Facility Well Name CHS Refinery #3 **UIC Permit #** KS-01-113-010 **Month** May **Year** 2019

Submitted 06/21/2019 **Approved** 07/05/2019 **KOLAR Document ID** 1463785

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	6,317	4.38	97	98	10.5	9.6	
Monthly Maximum	7,670	5.33	112	114	18.0	17.3	
Monthly Minimum	2,656	1.83	82	86	1.0	0.5	
Monthly Total	195,828						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
128.46	85.70	19.49	0.45

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	7,152.83	4.98	96	92.9	1	0.7	3			ZB		
2	07:00	7,166.57	4.98	91	91.9	6	5.0	3			TB		
3	07:00	7,185.55	5.00	94	93.9	2	0.8	5			AS		
4	07:00	7,177.67	4.98	92	92.5	2	0.9	5			AS		
5	07:00	7,198.40	5.00	96	96.5	2	0.9	4			AS		
6	07:00	7,169.90	4.98	102	107.3	1	0.8	5			JC		
7	07:00	7,103.67	4.93	98	99.5	2	1.1	6			DJ		
8	07:00	6,690.29	4.64	96	96.1	17	15.6	5			AS		
9	07:00	7,670.43	5.33	85	86.1	2	1.7	3			AS		
10	07:00	6,905.60	4.79	82	88.2	7	1.7	3			JC		
11	07:00	6,440.36	4.48	92	94.0	7	6.9	3			JC		
12	07:00	6,725.86	4.67	90	92.5	15	14.7	4			JC		
13	07:00	7,208.00	5.00	94	94.8	17	15.6	6			RM		
14	07:00	7,075.05	4.90	96	98.1	12	10.9	5			RM		
15	07:00	5,924.33	4.12	102	104.7	15	15.7	7			JC		
16	07:00	6,665.10	4.62	104	106.0	17	16.1	8			JC		
17	07:00	6,093.90	4.24	112	114.1	16	15.8	10			RM		
18	07:00	6,367.62	4.43	112	111.8	16	15.3	9			RM		
19	07:00	5,672.17	3.93	94	93.5	4	2.7	5			RM		
20	07:00	3,947.52	2.74	90	91.7	5	4.0	5			ZB		
21	07:00	5,696.05	3.95	96	91.1	18	16.5	5			ZB		
22	07:00	6,520.98	4.52	96	96.3	16	14.9	7			BF		
23	07:00	6,009.74	4.17	96	98.6	17	15.7	5			BF		
24	07:00	5,774.05	4.00	100	101.7	17	16.5	6			ZB		
25	07:00	6,263.60	4.36	99	100.0	18	16.6	7			ZB		
26	07:00	6,412.05	4.45	100	102.4	1	0.5	8			ZB		
27	07:00	5,879.00	4.07	100	101.8	17	16.2	7			AS		
28	07:00	6,255.50	4.33	111	111.4	18	16.6	10			AS		
29	07:00	6,179.17	4.29	102	104.6	18	17.3	9			ZB		
30	07:00	4,641.86	3.21	91	93.1	3	2.2	6			ZB		
31	07:00	2,655.69	1.83	96	97.2	17	16.3	7			AS		

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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	76.00	05/07/2019	6.50	05/07/2019	787.0	05/07/2019	05/23/2019		
2	72.00	05/14/2019	6.56	05/14/2019	863.0	05/14/2019	05/22/2019		
3	73.00	05/21/2019	7.20	05/21/2019	447.0	05/21/2019	06/04/2019		
4	82.00	05/28/2019	7.09	05/28/2019	298.0	05/28/2019	06/12/2019		
5									

No monthly injectate samples required.