Facility Well Name Northern (Cunningham) #2 **UIC Permit #** KS-05-151-002 **Month** February **Year** 2022

Submitted 03/02/2022 **Approved** 03/17/2022 **KOLAR Document ID** 1631907

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 28

Barrels per Day Maximum: 4,000

			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	1,295	1.65	107	106	-22.3	-22.7	0
Monthly Maximum	1,410	1.83	114	112	-21.0	-19.1	0
Monthly Minimum	817	1.48	102	101	-24.0	-24.9	0
Monthly Total	36,269						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
113.43	99.49	-16.49	-28.33

Comments:

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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	09:00	1,328.93	1.71	103	102.8	-23	-23.7	18		0	WV		
2	10:10	984.29	1.83	103	102.8	-23	-23.6	17		0	WV		
3	15:10	1,365.12	1.64	113	111.6	-22	-22.6	16		0	WV		
4	08:00	1,376.48	1.74	114	112.4	-24	-24.9	17		0	WV		
5	09:20	1,272.50	1.60	110	108.4	-23	-23.1	16		0	WV		
6	09:00	1,331.52	1.71	110	108.2	-24	-23.4	17		0	WV		
7	08:21	1,349.69	1.74	107	104.9	-23	-23.4	17		0	BD		
8	08:31	1,328.45	1.69	108	106.1	-22	-22.1	18		0	BD		
9	09:05	1,322.71	1.62	106	103.8	-22	-22.6	17		0	BD		
10	08:34	1,142.02	1.64	104	102.3	-23	-23.6	17		0	BD		
11	09:27	816.93	1.64	104	101.7	-24	-23.9	16		0	BD		
12	07:00	1,382.00	1.62	113	110.8	-22	-23.3	16		0	BD		
13	07:42	1,337.93	1.62	112	110.7	-22	-22.8	17		0	BD		
14	08:55	1,381.62	1.60	110	109.4	-22	-21.0	17		0	KS		
15	02:50	1,324.67	1.64	108	105.2	-21	-22.7	17		0	KS		
16	13:00	1,162.90	1.52	110	107.5	-21	-22.2	18		0	KS		
17	07:50	1,371.83	1.48	105	104.9	-22	-23.9	17		0	KS		
18	09:10	1,320.90	1.69	103	105.5	-23	-23.6	17		0	KS		
19	07:00	1,327.38	1.64	103	104.6	-22	-22.6	17		0	KS		
20	07:15	1,391.95	1.57	102	104.3	-21	-22.7	17		0	KS		
21	09:30	1,326.88	1.60	105	103.8	-21	-21.3	17		0	AB		
22	08:50	1,383.55	1.62	105	102.2	-23	-23.9	17		0	AB		
23	11:20	1,267.40	1.64	103	101.0	-22	-19.7	17		0	AB		
24	08:30	1,264.83	1.79	106	105.2	-21	-19.4	17		0	AB		
25	09:00	1,337.24	1.71	106	105.1	-21	-19.1	17		0	AB		
26	08:00	1,338.05	1.52	106	103.4	-22	-22.6	17		0	AB		
27	08:00	1,409.83	1.57	105	102.2	-23	-24.3	17		0	AB		
28	08:35	1,321.48	1.71	105	103.5	-22	-22.4	17		0	WV		
29													
30													
31													

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Weekly Injectate Samples

Kansas Lab Certificate Number E-10146

Week	**Temperature**		**pH**		**Chloride**				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	82.40	02/07/2022	6.50	02/07/2022	N/A				
2	72.40	02/14/2022	6.60	02/14/2022	N/A				
3	78.00	02/21/2022	6.50	02/21/2022	N/A				
4	88.00	02/28/2022	6.80	02/28/2022	N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 01/11/2022
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	2,290.000	mg/l
Chloride	29,100.000	mg/l
Conductivity	70.600	Mmhos
Magnesium	557.000	mg/l
Sodium	16,000.000	mg/l
Sulfate	2,260.000	mg/l
Total Alkalinity as CaCO3	298.000	mg/l
Total Dissolved Solids	52,800.000	mg/l
Total Suspended Solids	95.300	mg/l