



DRILL STEM TEST REPORT

Prepared For: **Toto Energy LLC.**

25815 Oak Ridge. Dr.Spring
Texas 77380

ATTN: Harley Sayles

Baker 19-1

19-33-6w-Cowley

Start Date: 2013.10.14 @ 07:30:00

End Date: 2013.10.14 @ 13:13:00

Job Ticket #: 18570 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2013.10.14 @ 11:18:54



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 ATTN: Harley Sayles

19-33-6w-Cowley
Baker 19-1
 Job Ticket: 18570 **DST#: 2**
 Test Start: 2013.10.14 @ 07:30:00

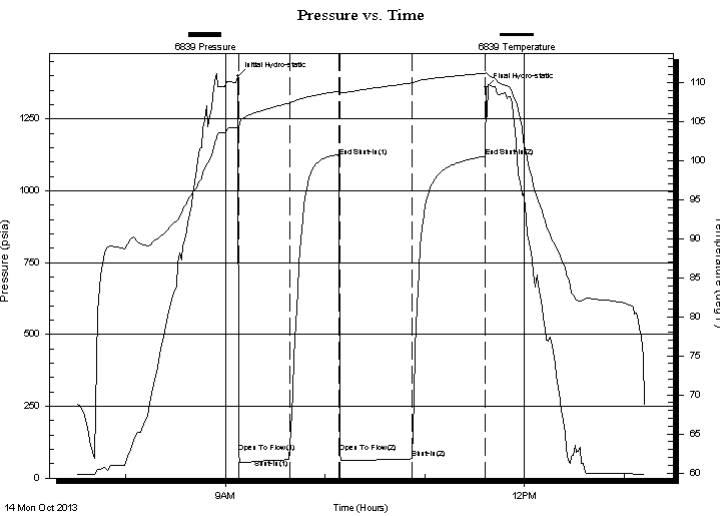
GENERAL INFORMATION:

Formation: **Pawnee-Ft.Scott**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 09:08:00 Tester: Dustin Ellis
 Time Test Ended: 13:13:00 Unit No: 3315-Great Bend-340
 Interval: **2750.00 ft (KB) To 2796.00 ft (KB) (TVD)** Reference Elevations: 1308.00 ft (KB)
 Total Depth: 2796.00 ft (KB) (TVD) 1297.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 6839

Press @ RunDepth: 67.54 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.10.14 End Date: 2013.10.14 Last Calib.: 2013.10.14
 Start Time: 07:30:00 End Time: 13:13:00 Time On Btm: 2013.10.14 @ 09:07:30
 Time Off Btm: 2013.10.14 @ 11:37:00

TEST COMMENT: 1st Open 30 minutes Fair building blow built to bottom bucket in 14 minutes.
 1st Shut in 30 minutes No blow back.
 2nd Open 45 minutes Strong blow blew off the bottom of a 5 gallon bucket of water instantly.
 2nd Shut in 45 minutes No blow back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1398.33 | 104.23 | Initial Hydro-static |
| 1 | 88.29 | 104.24 | Open To Flow (1) |
| 31 | 64.05 | 107.33 | Shut-In(1) |
| 61 | 1118.12 | 108.89 | End Shut-In(1) |
| 62 | 89.43 | 108.64 | Open To Flow (2) |
| 105 | 67.54 | 109.93 | Shut-In(2) |
| 149 | 1118.88 | 111.17 | End Shut-In(2) |
| 150 | 1360.43 | 111.28 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--|--------------|
| 0.00 | Gas to surface in 2 minutes into pipe on | 0.00 |
| 61.00 | Mud 100% | 0.30 |
| | | |
| | | |

Gas Rates

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



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Baker 19-1
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 Test Start: 2013.10.14 @ 07:30:00

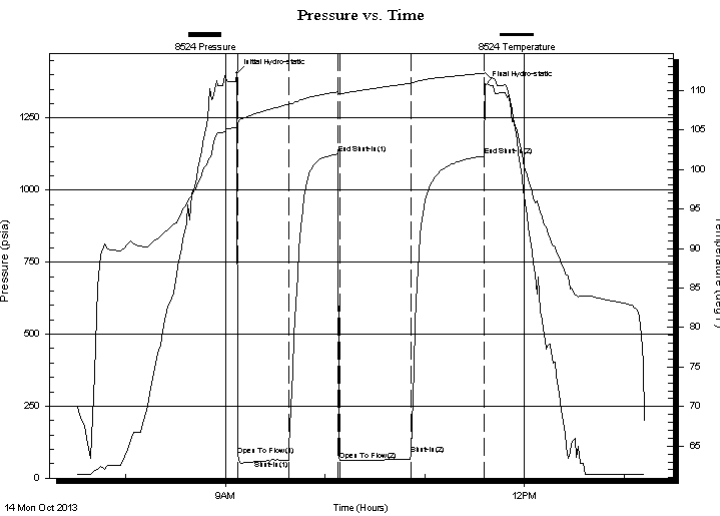
GENERAL INFORMATION:

Formation: **Pawnee-Ft.Scott**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:08:00
 Time Test Ended: 13:13:00
 Interval: **2750.00 ft (KB) To 2796.00 ft (KB) (TVD)**
 Total Depth: 2796.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-340
 Reference Elevations: 1308.00 ft (KB)
 1297.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8524

Press @ RunDepth: 1118.23 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.10.14 End Date: 2013.10.14 Last Calib.: 2013.10.14
 Start Time: 07:30:00 End Time: 13:12:30 Time On Btm: 2013.10.14 @ 09:07:00
 Time Off Btm: 2013.10.14 @ 11:36:30

TEST COMMENT: 1st Open 30 minutes Fair building blow built to bottom bucket in 14 minutes.
 1st Shut in 30 minutes No blow back.
 2nd Open 45 minutes Strong blow blew off the bottom of a 5 gallon bucket of water instantly.
 2nd Shut in 45 minutes No blow back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1406.03 | 105.32 | Initial Hydro-static |
| 1 | 78.74 | 105.76 | Open To Flow (1) |
| 31 | 63.25 | 108.24 | Shut-In(1) |
| 61 | 1125.18 | 109.83 | End Shut-In(1) |
| 62 | 60.94 | 109.62 | Open To Flow (2) |
| 105 | 82.44 | 110.92 | Shut-In(2) |
| 149 | 1118.23 | 112.18 | End Shut-In(2) |
| 150 | 1364.53 | 112.29 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--|--------------|
| 0.00 | Gas to surface in 2 minutes into pipe on | 0.00 |
| 61.00 | Mud 100% | 0.30 |
| | | |
| | | |

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Toto Energy LLC.
 25815 Oak Ridge. Dr.Spring
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19-33-6w-Cowley
Baker 19-1
 Job Ticket: 18570 **DST#: 2**
 Test Start: 2013.10.14 @ 07:30:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 2492.00 ft | Diameter: 3.80 inches | Volume: 34.96 bbl | Tool Weight: | 2000.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight set on Packer: | 20000.00 lb |
| Drill Collar: | Length: 260.08 ft | Diameter: 2.25 inches | Volume: 1.28 bbl | Weight to Pull Loose: | 73000.00 lb |
| | | | <u>Total Volume: 36.24 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 30.08 ft | | | String Weight: Initial | 59000.00 lb |
| Depth to Top Packer: | 2750.00 ft | | | Final | 59000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 46.00 ft | | | | |
| Tool Length: | 74.00 ft | | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | | |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|--------------|------------|----------|------------|------------------------------------|
| Shut-In Tool | 5.00 | | | 2727.00 | |
| Hydraulic Tool | 5.00 | | | 2732.00 | |
| Jars | 6.00 | | | 2738.00 | |
| Safety Joint | 2.00 | | | 2740.00 | |
| Packer | 5.00 | | | 2745.00 | 28.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 2750.00 | |
| Anchor | 41.00 | | | 2791.00 | |
| Recorder | 1.00 | 8524 | Inside | 2792.00 | |
| Recorder | 1.00 | 6839 | Outside | 2793.00 | |
| Bull Plug | 3.00 | | | 2796.00 | 46.00 Bottom Packers & Anchor |
| Total Tool Length: | 74.00 | | | | |



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FLUID SUMMARY

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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: 49.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 8.39 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psia | | |
| Salinity: 1200.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|--|---------------|
| 0.00 | Gas to surface in 2 minutes into pipe on | 0.000 |
| 61.00 | Mud 100% | 0.300 |

Total Length: 61.00 ft Total Volume: 0.300 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time

