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

Submitted 12/02/2020 **Approved** 12/07/2020 **KOLAR Document ID** 1537908

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 27

Barrels per Day Maximum: 35,714

			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	1,683	7.64	113	114	-12.2	-13.5	0
Monthly Maximum	2,279	9.88	120	122	-6.0	-7.8	0
Monthly Minimum	0	0.00	100	99	-18.0	-19.0	0
Monthly Total	52,181						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
123.14	98.74	-7.03	-19.32

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	09:00	1,794.43	7.50	100	101.1	-12	-14.0	32	N/A	0	NR		
2	09:30	2,033.33	7.14	115	114.2	-11	-14.4	32	N/A	0	NR		
3	11:00	2,253.69	8.50	115	115.7	-10	-16.1	32	N/A	0	NR		
4	09:00	1,845.29	7.60	115	116.0	-14	-15.1	32	N/A	0	NR		
5	09:00	1,629.36	9.17	120	121.1	-11	-12.0	33	N/A	0	NR		
6	10:00	1,183.05	9.55	120	120.6	-12	-14.1	33	N/A	0	NR		
7	10:30	1,615.60	9.52	120	121.3	-15	-16.8	33	N/A	0	NR		
8	09:30	1,639.86	9.88	120	122.1	-17	-17.7	33	N/A	0	NR		
9	11:00	1,806.83	9.40	115	117.1	-13	-14.2	33	N/A	0	NR		
10	11:00	1,673.52	8.50	115	114.7	-9	-11.0	33	N/A	0	NR		
11	09:30	1,604.48	7.50	115	117.5	-12	-13.9	32	N/A	0	NR		
12	10:00	1,764.24	8.45	110	111.0	-14	-15.7	32	N/A	0	NR		
13	11:00	1,887.81	9.52	110	112.0	-12	-13.5	32	N/A	0	NR		
14	11:30	2,279.31	8.93	110	112.7	-11	-12.5	32	N/A	0	NR		
15	09:30	2,015.83	7.67	110	114.5	-14	-15.0	32	N/A	0	NR		
16	09:00	2,136.24	8.71	105	106.1	-15	-16.2	32	N/A	0	NR		
17	11:00	2,244.21	7.33	105	104.8	-14	-15.0	32	N/A	0	NR		
18	11:30	2,153.67	8.19	105	105.3	-16	-16.7	32	N/A	0	NR		
19	12:00	2,135.17	8.81	105	106.0	-18	-19.0	33	N/A	0	NR		
20	11:00	2,184.62	9.88	100	99.3	-12	-13.5	33	N/A	0	NR		
21	09:00	2,045.74	9.79	100	101.0	-11	-12.1	33	N/A	0	NR		
22	10:00	2,271.40	9.52	120	119.8	-7	-10.1	33	N/A	0	NR		
23	09:00	2,240.50	8.93	120	120.3	-9	-9.2	33	N/A	0	NR		
24	09:30	2,143.33	9.29	115	114.4	-12	-10.1	33	N/A	0	NR		
25	09:00	1,926.21	9.52	115	116.3	-17	-13.1	33	N/A	0	NR		
26	10:00	0.00	0.00	115	117.1	-6	-7.8	32	N/A	0	NR		
27	10:30	0.00	0.00	120	119.1	-7	-8.3	32	N/A	0	NR		
28	09:30	0.00	0.00	120	117.5	-9	-11.0	32	N/A	0	NR		
29	09:30	0.00	0.00	115	116.0	-8	-8.2	32	N/A	0	NR		
30	10:00	1,758.19	9.14	115	115.8	-14	-15.0	32	N/A	0	NR		
31	09:00	1,915.57	8.93	110	112.8	-16	-17.5	32	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	84.60	10/07/2020	7.03	10/07/2020	557.0	10/07/2020	10/09/2020		
2	118.38	10/14/2020	7.25	10/14/2020	548.0	10/14/2020	10/19/2020		
3	64.15	10/21/2020	7.03	10/21/2020	619.0	10/21/2020	10/23/2020		
4									
5									

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 10/01/2020
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	58.500	mg/l
Biological Oxygen Demand (BOD)	179.000	mg/l
Calcium	70.000	mg/l
Conductivity	2.940	Mmhos
Magnesium	17.200	mg/l
Oil and Grease	18.10000	mg/l
Sodium	433.000	mg/l
Sulfate	8.200	mg/l
Total Alkalinity as CaCO3	692.00000	mg/l (as CaCO3)
Total Dissolved Solids	165.000	mg/l
Total Suspended Solids	143.000	mg/l