Facility Well Name Lakin #1 **UIC Permit #** KS-05-093-002 **Month** November **Year** 2020

Submitted 12/02/2020 **Approved** 12/07/2020 **KOLAR Document ID** 1537887

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

Barrels per Day Maximum: 7,143

			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	825	0.65	133	123	-23.0	-5.6	
Monthly Maximum	1,548	1.81	150	143	-2.0	-0.1	
Monthly Minimum	262	0.00	120	112	-30.0	-12.0	
Monthly Total	24,762						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
143.00	112.00	-0.08	-12.00

Comments:

Lakin #1 11/2020

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	07:30	666.67	0.57	130	119.0	-30	-0.1	31			DW		
2	08:33	833.33	0.79	130	120.0	-30	-7.7	31			TL		
3	08:37	1,380.95	0.93	130	121.0	-30	-7.7	31			DW		
4	08:45	1,523.81	1.60	130	121.0	-30	-7.7	31			TL		
5	08:27	619.05	0.00	130	126.0	-4	-0.1	31			DW		
6	08:38	1,023.81	0.60	130	122.0	-30	-12.0	31			TL		
7	07:05	1,547.62	1.57	130	122.0	-30	-7.7	31			JS		
8	07:04	452.38	0.00	130	126.0	-4	-0.1	31			JS		
9	08:27	1,214.29	0.57	130	123.0	-30	-7.7	31			DW		
10	08:49	261.90	1.81	140	134.0	-30	-7.7	31			TL		
11	07:17	738.10	1.57	135	125.0	-30	-7.7	31			RV		
12	08:34	571.43	0.60	140	125.0	-30	-7.7	31			TL		
13	08:37	928.57	0.48	140	126.0	-30	-7.7	31			TL		
14	07:14	285.71	0.00	150	143.0	-4	-0.1	31			RV		
15	07:09	571.43	0.00	140	127.0	-30	-7.7	31			RV		
16	08:42	1,214.29	0.62	140	127.0	-30	-7.7	31			DW		
17	08:51	880.95	0.00	140	130.0	-2	-0.1	31			DW		
18	08:38	1,452.38	1.62	130	117.0	-30	-7.7	31			DW		
19	08:35	428.57	0.00	150	141.0	-4	-0.1	31			DW		
20	08:38	1,285.71	0.98	130	116.0	-30	-7.7	31			DW		
21	08:32	857.14	1.60	130	113.0	-30	-7.7	31			TL		
22	08:33	404.76	0.00	140	129.0	-4	-0.1	31			TL		
23	08:56	1,142.86	0.57	120	112.0	-30	-7.7	31			DW		
24	08:40	571.43	0.00	140	129.0	-4	-0.1	31			DW		
25	08:38	309.52	0.00	140	126.0	-4	-0.1	31			DW		
26	08:00	547.62	0.48	120	112.0	-30	-7.7	31			SH		
27	08:54	619.05	0.57	120	113.0	-30	-7.7	31			SH		
28	08:37	619.05	0.67	120	113.0	-30	-7.7	31			SH		
29	09:57	619.05	0.57	120	115.0	-30	-7.7	31			SH		
30	08:42	1,190.48	0.64	120	113.0	-30	-7.7	31			DW		
31													

Lakin #1 11/2020

Weekly Injectate Samples

Kansas Lab Certificate Number

Week	Temperature		pH		Chloride				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	61.70	11/03/2020	8.01	11/03/2020	N/A				
2	61.70	11/10/2020	8.12	11/10/2020	N/A				
3	64.40	11/17/2020	8.18	11/17/2020	N/A				
4	63.50	11/24/2020	8.11	11/24/2020	N/A				
5					N/A				

No monthly injectate samples required.

Lakin #1 11/2020

Quarterly Injectate Samples

Quarter 4
Date Sample Collected 10/07/2020
Kansas Lab Certificate Number E-10150
Lab Name Servi-Tech Lab

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

Constituent	Value	Units
Calcium	660.000	mg/l
Chloride	440.000	mg/l
Conductivity	6.260	Mmhos
Gross Alpha	84.000	pCi/l
Magnesium	374.000	mg/l
Selenium	0.039	mg/l
Sodium	644.000	mg/l
Sulfate	3,000.000	mg/l
Total Alkalinity as CaCO3	890.000	mg/l
Total Dissolved Solids	5,600.000	mg/l
Total Suspended Solids	5.000	mg/l
Uranium	0.171	mg/l