Facility Well Name CHS Refinery #4 **UIC Permit #** KS-01-113-011 **Month** November **Year** 2022

Submitted 12/13/2022 **Approved** 12/28/2022 **KOLAR Document ID** 1676574

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	7,345	5.10	91	90	4.2	0.3	10
Monthly Maximum	12,833	8.90	101	100	5.0	1.6	10
Monthly Minimum	3,166	2.19	74	76	4.0	0.0	10
Monthly Total	220,362						10

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
110.11	70.02	12.80	0.00

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	4,225.02	2.93	90	88.8	4	0.1	1			MB		
2	07:00	6,152.24	4.26	90	88.7	4	0.2	1			BD		
3	07:00	9,083.67	6.31	88	86.9	4	0.2	1			TY		
4	07:00	9,061.38	6.29	95	97.2	4	0.2	1			MB		
5	07:00	9,039.76	6.29	90	90.3	4	0.2	1			MB		
6	07:00	9,034.62	6.29	90	91.5	4	0.2	1			MB		
7	07:00	5,838.17	4.05	90	88.0	4	0.2	1			MH		
8	07:00	5,865.26	4.07	94	92.6	4	0.2	1			MH		
9	07:00	10,649.48	7.40	95	92.8	4	0.1	1			BD		
10	07:00	12,833.48	8.90	94	91.7	4	0.0	1			BD		
11	07:00	7,730.40	5.36	92	90.3	4	0.0	1			MH		
12	07:00	4,637.14	3.21	94	92.3	4	0.0	1			MH		
13	07:00	3,165.60	2.19	93	91.7	5	1.6	1			MH		
14	07:00	3,619.19	2.52	92	89.6	5	1.6	1			TY		
15	07:00	5,014.98	3.48	94	90.1	5	0.5	1			TY		
16	07:00	4,995.76	3.48	90	89.6	4	0.7	1			CG		
17	07:00	4,994.74	3.48	93	92.9	4	0.6	1			CG		
18	07:00	4,979.31	3.45	100	90.5	5	0.5	1			TY		
19	07:00	4,982.40	3.45	101	92.3	4	0.6	1			JC		
20	07:00	4,994.05	3.48	98	95.5	5	0.5	1			TY		
21	07:00	6,068.57	4.21	95	93.7	4	0.2	1			NB		
22	07:00	8,959.88	6.21	100	100.2	4	0.2	1	Mineral Oil	10	NB		
23	07:00	9,159.76	6.36	88	86.3	4	0.1	11			TY		
24	07:00	9,189.95	6.38	90	88.2	4	0.1	12			TY		
25	07:00	9,224.57	6.40	85	85.2	4	0.1	12			NB		
26	07:00	9,306.17	6.45	80	80.3	4	0.1	12			NB		
27	07:00	9,378.86	6.52	74	76.3	4	0.1	14			TY		
28	07:00	9,392.90	6.52	88	86.2	4	0.1	10			BD		
29	07:00	9,398.05	6.52	76	81.6	4	0.1	11			BD		
30	07:00	9,386.74	6.52	80	83.9	4	0.1	9			MW		
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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	78.40	11/01/2022	7.50	11/01/2022	1,110.0	11/01/2022	11/21/2022		
2	75.40	11/08/2022	7.30	11/08/2022	857.0	11/08/2022	11/21/2022		
3	76.60	11/15/2022	7.60	11/15/2022	1,050.0	11/15/2022	11/21/2022		
4	76.00	11/22/2022	7.05	11/22/2022	993.0	11/22/2022	12/05/2022		
5	79.90	11/29/2022	7.10	11/29/2022	981.0	11/29/2022	12/05/2022		

No monthly injectate samples required.