Facility Well Name Deffenbaugh #2 **UIC Permit #** KS-01-091-002 **Month** August **Year** 2021

Submitted 09/07/2021 **Approved** 09/20/2021 **KOLAR Document ID** 1589555

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	3,187	2.46	80	80	-12.8	-12.6	0
Monthly Maximum	7,434	7.55	82	81	-12.0	-11.8	0
Monthly Minimum	1,046	0.55	79	78	-13.0	-13.2	0
Monthly Total	98,809						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
88.24	77.39	0.14	-13.33

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	06:55	2,304.00	6.31	79	78.2	-13	-12.7	24	N/A	0	DWK	6.00	86.10
2	06:45	2,373.14	0.60	79	78.3	-12	-12.0	24	N/A	0	DWK	5.80	85.60
3	06:40	2,239.14	0.79	79	78.6	-12	-12.3	24	N/A	0	DWK	6.10	87.40
4	06:40	2,101.90	0.71	79	78.3	-12	-12.4	24	N/A	0	DWK	6.10	86.30
5	06:35	2,183.33	0.81	79	78.3	-13	-12.4	24	N/A	0	DWK	6.10	87.30
6	06:45	2,026.67	0.69	79	78.6	-12	-12.2	24	N/A	0	DWK	6.20	85.40
7	06:57	1,045.90	0.79	79	78.5	-12	-12.3	24	N/A	0	AWK	6.30	85.90
8	07:05	1,149.81	0.79	79	78.8	-12	-12.4	24	N/A	0	DWK	6.40	85.70
9	06:45	1,707.10	2.02	79	78.8	-13	-13.1	24	N/A	0	DWK	6.50	86.60
10	06:35	1,755.69	0.55	80	78.8	-13	-12.2	24	N/A	0	DWK	6.30	87.80
11	06:35	1,072.26	0.71	80	78.8	-13	-12.4	24	N/A	0	DWK	6.40	86.70
12	06:35	1,443.14	0.79	80	78.9	-13	-12.5	24	N/A	0	DWK	6.40	87.40
13	06:55	1,593.52	0.83	80	79.3	-13	-12.9	24	N/A	0	AWK	6.20	82.70
14	10:00	2,962.86	2.19	80	80.2	-13	-13.1	23	N/A	0	RLW	6.10	85.20
15	06:55	1,992.76	2.33	80	80.3	-13	-13.2	23	N/A	0	AWK	6.00	81.90
16	06:45	2,782.86	1.48	80	79.7	-13	-12.6	23	N/A	0	AWK	6.00	83.60
17	06:45	3,991.14	4.74	80	79.8	-13	-12.7	23	N/A	0	DWK	5.70	81.10
18	06:35	4,040.19	1.95	80	78.8	-13	-13.2	23	N/A	0	DWK	5.70	81.30
19	06:35	5,069.14	7.55	80	79.9	-12	-11.8	24	N/A	0	DWK	6.50	84.40
20	06:40	6,255.71	1.88	80	80.0	-13	-12.9	24	N/A	0	DWK	6.50	85.60
21	09:30	2,268.31	2.24	80	80.5	-13	-13.1	23	N/A	0	RLW	6.00	85.10
22	06:45	2,543.81	1.14	81	80.7	-13	-12.7	23	N/A	0	DWK	6.10	83.10
23	06:45	3,370.07	5.36	81	80.5	-13	-12.8	23	N/A	0	DWK	6.20	84.40
24	06:45	3,242.79	3.90	81	80.3	-13	-12.3	23	N/A	0	DWK	6.00	84.20
25	06:30	3,749.50	4.67	81	80.5	-13	-12.8	23	N/A	0	DWK	5.60	84.00
26	06:40	3,556.00	3.74	81	80.6	-13	-13.2	23	N/A	0	DWK	5.90	84.10
27	06:35	7,433.71	1.02	82	80.8	-13	-12.5	24	N/A	0	DWK	5.80	89.10
28	06:55	6,062.10	4.62	81	80.9	-13	-12.7	24	N/A	0	AWK	5.60	88.00
29	06:55	4,875.52	3.93	82	81.1	-13	-12.9	24	N/A	0	AWK	5.60	87.20
30	06:45	5,715.81	3.62	82	81.1	-13	-12.8	24	N/A	0	DWK	5.60	86.30
31	06:45	5,901.14	3.45	80	79.9	-13	-12.7	24	N/A	0	DWK	5.50	86.30

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Quarterly Injectate Samples

Quarter 2
Date Sample Collected 06/10/2021
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	6,680.000	mg/l
Arsenic	0.094	mg/l
Benzene	0.003	mg/l
Calcium	110.000	mg/l
Chloride	1,400.000	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	13.680	Mmhos
Copper	0.007	mg/l
Dichloromethane (Methylene Chloride)	0.005	mg/l
Ethylbenzene	0.006	mg/l
Heptachlor	0.000	mg/l
Iron	6.300	mg/l
Lead	<0.005	mg/l

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Quarterly Injectate Samples (continued)

Constituent	Value	Units
Magnesium	103.000	mg/l
Methyl Ethyl Ketone (2-Butanone)	2.430	mg/l
Methyl Isobutyl Ketone (4-Methyl 2-Pentanone)	0.03840	mg/l
Nitrobenzene	<0.010	mg/l
Phenol	0.165	mg/l
Pyrene	<0.001	mg/l
Silver	<0.005	mg/l
Sulfate	224.000	mg/l
Tetrachloroethylene	<0.001	mg/l
Thallium	<0.002	mg/l
Toluene	0.043	mg/l
Total Alkalinity as CaCO3	5,580.000	mg/l
Total Dissolved Solids	7,220.000	mg/l
Total Hardness as CaCO3	697.000	mg/l
Total Suspended Solids	46.700	mg/l
Trichloroethylene	<0.001	mg/l
Trichlorofluoromethane	0.003	mg/l
Vinyl Chloride	<0.001	mg/l
Xylene	0.019	mg/l
Zinc	0.186	mg/l