Facility Well Name Pioneer #2 **UIC Permit #** KS-01-077-001 **Month** December **Year** 2020

Submitted 01/26/2021 **Approved** 01/27/2021 **KOLAR Document ID** 1545985

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

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	62	0.04	86	86	-26.5	-26.7	0
Monthly Maximum	105	0.07	94	94	-24.0	-24.7	0
Monthly Minimum	23	0.02	80	80	-27.0	-27.4	0
Monthly Total	1,925						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
95.56	77.56	-13.55	-27.92

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	53.36	0.05	86	86.1	-26	-26.4	17		0	MS		
2	14:00	76.02	0.05	83	82.7	-27	-27.1	17		0	MS		
3	14:00	26.50	0.02	82	82.5	-26	-25.8	17		0	MS		
4	14:00	43.93	0.02	86	85.8	-25	-25.4	17		0	MS		
5	14:00	73.90	0.05	87	86.9	-26	-26.3	17		0	MS		
6	14:00	67.88	0.05	86	86.4	-26	-26.4	17		0	MS		
7	14:00	87.38	0.07	87	87.0	-27	-27.2	17		0	MS		
8	14:00	69.81	0.05	87	87.1	-27	-27.4	17		0	MB		
9	14:00	83.81	0.05	88	88.2	-26	-26.7	17		0	MB		
10	14:00	81.36	0.05	87	87.1	-26	-26.7	17		0	MB		
11	14:00	35.00	0.02	82	82.1	-26	-26.9	17		0	MB		
12	14:00	74.38	0.05	80	80.1	-27	-27.3	17		0	MB		
13	14:00	31.14	0.02	80	80.3	-26	-26.4	17		0	MB		
14	14:00	79.48	0.05	82	82.1	-24	-24.7	17		0	MB		
15	14:00	43.74	0.02	82	82.1	-26	-25.8	17		0	KS		
16	14:00	34.57	0.02	82	82.0	-27	-26.7	17		0	KS		
17	14:00	43.90	0.02	85	85.2	-27	-26.9	17		0	KS		
18	14:00	51.76	0.05	85	84.9	-27	-26.7	17		0	KS		
19	14:00	57.07	0.05	85	85.0	-27	-27.0	17		0	KS		
20	14:00	76.62	0.05	85	85.3	-27	-27.0	17		0	KS		
21	14:00	82.29	0.05	86	85.7	-27	-27.2	17		0	KS		
22	14:00	53.69	0.05	87	87.2	-27	-26.7	17		0	MS		
23	14:00	60.60	0.05	83	83.5	-26	-26.1	17		0	MS		
24	14:00	22.76	0.02	86	85.8	-27	-27.1	17		0	MS		
25	14:00	69.69	0.05	92	91.6	-27	-27.3	17		0	MS		
26	14:00	53.14	0.05	94	94.4	-27	-27.0	17		0	MS		
27	14:00	104.81	0.07	92	91.9	-27	-27.1	17		0	MS		
28	14:00	76.24	0.05	88	88.1	-27	-27.4	17		0	MS		
29	14:00	75.69	0.05	88	88.7	-27	-27.0	17		0	MB		
30	14:00	67.69	0.05	89	89.8	-26	-26.3	17		0	MB		
31	14:00	66.31	0.05	87	87.7	-27	-27.2	17		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	49.00	12/02/2020	7.80	12/02/2020	650.0	12/02/2020	12/03/2020		
2	52.00	12/10/2020	7.80	12/10/2020	700.0	12/10/2020	12/15/2020		
3	52.00	12/16/2020	7.60	12/16/2020	575.0	12/16/2020	12/18/2020		
4	48.00	12/22/2020	7.80	12/22/2020	675.0	12/22/2020	12/29/2020		
5	54.00	12/30/2020	8.00	12/30/2020	668.0	12/30/2020	01/04/2021		

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 4
Date Sample Collected 12/07/2020
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
Benzene	0.000	mg/l
Calcium	491.000	mg/l
Conductivity	3,800.000	Mmhos
Iron	0.186	mg/l
Magnesium	38.100	mg/l
Sulfate	1,180.000	mg/l
Total Alkalinity as CaCO3	90.000	mg/l
Total Dissolved Solids	2,870.000	mg/l
Total Hardness as CaCO3	1,383.000	mg/l