Facility Well Name CHS Refinery #4 **UIC Permit #** KS-01-113-011 **Month** July **Year** 2020

Submitted 08/25/2020 **Approved** 08/25/2020 **KOLAR Document ID** 1527762

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	20,609	14.31	94	93	12.8	10.6	
Monthly Maximum	23,309	16.19	108	107	18.0	16.5	
Monthly Minimum	14,124	9.81	80	82	2.0	0.1	
Monthly Total	638,871						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
146.45	79.86	17.71	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	21,519.00	14.95	90	87.3	16	14.4	15			MH		
2	07:00	22,009.36	15.29	92	90.4	17	14.5	15			MH		
3	07:00	19,853.93	13.79	100	103.6	16	14.1	16			JC		
4	07:00	18,820.24	13.07	98	99.1	3	0.2	15			JC		
5	07:00	18,868.62	13.10	90	85.7	3	0.2	13			JC		
6	07:00	19,434.64	13.50	87	85.3	3	0.4	16			JM		
7	07:00	20,733.40	14.40	85	87.0	17	14.4	16			JM		
8	07:00	20,939.29	14.55	96	87.1	17	14.4	15			JC		
9	07:00	21,031.38	14.60	96	92.2	8	4.6	16			JC		
10	07:00	23,301.31	16.19	90	90.8	17	15.1	16			JM		
11	07:00	23,309.05	16.19	92	93.4	18	15.6	16			RM		
12	07:00	22,737.24	15.79	98	98.6	17	14.5	16			RM		
13	07:00	23,110.43	16.05	100	96.9	17	14.8	16			MW		
14	07:00	22,797.52	15.83	100	98.8	15	16.5	10			MW		
15	07:00	22,514.24	15.64	102	101.0	16	14.1	15			RM		
16	07:00	21,239.79	14.74	102	101.7	16	14.1	15			RM		
17	07:00	20,368.29	14.14	87	83.6	16	13.7	15			MW		
18	07:00	18,079.00	12.55	100	102.4	3	0.1	16			MW		
19	07:00	17,559.17	12.19	80	84.4	2	0.2	14			MW		
20	07:00	18,157.21	12.62	84	82.3	3	0.3	15			MH		
21	07:00	14,123.67	9.81	95	95.0	3	0.2	15			MH		
22	07:00	21,127.43	14.67	85	87.9	3	0.2	16			MW		
23	07:00	21,319.64	14.81	100	101.0	16	14.1	16			MW		
24	07:00	21,152.95	14.69	96	94.5	16	14.2	16			MH		
25	07:00	21,097.62	14.64	96	95.3	17	14.6	16			MH		
26	07:00	21,019.40	14.60	96	95.7	17	14.7	16			MH		
27	07:00	20,876.24	14.50	92	83.9	17	15.3	16			JC		
28	07:00	20,725.02	14.38	94	97.7	17	15.1	15			JC		
29	07:00	20,641.05	14.33	86	85.1	17	14.7	16			MH		
30	07:00	20,325.52	14.12	108	106.7	18	15.3	16			MH		
31	07:00	20,079.62	13.95	82	84.7	16	13.9	15			JC		

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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	72.00	07/07/2020	7.45	07/07/2020	826.0	07/07/2020	07/21/2020		
2	77.00	07/14/2020	7.45	07/14/2020	903.0	07/14/2020	07/21/2020		
3	91.00	07/21/2020	7.50	07/21/2020	659.0	07/21/2020	07/30/2020		
4	86.00	07/28/2020	7.76	07/28/2020	649.0	07/28/2020	08/07/2020		
5									

No monthly injectate samples required.