Facility Well Name CHS Refinery #3 **UIC Permit #** KS-01-113-010 **Month** December **Year** 2020

Submitted 01/15/2021 **Approved** 01/19/2021 **KOLAR Document ID** 1542635

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 25

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	539	0.37	97	97	12.3	11.5	
Monthly Maximum	3,509	2.43	100	101	16.0	15.0	
Monthly Minimum	0	0.00	90	92	4.0	3.1	
Monthly Total	16,712						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
109.41	86.37	16.51	0.89

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	82.29	0.05	98	97.1	15	13.9	4			MW		
2	07:00	26.74	0.02	98	97.0	15	14.2	4			JM		
3	07:00	25.02	0.02	98	97.3	14	13.4	4			JM		
4	07:00	18.17	0.02	98	97.3	14	13.4	4			MW		
5	07:00	67.55	0.05	99	99.0	14	13.4	5			MW		
6	07:00	28.81	0.02	98	96.9	14	13.4	5			MW		
7	07:00	0.69	0.00	98	98.8	14	13.5	5			AS		
8	07:00	0.00	0.00	98	98.5	14	13.4	5			AS		
9	07:00	0.00	0.00	100	101.4	14	13.5	5			MB		
10	07:00	0.00	0.00	100	101.0	14	13.5	5			MW		
11	07:00	0.00	0.00	100	101.0	15	13.5	6			AS		
12	07:00	0.00	0.00	98	99.6	15	13.5	6			AS		
13	07:00	0.00	0.00	99	98.6	14	13.4	6			MB		
14	07:00	348.69	0.24	98	95.0	15	13.8	6			JC		
15	07:00	3,509.48	2.43	100	98.5	4	3.1	2			JC		
16	07:00	1,092.69	0.76	100	99.5	8	7.2	3			MH		
17	07:00	1,187.67	0.83	95	94.6	10	9.1	2			MH		
18	07:00	1,265.83	0.88	95	97.9	5	4.0	2			MD		
19	07:00	1,240.12	0.86	92	94.7	5	5.2	2			JC		
20	07:00	1,129.71	0.79	98	96.5	7	6.4	2			JC		
21	07:00	988.12	0.69	98	97.4	9	8.1	2			RM		
22	07:00	933.95	0.64	98	97.6	10	9.7	2			RM		
23	07:00	763.19	0.52	100	100.7	12	11.8	2			JC		
24	07:00	773.48	0.55	96	91.9	9	8.0	2			JC		
25	07:00	566.74	0.40	94	92.3	13	12.8	1			MB		
26	07:00	433.02	0.31	95	95.3	14	12.8	2			MB		
27	07:00	443.67	0.31	90	96.1	14	13.1	1			MB		
28	07:00	496.45	0.33	92	95.2	14	13.9	1			MW		
29	07:00	493.38	0.33	96	94.7	13	11.9	1			BF		
30	07:00	417.60	0.29	95	93.7	16	14.7	1			MB		
31	07:00	379.19	0.26	97	92.2	16	15.0	1			MB		

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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	52.00	12/01/2020	7.52	12/01/2020	214.0	12/01/2020	12/23/2020		
2	52.00	12/08/2020	8.10	12/08/2020	215.0	12/08/2020	12/29/2020		
3	62.00	12/15/2020	7.70	12/15/2020	563.0	12/15/2020	12/29/2020		
4	65.00	12/22/2020	7.74	12/22/2020	164.0	12/22/2020	12/29/2020		
5	55.00	12/29/2020	7.90	12/29/2020	164.0	12/29/2020	01/07/2021		

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 4
Date Sample Collected 12/22/2020
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	ND	mg/l
Benzene	ND	mg/l
Calcium	21.000	mg/l
Conductivity	1.000	Mmhos
Ethylbenzene	ND	mg/l
Iron	0.240	mg/l
Magnesium	2.100	mg/l
Oil & Grease	ND	mg/l
Sodium	140.000	mg/l
Sulfate	55.000	mg/l
Toluene	ND	mg/l
Total Alkalinity as CaCO3	82.000	mg/l
Total Dissolved Solids	473.000	mg/l
Total Suspended Solids	ND	mg/l
Trichloroethene	ND	mg/l
Xylene	ND	mg/l