Facility Well Name CHS Refinery #1 **UIC Permit #** KS-01-113-008 **Month** February **Year** 2021

Submitted 03/16/2021 **Approved** 03/17/2021 **KOLAR Document ID** 1564361

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 28

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	9,930	6.90	96	94	4.1	6.8	
Monthly Maximum	12,074	8.38	100	99	15.0	14.2	
Monthly Minimum	7,854	5.45	90	88	1.0	0.7	
Monthly Total	278,038						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
108.10	0.04	14.33	0.74

Comments:

Continuous recorders were calibrated on 2/4.

CHS Refinery #1 02/2021

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	8,550.86	5.93	92	89.2	2	1.0	5			MH		
2	07:00	8,995.19	6.24	96	94.5	2	1.0	6			MH		
3	07:00	9,247.88	6.43	90	89.9	2	0.9	6			BF		
4	07:00	10,319.31	7.17	92	90.0	3	3.7	6			MW		
5	07:00	9,830.05	6.83	90	88.2	3	3.1	6			MH		
6	07:00	9,728.90	6.76	90	88.3	2	2.9	6			MH		
7	07:00	8,839.88	6.14	94	91.8	2	2.9	6			MH		
8	07:00	11,021.83	7.64	96	91.5	2	3.0	5			JC		
9	07:00	9,235.19	6.40	96	94.2	2	2.9	5			JC		
10	07:00	11,520.69	8.00	94	92.2	15	14.0	4			MH		
11	07:00	8,571.10	5.95	96	93.8	2	14.1	5			MH		
12	07:00	9,664.12	6.71	92	89.8	2	14.2	6			JC		
13	07:00	8,378.40	5.81	98	94.9	9	14.1	6			JC		
14	07:00	7,854.17	5.45	96	94.9	3	14.2	5			JC		
15	07:00	9,650.40	6.69	96	95.4	9	14.1	4			RM		
16	07:00	10,526.40	7.31	95	93.3	5	14.0	3			MB		
17	07:00	10,337.14	7.19	100	98.2	3	14.0	4			JC		
18	07:00	10,423.55	7.24	100	98.3	2	14.1	5			JC		
19	07:00	10,683.43	7.43	98	96.4	2	2.3	5			RM		
20	07:00	9,705.26	6.74	100	99.0	2	2.3	5			RM		
21	07:00	10,334.40	7.17	98	96.6	2	2.1	5			RM		
22	07:00	11,434.29	7.95	100	96.0	15	14.1	6			MW		
23	07:00	12,073.71	8.38	100	97.6	5	2.9	6			BF		
24	07:00	9,858.17	6.86	98	94.0	2	1.7	6			MB		
25	07:00	9,059.67	6.29	100	97.2	3	3.1	7			MB		
26	07:00	10,881.26	7.55	90	90.5	9	8.0	7			MW		
27	07:00	11,008.12	7.64	92	90.0	1	0.7	6			MW		
28	07:00	10,304.90	7.17	95	92.4	5	6.0	7			MW		
29													
30													
31													

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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	91.70	02/02/2021	7.65	02/02/2021	492.0	02/02/2021	02/25/2021		
2	73.00	02/09/2021	7.42	02/09/2021	578.0	02/09/2021	02/26/2021		
3	74.84	02/16/2021	7.26	02/16/2021	662.0	02/16/2021	02/25/2021		
4	88.00	02/23/2021	7.20	02/23/2021	748.0	02/23/2021	03/05/2021		
5									

No monthly injectate samples required.