Facility Well Name Northern (Bushton) #1 **UIC Permit #** KS-01-159-003 **Month** August **Year** 2021

Submitted 09/08/2021 **Approved** 09/24/2021 **KOLAR Document ID** 1589770

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 8

Barrels per Day Maximum: 3,840

			Annulus Pressure psig min 60		Injection Pressure		
	Injection Volume Barrels per Day	Injection Rate Barrels per Minute	Gauge psig	Cont. Record psig	Gauge psig	Cont. Record psig	Amount Added to Seal Pot
Monthly Average	88	0.07	125	122	-26.3	-23.2	0
Monthly Maximum	1,252	2.02	128	124	-3.0	-2.0	0
Monthly Minimum	0	0.00	117	112	-29.0	-25.3	0
Monthly Total	2,738						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
136.30	111.80	1.50	-26.70

Comments:

8/10/21: Started injection for fall-off test. 8/11/21: Performed fall-off test. 8/13/21: Replaced pressure and vacuum gauges: 8/25/21: Injected remaing water from fall-off test.

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Daily Recorder Data

Day	Time 24 hr	Injection Volume Barrels Per Day	Injection Rate Barrels Per Minute	Annulus Pressure (Gauge) psig	Annulus Pressure (Continuous Recorder) psig	Injection Pressure (Gauge) + / -	Injection Pressure (Continuous Recorder) + / -	Seal Pot Fluid Level inches	Type of Fluid Added to Seal Pot	Amount of Fluid Added to Seal Pot gallons	Initials of Collector of Field Recordings		
1	10:00	0.00	0.00	125	122.2	-28	-25.0	7	N	0	RB		
2	06:00	0.00	0.00	126	122.3	-29	-25.1	7	N	0	MU		
3	06:00	0.00	0.00	123	121.1	-24	-21.3	7	N	0	MU		
4	06:00	0.00	0.00	125	122.1	-27	-25.0	7	N	0	MU		
5	06:00	0.00	0.00	125	122.2	-29	-25.1	7	N	0	MU		
6	09:00	151.79	0.00	121	116.8	-28	-24.9	7	N	0	DJ		
7	07:30	0.00	0.00	127	122.4	-28	-24.7	7	N	0	DJ		
8	08:00	0.00	0.00	126	122.4	-28	-24.7	7	N	0	DJ		
9	09:30	0.00	0.00	127	122.0	-28	-24.7	7	N	0	TM		
10	06:30	0.00	0.00	127	122.0	-28	-24.7	7	N	0	TM		
11	06:15	1,252.45	2.02	117	111.8	-27	-24.2	7	N	0	RB		
12	08:45	502.69	0.00	122	120.9	-5	-2.0	7	N	0	RB		
13	07:45	0.00	0.00	125	121.7	-3	-2.4	7	N	0	MW		
14	08:45	11.55	0.00	125	121.9	-28	-25.3	7	N	0	MW		
15	07:00	0.00	0.00	125	122.3	-28	-25.0	7	N	0	MW		
16	08:26	0.00	0.00	125	122.3	-28	-24.9	6	N	0	LM		
17	08:15	0.00	0.00	126	122.5	-28	-24.8	6	N	0	LM		
18	08:55	0.00	0.00	126	122.8	-28	-24.8	6	N	0	LM		
19	06:00	0.00	0.00	126	122.6	-28	-24.9	6	N	0	MU		
20	06:00	0.00	0.00	125	122.4	-28	-25.0	6	N	0	MU		
21	07:00	0.00	0.00	126	122.6	-28	-24.8	7	N	0	MU		
22	08:00	6.29	0.00	125	123.0	-28	-24.8	7	N	0	MW		
23	07:15	0.00	0.00	128	123.5	-28	-24.6	7	N	0	MW		
24	07:40	0.00	0.00	126	123.5	-28	-24.7	7	N	0	MW		
25	06:45	639.33	0.00	125	121.8	-27	-24.8	7	N	0	TM		
26	08:45	75.02	0.00	124	120.0	-28	-24.5	7	N	0	RB		
27	08:45	0.00	0.00	125	124.0	-28	-24.5	7	N	0	RB		
28	11:00	99.05	0.00	125	123.5	-28	-24.5	7	N	0	RB		
29	06:00	0.00	0.00	126	122.2	-28	-24.8	7	N	0	RB		
30	06:00	0.00	0.00	126	122.2	-28	-24.8	7	N	0	MU		
31	06:00	0.00	0.00	126	122.6	-28	-24.5	7	N	0	MU		

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Weekly Injectate Samples

Kansas Lab Certificate Number

Week	Temperature		pH		Chloride				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	67.00	08/06/2021	6.81	08/06/2021	N/A				
2	67.00	08/11/2021	7.05	08/11/2021	N/A				
3	71.00	08/25/2021	5.30	08/25/2021	N/A				
4	70.00	08/31/2021	6.11	08/31/2021	N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 3
Date Sample Collected 08/11/2021
Kansas Lab Certificate Number E-10146
Lab Name Pace Analytical-Salina

These samples shall be representative of injection activity and shall therefore be collected on days of injection.

Constituent	Value	Units
Calcium	86.400	mg/l
Chloride	27.100	mg/l
Conductivity	57.700	Mmhos
Diethanolamine	<50.000	mg/l
Iron	3.770	mg/l
Magnesium	11.100	mg/l
Sulfate	18.000	mg/l
Total Alkalinity as CaCO3	268.000	mg/l
Total Dissolved Solids	366.000	mg/l
Total Hardness as CaCO3	261.000	mg/l