Facility Well Name CHS Refinery #1 **UIC Permit #** KS-01-113-008 **Month** October **Year** 2022

Submitted 11/17/2022 **Approved** 11/30/2022 **KOLAR Document ID** 1673716

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

Barrels per Day Maximum: 34,286

			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	11,851	8.23	101	98	3.0	2.6	
Monthly Maximum	19,623	13.62	114	111	14.0	13.8	
Monthly Minimum	0	0.00	93	91	1.0	0.9	
Monthly Total	367,366						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
122.79	85.96	17.30	0.78

Comments:

CHS Refinery #1 10/2022

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	15,628.45	10.86	98	97.6	2	1.3	8			MW		
2	07:00	16,304.90	11.33	93	92.1	2	1.4	8			MW		
3	07:00	16,337.48	11.36	100	95.3	2	1.5	9			MB		
4	07:00	13,599.10	9.45	100	95.6	2	1.5	6			MB		
5	07:00	7,222.62	5.02	105	99.4	2	1.3	7			AF		
6	07:00	6,925.02	4.81	95	92.5	2	1.3	5			AF		
7	07:00	7,581.95	5.26	100	97.1	2	1.4	6			MB		
8	07:00	5,780.24	4.02	96	92.8	1	1.3	4			BD		
9	07:00	6,140.57	4.26	96	92.5	1	1.2	4			BD		
10	07:00	6,184.81	4.29	97	94.5	2	1.3	5			MH		
11	07:00	10,092.33	7.00	102	99.1	14	12.9	8			MH		
12	07:00	3,153.26	2.19	94	91.1	14	13.8	5			BD		
13	07:00	0.00	0.00	98	93.7	13	12.2	4			BD		
14	07:00	10,588.45	7.36	100	97.6	2	1.4	7			MH		
15	07:00	14,715.76	10.21	100	97.2	2	1.2	7			CG		
16	07:00	14,853.60	10.31	98	95.4	2	1.5	8			CG		
17	07:00	15,164.90	10.52	96	93.3	2	0.9	3			TY		
18	07:00	8,277.95	5.74	114	111.0	2	1.2	7			TY		
19	07:00	15,406.98	10.69	110	109.1	2	1.4	7			CG		
20	07:00	16,119.76	11.19	110	110.2	2	1.5	6			CG		
21	07:00	19,193.14	13.33	114	111.0	2	1.8	7			TY		
22	07:00	18,536.90	12.88	110	109.7	2	1.4	6			JC		
23	07:00	19,623.43	13.62	96	94.7	2	4.2	6			TY		
24	07:00	18,938.05	13.14	110	108.6	2	1.4	6			JC		
25	07:00	18,146.40	12.60	100	96.1	2	1.4	7			BD		
26	07:00	14,860.12	10.31	100	100.4	2	1.6	7			JC		
27	07:00	11,489.83	7.98	100	96.1	2	1.5	6			JC		
28	07:00	7,669.71	5.33	100	92.5	2	1.9	6			JC		
29	07:00	9,674.40	6.71	96	93.2	1	1.4	7			BD		
30	07:00	8,310.52	5.76	96	92.6	2	1.3	5			TY		
31	07:00	10,844.90	7.52	95	91.4	2	1.3	4			MB		

CHS Refinery #1 10/2022

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	91.00	10/04/2022	7.37	10/04/2022	997.0	10/04/2022	10/06/2022		
2	93.20	10/11/2022	7.29	10/11/2022	1,020.0	10/11/2022	11/02/2022		
3	91.30	10/18/2022	7.22	10/18/2022	960.0	10/18/2022	11/02/2022		
4	88.30	10/25/2022	7.43	10/25/2022	801.0	10/25/2022	11/02/2022		
5									

No monthly injectate samples required.