Facility Well Name Holly Frontier #1 **UIC Permit #** KS-01-115-001 **Month** October **Year** 2019

Submitted 11/25/2019 **Approved** 11/27/2019 **KOLAR Document ID** 1483546

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 13

Barrels per Day Maximum: 6,167

			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	566	0.46	153	155	-18.8	-15.1	
Monthly Maximum	1,303	1.05	168	173	-9.0	-0.1	
Monthly Minimum	104	0.07	118	116	-25.0	-26.3	
Monthly Total	7,361						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
179.00	114.50	-2.50	-26.50

Comments:

Due to maintenance activities at our Fluid Catalytic Cracker Unit(FCCU), the injection well was out of service and received no flow starting on the 13th of October, and persisted through the remainder of the month.

Holly Frontier #1 10/2019

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	08:45	1,303.17	1.05	124	123.3	-24	-25.5	15			RC		
2	11:00	1,007.33	0.90	118	115.9	-24	-24.6	19			RC		
3	08:40	1,243.74	0.60	153	153.1	-25	-26.0	10			RC		
4	08:00	1,090.43	1.05	155	156.4	-24	-26.3	8			RC		
5	05:45	855.79	0.86	158	159.8	-24	-25.4	8			PS		
6	08:35	787.00	0.76	150	155.7	-24	-26.1	8			PS		
7	08:20	195.02	0.07	160	162.8	-25	-15.4	8			RC		
8	07:40	131.50	0.12	162	161.6	-20	-18.1	9			SW		
9	11:00	157.69	0.07	162	161.8	-14	-4.6	8			RC		
10	07:35	172.98	0.10	162	164.1	-12	-1.7	8			RC		
11	07:55	154.88	0.12	168	167.7	-10	-1.5	8			RC		
12	07:58	157.48	0.12	164	173.4	-9	-0.4	8			GAO		
13	07:59	103.50	0.12	155	154.3	-9	-0.1	8			GAO		
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Holly Frontier #1 10/2019

Weekly Injectate Samples

Kansas Lab Certificate Number E-10146

Week	**Temperature**		**pH**		**Chloride**				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	106.19	10/02/2019	7.50	10/02/2019	171.0	10/02/2019	10/09/2019		
2	76.44	10/09/2019	6.20	10/09/2019	57.7	10/09/2019	10/11/2019		
3									
4									
5									

No monthly injectate samples required.