21.3	-72	480	658.9	-27	
MU-113	MU1 Underlying	3/14/2017	13	95	206.0	-54	5.0	21.3	-77	482	658.9	-27	
MU-113	MU1 Underlying	3/31/2017	17	89	206.0	-57	5.6	21.3	-73	485	658.9	-26	
LC29M	Regional DE	3/27/2017	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Insufficient water
MB-10	Regional DE	3/27/2017	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Insufficient water

UCL : Upper Control Limit

† : UCL determined by well group (see Permit to Mine, Mine Unit 1 Report, Table MU1 4-12)

Italics : Indicates warning when result is > UCL but < 120% of UCL

Bold Italics : Indicates one value > 120% of UCL; or 2 or 3 values > UCL

Attachment 4: MU1 Water Quality Data - QC
4th Quarter 2016
Lost Creek ISR Project PT788

QC Sample ID	Collection Date	QC Type	Source Sample ID	Alkalinity (mg/L)			Chloride (mg/L)			Sp. Cond. (uS/cm)		
				QC Sample Assay	Source Sample Assay	RPD	QC Sample Assay	Source Sample Assay	RPD	QC Sample Assay	Primary Sample Assay	RPD
M-129	1/13/2017	Duplicate	M-120	128	115	11	5.0	5.0	0	487	488	0
M-129	1/26/2017	Duplicate	M-123	108	111	3	5.1	5.6	10	504	495	2
M-129	2/10/2017	Duplicate	M-123	116	115	1	5.3	5.3	1	498	496	0
M-129	2/20/2017	Duplicate	M-121	108	112	4	5.9	6.3	7	514	514	0
M-129	3/8/2017	Duplicate	M-118	99	95	4	4.9	5.8	17	513	492	4
M-129	3/28/2017	Duplicate	M-117	93	98	5	5.4	5.8	6	504	500	1
M-130	1/13/2017	Field Blank	N/A	ND(5)	N/A	N/A	ND(1)	N/A	N/A	ND(5)	N/A	N/A
M-130	1/27/2017	Field Blank	N/A	7	N/A	N/A	0.0	N/A	N/A	31	N/A	N/A
M-130	2/10/2017	Field Blank	N/A	11	N/A	N/A	0.0	N/A	N/A	5	N/A	N/A
M-130	2/21/2017	Field Blank	N/A	15	N/A	N/A	0.0	N/A	N/A	31	N/A	N/A
M-130	3/8/2017	Field Blank	N/A	11	N/A	N/A	0.0	N/A	N/A	29	N/A	N/A
M-130	3/28/2017	Field Blank	N/A	12	N/A	N/A	0.0	N/A	N/A	28	N/A	N/A
M-131	1/13/2017	Duplicate	M-121	116	112	4	6.0	5.7	5	522	516	1
M-131	1/26/2017	Duplicate	M-124	105	107	1	4.5	4.7	5	470	469	0
M-131	2/10/2017	Duplicate	M-124	107	108	1	4.6	4.8	6	468	469	0
M-131	2/20/2017	Duplicate	M-122	118	110	7	5.1	5.4	5	502	502	0
M-131	3/8/2017	Duplicate	M-119	113	112	1	5.5	6.4	16	473	468	1
M-131	3/28/2017	Duplicate	M-118	93	91	2	5.5	5.3	3	510	502	2
M-132	1/13/2017	Field Blank	N/A	ND(5)	N/A	N/A	ND(1)	N/A	N/A	ND(5)	N/A	N/A
M-132	1/27/2017	Field Blank	N/A	9	N/A	N/A	0.6	N/A	N/A	2	N/A	N/A
M-132	2/10/2017	Field Blank	N/A	1	N/A	N/A	0.0	N/A	N/A	1	N/A	N/A
M-132	2/21/2017	Field Blank	N/A	13	N/A	N/A	0.0	N/A	N/A	33	N/A	N/A
M-132	3/8/2017	Field Blank	N/A	14	N/A	N/A	0.0	N/A	N/A	30	N/A	N/A
M-132	3/28/2017	Field Blank	N/A	13	N/A	N/A	0.0	N/A	N/A	31	N/A	N/A
MO-121	1/17/2017	Duplicate	MO-109	113	113	0	7.0	8.0	13	516	517	0
MO-121	1/30/2017	Duplicate	MO-102	97	100	3	6.8	6.6	3	595	590	1
MO-121	2/15/2017	Duplicate	MO-109	109	107	2	6.7	7.1	6	511	508	1
MO-121	2/28/2017	Duplicate	MU-105	102	100	2	5.0	6.0	18	434	432	0
MO-121	3/13/2017	Duplicate	MO-103	115	95	19	10.0	9.7	4	715	718	0
MO-121	3/30/2017	Duplicate	MO-109	103	101	2	7.4	7.6	3	523	516	1
MO-122	1/17/2017	Field Blank	N/A	ND(5)	N/A	N/A	ND(1)	N/A	N/A	ND(5)	N/A	N/A
MO-122	1/31/2017	Field Blank	N/A	110	N/A	N/A	10.0	N/A	N/A	712	N/A	N/A
MO-122	2/15/2017	Field Blank	N/A	13	N/A	N/A	0.0	N/A	N/A	6	N/A	N/A
MO-122	3/1/2017	Field Blank	N/A	17	N/A	N/A	0.0	N/A	N/A	37	N/A	N/A
MO-122	3/14/2017	Field Blank	N/A	12	N/A	N/A	0.0	N/A	N/A	30	N/A	N/A
MO-122	3/30/2017	Duplicate	MO-110	92	91	1	4.9	5.0	1	444	438	1
MU-123	1/17/2017	Duplicate	MO-110	97	102	5	7.0	5.0	33	469	442	6
MU-123	1/30/2017	Field Blank	N/A	9	N/A	N/A	0.0	N/A	N/A	33	N/A	N/A
MU-123	2/15/2017	Duplicate	MO-110	96	98	2	5.7	5.2	10	438	434	1
MU-123	3/1/2017	Duplicate	MU-112	95	94	1	4.8	6.2	25	450	447	1
MU-123	3/13/2017	Duplicate	MO-105	106	104	2	6.2	5.4	14	481	479	0
MU-123	3/30/2017	Field Blank	N/A	13	N/A	N/A	0.0	N/A	N/A	31	N/A	N/A
MU-124	1/17/2017	Field Blank	N/A	ND(5)	N/A	N/A	ND(1)	N/A	N/A	ND(5)	N/A	N/A
MU-124	1/31/2017	Field Blank	N/A	10	N/A	N/A	0.5	N/A	N/A	2	N/A	N/A
MU-124	2/15/2017	Field Blank	N/A	3	N/A	N/A	0.0	N/A	N/A	7	N/A	N/A
MU-124	3/1/2017	Field Blank	N/A	14	N/A	N/A	0.0	N/A	N/A	35	N/A	N/A
MU-124	3/14/2017	Field Blank	N/A	15	N/A	N/A	0.0	N/A	N/A	34	N/A	N/A

RPD: Relative Percent Difference