Facility Well Name Northern (Cunningham) WIW #3 **UIC Permit #** KS-05-151-003 **Month** September **Year** 2023

Submitted 10/02/2023 **Approved** 10/26/2023 **KOLAR Document ID** 1731477

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 4

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	4	0.04	106	106	-23.7	-23.3	0
Monthly Maximum	60	0.33	109	108	-22.0	-22.0	0
Monthly Minimum	0	0.00	99	99	-25.0	-25.0	0
Monthly Total	131						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
111.68	98.86	-14.58	-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	09:29	0.00	0.00	106	106.5	-24	-23.0	17		0	JCJ		
2	05:45	0.00	0.00	106	106.5	-24	-23.0	17		0	JCJ		
3	08:17	0.00	0.00	106	106.3	-23	-23.0	17		0	JCJ		
4	13:44	0.00	0.00	107	107.2	-25	-23.0	17		0	GKB		
5	11:18	1.24	0.33	107	107.0	-25	-23.0	17		0	GKB		
6	09:23	0.00	0.00	106	105.8	-24	-24.0	17		0	GKB		
7	10:50	0.00	0.00	107	106.6	-24	-23.0	17		0	GKB		
8	09:47	0.00	0.00	106	106.9	-24	-23.0	17		0	GKB		
9	12:53	0.00	0.00	106	106.8	-25	-23.0	17		0	GKB		
10	14:30	0.00	0.00	109	107.0	-25	-23.0	17		0	RP		
11	09:00	19.57	0.12	102	101.5	-25	-25.0	15		0	DMH		
12	15:31	0.00	0.00	106	106.6	-24	-23.0	17		0	GKB		
13	09:45	0.00	0.00	106	105.0	-24	-24.0	17		0	JWM		
14	13:56	0.00	0.00	106	106.8	-24	-24.0	17		0	JWM		
15	09:21	0.00	0.00	106	106.0	-24	-24.0	17		0	JWM		
16	08:00	0.00	0.00	106	105.4	-24	-24.0	17		0	DMH		
17	09:58	0.00	0.00	106	105.7	-23	-23.0	17		0	JWM		
18	13:21	59.81	0.33	99	99.0	-23	-22.0	14		0	BD		
19	10:02	0.00	0.00	105	105.6	-23	-23.0	16		0	BD		
20	09:43	0.00	0.00	105	105.4	-22	-24.0	17		0	BD		
21	11:51	0.00	0.00	105	106.8	-23	-23.0	17		0	BD		
22	13:30	0.00	0.00	106	107.2	-23	-23.0	16		0	BD		
23	06:15	0.00	0.00	105	107.1	-23	-23.0	17		0	BD		
24	12:45	0.00	0.00	105	106.9	-24	-23.0	17		0	BD		
25	11:30	50.62	0.33	100	99.6	-23	-23.0	15		0	DKO		
26	08:30	0.00	0.00	105	104.5	-23	-23.0	17		0	DKO		
27	09:55	0.00	0.00	105	105.6	-23	-23.0	17		0	HS		
28	09:10	0.00	0.00	107	106.4	-23	-23.0	17		0	DKO		
29	10:23	0.00	0.00	107	107.4	-23	-24.0	17		0	GKB		
30	13:36	0.00	0.00	107	107.6	-23	-23.0	17		0	GKB		
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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	83.40	09/05/2023	6.59	09/05/2023	N/A				
2	69.20	09/11/2023	6.76	09/11/2023	N/A				
3	79.20	09/18/2023	6.76	09/18/2023	N/A				
4	82.10	09/25/2023	6.69	09/25/2023	N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 3
Date Sample Collected 07/05/2023
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	2,090.000	mg/l
Chloride	32,900.000	mg/l
Conductivity	78.500	Mmhos
Magnesium	534.000	mg/l
Sodium	15,900.000	mg/l
Sulfate	2,180.000	mg/l
Total Alkalinity as CaCO3	310.000	mg/l
Total Dissolved Solids	55,900.000	mg/l
Total Suspended Solids	283.000	mg/l