Facility Well Name Kansas Ethanol #5 **UIC Permit #** KS-01-159-007 **Month** April **Year** 2020

Submitted 05/14/2020 **Approved** 05/18/2020 **KOLAR Document ID** 1515943

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

Barrels per Day Maximum: 13,714

			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	3,712	2.12	73	75	-25.2	-21.2	
Monthly Maximum	4,929	2.98	75	78	-24.0	-19.5	
Monthly Minimum	2,119	0.00	71	72	-28.0	-22.9	
Monthly Total	111,357						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
78.50	71.20	-18.40	-23.00

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	Conduc-tivity	
1	11:12	4,928.57	2.76	71	74.4	-24	-20.5	11	N/A		LB	2,091.00	
2	05:15	2,404.76	0.00	72	75.0	-27	-21.8	11	N/A		BF	2,771.00	
3	05:15	4,023.81	0.38	71	72.4	-24	-21.4	11	N/A		BF	2,810.00	
4	08:45	4,500.00	2.71	71	72.5	-25	-21.5	11	N/A		PH	2,040.00	
5	01:30	3,380.95	0.00	75	77.8	-26	-20.8	12	N/A		PH	2,757.00	
6	05:45	2,119.05	2.86	73	75.0	-24	-20.0	11	N/A		BF	2,616.00	
7	05:15	3,976.19	2.83	74	76.6	-24	-19.6	11	N/A		BF	2,700.00	
8	05:15	3,523.81	2.83	74	74.8	-24	-20.8	11	N/A		BF	2,521.00	
9	05:30	3,928.57	2.76	74	74.2	-25	-21.4	11	N/A		BF	2,717.00	
10	05:15	3,928.57	2.76	72	72.6	-25	-22.1	11	N/A		BF	2,542.00	
11	08:45	4,380.95	2.60	73	75.7	-25	-20.6	11	N/A		JC	3,155.00	
12	08:45	3,476.19	2.95	75	77.5	-24	-19.5	11	N/A		JC	2,924.00	
13	08:25	3,761.90	2.98	71	73.2	-25	-21.7	11	N/A		LB	2,573.00	
14	12:30	4,309.52	0.00	72	74.9	-28	-22.8	11	N/A		AJR	3,097.00	
15	10:15	3,190.48	2.90	72	73.8	-25	-21.4	11	N/A		AJR	2,758.00	
16	10:15	3,666.67	2.86	72	74.6	-25	-21.0	11	N/A		AJR	3,217.00	
17	09:30	3,571.43	2.95	72	73.7	-25	-21.4	11	N/A		AJR	2,613.00	
18	08:55	3,404.76	2.95	72	74.0	-25	-21.3	11	N/A		DW	3,097.00	
19	08:50	3,476.19	2.93	74	75.9	-25	-20.3	11	N/A		DW	3,240.00	
20	05:15	2,928.57	2.90	74	76.2	-24	-20.1	11	N/A		BF	2,977.00	
21	05:15	3,904.76	2.90	74	74.5	-25	-21.3	11	N/A		BF	3,001.00	
22	05:15	3,809.52	2.98	74	74.9	-25	-21.2	11	N/A		BF	2,774.00	
23	05:15	3,976.19	2.88	73	74.1	-25	-21.3	11	N/A		BF	2,881.00	
24	05:15	3,761.90	0.00	74	75.0	-27	-22.3	11	N/A		BF	3,411.00	
25	08:45	4,404.76	0.00	73	74.1	-27	-22.9	11	N/A		AT	2,725.00	
26	08:45	3,619.05	0.00	73	74.0	-27	-22.9	11	N/A		AT	3,115.00	
27	05:15	3,142.86	0.00	74	74.6	-27	-22.5	11	N/A		BF	3,005.00	
28	05:15	3,880.95	2.93	74	75.6	-25	-20.7	11	N/A		BF	2,919.00	
29	05:15	3,904.76	2.90	74	74.8	-25	-20.8	11	N/A		BF	3,216.00	
30	07:30	4,071.43	2.98	74	74.3	-25	-21.3	11	N/A		BF	3,180.00	
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Weekly Injectate Samples

Kansas Lab Certificate Number E-10152

Week	**Temperature**		**pH**		**Chloride**				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	62.60	04/01/2020	7.69	04/01/2020	280.0	04/01/2020	04/06/2020		
2	66.30	04/08/2020	7.45	04/08/2020	335.0	04/08/2020	04/09/2020		
3	62.10	04/15/2020	7.54	04/15/2020	325.0	04/15/2020	04/16/2020		
4	65.20	04/23/2020	7.46	04/23/2020	325.0	04/23/2020	04/24/2020		
5	67.30	04/29/2020	7.63	04/29/2020	320.0	04/29/2020	05/01/2020		

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 2
Date Sample Collected 04/01/2020
Kansas Lab Certificate Number E-10152
Lab Name SDK Laboratories (Hutchinson)

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

Constituent	Value	Units
Calcium	187.000	mg/l
Iron	0.010	mg/l
Magnesium	43.200	mg/l
Sulfate	160.000	mg/l
Total Alkalinity as CaCO3	460.000	mg/l
Total Dissolved Solids	1,450.000	mg/l
Total Hardness as CaCO3	645.000	mg/l