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

Submitted 10/12/2021 **Approved** 10/22/2021 **KOLAR Document ID** 1594333

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

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	3,428	2.44	79	78	-12.7	-12.8	0
Monthly Maximum	6,472	5.21	80	79	-11.0	-10.1	0
Monthly Minimum	1,639	0.00	78	77	-13.0	-13.4	0
Monthly Total	102,833						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
83.71	76.36	-8.15	-13.50

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	06:45	6,324.10	3.67	80	79.4	-13	-12.8	24	N/A	0	DWK	5.70	85.80
2	06:35	5,995.90	5.21	80	79.3	-13	-12.7	24	N/A	0	DWK	5.80	85.40
3	06:40	6,223.71	4.36	80	79.1	-13	-12.7	24	N/A	0	DWK	5.80	85.20
4	10:00	5,687.62	0.00	80	79.1	-11	-10.1	23	N/A	0	RLW	5.70	82.60
5	06:55	6,381.67	4.14	80	78.2	-13	-12.8	24	N/A	0	AWK	5.90	84.90
6	06:40	6,471.62	4.40	79	78.6	-12	-12.6	24	N/A	0	DWK	5.90	84.50
7	06:45	6,207.95	4.86	79	78.3	-12	-12.6	24	N/A	0	DWK	5.80	85.90
8	06:30	5,647.05	4.24	79	78.5	-12	-12.8	24	N/A	0	DWK	5.80	84.60
9	06:40	5,381.14	3.88	79	78.5	-12	-12.8	24	N/A	0	DWK	5.80	85.10
10	06:30	4,228.29	2.48	78	77.6	-12	-12.9	25	N/A	0	DWK	5.90	89.00
11	09:30	2,863.57	1.38	79	78.2	-12	-12.5	24	N/A	0	RLW	5.80	91.90
12	06:40	2,670.90	3.19	79	78.2	-13	-12.9	25	N/A	0	DWK	5.80	90.40
13	06:45	1,861.19	3.02	78	77.9	-13	-13.0	25	N/A	0	DWK	6.20	87.50
14	06:35	1,876.05	3.14	78	78.0	-13	-13.0	25	N/A	0	DWK	6.30	88.00
15	06:45	1,643.90	1.50	78	78.0	-13	-12.7	25	N/A	0	DWK	6.30	86.80
16	06:40	1,638.81	1.48	78	77.7	-13	-12.7	24	N/A	0	DWK	6.40	86.10
17	06:45	2,953.00	2.55	78	78.0	-13	-13.2	24	N/A	0	DWK	6.30	86.90
18	06:55	2,610.95	2.05	78	77.8	-13	-13.4	24	N/A	0	AWK	6.00	80.90
19	07:00	2,916.64	1.48	78	77.5	-13	-13.3	23	N/A	0	DWK	6.00	82.10
20	06:35	2,237.12	1.60	78	77.0	-13	-13.2	24	N/A	0	DWK	6.20	85.00
21	06:45	2,357.29	1.36	78	77.8	-13	-12.9	24	N/A	0	DWK	6.20	83.80
22	06:50	2,170.24	1.74	78	77.6	-13	-13.4	23	N/A	0	DWK	6.40	80.40
23	07:00	1,989.95	1.50	78	77.1	-13	-12.9	23	N/A	0	DWK	6.20	81.10
24	06:45	2,524.67	1.52	78	77.4	-13	-13.2	23	N/A	0	DWK	6.10	83.60
25	09:30	1,733.52	1.67	79	78.3	-13	-13.2	23	N/A	0	RLW	6.30	84.70
26	06:55	1,943.71	1.76	78	77.5	-13	-13.3	23	N/A	0	AWK	6.20	82.50
27	06:45	2,122.48	1.36	78	77.6	-13	-12.5	24	N/A	0	DWK	6.20	85.90
28	06:45	2,078.29	1.88	78	77.6	-13	-13.2	24	N/A	0	DWK	6.10	85.60
29	06:35	2,184.95	1.55	78	77.6	-13	-12.8	24	N/A	0	DWK	6.00	86.60
30	06:35	1,906.57	0.29	78	77.6	-12	-12.7	24	N/A	0	DWK	5.90	87.10
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Quarterly Injectate Samples

Quarter 3
Date Sample Collected 08/12/2021
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	0.003	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	3.610	mg/l
Arsenic	0.109	mg/l
Benzene	0.003	mg/l
Calcium	114.000	mg/l
Chloride	1,710.000	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	15.760	Mmhos
Copper	10.400	mg/l
Dichloromethane (Methylene Chloride)	0.005	mg/l
Ethylbenzene	0.006	mg/l
Heptachlor	0.000	mg/l
Iron	6.210	mg/l
Lead	5.810	mg/l

Quarterly Injectate Samples (continued)

Constituent	Value	Units
Magnesium	99.200	mg/l
Methyl Ethyl Ketone (2-Butanone)	3.430	mg/l
Methyl Isobutyl Ketone (4-Methyl 2-Pentanone)	0.04640	mg/l
Nitrobenzene	0.010	mg/l
Phenol	0.392	mg/l
Pyrene	0.001	mg/l
Silver	0.005	mg/l
Sulfate	212.000	mg/l
Tetrachloroethylene	0.004	mg/l
Thallium	0.004	mg/l
Toluene	0.051	mg/l
Total Alkalinity as CaCO3	6,060.000	mg/l
Total Dissolved Solids	6,940.000	mg/l
Total Hardness as CaCO3	693.000	mg/l
Total Suspended Solids	44.500	mg/l
Trichloroethylene	0.001	mg/l
Trichlorofluoromethane	0.003	mg/l
Vinyl Chloride	0.001	mg/l
Xylene	0.019	mg/l
Zinc	0.281	mg/l