Facility Well Name Koch Fertilizer #2 **UIC Permit #** KS-01-057-001 **Month** November **Year** 2020

Submitted 12/22/2020 **Approved** 12/28/2020 **KOLAR Document ID** 1539860

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 30

Barrels per Day Maximum: 20,143

			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	5,458	3.78	174	174	-20.4	-18.8	0
Monthly Maximum	17,270	17.52	182	182	-8.0	-6.8	0
Monthly Minimum	34	0.02	158	157	-29.0	-26.0	0
Monthly Total	163,735						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
212.10	157	-6.70	-29.00

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		
1	09:49	14,219.55	10.71	169	168.0	-28	-25.3	21	0	0	JW		
2	14:28	6,060.29	0.02	176	179.0	-24	-23.3	23	0	0	CN		
3	08:45	34.26	0.02	178	177.0	-21	-18.9	23	0	0	CN		
4	12:18	34.29	0.02	180	180.0	-18	-14.0	23	0	0	CN		
5	09:47	33.93	0.02	180	180.0	-11	-11.9	23	0	0	JP		
6	14:15	34.17	0.02	182	182.0	-10	-8.7	24	0	0	CN		
7	11:39	34.31	0.02	181	181.0	-8	-7.5	24	0	0	AB		
8	09:00	34.24	0.02	180	181.0	-8	-6.8	23	0	0	AB		
9	10:25	9,376.79	7.62	177	178.0	-27	-25.3	23	0	0	AB		
10	13:00	12,846.76	8.57	168	168.0	-28	-25.0	21	0	0	CN		
11	09:53	13,515.67	10.48	167	168.0	-28	-25.0	21	0	0	CN		
12	10:10	12,753.45	9.55	168	168.0	-28	-25.4	21	0	0	CS		
13	11:00	13,099.21	13.10	170	170.0	-28	-24.0	22	0	0	CN		
14	13:31	14,678.19	12.14	177	178.0	-26	-24.1	23	0	0	JW		
15	11:17	13,802.90	8.57	167	167.0	-26	-25.6	22	0	0	JW		
16	11:32	4,165.86	0.02	175	175.0	-23	-22.9	22	0	0	JW		
17	10:43	34.24	0.02	176	176.0	-21	-19.2	23	0	0	JW		
18	12:10	34.31	0.02	178	179.0	-15	-15.0	23	0	0	CN		
19	11:37	34.29	0.02	158	157.0	-29	-26.0	19	0	0	CN		
20	11:04	13,414.19	14.81	176	176.0	-28	-24.0	23	0	0	CN		
21	09:31	15,635.52	17.52	170	171.0	-23	-23.5	22	0	0	JP		
22	12:22	17,269.50	0.02	173	173.0	-28	-26.0	22	0	0	AB		
23	09:47	2,053.95	0.02	174	174.0	-24	-22.8	22	0	0	AB		
24	10:30	34.31	0.02	176	177.0	-21	-19.0	23	0	0	AB		
25	14:05	34.26	0.02	177	178.0	-17	-15.6	23	0	0	AB		
26	09:11	34.19	0.02	176	176.0	-14	-13.4	23	0	0	CS		
27	09:18	34.31	0.02	176	176.0	-12	-11.3	23	0	0	CS		
28	09:00	34.24	0.02	176	176.0	-10	-9.2	23	0	0	CS		
29	09:20	34.31	0.02	177	177.0	-10	-7.8	23	0	0	CS		
30	11:30	329.60	0.02	162	162.0	-19	-18.0	20	0	0	JW		
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Weekly Injectate Samples

Kansas Lab Certificate Number E-10116

Week	Temperature		pH		Chloride			Nitrate	Orthophosphate
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed	mg/l	mg/l
1	96.30	11/02/2020	7.45	11/02/2020	282.0	11/02/2020	11/09/2020	49.10000	1.30000
2	89.20	11/09/2020	7.26	11/09/2020	282.0	11/09/2020	11/13/2020	49.70000	1.40000
3	96.70	11/16/2020	7.77	11/16/2020	322.0	11/16/2020	11/18/2020	49.10000	1.30000
4	79.60	11/23/2020	6.65	11/23/2020	259.0	11/23/2020	11/24/2020	55.60000	1.30000
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Monthly Injectate Samples

Date Sample Collected 11/02/2020

Kansas Lab Certificate Number 10116

Constituent	Value	Units
Chromium	0.0621	mg/l

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Quarterly Injectate Samples

Quarter 4
Date Sample Collected 10/05/2020
Kansas Lab Certificate Number E-10116
Lab Name Pace Analytical-Lenexa

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

Constituent	Value	Units
Calcium	304.000	mg/l
Conductivity	2,860.000	Mmhos
Iron	0.149	mg/l
Magnesium	92.400	mg/l
Sodium	288.000	mg/l
Specific Gravity	0.980	N/A
Sulfate	981.000	mg/l
Total Alkalinity as CaCO3	313.000	mg/l
Total Dissolved Solids	2,350.000	mg/l
Total Hardness as CaCO3	1,140.000	mg/l
Zinc	0.405	mg/l