**Facility Well Name** Williams (Mitchell) #2 **UIC Permit #** KS-01-159-008 **Month** June **Year** 2020

**Submitted** 07/24/2020 **Approved** 07/24/2020 **KOLAR Document ID** 1524761

# Class I-V Injection Well Monthly Monitoring

## Summary of Monthly Report

**Number of days injection occurred:** 14

**Barrels per Day Maximum:** 47,619

| | | | Annulus Pressure psig min 50 | | 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** | 3,935 | 3.13 | 90 | 91 | -24.7 | -24.8 | 0 |
| **Monthly Maximum** | 10,919 | 7.24 | 98 | 101 | -20.0 | -23.0 | 0 |
| **Monthly Minimum** | 0 | 0.00 | 83 | 83 | -27.0 | -27.1 | 0 |
| **Monthly Total** | 118,045 | | | | | | 0 |

## Summary of Continuous Recorder Data

| Maximum Annulus Pressure psig | Minimum Annulus Pressure psig | Maximum Injection Pressure psig | Minimum Injection Pressure psig |
|---|---|---|---|
| 102.83 | 81.20 | -21.30 | -27.19 |

**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 | Meter Reading | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 09:41 | 0.00 | 0.00 | 96 | 96.0 | -27 | -27.0 | 44 | N/A | 0 | CC | | |
| 2 | 07:30 | 0.00 | 0.00 | 95 | 95.0 | -27 | -27.0 | 44 | N/A | 0 | AW | | |
| 3 | 08:05 | 0.00 | 0.00 | 96 | 96.0 | -26 | -26.0 | 44 | N/A | 0 | AW | | |
| 4 | 07:22 | 0.00 | 0.00 | 95 | 95.0 | -26 | -26.0 | 44 | N/A | 0 | AW | | |
| 5 | 07:16 | 0.00 | 0.00 | 96 | 100.0 | -27 | -24.0 | 45 | N/A | 0 | BK | | |
| 6 | 07:46 | 0.00 | 0.00 | 95 | 100.0 | -27 | -24.0 | 45 | N/A | 0 | BK | | |
| 7 | 08:06 | 0.00 | 0.00 | 97 | 101.0 | -27 | -24.0 | 45 | N/A | 0 | TH | | |
| 8 | 08:34 | 0.00 | 0.00 | 97 | 100.0 | -26 | -23.0 | 45 | N/A | 0 | TH | | |
| 9 | 08:30 | 0.00 | 0.00 | 97 | 97.0 | -25 | -26.4 | 45 | N/A | 0 | BJ | | |
| 10 | 10:40 | 0.00 | 0.00 | 94 | 93.6 | -27 | -26.9 | 45 | N/A | 0 | BJ | | |
| 11 | 08:00 | 0.00 | 0.00 | 94 | 93.4 | -27 | -27.1 | 45 | N/A | 0 | BJ | | |
| 12 | 07:45 | 0.00 | 0.00 | 94 | 94.0 | -27 | -27.0 | 45 | N/A | 0 | AW | | |
| 13 | 07:50 | 0.00 | 0.00 | 96 | 96.0 | -27 | -27.0 | 44 | N/A | 0 | AW | | |
| 14 | 09:33 | 0.00 | 0.00 | 98 | 98.0 | -27 | -27.0 | 44 | N/A | 0 | AW | | |
| 15 | 09:18 | 5,080.95 | 3.52 | 86 | 86.0 | -24 | -24.0 | 33 | N/A | 0 | AW | | |
| 16 | 09:00 | 8,661.90 | 5.98 | 86 | 86.0 | -24 | -24.0 | 34 | N/A | 0 | CC | | |
| 17 | 07:53 | 8,228.57 | 6.17 | 85 | 85.0 | -24 | -24.0 | 33 | N/A | 0 | CC | | |
| 18 | 08:47 | 8,766.67 | 5.50 | 85 | 85.0 | -24 | -24.0 | 33 | N/A | 0 | CC | | |
| 19 | 08:55 | 8,578.57 | 5.95 | 83 | 83.0 | -24 | -24.0 | 33 | N/A | 0 | CC | | |
| 20 | 08:48 | 8,847.62 | 6.29 | 84 | 84.0 | -24 | -24.0 | 33 | N/A | 0 | CC | | |
| 21 | 09:28 | 8,626.19 | 6.10 | 86 | 86.0 | -24 | -24.0 | 33 | N/A | 0 | CC | | |
| 22 | 08:46 | 8,490.48 | 6.19 | 85 | 85.0 | -24 | -24.0 | 33 | N/A | 0 | CC | | |
| 23 | 02:45 | 10,919.05 | 5.95 | 88 | 88.0 | -22 | -24.0 | 33 | N/A | 0 | TH | | |
| 24 | 13:50 | 8,364.29 | 5.81 | 89 | 89.0 | -22 | -24.0 | 34 | N/A | 0 | TH | | |
| 25 | 09:30 | 7,083.33 | 5.95 | 85 | 85.0 | -23 | -24.0 | 34 | N/A | 0 | TH | | |
| 26 | 08:22 | 8,314.29 | 5.79 | 85 | 85.0 | -22 | -24.0 | 34 | N/A | 0 | TH | | |
| 27 | 08:55 | 0.00 | 6.07 | 85 | 85.0 | -24 | -24.0 | 33 | N/A | 0 | TH | | |
| 28 | 07:45 | 0.00 | 6.00 | 86 | 86.0 | -22 | -23.0 | 33 | N/A | 0 | TH | | |
| 29 | 12:10 | 10,421.43 | 7.24 | 89 | 89.0 | -22 | -23.0 | 34 | N/A | 0 | TH | | |
| 30 | 09:15 | 7,661.90 | 5.31 | 85 | 88.0 | -20 | -23.1 | 33 | N/A | 0 | BD | | |
| 31 | | | | | | | | | | | | | |

Williams (Mitchell) #2 06/2020

# Weekly Injectate Samples

**Kansas Lab Certificate Number** E-10152

| **Week** | **Temperature** | | **pH** | | **Chloride** | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Degrees Fahrenheit | Date | Standard Units | Date | Cl concentration (mg/l) | Date Sample Collected | Date Sampl Analysed | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | 73.10 | 06/14/2020 | 6.33 | 06/14/2020 | 162,400.0 | 06/14/2020 | 07/13/2020 | | |
| 4 | 73.50 | 06/19/2020 | 6.14 | 06/19/2020 | 156,200.0 | 06/19/2020 | 07/13/2020 | | |
| 5 | | | | | | | | | |

## No monthly injectate samples required.

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# Quarterly Injectate Samples

**Quarter** 2
**Date Sample Collected** 06/26/2020
**Kansas Lab Certificate Number** E-10152
**Lab Name** SDK Laboratories (Hutchinson)

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

| Constituent | Value | Units |
|---|---|---|
| Calcium | 1,450.000 | mg/l |
| Conductivity | 475,000.000 | Mmhos |
| Iron | 73.200 | mg/l |
| Magnesium | 148.000 | mg/l |
| Sulfate | 3,230.000 | mg/l |
| Total Alkalinity as CaCO3 | 88.000 | mg/l |
| Total Dissolved Solids | 295,000.000 | mg/l |
| Total Hardness as CaCO3 | 4,230.000 | mg/l |
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