Facility Well Name CHS Refinery #4 **UIC Permit #** KS-01-113-011 **Month** April **Year** 2023

Submitted 05/11/2023 **Approved** 05/11/2023 **KOLAR Document ID** 1713086

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	11,292	7.84	90	89	4.0	0.0	
Monthly Maximum	13,046	9.07	102	106	5.0	0.1	
Monthly Minimum	8,900	6.19	84	83	4.0	0.0	
Monthly Total	338,758						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
105.96	69.39	12.53	0.00

Comments:

CHS Refinery #4 04/2023

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	11,859.76	8.24	87	85.6	4	0.1	10			MH		
2	07:00	11,846.05	8.24	90	87.3	4	0.0	12			CG		
3	07:00	11,872.12	8.24	91	89.9	5	0.0	7			TY		
4	07:00	10,747.19	7.45	84	82.6	4	0.0	14			TY		
5	07:00	8,900.24	6.19	88	86.1	4	0.0	9			CG		
6	07:00	9,014.40	6.26	86	85.6	4	0.0	11			CG		
7	07:00	9,128.24	6.33	90	86.7	4	0.0	13			TY		
8	07:00	9,664.45	6.71	90	83.6	4	0.0	12			JC		
9	07:00	13,046.05	9.07	90	90.4	4	0.0	13			TY		
10	07:00	12,186.17	8.45	90	90.0	4	0.0	13			NB		
11	07:00	10,548.00	7.33	92	91.7	4	0.0	14			NB		
12	07:00	10,757.48	7.48	90	88.7	4	0.0	12			TY		
13	07:00	10,979.31	7.62	92	89.7	4	0.0	12			TY		
14	07:00	10,919.67	7.57	92	91.0	4	0.0	14			NB		
15	07:00	10,875.43	7.55	96	95.8	4	0.0	12			NB		
16	07:00	10,968.00	7.62	102	105.7	4	0.0	10			NB		
17	07:00	10,949.48	7.60	90	90.6	4	0.0	10			MB		
18	07:00	10,960.81	7.62	90	91.7	4	0.1	15			MB		
19	07:00	11,911.88	8.26	88	87.0	4	0.1	14			NB		
20	07:00	12,137.83	8.43	90	88.0	4	0.0	10			NB		
21	07:00	12,098.74	8.40	90	90.3	4	0.1	9			MB		
22	07:00	11,974.62	8.31	90	87.5	4	0.1	7			MB		
23	07:00	11,900.57	8.26	90	90.5	4	0.1	8			MB		
24	07:00	11,903.31	8.26	88	87.6	4	0.1	4			MH		
25	07:00	11,927.67	8.29	88	87.0	4	0.0	4			MH		
26	07:00	11,986.98	8.33	90	86.9	4	0.0	3			MB		
27	07:00	11,914.29	8.29	90	88.7	4	0.0	3			MB		
28	07:00	11,916.69	8.29	90	87.9	4	0.0	4			MH		
29	07:00	11,930.74	8.29	92	89.6	4	0.0	5			MH		
30	07:00	11,931.76	8.29	90	87.4	4	0.0	6			MH		
31													

CHS Refinery #4 04/2023

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	73.00	04/04/2023	7.80	04/04/2023	997.0	04/04/2023	04/18/2023		
2	82.30	04/11/2023	7.07	04/11/2023	762.0	04/11/2023	04/18/2023		
3	84.00	04/18/2023	7.33	04/18/2023	1,440.0	04/18/2023	05/01/2023		
4	74.80	04/25/2023	7.32	04/25/2023	1,100.0	04/25/2023	05/01/2023		
5									

No monthly injectate samples required.