Facility Well Name CHS Refinery #1 **UIC Permit #** KS-01-113-008 **Month** June **Year** 2021

Submitted 07/20/2021 **Approved** 07/30/2021 **KOLAR Document ID** 1582885

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

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	10,642	7.39	103	99	8.5	7.7	
Monthly Maximum	12,717	8.83	121	120	16.0	15.6	
Monthly Minimum	7,046	4.90	82	79	2.0	1.2	
Monthly Total	319,267						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
132.64	64.64	15.74	0.98

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	12,448.45	8.64	104	103.0	15	14.4	9			JC		
2	07:00	12,717.26	8.83	106	104.2	3	1.2	10			MH		
3	07:00	12,692.90	8.81	106	103.8	15	13.8	10			MH		
4	07:00	12,507.76	8.69	106	105.5	14	15.6	11			JC		
5	07:00	12,180.69	8.45	110	106.3	15	13.9	11			JC		
6	07:00	12,538.62	8.71	110	108.4	15	14.0	12			JC		
7	07:00	12,382.29	8.60	108	105.0	15	14.0	12			RM		
8	07:00	7,202.40	5.00	104	101.7	8	6.8	12			RM		
9	07:00	7,045.71	4.90	100	95.6	3	2.5	5			JC		
10	07:00	7,745.83	5.38	100	94.1	2	2.0	5			JC		
11	07:00	7,601.48	5.29	98	94.1	3	2.6	5			RM		
12	07:00	7,798.98	5.40	98	95.4	4	2.7	5			MB		
13	07:00	7,969.38	5.52	99	94.1	2	1.7	4			MB		
14	07:00	8,305.02	5.76	102	99.5	2	1.6	4			MW		
15	07:00	8,961.60	6.21	104	99.5	2	1.9	4			MW		
16	07:00	10,983.43	7.62	121	120.3	2	1.4	10			MB		
17	07:00	11,394.86	7.90	120	116.1	15	14.3	10			MB		
18	07:00	11,536.81	8.00	119	117.9	5	3.8	11			BF		
19	07:00	12,291.10	8.52	100	95.7	15	14.5	11			BF		
20	07:00	12,355.88	8.57	105	103.3	14	14.0	14			MW		
21	07:00	11,583.43	8.05	104	101.0	3	2.0	14			AS		
22	07:00	11,515.55	8.00	108	105.2	15	14.6	15			AS		
23	07:00	12,308.24	8.55	82	79.2	16	14.5	9			MW		
24	07:00	11,985.60	8.33	83	83.0	15	14.3	9			MW		
25	07:00	12,004.45	8.33	96	93.1	15	9.2	13			TY		
26	07:00	11,858.40	8.24	93	91.0	8	7.8	13			AS		
27	07:00	11,744.57	8.17	90	87.7	7	6.2	13			AS		
28	07:00	9,335.67	6.48	110	90.8	2	1.5	11			JC		
29	07:00	9,748.81	6.76	96	93.1	2	1.5	12			TY		
30	07:00	8,521.71	5.93	95	92.0	2	1.4	13			MH		
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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	06/01/2021	7.57	06/01/2021	404.0	06/01/2021	06/15/2021		
2	75.00	06/08/2021	7.36	06/08/2021	784.0	06/08/2021	06/30/2021		
3	81.00	06/15/2021	7.41	06/15/2021	1,010.0	06/15/2021	06/24/2021		
4	93.00	06/22/2021	8.06	06/22/2021	400.0	06/22/2021	07/06/2021		
5	96.00	06/29/2021	7.54	06/29/2021	701.0	06/29/2021	07/06/2021		

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 2
Date Sample Collected 06/15/2021
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
Ammonia	2.600	mg/l
Benzene	ND	mg/l
Calcium	420.000	mg/l
Conductivity	4.000	Mmhos
Ethylbenzene	ND	mg/l
Iron	34.700	mg/l
Magnesium	38.600	mg/l
Oil & Grease	106.000	mg/l
Sodium	556.000	mg/l
Sulfate	611.000	mg/l
Toluene	0.001	mg/l
Total Alkalinity as CaCO3	627.000	mg/l
Total Dissolved Solids	3,290.000	mg/l
Total Suspended Solids	228.000	mg/l
Xylene	0.014	mg/l