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

Submitted 10/03/2023 **Approved** 10/26/2023 **KOLAR Document ID** 1731568

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	0.05	105	105	-20.1	-19.8	0
Monthly Maximum	55	0.45	107	107	-15.0	-14.0	0
Monthly Minimum	0	0.00	100	101	-24.0	-24.0	0
Monthly Total	121						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
111.42	99.74	-6.37	-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	12:05	36.31	0.36	105	104.7	-24	-24.0	16		0	DMH		
2	08:00	0.00	0.00	105	104.7	-16	-16.0	16		0	DMH		
3	08:45	0.00	0.00	105	105.1	-15	-16.0	16		0	DMH		
4	13:59	0.00	0.00	105	105.6	-17	-14.0	16		0	JWM		
5	07:46	0.00	0.00	105	105.4	-15	-14.0	16		0	DMH		
6	13:35	0.00	0.00	105	105.6	-15	-14.0	16		0	JWM		
7	11:30	9.55	0.31	105	105.5	-15	-15.0	17		0	BD		
8	10:39	0.00	0.00	105	105.4	-20	-20.0	16		0	BD		
9	11:20	0.00	0.00	106	105.4	-20	-20.0	17		0	BD		
10	09:30	0.00	0.00	105	105.1	-19	-18.0	17		0	BD		
11	11:00	0.00	0.00	105	106.2	-19	-19.0	17		0	BD		
12	11:27	0.00	0.00	106	106.2	-20	-19.0	17		0	GN		
13	09:15	0.00	0.00	106	106.3	-20	-20.0	17		0	HS		
14	10:50	0.00	0.45	100	100.6	-19	-19.0	15		0	HS		
15	17:15	0.00	0.00	105	106.0	-18	-17.0	17		0	HS		
16	09:30	0.00	0.00	106	105.5	-19	-19.0	17		0	HS		
17	09:25	0.00	0.00	106	105.8	-18	-18.0	17		0	HS		
18	09:20	0.00	0.00	106	105.4	-18	-18.0	17		0	HS		
19	06:25	0.00	0.00	106	106.6	-18	-18.0	17		0	BD		
20	07:20	0.00	0.00	106	106.6	-22	-22.0	17		0	DKO		
21	10:00	55.07	0.26	103	103.2	-23	-23.0	15		0	AB		
22	11:15	0.00	0.00	105	105.7	-24	-23.0	16		0	AB		
23	09:56	0.00	0.00	107	106.0	-24	-23.0	17		0	BD		
24	15:30	0.00	0.00	106	106.6	-23	-22.0	17		0	AB		
25	10:00	0.00	0.00	106	106.4	-23	-24.0	17		0	AB		
26	09:00	0.00	0.00	105	105.8	-23	-24.0	17		0	KS		
27	10:10	0.00	0.00	106	106.3	-23	-23.0	17		0	DV		
28	09:15	20.38	0.29	105	104.2	-23	-23.0	17		0	CWA		
29	09:13	0.00	0.00	106	105.4	-23	-23.0	17		0	CWA		
30	08:48	0.00	0.00	105	105.8	-23	-23.0	17		0	JCJ		
31	08:46	0.00	0.00	106	105.8	-23	-23.0	17		0	JCJ		

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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	79.80	08/07/2023	6.50	08/07/2023	N/A				
2	75.20	08/14/2023	6.48	08/14/2023	N/A				
3	80.00	08/21/2023	6.52	08/21/2023	N/A				
4	76.10	08/28/2023	6.50	08/28/2023	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