Facility Well Name Pioneer #2 **UIC Permit #** KS-01-077-001 **Month** September **Year** 2019

Submitted 12/04/2019 **Approved** 12/24/2019 **KOLAR Document ID** 1477562

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

Barrels per Day Maximum: 1,000

	Injection Volume Barrels per Day	Injection Rate Barrels per Minute	Annulus Pressure psig min 60 Gauge psig	Annulus Pressure Cont. Record psig	Injection Pressure Gauge psig	Injection Pressure Cont. Record psig	Amount Added to Seal Pot
Monthly Average	117	0.08	91	90	-26.7	-26.4	0
Monthly Maximum	192	0.14	94	93	-25.0	-24.5	0
Monthly Minimum	8	0.00	86	85	-28.0	-27.1	0
Monthly Total	3,524						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
94.03	81.93	14.46	27.49

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	14:00	191.81	0.14	90	88.9	-27	-26.9	18		0	SA		
2	14:00	133.33	0.10	92	91.2	-28	-27.1	18		0	SA		
3	14:00	133.90	0.10	94	93.3	-26	-26.0	18		0	MS		
4	14:00	47.86	0.02	94	93.1	-27	-26.6	18		0	MS		
5	14:00	8.17	0.00	94	93.0	-25	-24.5	18		0	MB		
6	14:00	123.74	0.10	93	91.3	-27	-26.9	18		0	MB		
7	14:00	109.81	0.07	91	89.6	-27	-26.9	18		0	MB		
8	14:00	136.60	0.10	90	88.4	-27	-26.8	18		0	MB		
9	14:00	172.29	0.12	90	88.6	-26	-26.5	18		0	MB		
10	14:00	183.50	0.12	90	89.5	-27	-26.3	18		0	KS		
11	14:00	134.98	0.10	90	89.7	-26	-26.8	18		0	KS		
12	14:00	157.36	0.12	86	85.8	-27	-26.8	18		0	KS		
13	14:00	40.62	0.02	91	90.8	-26	-25.6	18		0	MS		
14	14:00	104.10	0.07	92	91.4	-27	-26.3	18		0	KS		
15	14:00	120.29	0.10	94	93.0	-27	-26.8	18		0	KS		
16	14:00	182.90	0.12	94	92.5	-27	-26.2	18		0	MB		
17	14:00	105.60	0.07	90	90.4	-27	-26.6	18		0	MS		
18	14:00	130.52	0.10	90	90.5	-26	-26.6	18		0	MS		
19	14:00	141.57	0.10	92	91.3	-26	-26.0	18		0	SA		
20	14:00	148.36	0.10	90	88.6	-27	-26.7	18		0	MS		
21	14:00	140.95	0.10	90	88.7	-27	-26.6	18		0	SA		
22	14:00	176.60	0.12	90	88.0	-28	-26.6	18		0	SA		
23	14:00	17.38	0.02	91	91.2	-25	-24.5	18		0	MS		
24	14:00	39.33	0.02	92	91.3	-27	-26.1	18		0	MB		
25	14:00	100.52	0.07	91	89.7	-26	-26.3	18		0	MB		
26	14:00	106.43	0.07	86	85.3	-27	-26.7	18		0	MB		
27	14:00	153.36	0.10	92	90.8	-27	-26.2	18		0	MB		
28	14:00	112.40	0.07	86	84.6	-27	-26.6	18		0	MB		
29	14:00	78.55	0.05	90	89.1	-27	-26.3	18		0	MB		
30	14:00	91.19	0.07	92	90.3	-27	-26.5	18		0	MB		
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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	73.00	09/05/2019	7.90	09/05/2019	770.0	09/05/2019	09/10/2019		
2	72.00	09/12/2019	7.80	09/12/2019	720.0	09/12/2019	09/16/2019		
3	72.00	09/19/2019	7.70	09/19/2019	637.0	09/19/2019	09/23/2019		
4	74.00	09/24/2019	7.90	09/24/2019	662.0	09/24/2019	09/30/2019		
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No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 3
Date Sample Collected 09/11/2019
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
Benzene	0.000	mg/l
Calcium	466.000	mg/l
Conductivity	3,850.000	Mmhos
Iron	0.210	mg/l
Magnesium	35.900	mg/l
Sulfate	1,050.000	mg/l
Total Alkalinity as CaCO3	112.000	mg/l
Total Dissolved Solids	2,880.000	mg/l
Total Hardness as CaCO3	1,311.000	mg/l