Facility Well Name Lakin #1 **UIC Permit #** KS-05-093-002 **Month** August **Year** 2019

Submitted 09/27/2019 **Approved** 11/04/2019 **KOLAR Document ID** 1473169

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

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	524	2.12	150	145	-23.5	-9.1	
Monthly Maximum	619	2.64	150	152	0.0	8.0	
Monthly Minimum	286	0.00	150	143	-26.0	-11.0	
Monthly Total	16,238						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
155.40	136.60	0.01	-7.70

Comments:

We are having issues with our continuous recorder/accurate gauge readings. We are currently working to get these issues fixed asap.

Lakin #1 08/2019

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	08:29	619.05	2.48	150	152.0	-26	-11.0	17			DW		
2	08:50	619.05	2.64	150	143.0	-26	-11.0	17			DW		
3	08:15	595.24	2.60	150	145.0	-26	-11.0	17			SH		
4	08:56	619.05	2.62	150	145.0	-26	-11.0	17			SH		
5	08:43	595.24	2.60	150	144.0	-26	-11.0	17			DW		
6	09:50	571.43	2.48	150	145.0	-26	-11.0	17			DW		
7	08:38	595.24	2.45	150	144.0	-26	-11.0	17			DW		
8	08:47	571.43	2.50	150	144.0	-26	-11.0	17			DW		
9	08:41	523.81	2.24	150	144.0	-26	-11.0	17			DW		
10	08:38	523.81	2.14	150	144.0	-26	-11.0	17			DW		
11	07:34	285.71	0.00	150	147.0	0	8.0	17			DW		
12	08:32	523.81	1.90	150	144.0	-26	-11.0	17			DW		
13	08:44	523.81	2.26	150	144.0	-26	-11.0	17			DW		
14	08:36	380.95	1.83	150	144.0	-26	-11.0	17			DW		
15	08:32	500.00	2.24	150	144.0	-26	-11.0	17			DW		
16	08:44	428.57	2.29	150	143.0	-26	-11.0	17			DW		
17	07:17	547.62	2.29	150	144.0	-26	-11.0	17			NH		
18	08:27	404.76	0.00	150	149.0	0	8.0	17			NH		
19	08:30	619.05	2.52	150	144.0	-26	-11.0	17			DW		
20	08:39	452.38	2.52	150	144.0	-26	-11.0	17			DW		
21	08:39	571.43	2.50	150	143.0	-26	-11.0	17			DW		
22	08:38	571.43	2.50	150	144.0	-26	-11.0	17			DW		
23	08:45	571.43	2.43	150	144.0	-26	-11.0	17			DW		
24	08:42	523.81	2.26	150	144.0	-26	-11.0	17			SH		
25	08:45	380.95	2.24	150	148.0	-26	-11.0	17			SH		
26	08:46	523.81	2.24	150	143.0	-26	-11.0	17			DW		
27	08:44	428.57	0.00	150	150.0	0	8.0	17			DW		
28	08:40	523.81	2.14	150	144.0	-26	-11.0	17			DW		
29	08:30	571.43	2.31	150	144.0	-26	-10.0	17			DW		
30	08:43	523.81	2.26	150	144.0	-26	-10.0	17			DW		
31	08:49	547.62	2.26	150	144.0	-26	-11.0	17			DW		

Lakin #1 08/2019

Weekly Injectate Samples

Kansas Lab Certificate Number 10265

Week	Temperature		pH		Chloride				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	65.30	08/06/2019	7.64	08/06/2019	N/A				
2	64.04	08/13/2019	7.85	08/13/2019	N/A				
3	67.82	08/20/2019	7.87	08/20/2019	N/A				
4	67.82	08/27/2019	7.93	08/27/2019	N/A				
5					N/A				

No monthly injectate samples required.

Lakin #1 08/2019

Quarterly Injectate Samples

Quarter 3
Date Sample Collected 07/30/2019
Kansas Lab Certificate Number 10265
Lab Name

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

Constituent	Value	Units
Calcium	720.000	mg/l
Chloride	470.000	mg/l
Conductivity	7,420.000	Mmhos
Magnesium	416.000	mg/l
Selenium	0.041	mg/l
Sodium	3,300.000	mg/l
Total Alkalinity as CaCO3	990.000	mg/l (as CaCO3)
Total Dissolved Solids	6,580.000	mg/l
Total Suspended Solids	39.000	mg/l