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

Submitted 06/22/2022 **Approved** 06/29/2022 **KOLAR Document ID** 1649402

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	1,210	0.28	283	281	-3.9	-3.0	
Monthly Maximum	10,261	2.69	481	482	0.0	1.3	
Monthly Minimum	0	0.00	145	143	-26.0	-26.1	
Monthly Total	37,505						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
503.00	137.00	1.33	-26.28

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. Total Alkalinity analysis was performed out of hold time. We are planning to resample for Total Alkalinity during our next run expected in June 2022.

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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	07:12	0.00	0.00	230	227.9	0	1.2	33			CG		
2	08:10	0.00	0.00	211	210.0	0	1.3	33			TK		
3	08:19	0.00	0.00	198	195.0	0	1.3	33			MH		
4	07:51	0.00	0.00	187	182.8	0	1.3	33			MH		
5	08:07	0.00	0.00	175	171.4	0	1.3	33			MH		
6	07:56	0.00	0.00	164	161.3	0	1.3	33			MH		
7	08:14	0.00	0.00	155	151.7	0	1.3	33			MH		
8	07:40	0.00	0.00	145	142.9	0	1.3	33			MH		
9	07:46	0.00	0.00	320	318.8	0	1.3	33			CS		
10	08:55	0.00	0.00	286	285.0	0	1.3	33			CS		
11	07:48	0.00	0.00	260	256.6	0	1.3	33			CS		
12	08:02	0.00	0.00	233	230.4	0	1.3	33			CS		
13	08:13	0.00	0.00	210	207.5	0	1.3	33			LF		
14	08:13	0.00	0.00	190	187.9	0	1.3	33			CS		
15	06:20	0.00	0.00	175	172.1	0	1.3	33			CS		
16	06:24	8,391.79	2.69	230	231.5	-24	-26.1	26			TK		
17	06:47	4,701.19	2.02	305	303.8	-25	-26.0	26			TK		
18	06:05	4,455.79	2.02	290	287.1	-26	-26.0	26			TK		
19	06:26	9,696.10	2.00	220	217.1	-25	-25.8	26			TK		
20	07:24	10,260.52	0.00	237	235.3	-21	-21.7	26			TK		
21	06:45	0.00	0.00	365	362.1	0	1.3	29			TK		
22	06:02	0.00	0.00	478	476.5	0	1.3	30			TK		
23	07:54	0.00	0.00	481	482.1	-1	1.3	30			KK		
24	08:15	0.00	0.00	463	464.1	0	1.3	30			KK		
25	07:43	0.00	0.00	441	440.9	0	1.3	31			KK		
26	08:05	0.00	0.00	414	413.6	0	1.3	31			KK		
27	08:15	0.00	0.00	389	387.7	0	1.3	31			KK		
28	06:35	0.00	0.00	365	363.4	0	1.3	31			KK		
29	07:17	0.00	0.00	340	337.3	0	1.3	32			KK		
30	07:15	0.00	0.00	316	313.4	0	1.3	32			KK		
31	08:15	0.00	0.00	293	290.8	0	1.3	32			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	61.50	05/19/2022	7.31	05/19/2022	540.0	05/19/2022	05/19/2022		
2									
3									
4									
5									

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 2
Date Sample Collected 05/19/2022
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	ND	mg/l
Calcium	698.000	mg/l
Chloride	540.000	mg/l
Conductivity	5,450.000	Mmhos
Magnesium	158.000	mg/l
Sodium	488.000	mg/l
Sulfate	2,000.000	mg/l
Total Alkalinity as CaCO3	670.00000	mg/l (as CaCO3)
Total Dissolved Solids	3,940.000	mg/l
Total Hardness as CaCO3	2,400.00000	mg/l (as CaCO3)
Total Suspended Solids	ND	mg/l