Facility Well Name Holly Frontier #1 **UIC Permit #** KS-01-115-001 **Month** September **Year** 2022

Submitted 10/27/2022 **Approved** 10/28/2022 **KOLAR Document ID** 1669558

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

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	903	0.65	136	134	-24.2	-22.4	24
Monthly Maximum	1,250	0.95	182	172	-20.0	-19.3	24
Monthly Minimum	840	0.43	112	112	-27.0	-26.2	24
Monthly Total	27,084						24

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
190.20	0.00	-18.30	-26.30

Comments:

Minimum annulus pressure reported on 9/1/22 was the result of closing off the pressure transducer to add oil to the pot. Reading returned to normal immediately after servicing.

Holly Frontier #1 09/2022

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	09:30	1,249.93	0.95	120	116.6	-26	-24.6	21	yes	24	BC		
2	07:30	1,075.00	0.74	112	111.7	-27	-26.2	21			KCS		
3	09:15	889.57	0.64	112	171.8	-26	-24.1	20			TN		
4	09:31	896.02	0.62	182	157.1	-22	-20.0	19			TN		
5	07:00	902.60	0.64	160	157.6	-22	-20.5	20			PS		
6	09:53	900.52	0.57	170	156.1	-22	-20.6	20			TN		
7	11:15	899.45	0.62	146	143.0	-22	-20.5	20			TN		
8	06:11	895.81	0.64	140	138.8	-23	-21.0	20			BM		
9	06:26	884.02	0.64	140	137.8	-23	-20.6	20			BM		
10	09:04	892.90	0.62	136	135.1	-23	-20.9	20			BM		
11	20:15	924.26	0.62	135	133.8	-23	-21.8	19			TN		
12	07:20	895.67	0.67	128	126.6	-24	-22.1	19			SW		
13	07:50	885.86	0.76	132	128.8	-23	-21.9	19			MM		
14	10:45	897.79	0.52	135	132.9	-23	-21.8	19			MM		
15	08:45	929.90	0.67	145	143.7	-27	-24.7	19			BC		
16	09:30	935.90	0.67	130	131.0	-25	-23.1	19			BC		
17	09:20	924.76	0.67	150	146.5	-26	-24.0	19			SW		
18	09:00	916.26	0.64	138	134.8	-20	-19.3	20			SW		
19	09:16	851.31	0.52	150	148.0	-26	-23.3	22			MM		
20	10:00	849.71	0.71	153	150.0	-24	-22.7	22			MM		
21	10:44	848.07	0.62	138	135.5	-26	-20.0	21			MM		
22	08:30	839.57	0.50	125	123.2	-24	-21.6	19			BC		
23	08:30	842.36	0.69	120	121.9	-25	-23.3	19			BC		
24	07:03	840.19	0.43	130	123.6	-25	-23.4	18			PS		
25	07:00	862.26	0.52	130	125.4	-25	-22.4	18			PS		
26	09:00	875.40	0.83	121	120.2	-25	-23.7	18			MM		
27	09:00	872.00	0.52	124	121.3	-24	-22.9	18			MM		
28	11:00	867.69	0.76	125	122.7	-25	-23.8	18			MM		
29	09:00	867.57	0.79	120	118.4	-25	-23.4	18			MM		
30	09:00	871.17	0.67	120	118.5	-26	-24.9	18			BC		
31													

Holly Frontier #1 09/2022

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	82.00	09/07/2022	6.30	09/07/2022	35.4	09/07/2022	09/09/2022		
2	77.10	09/14/2022	6.10	09/14/2022	40.7	09/14/2022	09/20/2022		
3	80.80	09/21/2022	6.20	09/21/2022	30.1	09/21/2022	10/04/2022		
4	73.90	09/28/2022	6.00	09/28/2022	37.8	09/28/2022	09/29/2022		
5									

No monthly injectate samples required.

Holly Frontier #1 09/2022

Quarterly Injectate Samples

Quarter 3
Date Sample Collected 09/21/2022
Kansas Lab Certificate Number E-10146
Lab Name Pace Analytical-Salina

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

Constituent	Value	Units
Ammonia	<0.200	mg/l
Arsenic	<0.050	mg/l
Benzene	<0.001	mg/l
Calcium	48.990	mg/l
Chromium	<0.0250	mg/l
Conductivity	0.627	Mmhos
Cyanide	0.018	mg/l
Ethylbenzene	<0.001	mg/l
Iron	0.479	mg/l
Magnesium	6.690	mg/l
Oil & Grease	<5.000	mg/l
Sodium	37.500	mg/l
Sulfate	186.000	mg/l
Toluene	<0.001	mg/l
Total Alkalinity as CaCO3	24.600	mg/l
Total Dissolved Solids	371.000	mg/l
Total Suspended Solids	65.000	mg/l
Xylene	<0.003	mg/l