Facility Well Name CHS Refinery #1 **UIC Permit #** KS-01-113-008 **Month** May **Year** 2023

Submitted 06/15/2023 **Approved** 06/26/2023 **KOLAR Document ID** 1718094

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	13,093	9.09	97	95	2.2	2.8	
Monthly Maximum	20,140	13.98	114	112	6.0	7.0	
Monthly Minimum	5,964	4.14	86	88	2.0	2.0	
Monthly Total	405,886						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
118.33	84.78	10.47	1.74

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	6,297.95	4.38	100	91.9	2	2.4	5			JC		
2	07:00	7,314.17	5.07	93	89.1	2	2.4	4			TY		
3	07:00	6,429.95	4.48	92	89.2	2	2.4	3			CG		
4	07:00	6,243.43	4.33	92	89.0	2	2.2	3			CG		
5	07:00	6,535.88	4.55	90	88.1	2	2.0	4			TY		
6	07:00	5,964.33	4.14	96	92.6	2	2.4	4			TY		
7	07:00	6,292.45	4.38	94	89.1	2	2.3	4			TY		
8	07:00	6,266.05	4.36	86	87.6	2	2.2	4			JC		
9	07:00	8,550.52	5.93	100	96.1	2	2.5	8			TY		
10	07:00	13,477.71	9.36	96	91.4	2	2.7	7			TY		
11	07:00	16,011.43	11.12	96	93.3	2	2.5	7			TY		
12	07:00	17,292.00	12.00	92	90.3	2	2.6	8			NB		
13	07:00	17,826.52	12.38	92	89.1	2	2.3	8			NB		
14	07:00	13,787.67	9.57	95	91.1	2	2.5	8			NB		
15	07:00	11,539.88	8.02	90	88.3	2	2.6	9			BD		
16	07:00	10,759.19	7.48	98	93.1	2	2.6	8			BD		
17	07:00	13,258.62	9.21	98	89.1	2	2.8	8			BD		
18	07:00	16,321.02	11.33	92	90.2	2	2.6	8			MW		
19	07:00	11,352.33	7.88	92	88.2	2	3.1	3			BD		
20	07:00	8,914.98	6.19	102	104.4	2	3.0	7			BD		
21	07:00	12,786.52	8.88	110	112.4	3	3.2	9			BD		
22	07:00	16,298.74	11.31	110	105.4	2	2.9	8			CG		
23	07:00	17,588.90	12.21	114	111.8	6	7.0	9			CG		
24	07:00	20,140.12	13.98	108	106.2	2	2.7	9			BD		
25	07:00	18,044.24	12.52	106	104.2	2	3.2	9			BD		
26	07:00	18,560.57	12.88	102	98.8	2	3.3	8			CG		
27	07:00	19,482.52	13.52	98	96.5	2	3.2	8			CG		
28	07:00	19,730.05	13.69	95	92.9	2	3.3	8			CG		
29	07:00	19,690.62	13.67	100	96.4	2	3.1	8			TY		
30	07:00	19,281.26	13.38	98	94.4	3	3.3	9			TY		
31	07:00	13,846.29	9.62	94	89.3	2	2.5	8			CG		

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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	82.00	05/02/2023	7.62	05/02/2023	1,050.0	05/02/2023	05/17/2023		
2	90.00	05/09/2023	7.52	05/09/2023	1,150.0	05/09/2023	05/17/2023		
3	95.10	05/16/2023	7.27	05/16/2023	476.0	05/16/2023	06/07/2023		
4	94.80	05/23/2023	7.39	05/23/2023	707.0	05/23/2023	06/07/2023		
5	91.30	05/30/2023	7.30	05/30/2023	748.0	05/30/2023	06/07/2023		

No monthly injectate samples required.