Facility Well Name Northern (Cunningham) #3 **UIC Permit #** KS-05-151-003 **Month** April **Year** 2021

Submitted 05/24/2021 **Approved** 05/31/2021 **KOLAR Document ID** 1574270

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	494	0.59	106	108	-22.6	-23.4	0
Monthly Maximum	552	0.71	124	127	-18.0	-20.0	0
Monthly Minimum	223	0.50	96	100	-25.0	-25.0	0
Monthly Total	14,824						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
136.17	93.96	-13.41	-29.35

Comments:

Well shut in on 2/22/21

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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	14:50	222.81	0.60	105	106.6	-18	-20.0	16		0	AB		
2	08:30	467.14	0.57	96	99.6	-18	-21.0	12		0	AB		
3	07:45	346.24	0.55	103	105.4	-19	-21.0	15		0	AB		
4	09:15	495.33	0.55	100	101.9	-22	-23.0	13		0	AB		
5	09:30	507.45	0.71	102	103.1	-25	-24.0	14		0	WV		
6	09:25	516.81	0.60	103	104.6	-24	-23.0	14		0	WV		
7	09:05	516.02	0.60	102	103.5	-25	-24.0	14		0	WV		
8	09:15	521.50	0.57	102	103.1	-25	-24.0	14		0	WV		
9	09:00	512.64	0.55	103	104.9	-24	-24.0	15		0	WV		
10	08:45	510.50	0.57	102	102.8	-24	-24.0	15		0	WV		
11	11:25	509.36	0.62	103	105.4	-24	-23.0	15		0	WV		
12	08:55	410.88	0.67	104	104.3	-25	-25.0	15		0	GH		
13	10:50	502.00	0.62	103	103.2	-24	-23.0	14		0	GH		
14	08:10	496.38	0.64	103	103.4	-24	-24.0	14		0	GH		
15	08:20	499.07	0.64	103	103.2	-24	-25.0	14		0	GH		
16	08:10	501.79	0.64	103	103.4	-24	-24.0	15		0	GH		
17	07:15	520.67	0.62	103	103.9	-24	-24.0	15		0	GH		
18	07:20	514.67	0.64	104	104.4	-24	-24.0	15		0	GH		
19	09:00	515.74	0.60	103	105.2	-22	-24.0	15		0	KS		
20	09:30	521.38	0.50	105	104.4	-21	-24.0	15		0	KS		
21	09:50	518.02	0.52	105	107.5	-22	-23.0	16		0	KS		
22	09:15	521.26	0.62	110	109.3	-21	-24.0	16		0	KS		
23	09:20	501.55	0.60	110	111.2	-20	-23.0	16		0	KS		
24	07:35	525.50	0.57	110	112.0	-22	-24.0	16		0	KS		
25	07:50	534.93	0.52	112	113.7	-21	-23.0	16		0	KS		
26	09:00	536.95	0.57	114	116.0	-22	-23.0	16		0	AB		
27	09:10	545.21	0.52	115	117.8	-22	-24.0	16		0	AB		
28	10:45	552.43	0.55	119	123.1	-23	-24.0	16		0	AB		
29	08:00	437.21	0.50	122	125.0	-23	-23.0	17		0	AB		
30	08:35	542.95	0.57	124	126.8	-23	-24.0	16		0	AB		
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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	82.00	04/05/2021	6.50	04/05/2021	N/A				
2	72.00	04/12/2021	6.40	04/12/2021	N/A				
3	78.00	04/19/2021	7.00	04/19/2021	N/A				
4	87.00	04/26/2021	6.80	04/26/2021	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	2,060.000	mg/l
Chloride	26,100.000	mg/l
Conductivity	69.900	Mmhos
Magnesium	496.000	mg/l
Sodium	16,700.000	mg/l
Sulfate	2,180.000	mg/l
Total Alkalinity as CaCO3	281.000	mg/l
Total Dissolved Solids	67,600.000	mg/l
Total Suspended Solids	35.700	mg/l