Facility Well Name CHS Refinery #3 **UIC Permit #** KS-01-113-010 **Month** August **Year** 2022

Submitted 09/14/2022 **Approved** 09/30/2022 **KOLAR Document ID** 1664765

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	3,987	2.77	94	94	3.7	4.1	
Monthly Maximum	6,787	4.71	110	110	16.0	15.2	
Monthly Minimum	1,194	0.83	80	81	2.0	2.5	
Monthly Total	123,582						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
135.05	80.31	17.43	1.91

Comments:

CHS Refinery #3 08/2022

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	3,256.45	2.26	92	89.1	2	2.8	12			TY		
2	07:00	2,788.81	1.93	90	90.4	2	2.8	11			BD		
3	07:00	2,148.69	1.50	90	90.7	2	2.8	12			JC		
4	07:00	4,352.24	3.02	95	93.2	2	2.9	13			JC		
5	07:00	3,411.43	2.38	90	91.7	2	2.9	12			MW		
6	07:00	3,391.19	2.36	90	91.5	4	3.9	12			MW		
7	07:00	4,706.05	3.26	90	89.3	2	2.8	12			MW		
8	07:00	2,848.45	1.98	90	89.3	2	2.9	12			MB		
9	07:00	4,232.57	2.93	80	84.5	2	2.8	11			MB		
10	07:00	2,852.57	1.98	82	83.5	2	2.9	11			MW		
11	07:00	3,694.29	2.57	80	83.3	5	5.2	11			JC		
12	07:00	5,651.67	3.93	80	81.0	12	11.0	11			AF		
13	07:00	5,800.81	4.02	80	83.7	2	2.8	11			MB		
14	07:00	1,194.17	0.83	98	97.3	2	2.9	10			BD		
15	07:00	2,723.31	1.88	110	108.3	2	2.9	13			CG		
16	07:00	5,501.14	3.81	110	110.3	2	2.5	13			MH		
17	07:00	4,333.02	3.00	95	96.7	2	2.8	10			MB		
18	07:00	4,966.62	3.45	100	99.0	2	2.8	11			MB		
19	07:00	2,983.19	2.07	98	97.5	2	2.8	12			MH		
20	07:00	3,838.62	2.67	97	96.2	11	9.9	11			CG		
21	07:00	5,993.48	4.17	95	97.4	2	2.8	12			CG		
22	07:00	3,448.45	2.40	95	95.5	2	2.8	11			TY		
23	07:00	3,819.76	2.64	95	94.5	11	9.9	11			TY		
24	07:00	6,172.45	4.29	97	100.7	3	2.8	12			CG		
25	07:00	6,205.71	4.31	100	101.9	16	15.2	13			CG		
26	07:00	6,786.52	4.71	100	96.6	5	4.9	12			JC		
27	07:00	4,973.14	3.45	99	94.1	3	2.7	11			JC		
28	07:00	2,450.74	1.69	96	94.2	2	2.7	10			JC		
29	07:00	3,492.00	2.43	98	99.0	3	2.7	10			MW		
30	07:00	2,281.38	1.60	98	100.0	2	2.8	11			MW		
31	07:00	3,283.55	2.29	98	95.6	2	2.8	11			JC		

CHS Refinery #3 08/2022

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	88.90	08/02/2022	7.86	08/02/2022	456.0	08/02/2022	08/10/2022		
2	90.10	08/09/2022	7.42	08/09/2022	363.0	08/09/2022	08/19/2022		
3	97.40	08/16/2022	7.84	08/16/2022	391.0	08/16/2022	08/19/2022		
4	88.20	08/23/2022	7.43	08/23/2022	414.0	08/23/2022	09/07/2022		
5	90.00	08/30/2022	7.37	08/30/2022	863.0	08/30/2022	09/07/2022		

No monthly injectate samples required.