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

Submitted 03/04/2021 **Approved** 03/17/2021 **KOLAR Document ID** 1562855

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 18

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	121	0.07	119	116	-25.8	-24.9	0
Monthly Maximum	1,491	1.83	125	123	-24.0	-24.3	0
Monthly Minimum	0	0.00	110	107	-26.0	-25.5	0
Monthly Total	3,392						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
124.50	101.90	-24.10	-25.60

Comments:

Disposal well lines were frozen from 2/10/21-2/19/21. No injection occurred. Upon thawing water lines, 62,611 gallons were injected. It averages as 6,261 gallons per day which is considered normal operation.

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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	08:03	82.38	0.00	119	115.0	-26	-24.9	10	N	0	LM		
2	08:16	94.79	0.00	119	115.0	-26	-25.1	11	N	0	LM		
3	08:15	81.83	0.00	120	115.6	-26	-24.9	9	N	0	DJ		
4	07:29	82.07	0.00	120	115.6	-26	-24.8	9	N	0	LM		
5	13:00	163.50	0.00	125	123.0	-25	-24.5	9	N	0	MU		
6	11:00	81.95	0.00	121	117.4	-26	-25.0	9	N	0	MU		
7	07:00	9.83	1.83	120	116.5	-26	-24.6	9	N	0	MU		
8	06:40	72.33	0.00	120	116.5	-26	-25.0	9	N	0	MW		
9	06:40	90.62	0.00	120	115.6	-26	-25.2	9	N	0	MW		
10	06:40	0.00	0.00	120	116.5	-26	-25.2	9	N	0	MW		
11	07:30	0.00	0.00	120	116.7	-26	-25.2	9	N	0	MW		
12	15:00	0.00	0.00	120	115.9	-26	-25.3	9	N	0	GA		
13	10:45	0.00	0.00	120	117.1	-24	-25.2	9	N	0	JP		
14	13:15	0.00	0.00	120	114.1	-26	-25.5	9	N	0	GA		
15	10:30	0.00	0.00	120	116.1	-26	-25.1	9	N	0	MU		
16	10:00	0.00	0.00	120	116.1	-26	-25.1	9	N	0	MU		
17	06:00	0.00	0.00	120	116.1	-26	-25.1	9	N	0	MU		
18	06:00	0.00	0.00	120	116.1	-26	-25.1	9	N	0	MU		
19	07:20	0.00	0.00	123	119.0	-26	-25.0	9	N	0	LM		
20	06:55	1,490.74	0.00	110	108.0	-26	-24.8	7	N	0	LM		
21	07:50	94.43	0.00	120	116.3	-26	-24.3	8	N	0	LM		
22	08:30	187.57	0.00	117	113.0	-24	-24.9	8	N	0	TM		
23	08:30	176.14	0.00	115	112.0	-24	-24.7	8	N	0	TM		
24	10:00	86.67	0.00	121	118.2	-26	-24.8	8	N	0	RB		
25	08:00	101.43	0.00	121	119.0	-26	-24.7	8	N	0	RB		
26	08:00	155.76	0.00	122	118.6	-26	-24.6	8	N	0	MW		
27	08:00	169.67	0.00	118	114.3	-26	-24.6	8	N	0	MW		
28	08:00	170.29	0.00	112	107.3	-26	-24.9	8	N	0	MW		
29													
30													
31													

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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	57.00	02/01/2021	7.58	02/01/2021	N/A				
2	49.00	02/08/2021	8.30	02/08/2021	N/A				
3	53.00	02/19/2021	7.29	02/19/2021	N/A				
4	54.00	02/21/2021	7.30	02/21/2021	N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 02/08/2021
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	127.000	mg/l
Chloride	67.200	mg/l
Conductivity	77.400	Mmhos
Diethanolamine	<100.000	mg/l
Iron	7.360	mg/l
Magnesium	27.200	mg/l
Sulfate	21.900	mg/l
Total Alkalinity as CaCO3	288.000	mg/l
Total Dissolved Solids	513.000	mg/l
Total Hardness as CaCO3	428.000	mg/l