Facility Well Name Northern (Cunningham) WIW #3 **UIC Permit #** KS-05-151-003 **Month** September **Year** 2022

Submitted 10/05/2022 **Approved** 10/21/2022 **KOLAR Document ID** 1667965

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	480	0.38	114	113	-22.4	-22.2	0
Monthly Maximum	660	0.55	121	119	-15.0	-16.0	0
Monthly Minimum	0	0.00	104	102	-25.0	-25.0	0
Monthly Total	14,411						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
124.74	99.11	0.22	-29.35

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	09:50	404.21	0.55	110	108.4	-22	-22.0	22		0	GKB		
2	09:46	607.38	0.17	114	113.4	-23	-23.0	23		0	GKB		
3	08:54	597.86	0.45	115	114.2	-24	-23.0	23		0	GKB		
4	10:12	608.76	0.45	115	115.4	-24	-22.0	24		0	GKB		
5	07:32	616.50	0.43	115	116.0	-22	-22.0	24		0	GKB		
6	09:00	640.50	0.43	118	117.6	-24	-22.0	24		0	DMH		
7	08:10	610.17	0.43	118	119.0	-22	-24.0	24		0	KS		
8	17:00	573.00	0.17	120	117.3	-24	-23.0	24		0	DMH		
9	09:30	624.55	0.45	119	117.4	-24	-23.0	24		0	DMH		
10	07:45	631.17	0.45	118	118.4	-23	-22.0	24		0	KS		
11	14:35	636.48	0.48	120	118.1	-24	-22.0	24		0	DMH		
12	09:47	633.40	0.48	118	116.8	-22	-22.0	24		0	BD		
13	10:41	617.86	0.43	115	114.2	-22	-22.0	25		0	BD		
14	08:59	593.93	0.40	121	119.3	-22	-22.0	25		0	BD		
15	09:22	605.81	0.43	120	118.8	-23	-22.0	25		0	BD		
16	10:26	599.79	0.43	120	118.3	-22	-22.0	24		0	BD		
17	07:26	600.26	0.43	120	119.0	-22	-22.0	24		0	BD		
18	09:00	659.81	0.48	120	118.8	-23	-22.0	24		0	BD		
19	13:55	374.64	0.45	110	108.9	-25	-23.0	21		0	HS		
20	07:54	350.05	0.48	115	113.9	-22	-23.0	23		0	CWA		
21	09:45	0.00	0.00	107	106.3	-18	-18.0	21		0	CWA		
22	08:55	0.00	0.00	104	102.2	-15	-16.0	20		0	HS		
23	14:10	44.21	0.07	104	102.9	-22	-22.0	20		0	HS		
24	06:20	31.31	0.12	105	104.2	-22	-23.0	20		0	HS		
25	08:50	75.67	0.17	105	102.5	-24	-25.0	19		0	HS		
26	08:45	450.10	0.48	105	104.7	-22	-23.0	20		0	AB		
27	08:45	583.79	0.50	110	108.5	-22	-23.0	21		0	AB		
28	09:50	604.95	0.52	110	109.0	-22	-23.0	21		0	DV		
29	09:35	442.50	0.52	106	104.5	-23	-23.0	20		0	DV		
30	09:20	592.33	0.52	110	108.9	-22	-23.0	21		0	DV		
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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	72.00	09/06/2022	6.30	09/06/2022	N/A				
2	96.50	09/12/2022	6.48	09/12/2022	N/A				
3	95.10	09/19/2022	6.26	09/19/2022	N/A				
4	85.50	09/26/2022	6.36	09/26/2022	N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 3
Date Sample Collected 07/18/2022
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	2,060.000	mg/l
Chloride	27,700.000	mg/l
Conductivity	78.200	Mmhos
Magnesium	554.000	mg/l
Sodium	15,600.000	mg/l
Sulfate	2,190.000	mg/l
Total Alkalinity as CaCO3	294.000	mg/l
Total Dissolved Solids	57,300.000	mg/l
Total Suspended Solids	44.700	mg/l