Facility Well Name Redbarn #1 **UIC Permit #** KS-01-009-001 **Month** April **Year** 2020

Submitted 06/01/2020 **Approved** 06/02/2020 **KOLAR Document ID** 1518060

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 19

Barrels per Day Maximum: 35,714

	Injection Volume Barrels per Day	Injection Rate Barrels per Minute	Annulus Pressure psig min 60 Gauge psig	Annulus Pressure Cont. Record psig	Injection Pressure Gauge psig	Injection Pressure Cont. Record psig	Amount Added to Seal Pot
Monthly Average	1,255	6.59	100	102	-13.7	-15.4	0
Monthly Maximum	2,317	12.17	110	111	-6.0	21.6	0
Monthly Minimum	0	0.00	90	92	-19.0	-22.9	0
Monthly Total	37,645						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
117.07	85.00	-1.57	-24.27

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	10:00	0.00	0.00	95	96.0	-16	-17.5	34	N/A	0	NR		
2	08:00	0.00	0.00	110	111.3	-11	-12.4	34	N/A	0	NR		
3	09:00	0.00	0.00	95	97.6	-9	-11.9	34	N/A	0	NR		
4	10:00	0.00	0.00	95	97.2	-11	-14.3	34	N/A	0	NR		
5	09:00	0.00	0.00	95	98.4	-14	-15.3	34	N/A	0	NR		
6	08:00	0.00	0.00	95	97.9	-18	-21.7	34	N/A	0	NR		
7	11:00	1,872.83	9.50	100	101.0	-19	-22.2	34	N/A	0	NR		
8	12:00	1,604.48	9.79	100	101.2	-14	-21.1	34	N/A	0	NR		
9	07:00	1,915.60	9.57	105	105.5	-17	-18.4	34	N/A	0	NR		
10	09:00	1,405.88	9.21	105	106.6	-13	-15.9	34	N/A	0	NR		
11	10:00	1,543.90	9.81	105	107.6	-11	-13.3	33	N/A	0	NR		
12	11:00	2,092.83	11.29	105	107.7	-6	-11.4	33	N/A	0	NR		
13	10:00	2,041.57	8.90	105	106.4	-12	-15.7	33	N/A	0	NR		
14	08:00	0.00	0.00	95	95.3	-19	-21.6	33	N/A	0	NR		
15	11:00	0.00	0.00	95	97.6	-14	-17.3	33	N/A	0	NR		
16	02:30	0.00	0.00	95	97.8	-14	-16.6	33	N/A	0	NR		
17	09:00	0.00	0.00	95	98.4	-12	-15.9	33	N/A	0	NR		
18	03:00	0.00	0.00	90	91.6	-19	21.6	33	N/A	0	NR		
19	10:00	2,316.67	9.50	100	102.7	-19	-22.9	33	N/A	0	NR		
20	11:00	2,280.33	9.88	100	104.7	-15	-17.5	33	N/A	0	NR		
21	12:00	2,254.40	11.60	95	98.9	-11	-14.0	33	N/A	0	NR		
22	09:00	2,231.95	12.17	95	97.7	-12	-15.9	33	N/A	0	NR		
23	10:00	2,270.95	9.50	100	102.7	-19	-21.7	33	N/A	0	NR		
24	09:00	1,951.52	9.00	100	103.4	-17	-19.1	33	N/A	0	NR		
25	08:00	2,085.43	10.60	100	105.0	-19	-21.2	34	N/A	0	NR		
26	07:00	2,242.60	11.07	105	106.9	-14	-15.74	34	N/A	0	NR		
27	10:00	1,544.67	11.95	105	104.6	-7	-11.4	34	N/A	0	NR		
28	09:00	1,725.90	11.10	105	104.9	-8	-10.7	34	N/A	0	NR		
29	10:00	2,016.36	11.93	105	107.7	-10	-14.6	34	N/A	0	NR		
30	09:00	2,247.02	11.31	100	102.7	-12	-15.9	33	N/A	0	NR		
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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	74.16	04/08/2020	6.62	04/08/2020	338.0	04/08/2020	04/18/2020		
2	77.13	04/22/2020	6.87	04/22/2020	392.0	04/22/2020	04/24/2020		
3									
4									
5									

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 04/30/2020
Kansas Lab Certificate Number E-10116
Lab Name Pace Analytical-Lenexa

These samples shall be representative of injection activity and shall therefore be collected on days of injection.

Constituent	Value	Units
Ammonia	115.000	mg/l
Biological Oxygen Demand (BOD)	148.000	mg/l
Calcium	12.200	mg/l
Conductivity	1,240.000	Mmhos
Magnesium	13.700	mg/l
Oil and Grease	8.900	mg/l
Sodium	382.000	mg/l
Sulfate	2.000	mg/l
Total Alkalinity as CaCO3	912.000	mg/l (as CaCO3)
Total Dissolved Solids	1,290.000	mg/l
Total Suspended Solids	74.800	mg/l