**Facility Well Name** Redbarn #1 **UIC Permit #** KS-01-009-001 **Month** January **Year** 2020

**Submitted** 03/11/2020 **Approved** 03/12/2020 **KOLAR Document ID** 1509711

# Class I-V Injection Well Monthly Monitoring

## Summary of Monthly Report

**Number of days injection occurred:** 25

**Barrels per Day Maximum:** 35,714

| | | | 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** | 1,295 | 7.75 | 103 | 105 | -12.8 | -14.8 | 0 |
| **Monthly Maximum** | 5,029 | 12.45 | 115 | 117 | -6.0 | -6.0 | 0 |
| **Monthly Minimum** | 0 | 0.00 | 95 | 97 | -19.0 | -20.5 | 0 |
| **Monthly Total** | 40,133 | | | | | | 0 |

## Summary of Continuous Recorder Data

| Maximum Annulus Pressure psig | Minimum Annulus Pressure psig | Maximum Injection Pressure psig | Minimum Injection Pressure psig |
|---|---|---|---|
| 116.93 | 91.98 | -1.51 | -22.95 |

**Comments:**

Was not running the last week

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# Daily Recorder Data

| Day | Time<br>24 hr | Injection Volume<br>Barrels Per Day | Injection Rate<br>Barrels Per Minute | Annulus Pressure (Gauge)<br>psig | Annulus Pressure (Continuous Recorder)<br>psig | Injection Pressure (Gauge)<br>+ / - | Injection Pressure (Continuous Recorder)<br>+ / - | Seal Pot Fluid Level<br>inches | Type of Fluid Added to Seal Pot | Amount of Fluid Added to Seal Pot<br>gallons | Initials of Collector of Field Recordings | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14:30 | 485.98 | 9.81 | 100 | 102.1 | -14 | -17.0 | 32 | N/A | 0 | NR | | |
| 2 | 15:00 | 2,143.90 | 9.71 | 100 | 104.4 | -12 | -11.3 | 31 | N/A | 0 | NR | | |
| 3 | 15:00 | 557.05 | 9.93 | 100 | 103.5 | -16 | -17.3 | 32 | N/A | 0 | NR | | |
| 4 | 14:00 | 2,426.38 | 12.17 | 100 | 102.2 | -12 | -14.3 | 31 | N/A | 0 | NR | | |
| 5 | 10:00 | 2,406.33 | 11.67 | 100 | 99.2 | -9 | -12.2 | 32 | N/A | 0 | NR | | |
| 6 | 08:00 | 1,539.19 | 12.45 | 110 | 112.2 | -8 | -11.2 | 32 | N/A | 0 | NR | | |
| 7 | 09:00 | 392.86 | 7.26 | 110 | 111.5 | -12 | -14.1 | 31 | N/A | 0 | NR | | |
| 8 | 12:30 | 375.36 | 7.40 | 110 | 112.6 | -11 | -12.5 | 31 | N/A | 0 | NR | | |
| 9 | 10:00 | 424.88 | 7.60 | 110 | 112.0 | -15 | -17.6 | 32 | N/A | 0 | NR | | |
| 10 | 07:30 | 372.45 | 7.57 | 105 | 107.2 | -6 | -6.0 | 31 | N/A | 0 | NR | | |
| 11 | 12:00 | 378.02 | 8.26 | 95 | 97.4 | -14 | -15.4 | 31 | N/A | 0 | NR | | |
| 12 | 11:00 | 414.81 | 7.33 | 95 | 98.4 | -14 | -14.3 | 31 | N/A | 0 | NR | | |
| 13 | 08:30 | 376.95 | 9.05 | 100 | 102.4 | -13 | -14.4 | 31 | N/A | 0 | NR | | |
| 14 | 14:30 | 3,125.05 | 9.19 | 115 | 116.5 | -6 | -8.4 | 31 | N/A | 0 | NR | | |
| 15 | 13:00 | 1,691.81 | 12.29 | 115 | 116.8 | -19 | -20.1 | 31 | N/A | 0 | NR | | |
| 16 | 11:00 | 1,758.57 | 9.79 | 110 | 111.3 | -16 | -18.3 | 31 | N/A | 0 | NR | | |
| 17 | 15:00 | 2,052.10 | 12.19 | 110 | 114.8 | -10 | -11.5 | 31 | N/A | 0 | NR | | |
| 18 | 11:00 | 1,418.36 | 9.21 | 110 | 113.6 | -12 | -14.4 | 31 | N/A | 0 | NR | | |
| 19 | 11:00 | 1,338.12 | 9.71 | 110 | 112.4 | -14 | -15.3 | 31 | N/A | 0 | NR | | |
| 20 | 09:00 | 966.57 | 9.45 | 100 | 101.4 | -10 | -12.2 | 31 | N/A | 0 | NR | | |
| 21 | 10:00 | 2,073.33 | 9.26 | 100 | 104.6 | -11 | -12.5 | 31 | N/A | 0 | NR | | |
| 22 | 15:00 | 3,168.10 | 7.95 | 100 | 102.4 | -10 | -12.7 | 31 | N/A | 0 | NR | | |
| 23 | 11:00 | 5,028.86 | 9.76 | 100 | 102.3 | -18 | -20.5 | 31 | N/A | 0 | NR | | |
| 24 | 14:00 | 675.14 | 9.07 | 100 | 104.6 | -14 | -18.4 | 31 | N/A | 0 | NR | | |
| 25 | 11:00 | 4,543.19 | 12.19 | 100 | 103.7 | -12 | -14.3 | 31 | N/A | 0 | NR | | |
| 26 | 10:00 | 0.00 | 0.00 | 100 | 102.9 | -12 | -13.1 | 31 | N/A | 0 | NR | | |
| 27 | 15:00 | 0.00 | 0.00 | 95 | 98.7 | -16 | -18.9 | 31 | N/A | 0 | NR | | |
| 28 | 10:00 | 0.00 | 0.00 | 95 | 97.0 | -16 | -18.9 | 31 | N/A | 0 | NR | | |
| 29 | 08:00 | 0.00 | 0.00 | 95 | 97.8 | -16 | -18.8 | 31 | N/A | 0 | NR | | |
| 30 | 10:00 | 0.00 | 0.00 | 95 | 96.9 | -12 | -14.3 | 31 | N/A | 0 | NR | | |
| 31 | 11:00 | 0.00 | 0.00 | 95 | 97.9 | -18 | -19.8 | 31 | N/A | 0 | NR | | |

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# Weekly Injectate Samples

**Kansas Lab Certificate Number** E-10146

| **Week** | **Temperature** | | **pH** | | **Chloride** | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Degrees Fahrenheit | Date | Standard Units | Date | Cl concentration (mg/l) | Date Sample Collected | Date Sampl Analysed | | |
| 1 | 72.14 | 01/08/2020 | 7.02 | 01/08/2020 | 544.0 | 01/08/2020 | 01/15/2020 | | |
| 2 | 74.30 | 01/14/2020 | 7.03 | 01/14/2020 | 634.0 | 01/14/2020 | 01/17/2020 | | |
| 3 | 78.16 | 01/22/2020 | 7.03 | 01/22/2020 | 587.0 | 01/22/2020 | 01/24/2020 | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |

## No monthly injectate samples required.