Facility Well Name CHS Refinery #1 **UIC Permit #** KS-01-113-008 **Month** March **Year** 2024

Submitted 04/22/2024 **Approved** 04/24/2024 **KOLAR Document ID** 1773997

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

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	13,216	9.18	99	97	2.2	2.7	
Monthly Maximum	19,159	13.31	110	107	8.0	13.2	
Monthly Minimum	5,522	3.83	94	92	1.0	0.9	
Monthly Total	409,689						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
113.60	89.80	13.74	0.66

Comments:

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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	10,981.36	7.62	100	97.6	2	1.2	5			MH		
2	07:00	11,290.45	7.83	96	93.2	2	1.0	4			CG		
3	07:00	10,658.48	7.40	100	97.3	2	1.0	4			CG		
4	07:00	10,365.26	7.19	102	97.6	2	1.1	5			TY		
5	07:00	10,844.88	7.52	94	91.7	2	1.1	5			TY		
6	07:00	10,964.50	7.62	95	93.0	2	1.0	6			CG		
7	07:00	11,867.07	8.24	95	92.5	2	1.2	6			CG		
8	07:00	9,103.24	6.33	95	92.5	2	1.1	3			NB		
9	07:00	6,195.00	4.31	98	95.1	3	1.8	3			NB		
10	07:00	5,522.10	3.83	100	95.9	2	1.1	3			NB		
11	07:00	7,251.74	5.05	98	95.7	1	0.9	3			NB		
12	07:00	11,477.00	7.98	105	106.8	2	0.9	5			NB		
13	07:00	11,812.48	8.21	110	106.8	2	1.2	5			CG		
14	07:00	11,340.12	7.88	106	102.8	2	0.9	4			CG		
15	07:00	14,379.95	9.98	100	98.8	1	2.0	4			MW		
16	07:00	16,589.10	11.52	102	98.6	2	1.5	5			NB		
17	07:00	16,480.67	11.45	100	96.4	2	1.6	5			BD		
18	07:00	14,442.81	10.02	108	95.1	2	13.2	5			MB		
19	07:00	12,911.12	8.98	100	95.7	2	1.9	5			MB		
20	07:00	16,958.05	11.79	96	94.5	2	1.6	5			NB		
21	07:00	16,332.86	11.33	96	93.3	2	1.8	5			NB		
22	07:00	15,885.12	11.02	100	98.4	8	9.4	6			BD		
23	07:00	15,463.17	10.74	96	95.4	2	1.5	4			BD		
24	07:00	14,501.48	10.07	98	98.4	2	1.8	5			BD		
25	07:00	14,157.10	9.83	100	97.4	2	1.8	5			MH		
26	07:00	16,118.10	11.19	96	92.8	2	11.0	4			MH		
27	07:00	13,433.69	9.33	100	96.8	2	12.5	4			BD		
28	07:00	17,861.83	12.40	98	98.1	2	1.8	4			BD		
29	07:00	19,158.90	13.31	98	97.9	2	1.7	5			MH		
30	07:00	18,220.26	12.64	98	97.2	2	2.0	5			MH		
31	07:00	17,121.29	11.88	102	100.4	2	1.8	6			MH		

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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	86.20	03/05/2024	7.86	03/05/2024	684.0	03/05/2024	03/22/2024		
2	62.00	03/12/2024	7.39	03/12/2024	617.0	03/12/2024	03/22/2024		
3	82.40	03/19/2024	7.45	03/19/2024	726.0	03/19/2024	03/22/2024		
4	86.70	03/26/2024	7.42	03/26/2024	906.0	03/26/2024	04/09/2024		
5									

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 03/26/2024
Kansas Lab Certificate Number E-10116
Lab Name Pace Analytical-Lenexa

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

Constituent	Value	Units
Ammonia	47.000	mg/l
Benzene	0.149	mg/l
Calcium	168.000	mg/l
Conductivity	4.240	Mmhos
Ethylbenzene	0.019	mg/l
Iron	5.730	mg/l
Magnesium	19.700	mg/l
Oil & Grease	8.500	mg/l
Sodium	531.000	mg/l
Sulfate	645.000	mg/l
Toluene	0.192	mg/l
Total Alkalinity as CaCO3	422.000	mg/l
Total Dissolved Solids	1,880.000	mg/l
Total Hardness as CaCO3	499.000	mg/l
Total Suspended Solids	32.800	mg/l
Xylene	0.189	mg/l