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

Submitted 04/11/2022 **Approved** 04/27/2022 **KOLAR Document ID** 1638749

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	2,288	1.33	79	79	-12.0	-13.1	0
Monthly Maximum	6,660	7.26	85	85	-12.0	-12.4	0
Monthly Minimum	1,173	0.45	77	77	-12.0	-13.5	0
Monthly Total	70,930						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
87.19	75.90	-4.46	-13.88

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	06:50	1,758.10	0.62	77	76.6	-12	-13.1	21	N/A	0	DWK	5.50	74.20
2	07:30	1,699.05	0.57	78	77.5	-12	-12.6	21	N/A	0	DWK	5.70	79.30
3	06:45	1,350.95	0.50	78	77.2	-12	-13.0	21	N/A	0	DWK	5.60	75.40
4	06:45	1,499.24	1.86	78	77.4	-12	-13.5	21	N/A	0	DWK	5.80	75.00
5	06:55	1,456.10	0.57	78	77.9	-12	-12.7	21	N/A	0	DWK	5.60	78.10
6	06:40	1,950.00	0.48	77	77.2	-12	-13.1	21	N/A	0	DWK	5.60	73.20
7	09:30	1,771.52	0.50	78	78.1	-12	-13.2	21	N/A	0	DWK	5.60	72.70
8	06:45	4,084.10	0.57	78	78.1	-12	-13.5	21	N/A	0	DWK	5.60	75.50
9	06:45	4,347.90	1.95	83	82.4	-12	-13.3	20	N/A	0	DWK	5.80	71.10
10	06:55	1,677.24	0.55	82	81.9	-12	-13.2	20	N/A	0	DWK	5.50	72.40
11	08:30	6,660.00	1.81	79	78.2	-12	-13.3	20	N/A	0	DWK	5.60	71.00
12	06:45	2,708.00	7.26	79	79.2	-12	-13.5	17	N/A	0	DWK	5.00	54.30
13	10:00	1,535.14	0.55	85	85.4	-12	-13.0	19	N/A	0	RLW	5.40	73.60
14	06:55	1,487.43	0.50	81	80.3	-12	-13.2	21	N/A	0	DWK	5.50	76.90
15	06:45	1,714.67	0.62	78	77.9	-12	-12.9	21	N/A	0	DWK	5.40	75.00
16	06:55	2,375.24	1.86	78	77.7	-12	-12.9	21	N/A	0	DWK	5.50	74.30
17	06:45	1,350.00	0.50	78	77.5	-12	-12.8	21	N/A	0	DWK	5.50	76.80
18	06:40	1,924.57	0.45	78	78.3	-12	-12.7	21	N/A	0	DWK	5.70	72.70
19	10:00	1,172.57	0.45	80	80.4	-12	-12.7	20	N/A	0	RLW	5.50	77.70
20	07:00	1,489.43	1.74	80	80.3	-12	-13.5	21	N/A	0	DWK	5.30	75.40
21	06:40	2,181.71	3.60	78	79.0	-12	-13.1	21	N/A	0	DWK	5.20	78.00
22	06:45	3,294.29	2.00	79	78.7	-12	-13.0	21	N/A	0	DWK	5.20	74.30
23	07:00	2,767.24	1.71	79	78.9	-12	-13.2	20	N/A	0	DWK	5.10	73.40
24	06:50	1,945.52	0.48	80	80.1	-12	-13.0	20	N/A	0	DWK	5.00	74.50
25	06:40	2,196.57	0.45	79	78.7	-12	-12.9	21	N/A	0	DWK	5.20	74.30
26	06:35	1,701.90	0.62	79	78.8	-12	-12.7	21	N/A	0	DWK	5.50	79.10
27	07:00	1,541.90	1.33	80	79.4	-12	-13.3	21	N/A	0	DWK	5.50	77.20
28	06:45	2,166.00	1.98	79	78.9	-12	-13.3	21	N/A	0	DWK	5.60	77.10
29	06:45	2,714.00	1.67	79	79.0	-12	-13.0	21	N/A	0	DWK	5.20	79.20
30	06:45	3,325.33	1.74	79	78.6	-12	-12.4	21	N/A	0	DWK	5.00	77.30
31	06:45	3,084.67	1.69	79	79.0	-12	-13.3	21	N/A	0	DWK	5.20	74.60

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 03/17/2022
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	<0.002	mg/l
1,2-Dichloropropane	<0.001	mg/l
1,3-Dichloropropene	<0.002	mg/l
Acetone	11.600	mg/l
Arsenic	0.144	mg/l
Benzene	0.004	mg/l
Calcium	73.800	mg/l
Chloride	2,910.000	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
Conductivity	20.000	Mmhos
Copper	0.057	mg/l
Dichloromethane (Methylene Chloride)	<0.011	mg/l
Ethylbenzene	0.007	mg/l
Heptachlor	<0.000	mg/l
Iron	7.080	mg/l
Lead	<0.022	mg/l

Quarterly Injectate Samples (continued)

Constituent	Value	Units
Magnesium	149.000	mg/l
Methyl Ethyl Ketone (2-Butanone)	5.580	mg/l
Methyl Isobutyl Ketone (4-Methyl 2-Pentanone)	0.05690	mg/l
Nitrobenzene	<0.010	mg/l
Phenol	5.210	mg/l
Pyrene	<0.003	mg/l
Silver	<0.023	mg/l
Sulfate	237.000	mg/l
Tetrachloroethylene	<0.002	mg/l
Thallium	<0.017	mg/l
Toluene	0.032	mg/l
Total Alkalinity as CaCO3	8,550.000	mg/l
Total Dissolved Solids	17,500.000	mg/l
Total Hardness as CaCO3	799.000	mg/l
Total Suspended Solids	42.000	mg/l
Trichloroethylene	<0.002	mg/l
Trichlorofluoromethane	<0.003	mg/l
Vinyl Chloride	<0.001	mg/l
Xylene	<0.021	mg/l
Zinc	0.413	mg/l