

**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

G&T Petro.
PO Box 8
MCCracken Ks 67445
ATTN:

Shirley #1A
14-17s-21w Ness,KS
Job Ticket: 36823 **DST#: 1**
Test Start: 2010.08.08 @ 18:46:43

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:50:43
Time Test Ended: 00:36:13

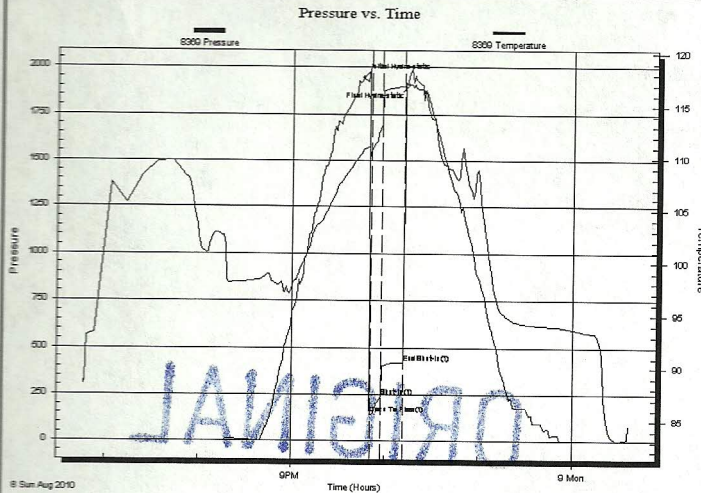
Interval: **4039.00 ft (KB) To 4109.00 ft (KB) (TVD)**
Total Depth: 4109.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole
Tester: Brett Dickinson
Unit No: 47

Reference Elevations: 2185.00 ft (KB)
2175.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8369 **Outside**
Press@RunDepth: 240.75 psig @ 4040.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.08.08 End Date: 2010.08.09 Last Calib.: 2010.08.09
Start Time: 18:46:48 End Time: 00:36:12 Time On Btm: 2010.08.08 @ 21:45:13
Time Off Btm: 2010.08.08 @ 22:14:43

TEST COMMENT: IF-BOB in 1.5min
ISI-No blow



PRESSURE SUMMARY

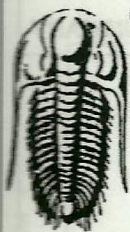
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1944.58 | 110.82 | Initial Hydro-static |
| 6 | 146.49 | 110.80 | Open To Flow (1) |
| 12 | 240.75 | 113.27 | Shut-In(1) |
| 27 | 422.88 | 116.93 | End Shut-In(1) |
| 30 | 1907.37 | 118.04 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------|--------------|
| 410.00 | VSOCM 5%O 95%M | 5.48 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

G&T Petro.
PO Box 8
MCCracken Ks 67445
ATTN:

Shirley #1A
14-17s-21w Ness, KS
Job Ticket: 36823 **DST#: 1**
Test Start: 2010.08.08 @ 18:46:43

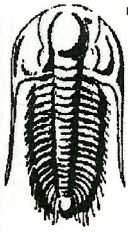
Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3995.00 ft | Diameter: 3.80 inches | Volume: 56.04 bbl | Tool Weight: | 2500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.70 inches | Volume: 0.00 bbl | Weight set on Packer: | 25000.00 lb |
| Drill Collar: | Length: 30.00 ft | Diameter: 2.25 inches | Volume: 0.15 bbl | Weight to Pull Loose: | 75000.00 lb |
| | | | <u>Total Volume: 56.19 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 14.00 ft | | | String Weight: Initial | 51000.00 lb |
| Depth to Top Packer: | 4039.00 ft | | | Final | 53000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 70.00 ft | | | | |
| Tool Length: | 98.00 ft | | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | | |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Change Over Sub | 1.00 | | | 4012.00 | |
| Shut In Tool | 5.00 | | | 4017.00 | |
| Hydraulic tool | 5.00 | | | 4022.00 | |
| Jars | 5.00 | | | 4027.00 | |
| Safety Joint | 2.00 | | | 4029.00 | |
| Packer | 5.00 | | | 4034.00 | 28.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4039.00 | |
| Stubb | 1.00 | | | 4040.00 | |
| Recorder | 0.00 | 6719 | Inside | 4040.00 | |
| Recorder | 0.00 | 8369 | Outside | 4040.00 | |
| Perforations | 2.00 | | | 4042.00 | |
| Change Over Sub | 1.00 | | | 4043.00 | |
| Blank Spacing | 62.00 | | | 4105.00 | |
| Change Over Sub | 1.00 | | | 4106.00 | |
| Bullnose | 3.00 | | | 4109.00 | 70.00 Bottom Packers & Anchor |

Total Tool Length: 98.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

G&T Petro.
PO Box 8
MCCracken Ks 67445
ATTN:

Shirley #1A
14-17s-21w Ness,KS
Job Ticket: 36823 **DST#: 1**
Test Start: 2010.08.08 @ 18:46:43

Mud and Cushion Information

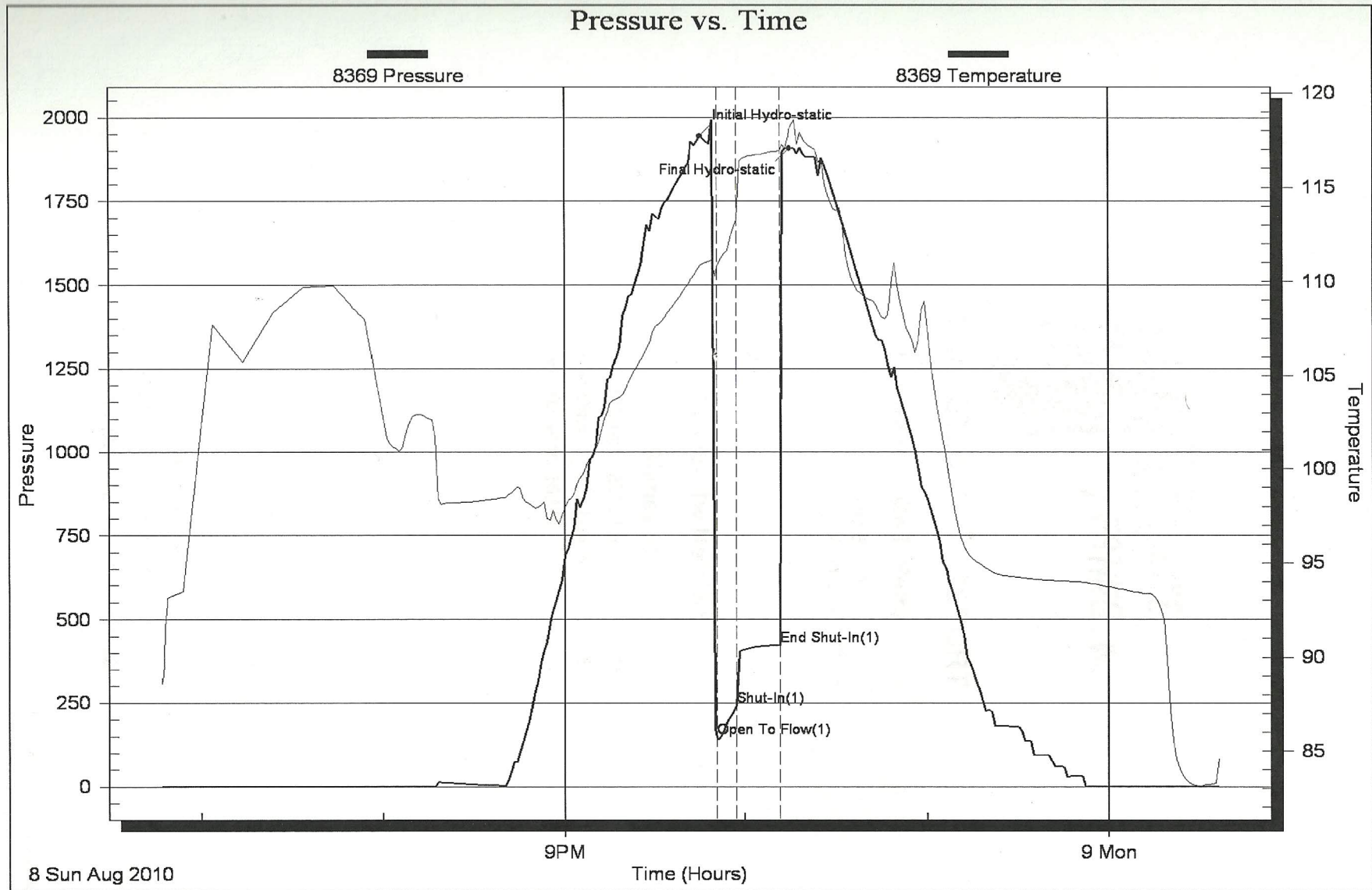
| | | | |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | ppm |
| Viscosity: 59.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 9.18 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 3000.00 ppm | | | |
| Filter Cake: inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------|---------------|
| 410.00 | VSOCM 5%O 95%M | 5.478 |

Total Length: 410.00 ft Total Volume: 5.478 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

G&T Petro.

Shirley #1A

PO Box 8
MCCracken Ks 67445

14-17s-21w Ness, KS

Job Ticket: 36824

DST#: 2

ATTN:

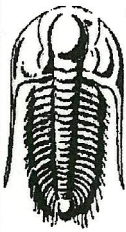
Test Start: 2010.08.09 @ 07:09:18

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4022.00 ft | Diameter: 3.80 inches | Volume: 56.42 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 0.00 ft | Diameter: 2.70 inches | Volume: 0.00 bbl | Weight set on Packer: 25000.00 lb |
| Drill Collar: | Length: 30.00 ft | Diameter: 2.25 inches | Volume: 0.15 bbl | Weight to Pull Loose: 80000.00 lb |
| | | | Total Volume: 56.57 bbl | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 24.00 ft | | | String Weight: Initial 53000.00 lb |
| Depth to Top Packer: | 4056.00 ft | | | Final 58000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 90.02 ft | | | |
| Tool Length: | 118.02 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|---------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 4029.00 | |
| Shut In Tool | 5.00 | | | 4034.00 | |
| Hydraulic tool | 5.00 | | | 4039.00 | |
| Jars | 5.00 | | | 4044.00 | |
| Safety Joint | 2.00 | | | 4046.00 | |
| Packer | 5.00 | | | 4051.00 | 28.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4056.00 | |
| Stubb | 1.00 | | | 4057.00 | |
| Recorder | 0.01 | 6719 | Inside | 4057.01 | |
| Recorder | 0.01 | 8369 | Outside | 4057.02 | |
| Perforations | 2.00 | | | 4059.02 | |
| Change Over Sub | 1.00 | | | 4060.02 | |
| Blank Spacing | 63.00 | | | 4123.02 | |
| Change Over Sub | 1.00 | | | 4124.02 | |
| Perforations | 19.00 | | | 4143.02 | |
| Bullnose | 3.00 | | | 4146.02 | 90.02 Bottom Packers & Anchor |
| Total Tool Length: | 118.02 | | | | |



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

G&T Petro.
 PO Box 8
 MCCracken Ks 67445
 ATTN:

Shirley #1A
14-17s-21w Ness,KS
 Job Ticket: 36824 **DST#: 2**
 Test Start: 2010.08.09 @ 07:09:18

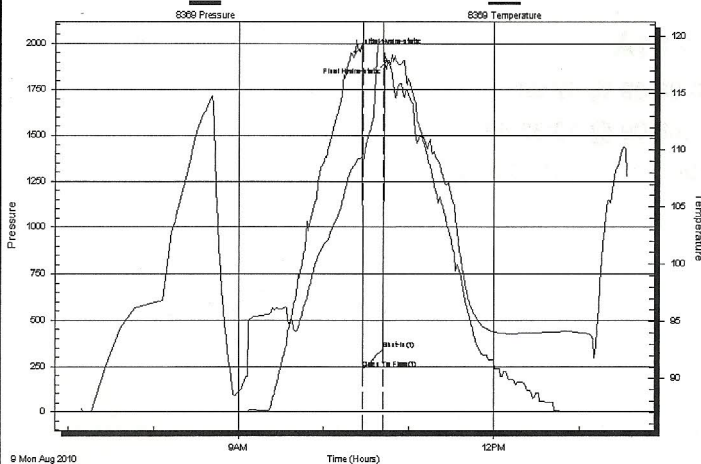
GENERAL INFORMATION:

Formation: **Cherokee Sand**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole
 Time Tool Opened: 10:27:48
 Tester: Brett Dickinson
 Time Test Ended: 13:33:48
 Unit No: 47
 Interval: **4056.00 ft (KB) To 4146.00 ft (KB) (TVD)**
 Reference Elevations: 2185.00 ft (KB)
 Total Depth: 4146.00 ft (KB) (TVD) 2175.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8369 **Outside**
 Press@RunDepth: psig @ 4057.02 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.08.09 End Date: 2010.08.09 Last Calib.: 2010.08.09
 Start Time: 07:09:23 End Time: 13:33:47 Time On Btm: 2010.08.09 @ 10:21:48
 Time Off Btm: 2010.08.09 @ 10:44:18

TEST COMMENT: IF-BOB in 1.25min

Pressure vs. Time



PRESSURE SUMMARY

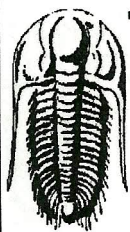
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1951.97 | 108.73 | Initial Hydro-static |
| 6 | 238.18 | 109.00 | Open To Flow (1) |
| 20 | 341.39 | 119.69 | Shut-In(1) |
| 23 | 1908.11 | 117.70 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 120.00 | VSMCW 10%M 90%W | 1.41 |
| 240.00 | MCW 35%M 65%W | 3.37 |
| 315.00 | Mud | 4.42 |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

G&T Petro.
PO Box 8
MCCracken Ks 67445
ATTN:

Shirley #1A
14-17s-21w Ness,KS
Job Ticket: 36824 **DST#: 2**
Test Start: 2010.08.09 @ 07:09:18

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 59.00 sec/qt
Water Loss: 9.18 in³
Resistivity: ohm.m
Salinity: 3000.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: 45000 ppm

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------|---------------|
| 120.00 | VSMCW 10%M 90%W | 1.410 |
| 240.00 | MCW 35%M 65%W | 3.367 |
| 315.00 | Mud | 4.419 |

Total Length: 675.00 ft Total Volume: 9.196 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time

