Facility Well Name CHS Refinery #3 **UIC Permit #** KS-01-113-010 **Month** March **Year** 2021

Submitted 04/19/2021 **Approved** 04/26/2021 **KOLAR Document ID** 1569052

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	1,145	0.80	100	100	3.1	2.2	
Monthly Maximum	1,545	1.07	108	108	5.0	3.9	
Monthly Minimum	799	0.55	95	92	2.0	1.3	
Monthly Total	35,486						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
113.45	91.55	5.73	1.08

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	1,544.57	1.07	100	98.7	3	1.9	3			MH		
2	07:00	1,390.29	0.98	104	103.5	3	1.6	4			MH		
3	07:00	1,297.38	0.90	104	103.5	4	2.9	4			MW		
4	07:00	1,094.05	0.76	106	106.7	4	2.8	4			MW		
5	07:00	1,016.90	0.71	108	108.2	4	2.8	4			MH		
6	07:00	1,077.95	0.74	105	104.3	3	1.7	4			MH		
7	07:00	1,100.24	0.76	105	103.5	2	1.3	4			MH		
8	07:00	1,082.05	0.76	104	104.5	2	1.8	4			JC		
9	07:00	916.12	0.64	106	105.2	2	1.9	4			JC		
10	07:00	799.19	0.55	108	107.3	3	1.7	4			MH		
11	07:00	1,059.76	0.74	100	100.5	2	1.5	4			MH		
12	07:00	1,325.14	0.93	100	102.2	2	1.8	4			JC		
13	07:00	1,306.29	0.90	100	100.3	2	2.1	4			JC		
14	07:00	1,027.88	0.71	102	103.5	3	1.6	4			JC		
15	07:00	1,160.24	0.81	101	102.7	4	3.1	4			MB		
16	07:00	1,054.62	0.74	100	100.2	3	2.5	4			MB		
17	07:00	1,386.52	0.95	100	95.5	4	2.0	4			JC		
18	07:00	1,422.52	0.98	96	91.6	3	1.9	3			JC		
19	07:00	1,016.57	0.71	98	94.5	5	3.9	3			RM		
20	07:00	1,053.60	0.74	96	96.8	3	2.5	3			RM		
21	07:00	1,031.31	0.71	98	99.7	3	2.0	3			RM		
22	07:00	1,241.83	0.86	101	100.5	3	1.8	3			MW		
23	07:00	1,457.14	1.02	96	97.6	3	2.4	4			BE		
24	07:00	1,511.31	1.05	95	96.1	3	2.1	4			MB		
25	07:00	1,332.69	0.93	96	96.8	3	1.5	4			RM		
26	07:00	1,128.33	0.79	96	97.2	2	2.0	4			BF		
27	07:00	897.60	0.62	100	99.9	4	2.5	4			MW		
28	07:00	1,005.26	0.69	98	94.9	3	2.4	4			MW		
29	07:00	887.67	0.62	98	98.9	3	2.6	4			MH		
30	07:00	929.48	0.64	97	97.8	3	2.8	4			MH		
31	07:00	931.55	0.64	95	92.8	4	2.9	4			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	68.00	03/02/2021	7.45	03/02/2021	628.0	03/02/2021	03/22/2021		
2	70.00	03/09/2021	7.01	03/09/2021	846.0	03/09/2021	03/22/2021		
3	71.00	03/15/2021	7.22	03/15/2021	724.0	03/16/2021	04/02/2021		
4	65.00	03/23/2021	8.28	03/23/2021	799.0	03/23/2021	04/05/2021		
5	69.50	03/30/2021	7.41	03/30/2021	690.0	03/30/2021	04/06/2021		

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 03/23/2021
Kansas Lab Certificate Number E-10116
Lab Name Pace Analytical-Lenexa

These samples shall be representative of injection activity and shall therefore be collected on days of injection.

Constituent	Value	Units
1,2 Dichloroethene	ND	mg/l
Ammonia	4.300	mg/l
Benzene	0.131	mg/l
Calcium	116.000	mg/l
Conductivity	3.000	Mmhos
Ethylbenzene	0.008	mg/l
Iron	9.020	mg/l
Magnesium	12.300	mg/l
Oil & Grease	18.700	mg/l
Sodium	431.000	mg/l
Sulfate	598.000	mg/l
Toluene	0.108	mg/l
Total Alkalinity as CaCO3	335.000	mg/l
Total Dissolved Solids	1,770.000	mg/l
Total Suspended Solids	29.000	mg/l
Trichloroethene	ND	mg/l
Xylene	0.080	mg/l