Facility Well Name CHS Refinery #3 **UIC Permit #** KS-01-113-010 **Month** July **Year** 2023

Submitted 08/17/2023 **Approved** 08/30/2023 **KOLAR Document ID** 1725880

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

Barrels per Day Maximum: 51,429

			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	2,677	1.86	89	89	4.7	4.3	
Monthly Maximum	5,180	3.60	105	104	18.0	16.8	
Monthly Minimum	186	0.12	0	0	2.0	2.6	
Monthly Total	82,996						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
124.12	0.00	17.73	1.88

Comments:

The annulus pressure continuous recorder was removed from the well during MIT testing during the month. Thus, that is why it read zero. No water was directed down the well during this time.

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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	07:00	462.52	0.31	92	87.0	4	3.3	8			JC		
2	07:00	725.14	0.50	90	83.5	4	3.3	8			JC		
3	07:00	882.86	0.62	90	89.2	4	2.8	8			NB		
4	07:00	716.57	0.50	84	84.3	4	3.5	8			NB		
5	07:00	356.24	0.24	90	83.1	4	3.4	8			JC		
6	07:00	208.12	0.14	90	83.5	4	3.8	8			JC		
7	07:00	185.83	0.12	80	80.6	4	3.7	7			NB		
8	07:00	591.76	0.40	80	81.5	3	3.6	7			NB		
9	07:00	259.88	0.19	80	81.7	3	3.2	7			NB		
10	07:00	343.88	0.24	80	83.4	3	2.9	7			BD		
11	07:00	846.52	0.60	80	87.2	17	16.6	7			MB		
12	07:00	3,678.86	2.55	90	89.5	3	2.7	10			NB		
13	07:00	3,487.88	2.43	94	97.9	3	2.8	12			NB		
14	07:00	3,897.26	2.71	100	101.6	3	2.8	13			MB		
15	07:00	3,237.26	2.24	90	91.6	2	2.8	11			MB		
16	07:00	3,527.31	2.45	94	96.7	3	2.8	12			MB		
17	07:00	3,625.02	2.52	92	93.3	3	2.8	12			MH		
18	07:00	1,138.62	0.79	0	0.0	13	12.0	11			CG		
19	07:00	1,604.90	1.12	105	103.7	18	16.8	12			MH		
20	07:00	2,673.95	1.86	98	99.2	2	2.6	13			CG		
21	07:00	4,281.95	2.98	90	92.3	2	2.6	12			CG		
22	07:00	4,400.24	3.05	92	94.7	2	2.7	13			CG		
23	07:00	4,162.98	2.88	92	94.2	2	2.7	13			CG		
24	07:00	4,482.86	3.12	104	102.2	4	3.3	13			TY		
25	07:00	5,180.24	3.60	104	103.6	9	8.0	15			TY		
26	07:00	4,806.17	3.33	100	99.0	2	2.7	14			CG		
27	07:00	4,128.00	2.86	92	96.7	2	2.7	14			CG		
28	07:00	4,271.31	2.98	98	96.5	3	2.8	14			TY		
29	07:00	4,878.86	3.38	98	98.5	3	2.6	14			TY		
30	07:00	5,090.40	3.52	96	97.5	3	2.7	14			NB		
31	07:00	4,862.74	3.38	100	99.6	10	3.6	14			RI		

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Weekly Injectate Samples

Kansas Lab Certificate Number E-10116

Week	**Temperature**		**pH**		**Chloride**				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	84.60	07/04/2023	7.86	07/04/2023	371.0	07/04/2023	07/25/2023		
2	85.30	07/11/2023	8.43	07/11/2023	397.0	07/11/2023	07/25/2023		
3	86.90	07/18/2023	7.24	07/18/2023	690.0	07/18/2023	07/25/2023		
4	85.80	07/25/2023	7.92	07/25/2023	900.0	07/25/2023	08/07/2023		
5									

No monthly injectate samples required.