Facility Well Name CHS Refinery #2 **UIC Permit #** KS-01-113-009 **Month** August **Year** 2019

Submitted 09/17/2019 **Approved** 09/18/2019 **KOLAR Document ID** 1472108

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

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	19,586	13.60	97	95	3.3	2.0	5
Monthly Maximum	26,287	18.26	110	107	9.0	7.6	5
Monthly Minimum	14,207	9.86	89	87	2.0	0.8	5
Monthly Total	607,169						5

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
121.75	0.08	16.26	0.52

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	20,454.83	14.21	92	90.3	3	1.6	11			AS		
2	07:00	21,171.40	14.69	98	94.7	3	1.3	9			JC		
3	07:00	21,916.24	15.21	100	98.7	3	1.4	11			JC		
4	07:00	19,875.62	13.81	100	97.6	2	1.4	11			JC		
5	07:00	20,948.29	14.55	104	103.5	3	1.6	13			RM		
6	07:00	23,003.36	15.98	96	93.6	4	2.5	14		5	RM		
7	07:00	18,020.40	12.52	110	107.0	3	1.5	10			JC		
8	07:00	16,801.38	11.67	102	101.9	2	1.1	8			JC		
9	07:00	14,207.48	9.86	94	92.2	2	1.2	6			RM		
10	07:00	14,555.17	10.12	94	92.6	2	0.9	6			RM		
11	07:00	14,555.52	10.12	95	93.5	2	1.0	6			RM		
12	07:00	15,170.74	10.52	96	93.8	2	0.9	6			ZB		
13	07:00	15,005.17	10.43	94	92.9	2	1.1	6			ZB		
14	07:00	15,315.74	10.64	95	91.2	2	0.9	7			ZB		
15	07:00	15,267.93	10.60	98	90.7	2	1.0	7			JC		
16	07:00	15,207.98	10.57	93	91.4	3	1.1	7			ZB		
17	07:00	15,312.81	10.64	93	91.3	2	0.8	7			ZB		
18	07:00	14,848.14	10.31	98	96.0	3	2.1	9			ZB		
19	07:00	23,794.19	16.52	100	96.9	9	7.4	9			AS		
20	07:00	26,229.86	18.21	102	99.8	3	2.0	10			AS		
21	07:00	26,286.93	18.26	105	103.1	4	2.9	10			ZB		
22	07:00	25,151.67	17.48	103	101.2	4	2.8	10			ZB		
23	07:00	19,408.62	13.48	100	93.7	2	1.2	9			CJ		
24	07:00	22,207.07	15.43	92	90.9	3	1.5	7			RI		
25	07:00	20,159.05	14.00	98	96.2	7	5.2	9			ZB		
26	07:00	23,941.86	16.62	92	89.8	3	1.6	8			DJ		
27	07:00	21,506.60	14.93	92	88.0	3	1.4	8			DJ		
28	07:00	20,045.43	13.93	91	90.3	3	2.1	8			AS		
29	07:00	22,358.07	15.52	89	86.8	3	1.1	6			AS		
30	07:00	21,081.38	14.64	100	98.1	9	7.6	10			DJ		
31	07:00	23,359.86	16.21	92	88.8	3	1.4	6			DJ		

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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	98.60	08/06/2019	7.68	08/06/2019	1,160.0	08/06/2019	08/22/2019		
2	86.20	08/13/2019	7.68	08/13/2019	1,210.0	08/16/2019	08/24/2019		
3	93.00	08/20/2019	7.68	08/20/2019	799.0	08/20/2019	09/03/2019		
4	86.50	08/27/2019	7.11	08/27/2019	1,170.0	08/27/2019	09/03/2019		
5									

No monthly injectate samples required.