Facility Well Name Northern (Bushton) #1 **UIC Permit #** KS-01-159-003 **Month** September **Year** 2022

Submitted 10/10/2022 **Approved** 10/21/2022 **KOLAR Document ID** 1668605

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 4

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	124	0.00	131	128	-26.2	-24.6	0
Monthly Maximum	1,395	0.00	146	141	-25.0	-24.0	0
Monthly Minimum	0	0.00	107	108	-28.0	-25.5	0
Monthly Total	3,716						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
146.70	94.40	-0.10	-25.20

Comments:

Low annulus pressures from replacement of guage and Nitrogen bottle on 9/26/22. Higher than normal injection pressure recorded on continuous recorder from isolation and replacement of gauge.

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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	13:00	0.00	0.00	146	140.8	-27	-24.3	6	N	0	MLU		
2	09:00	0.00	0.00	145	140.0	-27	-24.4	6	N	0	MW		
3	12:00	0.00	0.00	146	140.0	-27	-24.5	6	N	0	DS		
4	08:45	0.00	0.00	145	138.8	-27	-24.6	6	N	0	ADR		
5	09:00	0.00	0.00	145	140.0	-27	-24.5	6	N	0	RB		
6	06:10	0.00	0.00	145	139.9	-27	-24.5	6	N	0	RB		
7	08:00	1,260.90	0.00	135	128.0	-28	-24.8	6	N	0	TM		
8	08:00	1,394.95	0.00	135	130.0	-27	-24.9	6	N	0	TM		
9	06:15	14.14	0.00	144	138.2	-27	-24.5	6	N	0	DJ		
10	10:45	0.00	0.00	145	138.4	-28	-24.0	6	N	0	DJ		
11	10:00	0.00	0.00	145	136.5	-28	-25.0	6	N	0	DJ		
12	07:45	0.00	0.00	145	136.8	-28	-24.7	6	N	0	ADR		
13	09:30	0.00	0.00	145	138.8	-27	-24.5	6	N	0	ADR		
14	07:42	0.00	0.00	140	140.2	-27	-24.4	6	N	0	LM		
15	08:30	1,045.90	0.00	135	134.3	-25	-24.9	6	N	0	ADR		
16	07:00	0.00	0.00	136	139.1	-25	-24.9	6	N	0	MU		
17	07:30	0.00	0.00	130	131.0	-25	-24.5	6	N	0	TM		
18	09:00	0.00	0.00	133	130.0	-25	-24.6	6	N	0	MU		
19	10:00	0.00	0.00	127	126.8	-25	-24.9	6	N	0	DJ		
20	15:20	0.00	0.00	124	123.4	-25	-24.6	6	N	0	DJ		
21	09:30	0.00	0.00	120	121.3	-25	-24.5	6	N	0	DJ		
22	10:00	0.00	0.00	116	116.0	-26	-24.6	6	N	0	DJ		
23	09:20	0.00	0.00	115	116.0	-26	-24.9	6	N	0	RB		
24	08:45	0.00	0.00	115	116.0	-26	-25.5	6	N	0	RB		
25	08:00	0.00	0.00	113	114.0	-25	-25.5	6	N	0	RB		
26	07:00	0.00	0.00	108	111.0	-25	-24.5	6	N	0	MU		
27	08:00	0.00	0.00	110	114.0	-25	-24.6	6	N	0	MU		
28	08:00	0.00	0.00	110	111.0	-25	-24.3	6	N	0	MU		
29	09:10	0.00	0.00	107	108.0	-26	-24.3	6	N	0	TM		
30	09:00	0.00	0.00	110	109.6	-26	-24.0	5	N	0	MW		
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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	09/06/2022	7.62	09/06/2022	N/A				
2	69.00	09/14/2022	5.35	09/14/2022	N/A				
3					N/A				
4					N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 3
Date Sample Collected 08/09/2022
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	64.700	mg/l
Chloride	101.000	mg/l
Conductivity	48.400	Mmhos
Diethanolamine	109.000	mg/l
Iron	51.300	mg/l
Magnesium	14.500	mg/l
Sulfate	ND	mg/l
Total Alkalinity as CaCO3	401.000	mg/l
Total Dissolved Solids	1,000.000	mg/l
Total Hardness as CaCO3	221.000	mg/l