Facility Well Name Sunflower (Fort Dodge) #1 **UIC Permit #** KS-01-057-003 **Month** November **Year** 2022

Submitted 12/27/2022 **Approved** 12/28/2022 **KOLAR Document ID** 1677776

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 5

Barrels per Day Maximum: 20,571

	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	1,124	0.00	347	343	-3.4	-2.3	
Monthly Maximum	10,828	0.00	650	619	0.0	1.3	
Monthly Minimum	0	0.00	180	178	-26.0	-26.4	
Monthly Total	33,721						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
619.32	140.53	1.90	-26.54

Comments:

The actual injection rate (GPM) reading showed negative values throughout the month when the injection well had no flow and was recorded as negative, but changed to 0 for the report to indicate no flow at that time.

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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	07:58	0.00	0.00	322	319.1	0	1.2	31			CG		
2	08:12	0.00	0.00	311	309.7	0	1.3	31			TK		
3	08:12	0.00	0.00	302	299.0	0	1.3	32			TK		
4	08:10	0.00	0.00	290	287.8	0	1.2	32			TK		
5	08:00	0.00	0.00	280	277.1	0	1.3	32			TK		
6	07:56	0.00	0.00	269	266.5	0	1.1	32			TK		
7	08:26	0.00	0.00	259	256.5	0	1.2	32			LF		
8	08:18	0.00	0.00	251	246.8	0	1.3	32			KK		
9	08:23	0.00	0.00	242	237.2	0	1.3	32			KK		
10	08:05	0.00	0.00	234	228.7	0	1.1	32			KK		
11	07:49	0.00	0.00	225	220.6	0	1.2	32			KK		
12	06:32	0.00	0.00	219	213.7	0	1.2	32			KK		
13	09:19	0.00	0.00	210	206.0	0	1.3	32			LF		
14	03:23	5,771.10	0.00	314	311.8	-26	-26.0	25			KK		
15	00:22	6,190.07	0.00	270	266.7	-26	-26.3	25			TK		
16	01:24	7,442.21	0.00	238	233.1	-26	-26.4	25			TK		
17	07:17	10,827.83	0.00	180	178.4	-25	-23.7	25			CG		
18	03:30	3,489.83	0.00	410	406.9	0	1.3	26			TK		
19	00:51	0.00	0.00	650	619.1	0	1.3	27			TK		
20	07:40	0.00	0.00	650	619.1	0	1.3	27			LF		
21	08:11	0.00	0.00	582	583.3	0	1.3	28			CG		
22	08:07	0.00	0.00	539	539.5	0	1.3	29			CG		
23	13:32	0.00	0.00	491	491.3	0	1.3	29			CG		
24	06:32	0.00	0.00	466	466.3	0	1.3	29			LF		
25	08:35	0.00	0.00	432	432.6	0	1.3	29			LF		
26	07:17	0.00	0.00	408	406.3	0	1.3	30			CG		
27	06:28	0.00	0.00	385	382.2	0	1.3	30			CG		
28	08:52	0.00	0.00	361	357.8	0	1.3	30			CS		
29	07:44	0.00	0.00	310	307.4	0	1.3	31			CS		
30	07:51	0.00	0.00	312	309.4	0	1.3	31			CS		
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Weekly Injectate Samples

Kansas Lab Certificate Number E-10150

Week	**Temperature**		**pH**		**Chloride**				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	60.60	11/16/2022	7.46	11/16/2022	530.0	11/16/2022	11/17/2022		
2									
3									
4									
5									

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 4
Date Sample Collected 11/16/2022
Kansas Lab Certificate Number E-10150
Lab Name Servi-Tech Lab

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

Constituent	Value	Units
Ammonia	0.290	mg/l
Calcium	856.000	mg/l
Chloride	530.000	mg/l
Conductivity	6,550.000	Mmhos
Magnesium	187.000	mg/l
Sodium	522.000	mg/l
Sulfate	780.000	mg/l
Total Alkalinity as CaCO3	730.00000	mg/l (as CaCO3)
Total Dissolved Solids	5,050.000	mg/l
Total Hardness as CaCO3	2,900.00000	mg/l (as CaCO3)
Total Suspended Solids	ND	mg/l