Facility Well Name Deffenbaugh #2 **UIC Permit #** KS-01-091-002 **Month** January **Year** 2022

Submitted 02/08/2022 **Approved** 02/24/2022 **KOLAR Document ID** 1617278

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 31

Barrels per Day Maximum: 14,286

			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	1,434	1.34	77	76	-11.6	-12.8	0
Monthly Maximum	4,069	2.31	79	79	0.0	0.4	0
Monthly Minimum	218	0.00	72	71	-13.0	-13.7	0
Monthly Total	44,451						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
80.38	66.94	4.40	-13.86

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	pH Standard Units	Temperature degrees F
1	09:30	801.50	1.81	77	76.8	-13	-13.4	22	N/A	0	DSB	6.00	73.00
2	07:00	940.90	1.60	77	76.9	-12	-13.1	22	N/A	0	DWK	6.10	71.00
3	06:50	218.48	1.05	77	76.3	-12	-12.6	22	N/A	0	AWK	6.00	71.50
4	06:55	257.05	0.69	77	76.8	-12	-12.7	22	N/A	0	AWK	6.00	71.80
5	06:50	4,069.10	0.45	77	76.4	-12	-13.0	22	N/A	0	AWK	5.90	72.40
6	06:55	1,481.93	0.43	77	76.6	-12	-12.8	22	N/A	0	AWK	6.00	70.30
7	06:50	1,518.07	2.31	78	77.7	-12	-13.5	20	N/A	0	DWK	6.20	70.20
8	06:55	1,156.48	1.26	77	77.5	-12	-13.7	20	N/A	0	DWK	6.20	70.80
9	06:50	908.50	1.93	77	77.0	-12	-13.3	21	N/A	0	DWK	6.10	71.30
10	06:45	1,320.83	2.17	77	76.7	-12	-13.6	21	N/A	0	DWK	6.00	72.10
11	06:50	1,195.14	2.07	77	76.4	-12	-13.6	21	N/A	0	DWK	6.00	73.10
12	06:45	1,586.95	1.62	76	76.0	-12	-12.8	21	N/A	0	DWK	5.90	75.00
13	06:55	1,402.86	1.79	76	76.5	-12	-13.4	21	N/A	0	DWK	6.00	75.70
14	06:45	1,403.05	2.12	76	76.5	-12	-13.4	21	N/A	0	DWK	6.10	74.30
15	10:00	2,302.57	1.67	77	77.1	-12	-13.5	21	N/A	0	RLW	5.90	74.30
16	08:00	799.90	0.64	76	76.2	-12	-12.9	21	N/A	0	DWK	6.10	72.30
17	06:50	1,213.52	2.02	77	77.0	-12	-13.5	21	N/A	0	DWK	6.00	73.40
18	06:50	1,690.48	0.60	77	76.9	-12	-12.7	21	N/A	0	DWK	5.70	75.80
19	06:45	1,404.95	0.57	77	76.6	-12	-13.1	21	N/A	0	DWK	5.90	73.20
20	06:55	1,190.00	0.52	78	78.4	-12	-13.3	20	N/A	0	DWK	6.10	71.30
21	06:40	1,460.48	0.00	79	79.0	0	0.4	20	N/A	0	DWK	6.40	60.40
22	06:50	1,552.10	2.19	78	77.5	-12	-13.6	20	N/A	0	AWK	5.70	70.60
23	07:30	1,746.76	0.50	77	75.2	-12	-12.9	20	N/A	0	DWK	5.90	73.80
24	06:45	1,944.00	0.48	72	71.1	-12	-12.7	21	N/A	0	DWK	5.70	76.90
25	06:40	1,357.90	2.19	77	76.3	-12	-13.6	21	N/A	0	DWK	6.10	71.70
26	06:45	1,378.86	0.64	75	74.5	-12	-13.3	21	N/A	0	DWK	6.10	68.70
27	06:55	1,471.67	1.74	75	75.1	-12	-13.6	20	N/A	0	DWK	5.80	74.60
28	06:45	1,337.95	1.86	76	75.9	-12	-13.6	21	N/A	0	DWK	6.10	74.70
29	06:50	1,734.67	0.60	76	76.0	-12	-13.1	21	N/A	0	AWK	5.70	74.20
30	06:55	1,967.05	2.07	76	75.2	-12	-13.3	21	N/A	0	AWK	6.00	75.20
31	10:00	1,637.71	2.07	77	76.9	-12	-13.3	21	N/A	0	RLW	5.90	76.10

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Quarterly Injectate Samples

Quarter 4
Date Sample Collected 11/09/2021
Kansas Lab Certificate Number E-10277
Lab Name Pace Analytical National Center for Testing & Training

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

Constituent	Value	Units
1,1,1-Trichloroethane	<0.001	mg/l
1,1-Dichloroethane	<0.001	mg/l
1,2-Dichlorobenzene	<0.001	mg/l
1,2-Dichloroethane	<0.001	mg/l
1,1-Dichloroethylene	<0.001	mg/l
1,2-Dichloropropane	<0.001	mg/l
1,3-Dichloropropene	<0.001	mg/l
Acetone	4.510	mg/l
Arsenic	0.138	mg/l
Benzene	0.002	mg/l
Calcium	62.400	mg/l
Chloride	2,250.000	mg/l
Chlorobenzene	<0.001	mg/l
Chloroethane	<0.001	mg/l
Chloroform	<0.001	mg/l
Cis-1,2-Dichloroethylene	<0.001	mg/l
Copper	0.180	mg/l
Dichloromethane (Methylene Chloride)	0.005	mg/l
Ethylbenzene	0.006	mg/l
Heptachlor	0.000	mg/l
Iron	3.290	mg/l
Lead	0.009	mg/l
Magnesium	124.000	mg/l

Quarterly Injectate Samples (continued)

Constituent	Value	Units
Methyl Ethyl Ketone (2-Butanone)	1.860	mg/l
Methyl Isobutyl Ketone (4-Methyl 2-Pentanone)	0.02570	mg/l
Nitrobenzene	0.010	mg/l
Phenol	0.492	mg/l
Pyrene	0.003	mg/l
Silver	0.005	mg/l
Sulfate	151.000	mg/l
Tetrachloroethylene	<0.001	mg/l
Thallium	<0.004	mg/l
Toluene	0.026	mg/l
Total Alkalinity as CaCO3	8,210.000	mg/l
Total Dissolved Solids	10,600.000	mg/l
Total Hardness as CaCO3	668.000	mg/l
Total Suspended Solids	26.400	mg/l
Trichloroethylene	<0.001	mg/l
Trichlorofluoromethane	<0.003	mg/l
Vinyl Chloride	0.001	mg/l
Xylene	0.016	mg/l
Zinc	0.289	mg/l