Facility Well Name Northern (Cunningham) #1 **UIC Permit #** KS-05-151-001 **Month** June **Year** 2021

Submitted 07/08/2021 **Approved** 07/23/2021 **KOLAR Document ID** 1581638

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

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	1,334	1.18	106	105	-23.6	-22.0	0
Monthly Maximum	1,588	1.40	112	109	-21.0	-21.0	0
Monthly Minimum	532	1.02	90	93	-25.0	-24.0	0
Monthly Total	40,013						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
111.93	88.94	-19.57	-24.16

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	08:10	1,319.69	1.26	103	102.5	-24	-22.0	19		0	WV		
2	08:15	1,436.88	1.33	106	105.6	-24	-22.0	20		0	WV		
3	08:00	1,214.69	1.31	106	105.1	-24	-22.0	20		0	WV		
4	11:45	1,320.00	1.17	107	106.8	-24	-22.0	20		0	WV		
5	10:20	1,293.40	1.14	106	106.2	-24	-22.0	20		0	WV		
6	09:10	1,153.12	1.10	105	105.2	-25	-23.0	20		0	WV		
7	08:25	1,014.19	1.05	95	94.9	-25	-24.0	16		0	KS		
8	10:00	1,260.95	1.10	107	106.1	-23	-22.0	20		0	KS		
9	08:25	1,247.33	1.07	106	105.8	-24	-22.0	20		0	KS		
10	08:30	1,266.60	1.10	107	106.2	-23	-22.0	20		0	KS		
11	09:00	1,296.26	1.10	104	103.8	-21	-22.0	20		0	AB		
12	07:20	1,396.83	1.07	106	107.1	-25	-22.0	21		0	KS		
13	06:50	1,321.52	1.14	108	106.3	-24	-22.0	20		0	KS		
14	08:40	1,308.38	1.07	110	105.6	-23	-22.0	20		0	KS		
15	09:10	1,306.64	1.05	112	106.7	-24	-22.0	21		0	KS		
16	08:30	531.93	1.02	108	106.4	-24	-22.0	21		0	KS		
17	09:00	1,208.43	1.12	90	93.1	-23	-22.0	15		0	KS		
18	09:30	1,420.79	1.12	110	105.2	-22	-22.0	21		0	KS		
19	06:30	1,468.67	1.17	110	107.0	-23	-21.0	21		0	KS		
20	07:35	1,498.12	1.14	111	106.2	-23	-22.0	21		0	KS		
21	09:15	1,499.17	1.19	106	106.6	-23	-22.0	21		0	AB		
22	08:15	1,420.62	1.10	105	105.6	-23	-22.0	21		0	AB		
23	08:30	1,497.95	1.19	105	104.9	-23	-22.0	21		0	AB		
24	08:05	1,486.40	1.17	106	106.8	-23	-21.0	22		0	WV		
25	08:05	1,484.36	1.36	105	104.9	-25	-23.0	21		0	WV		
26	07:15	1,360.43	1.38	108	108.7	-23	-22.0	22		0	AB		
27	07:10	1,588.21	1.38	106	107.8	-24	-21.0	22		0	AB		
28	09:30	1,456.12	1.38	107	106.0	-24	-22.0	22		0	AB		
29	11:10	1,583.45	1.38	108	108.2	-24	-22.0	22		0	WV		
30	08:20	1,352.14	1.40	107	107.1	-23	-21.0	22		0	WV		
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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	99.00	06/07/2021	6.50	06/07/2021	N/A				
2	94.50	06/14/2021	6.50	06/14/2021	N/A				
3	94.00	06/21/2021	6.20	06/21/2021	N/A				
4	99.00	06/28/2021	6.40	06/28/2021	N/A				
5					N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 2
Date Sample Collected 04/07/2021
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	2,390.000	mg/l
Chloride	31,300.000	mg/l
Conductivity	79.800	Mmhos
Magnesium	587.000	mg/l
Sodium	18,700.000	mg/l
Sulfate	2,020.000	mg/l
Total Alkalinity as CaCO3	305.000	mg/l
Total Dissolved Solids	81,600.000	mg/l
Total Suspended Solids	41.900	mg/l