Facility Well Name Compass #3 **UIC Permit #** KS-01-159-005 **Month** May **Year** 2019

Submitted 06/21/2019 **Approved** 07/05/2019 **KOLAR Document ID** 1463821

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

Barrels per Day Maximum: 20,571

	Injection Volume Barrels per Day	Injection Rate Barrels per Minute	Annulus Pressure psig min 50 Gauge psig	Annulus Pressure Cont. Record psig	Injection Pressure Gauge psig	Injection Pressure Cont. Record psig	Amount Added to Seal Pot
Monthly Average	13,819	9.84	78	75	-16.9	-17.9	
Monthly Maximum	14,448	10.00	80	77	-16.0	-17.0	
Monthly Minimum	7,377	9.74	75	73	-17.0	-18.0	
Monthly Total	428,385						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
79.00	73.00	-17.00	-31.00

Comments:

Note 1: The injection volume is an composite average of multiple days before and after the day of the flooding. Values that could have been continious recorder were pulled from the continious recorder.

Compass #3 05/2019

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	Conductivity Mmhos	
1	09:40	9,827.43	9.90	78	76.0	-17	-18.0	7			KB	2,614.00	
2	08:57	14,087.33	9.81	78	75.0	-17	-18.0	7			KB	2,572.00	
3	10:01	14,110.95	9.95	79	76.0	-17	-18.0	7			KB	2,596.00	
4	09:13	14,137.93	9.76	79	76.0	-17	-18.0	7			KB	2,588.00	
5	06:52	14,120.76	9.79	80	77.0	-17	-18.0	7			KB	2,633.00	
6	10:24	14,112.76	9.79	80	77.0	-17	-18.0	7			KB	2,590.00	
7	07:31	14,098.55	9.76	80	77.0	-17	-18.0	7			KB	2,587.00	
8	10:21	14,140.19	9.79	79	76.0	-17	-18.0	7			BW	2,606.00	
9	07:25	14,159.14	9.93	78	75.0	-17	-18.0	7			BW	2,579.00	
10	06:49	14,090.36	9.79	77	74.0	-17	-18.0	7			BW	2,580.00	
11	08:39	14,134.57	9.90	78	75.0	-17	-18.0	7			BW	2,602.00	
12	12:42	14,199.14	9.74	79	76.0	-17	-18.0	7			BW	2,571.00	
13	09:55	14,193.69	9.88	78	75.0	-17	-18.0	7			BW	2,572.00	
14	07:30	14,217.31	9.93	79	76.0	-17	-18.0	7			BW	2,578.00	
15	07:54	14,215.45	9.90	79	76.0	-17	-18.0	7			KB	2,576.00	
16	08:01	14,216.60	9.90	79	76.0	-17	-18.0	7			KB	2,571.00	
17	07:46	14,171.43	9.81	80	77.0	-17	-18.0	7			KB	2,559.00	
18	08:38	14,178.48	9.76	79	76.0	-17	-17.0	7			KB	2,575.00	
19	07:07	14,156.52	9.76	77	74.0	-17	-18.0	7			KB	2,578.00	
20	07:33	14,079.12	9.76	77	74.0	-17	-18.0	7			KB	2,559.00	
21	07:30	14,047.12	9.79		73.0		-18.0				KB		
22	07:27	14,226.07	9.93	75	73.0	-16	-18.0	7			BW	2,575.00	
23	07:03	14,213.07	9.74	76	74.0	-16	-18.0	7			BW	2,551.00	
24	07:18	14,232.69	9.90	77	75.0	-16	-18.0	7			BW	2,590.00	
25	10:43	14,235.33	9.83	76	74.0	-17	-18.0	7			BW	2,564.00	
26	11:21	7,376.76	9.86	76	74.0	-17	-18.0	7			BW	2,547.00	
27	08:16	14,315.31	9.93	76	74.0	-17	-18.0	7			BW	2,560.00	
28	08:37	14,268.12	9.86	77	75.0	-17	-17.0	7			BW	2,557.00	
29	07:53	14,269.33	9.88	77	74.0	-17	-18.0	7			KB	2,547.00	
30	07:35	14,104.88	9.83	76	73.0	-17	-18.0	7			KB	2,548.00	
31	08:11	14,448.31	10.00	76	73.0	-17	-18.0	7			KB	2,524.00	

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	59.70	05/07/2019	7.30	05/07/2019	633.0	05/07/2019	05/07/2019		
2	73.20	05/12/2019	7.39	05/12/2019	674.0	05/12/2019	05/12/2019		
3	59.00	05/20/2019	7.29	05/20/2019	630.0	05/20/2019	05/20/2019		
4	60.40	05/26/2019	7.40	05/26/2019	631.0	05/26/2019	05/26/2019		
5									

No monthly injectate samples required.

Quarterly Injectate Samples

Quarter 2
Date Sample Collected 04/01/2019
Kansas Lab Certificate Number E-10152
Lab Name SDK Laboratories (Hutchinson)

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

Constituent	Value	Units
Calcium	120.000	mg/l
Iron	0.249	mg/l
Magnesium	15.600	mg/l
Sulfate	100.000	mg/l
Total Alkalinity as CaCO3	320.000	mg/l
Total Dissolved Solids	1,610.000	mg/l
Total Hardness as CaCO3	364.000	mg/l