Facility Well Name Koch Fertilizer #3 **UIC Permit #** KS-01-057-002 **Month** April **Year** 2019

Submitted 05/14/2019 **Approved** 06/07/2019 **KOLAR Document ID** 1460237

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 18

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	7,727	4.64	149	148	-24.6	-20.9	0
Monthly Maximum	19,248	13.48	160	160	-23.0	-18.1	0
Monthly Minimum	0	0.00	136	135	-25.0	-21.6	0
Monthly Total	231,807						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
162.00	134.60	-15.20	-21.80

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	10:10	0.00	0.00	155	158.0	-25	-21.6	17		0	JB		
2	09:15	9,623.19	10.43	136	136.0	-24	-20.8	13		0	DH		
3	09:30	15,027.10	11.52	136	136.0	-24	-20.2	13		0	DH		
4	11:30	15,027.10	10.00	136	135.0	-25	-20.7	13		0	DH		
5	10:45	19,248.38	0.00	150	150.0	-25	-21.4	16		0	DH		
6	11:50	0.00	0.00	154	155.0	-25	-21.3	17		0	TD		
7	10:55	0.00	0.00	153	157.0	-25	-21.4	17		0	MH		
8	14:35	0.00	0.00	160	160.0	-25	-21.4	17		0	DN		
9	11:58	10,431.19	0.00	142	142.0	-25	-21.4	16		0	DN		
10	09:30	955.36	0.00	154	155.0	-25	-21.0	17		0	RR		
11	10:30	0.00	0.00	158	157.0	-25	-21.1	17		0	RR		
12	09:55	0.00	0.00	158	158.0	-25	-21.4	18		0	RR		
13	09:00	0.00	0.00	160	159.0	-25	-21.4	18		0	RR		
14	11:45	0.00	0.00	160	159.0	-25	-21.4	18		0	BB		
15	08:40	6,204.76	0.00	143	143.0	-25	-21.4	18		0	BB		
16	10:36	14,533.31	13.10	138	138.0	-25	-19.5	22		0	BB		
17	12:02	17,178.19	13.21	143	142.0	-23	-19.3	23		0	BB		
18	11:15	17,192.48	10.19	139	138.0	-24	-20.8	14		0	DH		
19	11:00	16,457.93	10.00	138	138.0	-25	-21.0	13		0	DH		
20	09:30	6,815.76	0.00	151	151.0	-24	-21.4	16		0	DH		
21	09:45	0.00	0.00	156	156.0	-24	-21.2	17		0	DH		
22	14:11	0.00	0.00	158	158.0	-25	-21.6	16		0	DN		
23	09:00	0.00	0.00	159	158.0	-25	-21.6	16		0	DN		
24	11:30	13,917.07	13.45	138	138.0	-24	-19.8	13		0	DN		
25	15:01	12,716.00	13.48	145	144.0	-24	-19.6	15		0	DN		
26	08:30	16,716.40	10.50	138	138.0	-25	-20.6	13		0	RR		
27	12:20	16,016.98	10.19	140	140.0	-25	-20.5	13		0	WT		
28	17:30	16,375.76	13.19	150	138.0	-23	-18.1	16		0	WT		
29	16:30	7,370.50	0.00	152	152.0	-25	-21.3	17		0	WT		
30	08:50	0.00	0.00	155	155.0	-25	-21.3	17		0	RR		
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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	74.60	04/01/2019	7.16	04/01/2019	218.0	04/01/2019	04/10/2019	64.60000	0.80000
2	81.60	04/10/2019	6.66	04/10/2019	211.0	04/10/2019	04/22/2019	49.60000	0.62000
3	74.70	04/15/2019	6.33	04/15/2019	200.0	04/15/2019	04/22/2019	38.40000	1.00000
4	73.70	04/23/2019	7.16	04/23/2019	247.0	04/23/2019	04/29/2019	164.00000	0.31000
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Monthly Injectate Samples

Date Sample Collected 04/01/2019

Kansas Lab Certificate Number 10116

Constituent	Value	Units
Chromium	0.0359	mg/l

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Quarterly Injectate Samples

Quarter 1
Date Sample Collected 04/01/2019
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	372.000	mg/l
Conductivity	4,600.000	Mmhos
Iron	0.186	mg/l
Magnesium	97.200	mg/l
Sodium	438.000	mg/l
Specific Gravity	1.000	N/A
Sulfate	1,480.000	mg/l
Total Alkalinity as CaCO3	426.000	mg/l
Total Dissolved Solids	3,290.000	mg/l
Total Hardness as CaCO3	1,330.000	mg/l
Zinc	0.455	mg/l