



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Alan J. Vonfeldt
 P.O. BOX 611
 Russell KS 67665+0611
 ATTN: Herb Deines

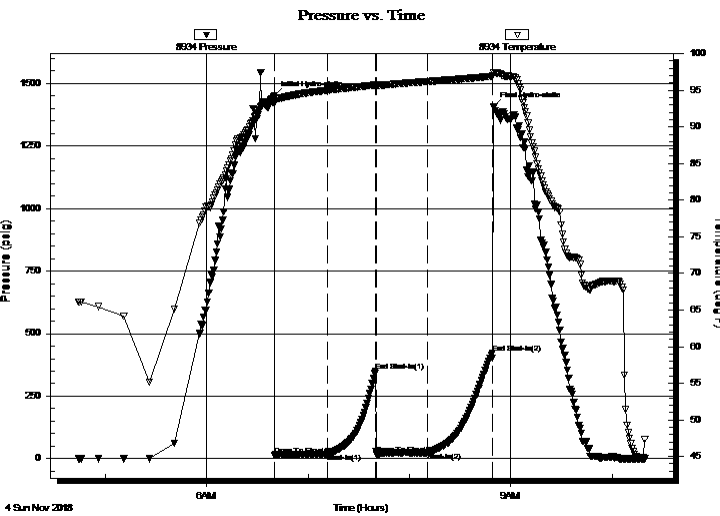
33-14S-13W Russell KS
Michaelis #4
 Job Ticket: 64761 **DST#: 1**
 Test Start: 2018.11.04 @ 04:44:00

GENERAL INFORMATION:

Formation: **LKC 'C'**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 06:40:15 Tester: Spencer J. Staab
 Time Test Ended: 10:19:45 Unit No: 84
 Interval: **2892.00 ft (KB) To 2975.00 ft (KB) (TVD)** Reference Elevations: 1735.00 ft (KB)
 Total Depth: 2975.00 ft (KB) (TVD) 1727.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8934 Inside
 Press@RunDepth: 24.43 psig @ 2895.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.11.04 End Date: 2018.11.04 Last Calib.: 2018.11.04
 Start Time: 04:44:15 End Time: 10:19:45 Time On Btm: 2018.11.04 @ 06:40:00
 Time Off Btm: 2018.11.04 @ 08:50:00

TEST COMMENT: 30-IF-Weak-Fair; Built to 4&1/4"
 30-ISI-No Return
 30-FF-Weak; Built to 2&1/4"
 30-FSI-No Return



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1451.25 | 94.05 | Initial Hydro-static |
| 1 | 13.11 | 93.16 | Open To Flow (1) |
| 32 | 19.55 | 95.01 | Shut-In(1) |
| 60 | 349.93 | 95.73 | End Shut-In(1) |
| 61 | 18.07 | 95.65 | Open To Flow (2) |
| 91 | 24.43 | 96.20 | Shut-In(2) |
| 129 | 422.64 | 96.93 | End Shut-In(2) |
| 130 | 1407.30 | 97.44 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 25.00 | VSOCM 2%O 98%M | 0.35 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

| Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|-----------------|------------------|
| | | |



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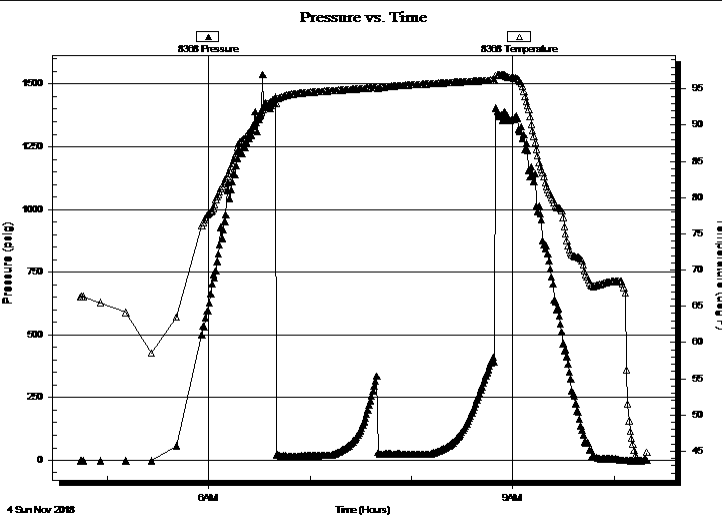
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 Total Depth: 2975.00 ft (KB) (TVD) 1727.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8368 Outside
 Press@RunDepth: psig @ 2895.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.11.04 End Date: 2018.11.04 Last Calib.: 2018.11.04
 Start Time: 04:44:15 End Time: 10:19:45 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IF-Weak-Fair; Built to 4&1/4"
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PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|------------|
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| | | | |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 25.00 | VSOCM 2%O 98%M | 0.35 |
| | | |
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| | | |
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Gas Rates

| Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|-----------------|------------------|
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FLUID SUMMARY

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33-14S-13W Russell KS
Michaelis #4
Job Ticket: 64761 **DST#: 1**
Test Start: 2018.11.04 @ 04:44:00

Mud and Cushion Information

| | | | |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | ppm |
| Viscosity: 55.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 6.00 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 2600.00 ppm | | | |
| Filter Cake: inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------|---------------|
| 25.00 | VSOCM 2%O 98%M | 0.354 |

Total Length: 25.00 ft Total Volume: 0.354 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: 2#LCM

