Facility Well Name Sunflower (Fort Dodge) #1 **UIC Permit #** KS-01-057-003 **Month** September **Year** 2023

Submitted 12/01/2023 **Approved** 12/28/2023 **KOLAR Document ID** 1732698

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 6

Barrels per Day Maximum: 20,571

			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	1,472	0.47	305	303	-6.5	-4.0	
Monthly Maximum	11,137	6.98	600	619	0.0	1.4	
Monthly Minimum	0	0.00	176	175	-27.0	-26.1	
Monthly Total	44,163						

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
607.40	136.29	1.43	-26.21

Comments:

The actual injection rate (GPM) reading showed negative values during 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.
The annulus pressure readings on 09/22 & 09/23 were flagged indicating a maximum of 500 psig. Requesting an update to flag at a higher pressure (600 psig) and working to reduce the annulus pressure below 600 psig.
12/01/23 update: The maximum annulus pressure reading of 607.4 was taken from our Ovation system data versus the injection well continuous recorder. It appears that this value is lower or cut off at 607.4 versus showing the maximum value of 619.4 that was read inside the injection well house. We have purchased a new pressure control valve that will be installed when received to relieve the pressure below 600 psig. We are able

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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	01:02	11,094.52	2.12	220	216.8	-26	-26.0	24			BM		
2	02:55	11,137.26	2.33	215	219.2	-26	-26.1	24			SM		
3	02:27	9,512.50	2.55	232	229.4	-26	-26.1	24			SM		
4	01:11	2,601.67	0.00	280	276.3	-24	-20.4	26			CS		
5	01:27	0.00	0.00	205	201.8	-18	-12.4	28			CS		
6	14:36	0.00	0.00	301	298.7	-9	-4.5	27			CS		
7	00:58	0.00	0.00	316	315.5	-7	-3.0	27			TK		
8	01:19	0.00	0.00	347	345.8	-5	-0.8	27			TK		
9	01:07	0.00	0.00	368	367.2	-4	0.2	27			LF		
10	01:27	0.00	0.00	385	384.2	-3	0.8	27			LF		
11	01:06	0.00	0.00	397	396.9	-3	1.1	28			LF		
12	00:51	0.00	0.00	407	407.0	-3	1.2	28			LF		
13	04:33	0.00	0.00	176	175.0	-2	1.3	29			CS		
14	01:19	0.00	0.00	186	184.3	-2	1.3	29			CS		
15	01:29	0.00	0.00	195	193.3	-2	1.3	29			CS		
16	00:59	0.00	0.00	204	200.9	-1	1.2	29			CG		
17	01:06	0.00	0.00	205	207.8	-1	1.3	29			BM		
18	01:37	0.00	0.00	216	214.1	-1	1.4	30			KK		
19	01:35	0.00	0.00	221	219.3	-1	1.4	30			BM		
20	01:04	0.00	0.00	225	223.8	-1	1.3	30			SM		
21	00:58	6,271.40	6.98	260	255.2	-27	-25.6	24			LF		
22	01:08	3,546.07	0.00	600	619.4	-1	1.3	24			SM		
23	00:50	0.00	0.00	541	539.7	-1	1.3	26			CG		
24	00:49	0.00	0.00	462	458.9	0	1.3	27			TK		
25	01:40	0.00	0.00	406	402.2	-1	1.3	28			CG		
26	01:42	0.00	0.00	365	362.1	0	1.3	28			TK		
27	01:01	0.00	0.00	337	330.3	-1	1.3	28			BM		
28	01:21	0.00	0.00	310	304.6	0	1.3	29			KK		
29	01:17	0.00	0.00	290	284.5	0	1.3	29			BM		
30	02:49	0.00	0.00	270	266.4	0	1.3	29			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	65.10	09/01/2023	7.36	09/01/2023	960.0	09/01/2023	09/01/2023		
2	62.70	09/20/2023	7.29	09/20/2023	307.0	09/20/2023	09/21/2023		
3									
4									
5									

No monthly injectate samples required.