



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1225079  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

|                                   |                 |   |
|-----------------------------------|-----------------|---|
| Spud Date or<br>Recompletion Date | Date Reached TD | Completion Date or<br>Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1225079

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

|  |   |
|--|---|
| Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>List All E. Logs Run: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>Name Top Datum |
|--|---|

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used  |                   |                           |                   |               |                |              |                            |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. |                   |                           |                   |               |                |              |                            |
| Purpose of String   | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |

| ADDITIONAL CEMENTING / SQUEEZE RECORD  |                  |                |              |                            |
|--|------------------|----------------|--------------|----------------------------|
| Purpose:   | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate<br><input type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><input type="checkbox"/> Plug Off Zone |                  |                |              |                            |
|  |                  |                |              |                            |

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |
|                |   |  |       |

|                |       |         |            |   |
|----------------|-------|---------|------------|---|
| TUBING RECORD: | Size: | Set At: | Packer At: | Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No |
|----------------|-------|---------|------------|---|

|   |  |         |             |               |         |
|---|--|---------|-------------|---------------|---------|
| Date of First, Resumed Production, SWD or ENHR. | Producing Method:<br><input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ |         |             |               |         |
| Estimated Production Per 24 Hours               | Oil Bbls.  | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |

|  |   |   |
|--|---|---|
| <b>DISPOSITION OF GAS:</b><br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | <b>METHOD OF COMPLETION:</b><br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i><br><input type="checkbox"/> Other <i>(Specify)</i> _____ | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|---|---|

|           |                           |
|-----------|---------------------------|
| Form      | ACO1 - Well Completion    |
| Operator  | Murfin Drilling Co., Inc. |
| Well Name | Hornbaker 1-11            |
| Doc ID    | 1225079                   |

All Electric Logs Run

|      |
|------|
|      |
| DIL  |
| DUCP |
| MEL  |
| BHCS |





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg.Co.Inc.**

250 N. Water, Ste.300  
Wichita KS 67202

ATTN: Chuck Schmaltz

### **Hornbaker #1-11**

#### **11-23s-11w Stafford,KS**

Start Date: 2014.07.21 @ 20:02:37

End Date: 2014.07.22 @ 04:01:37

Job Ticket #: 54233                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.25 @ 15:48:15



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54233

**DST#: 1**

ATTN: Chuck Schmaltz

Test Start: 2014.07.21 @ 20:02:37

## GENERAL INFORMATION:

Formation: **LKC D-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:10:37

Time Test Ended: 04:01:37

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

**Interval: 3286.00 ft (KB) To 3360.00 ft (KB) (TVD)**

Reference Elevations: 1804.00 ft (KB)

Total Depth: 3360.00 ft (KB) (TVD)

1793.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8352 Outside**

Press@RunDepth: 78.38 psig @ 3287.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.21

End Date:

2014.07.22

Last Calib.:

2014.07.22

Start Time: 20:02:42

End Time:

04:01:36

Time On Btm:

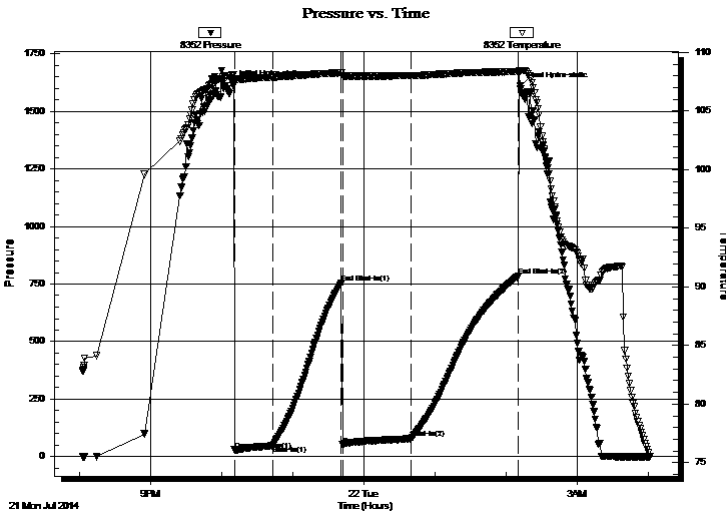
2014.07.21 @ 22:09:37

Time Off Btm:

2014.07.22 @ 02:11:37

**TEST COMMENT:** IF:Fair to strong blow . B.O.B. in 9 mins.  
IS:No blow .  
FF:Strong blow . B.O.B. in 4 1/2 mins.  
FS:No blow .

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1615.17         | 108.09       | Initial Hydro-static |
| 1           | 29.55           | 107.55       | Open To Flow (1)     |
| 34          | 48.10           | 107.89       | Shut-In(1)           |
| 92          | 754.70          | 108.27       | End Shut-In(1)       |
| 93          | 50.98           | 108.02       | Open To Flow (2)     |
| 151         | 78.38           | 108.02       | Shut-In(2)           |
| 241         | 783.27          | 108.36       | End Shut-In(2)       |
| 242         | 1609.73         | 108.46       | Final Hydro-static   |

## Recovery

| Length (ft) | Description        | Volume (bbl) |
|-------------|--------------------|--------------|
| 130.00      | GOCM 8%g 17%o 75%m | 0.64         |
| 0.00        | 300 ft.of GIP      | 0.00         |
|             |                    |              |
|             |                    |              |
|             |                    |              |

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54233

**DST#: 1**

ATTN: Chuck Schmaltz

Test Start: 2014.07.21 @ 20:02:37

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3010.00 ft | Diameter: 3.80 inches | Volume: 42.22 bbl              | Tool Weight: 2400.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 24000.00 lb  |
| Drill Collar:             | Length: 278.00 ft  | Diameter: 2.25 inches | Volume: 1.37 bbl               | Weight to Pull Loose: 68000.00 lb  |
|                           |                    |                       | <u>Total Volume: 43.59 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 30.00 ft           |                       |                                | String Weight: Initial 60500.00 lb |
| Depth to Top Packer:      | 3286.00 ft         |                       |                                | Final 60500.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 74.00 ft           |                       |                                |                                    |
| Tool Length:              | 102.00 ft          |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 3259.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3264.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3269.00    |                               |
| Jars             | 5.00        |            |          | 3274.00    |                               |
| Safety Joint     | 3.00        |            |          | 3277.00    |                               |
| Packer           | 4.00        |            |          | 3281.00    | 28.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3286.00    |                               |
| Stubb            | 1.00        |            |          | 3287.00    |                               |
| Recorder         | 0.00        | 8352       | Outside  | 3287.00    |                               |
| Recorder         | 0.00        | 8370       | Inside   | 3287.00    |                               |
| Perforations     | 5.00        |            |          | 3292.00    |                               |
| Blank Spacing    | 63.00       |            |          | 3355.00    |                               |
| Bullnose         | 5.00        |            |          | 3360.00    | 74.00 Bottom Packers & Anchor |

**Total Tool Length: 102.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54233

**DST#: 1**

ATTN: Chuck Schmaltz

Test Start: 2014.07.21 @ 20:02:37

### 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:

11500 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 11500.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description        | Volume<br>bbl |
|--------------|--------------------|---------------|
| 130.00       | GOCM 8%g 17%o 75%m | 0.639         |
| 0.00         | 300 ft.of GIP      | 0.000         |

Total Length: 130.00 ft

Total Volume: 0.639 bbl

Num Fluid Samples: 0

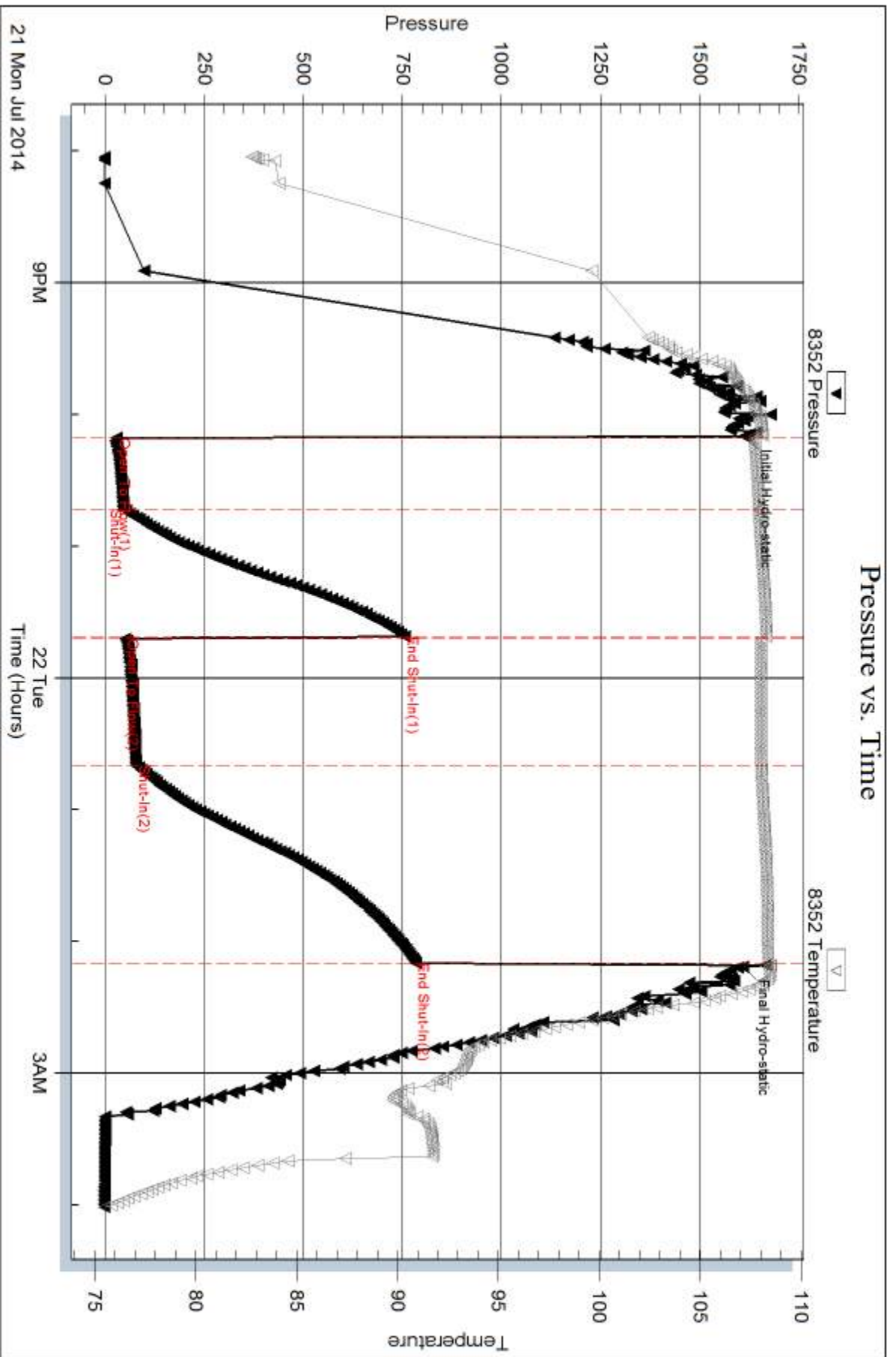
Num Gas Bombs: 0

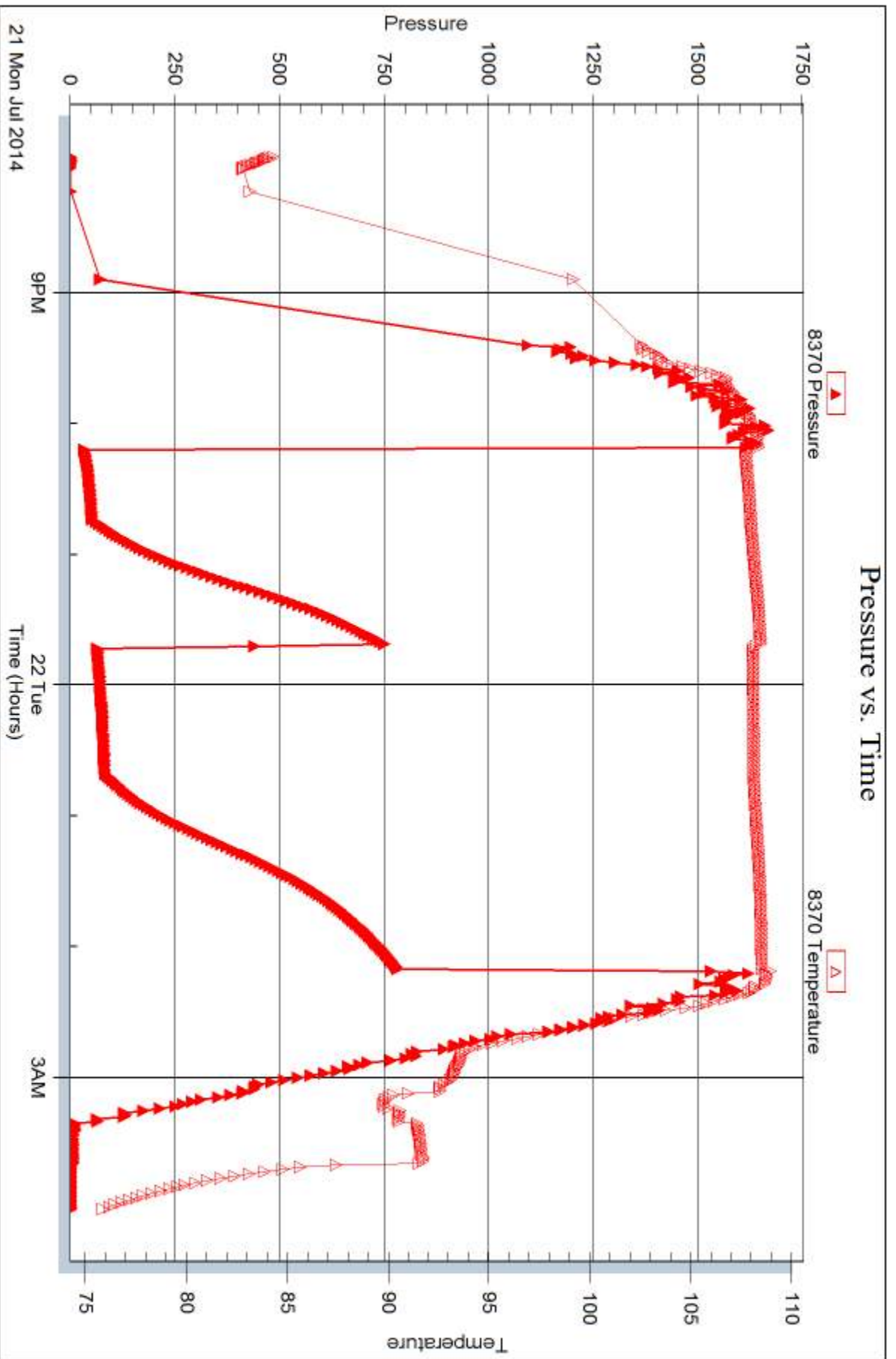
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg.Co.Inc.**

250 N. Water, Ste.300  
Wichita KS 67202

ATTN: Chuck Schmaltz

### **Hornbaker #1-11**

#### **11-23s-11w Stafford,KS**

Start Date: 2014.07.22 @ 16:29:49

End Date: 2014.07.23 @ 00:21:34

Job Ticket #: 54234                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.25 @ 15:47:53

Murfin Drlg.Co.Inc. 11-23s-11w Stafford,KS Hornbaker #1-11 DST # 2 LKC 2014.07.22



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drlg.Co.Inc.  
 250 N. Water, Ste.300  
 Wichita KS 67202  
 ATTN: Chuck Schmalz

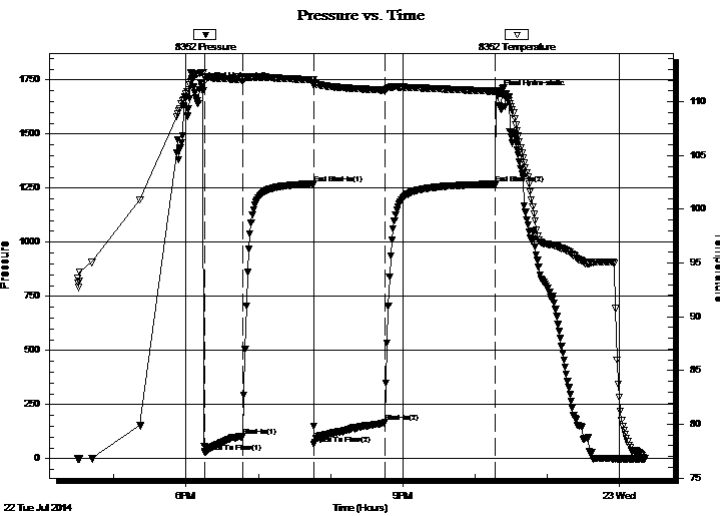
**11-23s-11w Stafford,KS**  
**Hornbaker #1-11**  
 Job Ticket: 54234 **DST#: 2**  
 Test Start: 2014.07.22 @ 16:29:49

## GENERAL INFORMATION:

Formation: **LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:15:34  
 Time Test Ended: 00:21:34  
 Interval: **3394.00 ft (KB) To 3504.00 ft (KB) (TVD)**  
 Total Depth: 3504.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Gry Pevoteaux  
 Unit No: 56  
 Reference Elevations: 1804.00 ft (KB)  
 1793.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8352 Outside**  
 Press@RunDepth: 168.94 psig @ 3395.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.07.22 End Date: 2014.07.23 Last Calib.: 2014.07.23  
 Start Time: 16:29:54 End Time: 00:21:33 Time On Btm: 2014.07.22 @ 18:13:04  
 Time Off Btm: 2014.07.22 @ 22:18:34

**TEST COMMENT:** IF:Strong blow . B.O.B. in 3 1/2 mins.  
 IS:No blow .  
 FF:Strong blow . B.O.B. in 1 min.GTS in 22 mins. TSTM  
 FS:Weak blow . 1 - 4".



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1717.29         | 112.72       | Initial Hydro-static |
| 3           | 29.22           | 112.33       | Open To Flow (1)     |
| 34          | 104.46          | 112.02       | Shut-In(1)           |
| 93          | 1270.30         | 112.03       | End Shut-In(1)       |
| 94          | 65.87           | 111.68       | Open To Flow (2)     |
| 152         | 168.94          | 111.08       | Shut-In(2)           |
| 244         | 1268.60         | 110.97       | End Shut-In(2)       |
| 246         | 1680.32         | 110.85       | Final Hydro-static   |

## Recovery

| Length (ft) | Description    | Volume (bbl) |
|-------------|----------------|--------------|
| 250.00      | MW 32% m 68% w | 1.23         |
| 105.00      | Drlg.mud       | 1.22         |
|             |                |              |
|             |                |              |
|             |                |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54234

**DST#: 2**

ATTN: Chuck Schmaltz

Test Start: 2014.07.22 @ 16:29:49

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3104.00 ft | Diameter: 3.80 inches | Volume: 43.54 bbl              | Tool Weight: 2400.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 24000.00 lb  |
| Drill Collar:             | Length: 278.00 ft  | Diameter: 2.25 inches | Volume: 1.37 bbl               | Weight to Pull Loose: 70000.00 lb  |
|                           |                    |                       | <u>Total Volume: 44.91 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 16.00 ft           |                       |                                | String Weight: Initial 62000.00 lb |
| Depth to Top Packer:      | 3394.00 ft         |                       |                                | Final 63000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 110.00 ft          |                       |                                |                                    |
| Tool Length:              | 138.00 ft          |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                 |
|------------------|-------------|------------|----------|------------|--------------------------------|
| Change Over Sub  | 1.00        |            |          | 3367.00    |                                |
| Shut In Tool     | 5.00        |            |          | 3372.00    |                                |
| Hydraulic tool   | 5.00        |            |          | 3377.00    |                                |
| Jars             | 5.00        |            |          | 3382.00    |                                |
| Safety Joint     | 3.00        |            |          | 3385.00    |                                |
| Packer           | 4.00        |            |          | 3389.00    | 28.00 Bottom Of Top Packer     |
| Packer           | 5.00        |            |          | 3394.00    |                                |
| Stubb            | 1.00        |            |          | 3395.00    |                                |
| Recorder         | 0.00        | 8352       | Outside  | 3395.00    |                                |
| Recorder         | 0.00        | 8370       | Inside   | 3395.00    |                                |
| Perforations     | 9.00        |            |          | 3404.00    |                                |
| Blank Spacing    | 95.00       |            |          | 3499.00    |                                |
| Bullnose         | 5.00        |            |          | 3504.00    | 110.00 Bottom Packers & Anchor |

**Total Tool Length: 138.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54234

**DST#: 2**

ATTN: Chuck Schmaltz

Test Start: 2014.07.22 @ 16:29:49

### 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:

95000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 10500.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description                          | Volume<br>bbbl |
|--------------|--------------------------------------|----------------|
| 250.00       | MW 32% <sub>m</sub> 68% <sub>w</sub> | 1.229          |
| 105.00       | Drlg.mud                             | 1.218          |

Total Length: 355.00 ft      Total Volume: 2.447 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

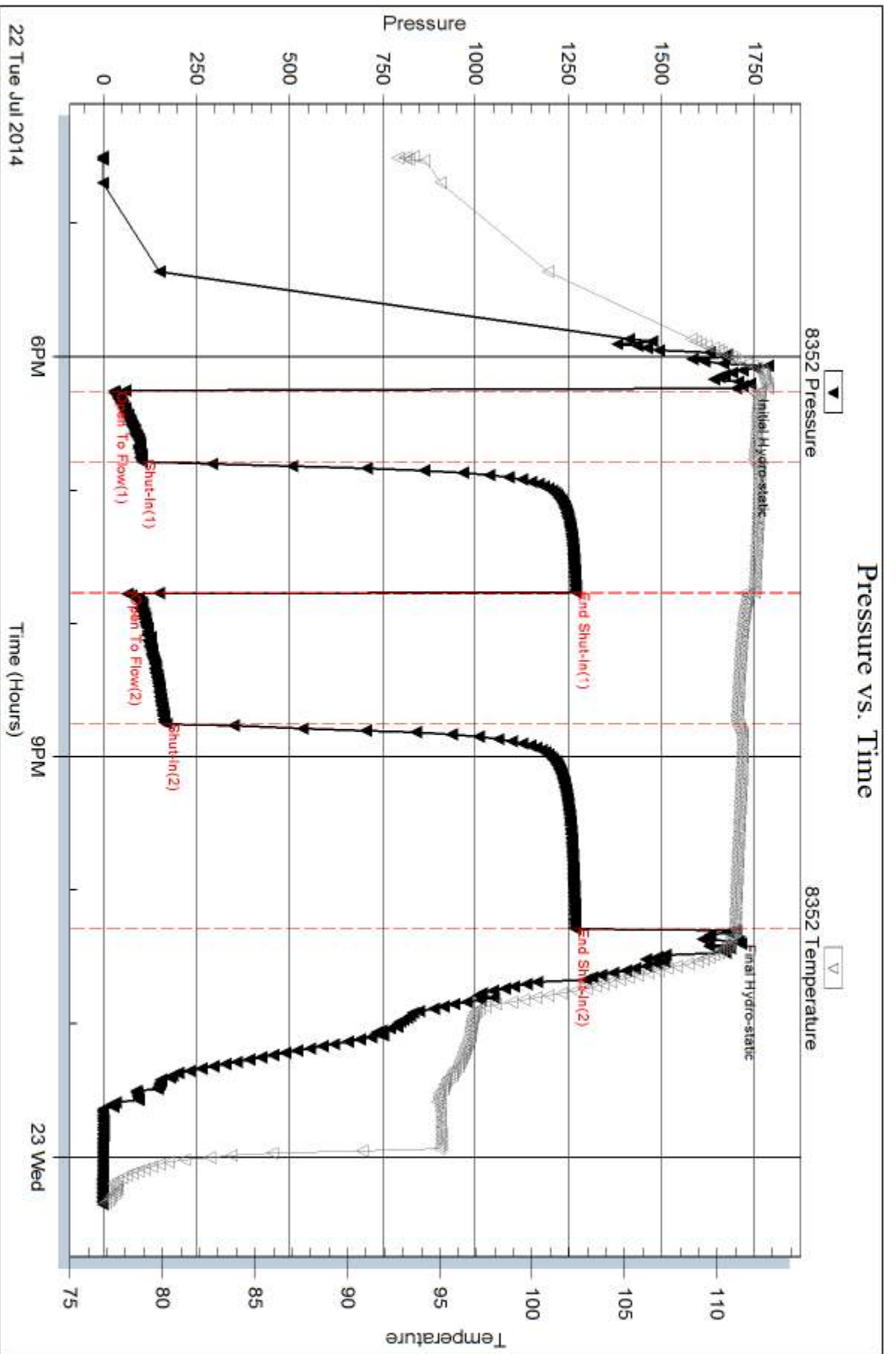
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .06@ 96deg





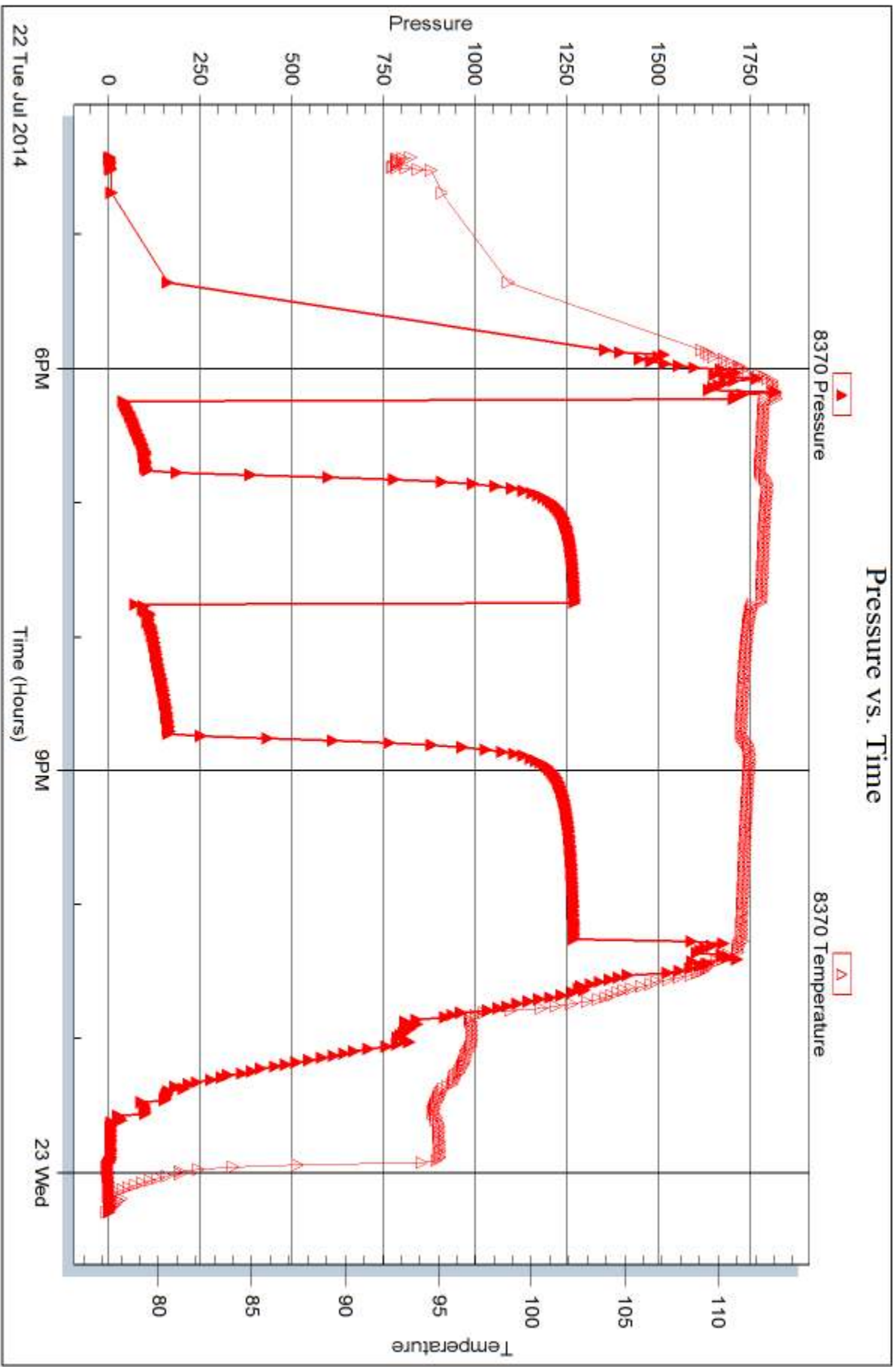
Serial #: 8370

Inside

Murfin Dtg. Co. Inc.

Hornbaker #1-11

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg.Co.Inc.**

250 N. Water, Ste.300  
Wichita KS 67202

ATTN: Chuck Schmaltz

### **Hornbaker #1-11**

#### **11-23s-11w Stafford,KS**

Start Date: 2014.07.23 @ 11:14:53

End Date: 2014.07.23 @ 17:26:53

Job Ticket #: 54235                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.25 @ 15:47:07



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54235

**DST#: 3**

ATTN: Chuck Schmaltz

Test Start: 2014.07.23 @ 11:14:53

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:47:23

Time Test Ended: 17:26:53

Test Type: Conventional Bottom Hole (Reset)

Tester: Gary Pevoteaux

Unit No: 56

**Interval: 3596.00 ft (KB) To 3657.00 ft (KB) (TVD)**

Reference Elevations: 1804.00 ft (KB)

Total Depth: 3657.00 ft (KB) (TVD)

1793.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8352 Outside**

Press@RunDepth: 44.92 psig @ 3597.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.23

End Date:

2014.07.23

Last Calib.:

2014.07.23

Start Time: 11:14:58

End Time:

17:26:52

Time On Btm:

2014.07.23 @ 12:45:53

Time Off Btm:

2014.07.23 @ 15:55:23

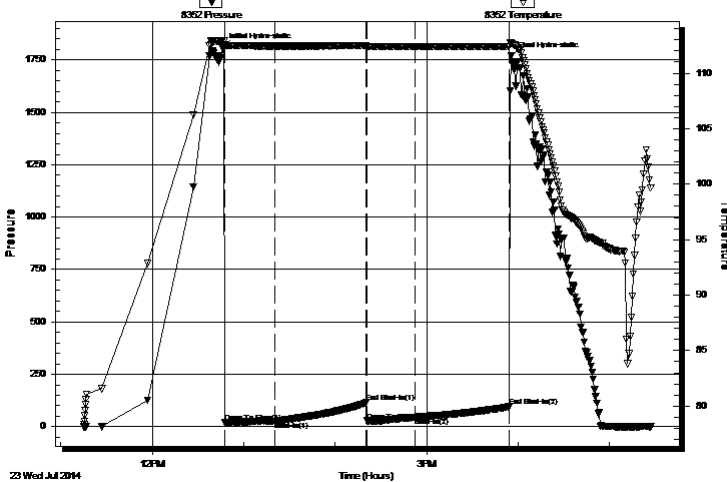
TEST COMMENT: IF:Weak blow . 1/2 - 3/4". Decreasing

IS:No blow .

FF:No blow .

FS:No blow .

Pressure vs. Time



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1811.34         | 112.93       | Initial Hydro-static |
| 2           | 20.09           | 112.43       | Open To Flow (1)     |
| 35          | 25.07           | 112.45       | Shut-In(1)           |
| 95          | 114.76          | 112.47       | End Shut-In(1)       |
| 95          | 27.08           | 112.42       | Open To Flow (2)     |
| 127         | 44.92           | 112.41       | Shut-In(2)           |
| 188         | 95.17           | 112.39       | End Shut-In(2)       |
| 190         | 1768.03         | 112.70       | Final Hydro-static   |

## Recovery

| Length (ft) | Description          | Volume (bbl) |
|-------------|----------------------|--------------|
| 20.00       | Drlg.mud (Good odor) | 0.10         |
|             |                      |              |
|             |                      |              |
|             |                      |              |
|             |                      |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54235

**DST#: 3**

ATTN: Chuck Schmaltz

Test Start: 2014.07.23 @ 11:14:53

## Tool Information

|                           |                    |                       |                                |                        |             |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3293.00 ft | Diameter: 3.80 inches | Volume: 46.19 bbl              | Tool Weight:           | 2400.00 lb  |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer:  | 24000.00 lb |
| Drill Collar:             | Length: 278.00 ft  | Diameter: 2.25 inches | Volume: 1.37 bbl               | Weight to Pull Loose:  | 75000.00 lb |
|                           |                    |                       | <u>Total Volume: 47.56 bbl</u> | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 3.00 ft            |                       |                                | String Weight: Initial | 62000.00 lb |
| Depth to Top Packer:      | 3596.00 ft         |                       |                                | Final                  | 63000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                                |                        |             |
| Interval between Packers: | 61.00 ft           |                       |                                |                        |             |
| Tool Length:              | 89.00 ft           |                       |                                |                        |             |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                        |             |

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 3569.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3574.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3579.00    |                               |
| Jars             | 5.00        |            |          | 3584.00    |                               |
| Safety Joint     | 3.00        |            |          | 3587.00    |                               |
| Packer           | 4.00        |            |          | 3591.00    | 28.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3596.00    |                               |
| Stubb            | 1.00        |            |          | 3597.00    |                               |
| Recorder         | 0.00        | 8352       | Outside  | 3597.00    |                               |
| Recorder         | 0.00        | 8370       | Inside   | 3597.00    |                               |
| Perforations     | 4.00        |            |          | 3601.00    |                               |
| Blank Spacing    | 32.00       |            |          | 3633.00    |                               |
| Perforations     | 19.00       |            |          | 3652.00    |                               |
| Bullnose         | 5.00        |            |          | 3657.00    | 61.00 Bottom Packers & Anchor |

**Total Tool Length: 89.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54235

**DST#: 3**

ATTN: Chuck Schmaltz

Test Start: 2014.07.23 @ 11:14:53

## 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:

9700 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9700.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description          | Volume<br>bbl |
|--------------|----------------------|---------------|
| 20.00        | Drlg.mud (Good odor) | 0.098         |

Total Length: 20.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

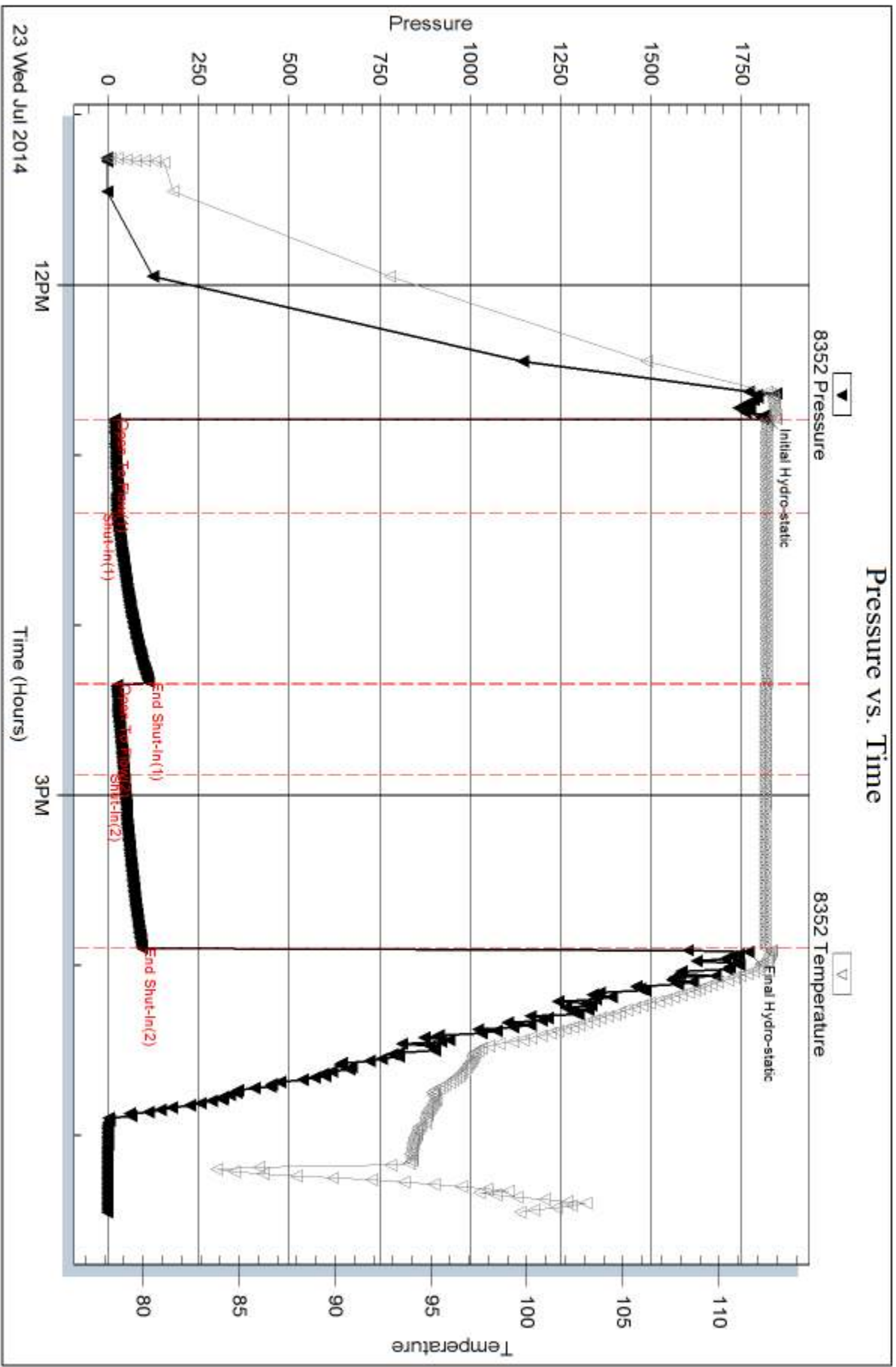
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:





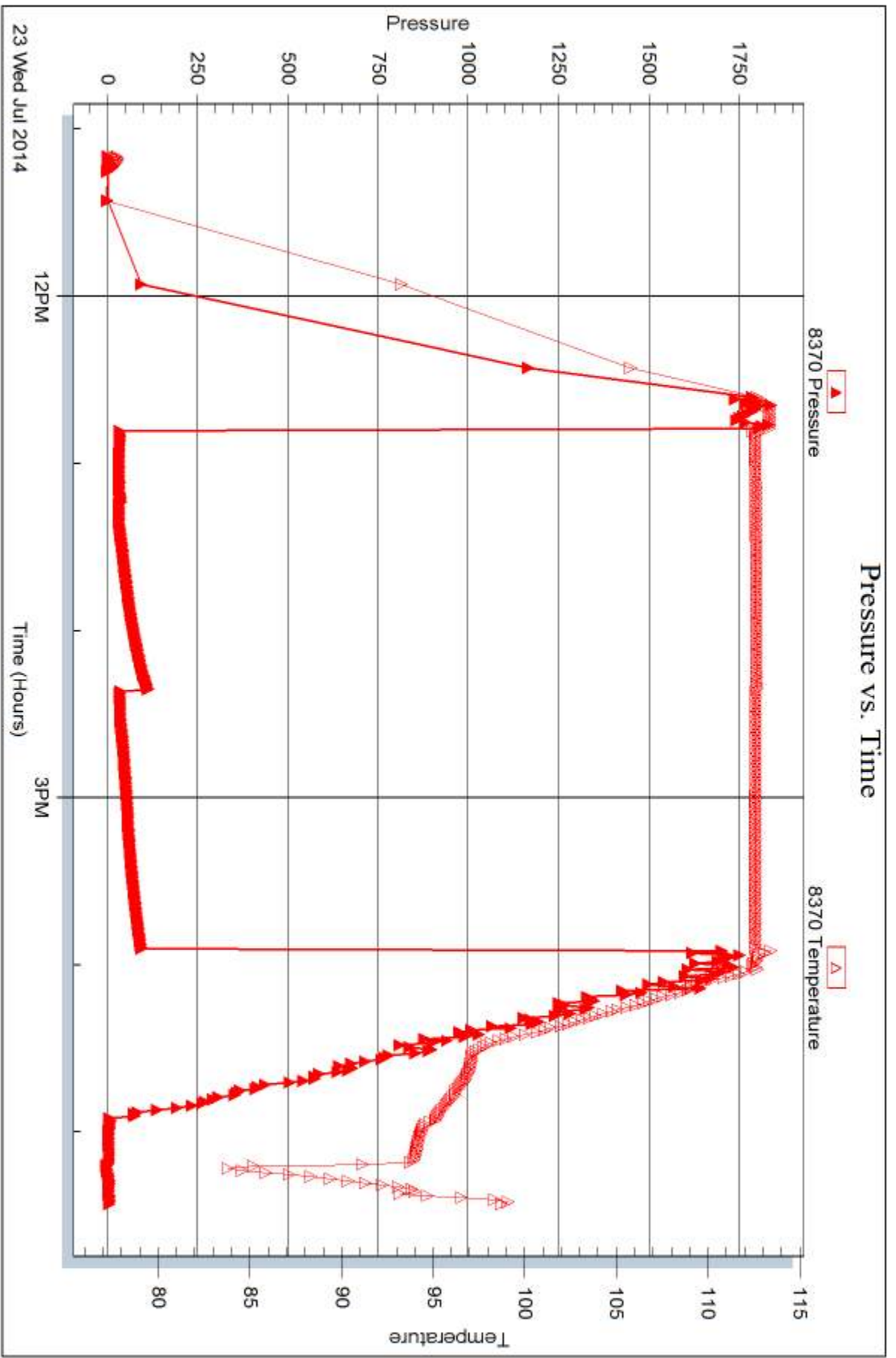
Serial #: 8370

Inside

Murfin Drtg. Co. Inc.

Hornbaker #1-11

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 54235

Printed: 2014.07.25 @ 15:47:10



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg.Co.Inc.**

250 N. Water, Ste.300  
Wichita KS 67202

ATTN: Chuck Schmaltz

### **Hornbaker #1-11**

#### **11-23s-11w Stafford,KS**

Start Date: 2014.07.24 @ 03:41:37

End Date: 2014.07.24 @ 11:38:52

Job Ticket #: 54236                      DST #: 4

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.25 @ 15:34:11

Murfin Drlg.Co.Inc.

11-23s-11w Stafford,KS

Hornbaker #1-11

DST # 4

Simpson/Arbuckle

2014.07.24



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54236

**DST#: 4**

ATTN: Chuck Schmaltz

Test Start: 2014.07.24 @ 03:41:37

## GENERAL INFORMATION:

Formation: **Simpson/Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:24:37

Time Test Ended: 11:38:52

Test Type: Conventional Bottom Hole (Reset)

Tester: Gry Pevoteaux

Unit No: 56

**Interval: 3636.00 ft (KB) To 3726.00 ft (KB) (TVD)**

Reference Elevations: 1804.00 ft (KB)

Total Depth: 3726.00 ft (KB) (TVD)

1793.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8352 Outside**

Press@RunDepth: 1026.94 psig @ 3637.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.24

End Date:

2014.07.24

Last Calib.:

2014.07.24

Start Time: 03:41:42

End Time:

11:38:51

Time On Btm:

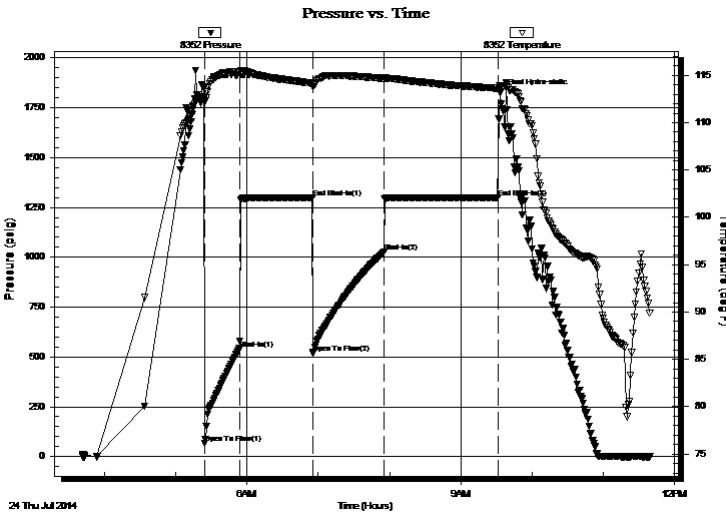
2014.07.24 @ 05:23:22

Time Off Btm:

2014.07.24 @ 09:32:52

TEST COMMENT: IF:Strong blow . B.O.B. in 3 mins.  
IS:No blow .  
FF:Strong blow .. B.O.B. in 4 mins.  
FS:No blow .

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1848.85         | 112.71       | Initial Hydro-static |
| 2           | 67.19           | 112.26       | Open To Flow (1)     |
| 31          | 541.20          | 115.35       | Shut-In(1)           |
| 92          | 1299.28         | 114.15       | End Shut-In(1)       |
| 92          | 518.91          | 113.82       | Open To Flow (2)     |
| 152         | 1026.94         | 114.67       | Shut-In(2)           |
| 248         | 1299.08         | 113.64       | End Shut-In(2)       |
| 250         | 1823.18         | 113.88       | Final Hydro-static   |

## Recovery

| Length (ft) | Description            | Volume (bbl) |
|-------------|------------------------|--------------|
| 2000.00     | SW / Rw .15ohms@91 deg | 25.52        |
| 280.00      | MW 19%m 81%w           | 3.93         |
|             |                        |              |
|             |                        |              |
|             |                        |              |

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54236

**DST#: 4**

ATTN: Chuck Schmaltz

Test Start: 2014.07.24 @ 03:41:37

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3355.00 ft | Diameter: 3.80 inches | Volume: 47.06 bbl              | Tool Weight: 2400.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 24000.00 lb  |
| Drill Collar:             | Length: 278.00 ft  | Diameter: 2.25 inches | Volume: 1.37 bbl               | Weight to Pull Loose: 82000.00 lb  |
|                           |                    |                       | <u>Total Volume: 48.43 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 25.00 ft           |                       |                                | String Weight: Initial 64000.00 lb |
| Depth to Top Packer:      | 3636.00 ft         |                       |                                | Final 70000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 90.00 ft           |                       |                                |                                    |
| Tool Length:              | 118.00 ft          |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 3609.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3614.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3619.00    |                               |
| Jars             | 5.00        |            |          | 3624.00    |                               |
| Safety Joint     | 3.00        |            |          | 3627.00    |                               |
| Packer           | 4.00        |            |          | 3631.00    | 28.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3636.00    |                               |
| Stubb            | 1.00        |            |          | 3637.00    |                               |
| Recorder         | 0.00        | 8352       | Outside  | 3637.00    |                               |
| Recorder         | 0.00        | 8370       | Inside   | 3637.00    |                               |
| Perforations     | 4.00        |            |          | 3641.00    |                               |
| Blank Spacing    | 63.00       |            |          | 3704.00    |                               |
| Perforations     | 17.00       |            |          | 3721.00    |                               |
| Bullnose         | 5.00        |            |          | 3726.00    | 90.00 Bottom Packers & Anchor |

**Total Tool Length: 118.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drlg.Co.Inc.

**11-23s-11w Stafford,KS**

250 N. Water, Ste.300  
Wichita KS 67202

**Hornbaker #1-11**

Job Ticket: 54236

**DST#: 4**

ATTN: Chuck Schmaltz

Test Start: 2014.07.24 @ 03:41:37

## 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:

39000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9700.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

| Length<br>ft | Description            | Volume<br>bbl |
|--------------|------------------------|---------------|
| 2000.00      | SW / Rw .15ohms@91 deg | 25.522        |
| 280.00       | MW 19%m 81%w           | 3.928         |

Total Length: 2280.00 ft

Total Volume: 29.450 bbl

Num Fluid Samples: 0

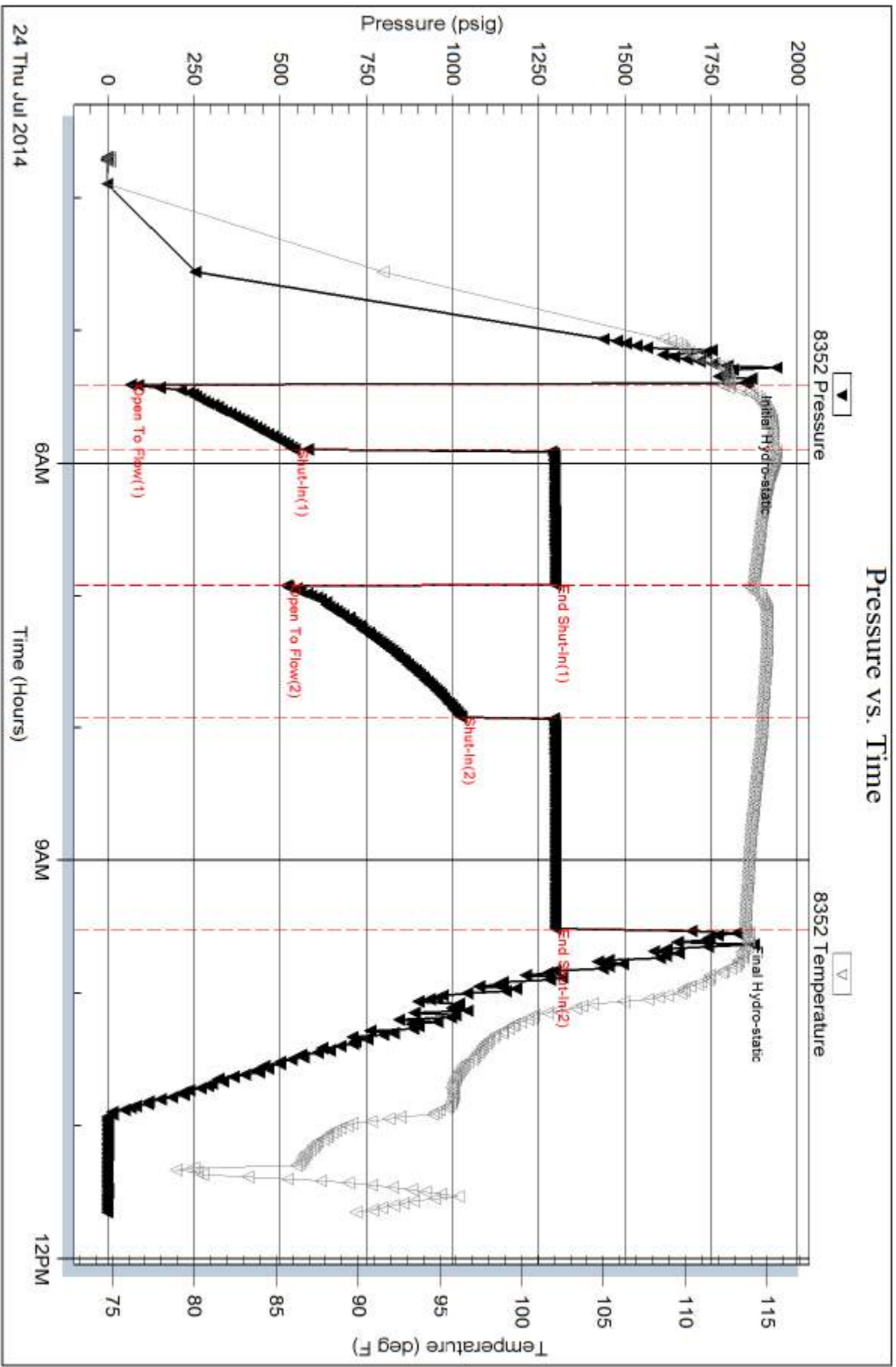
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:



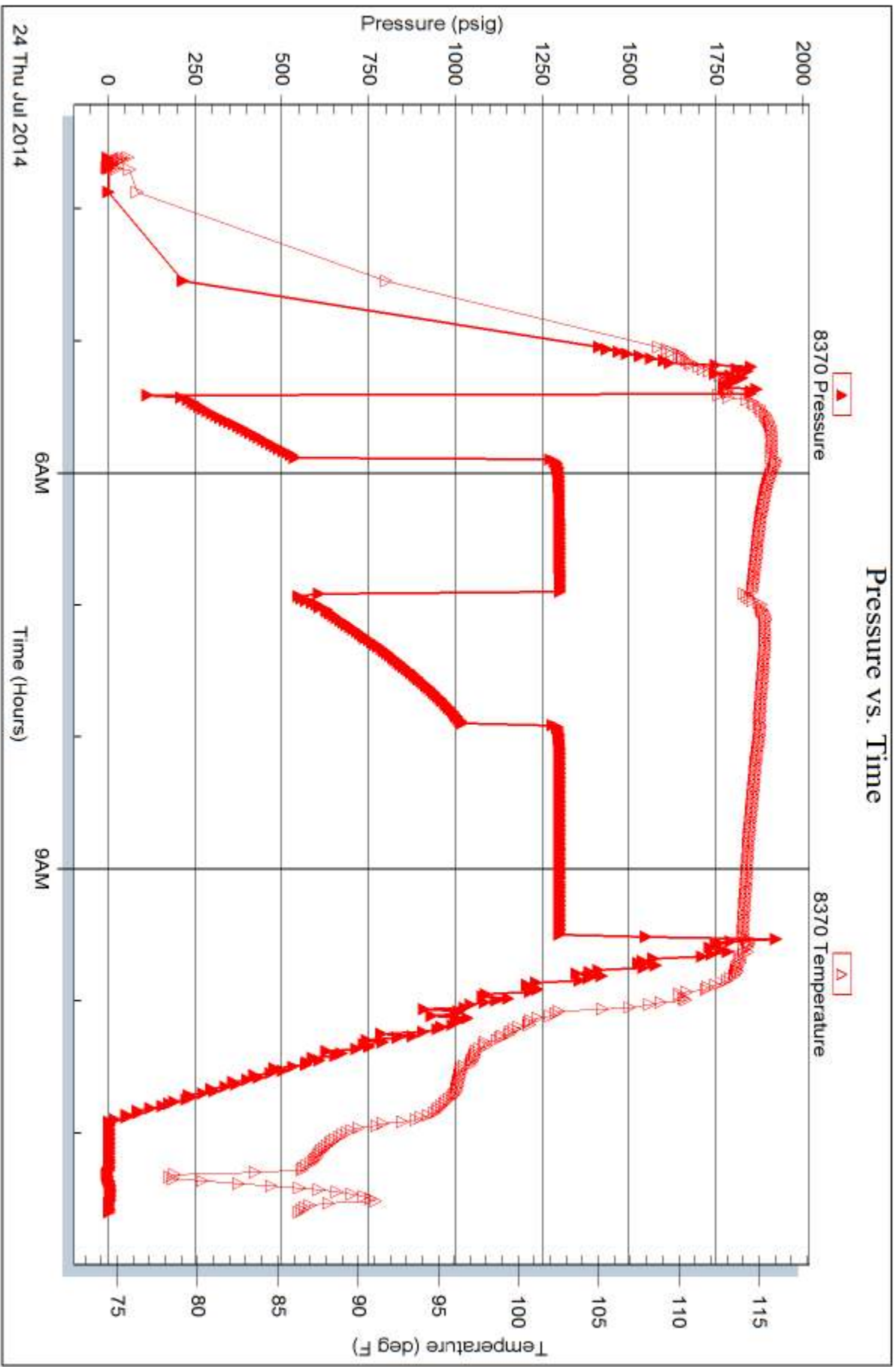
Serial #: 8370

Inside

Murfin Drtg. Co. Inc.

Hornbaker #1-11

DST Test Number: 4







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **54233**

4/10

Well Name & No. HORNBAKER #1-11 Test No. 1 Date 7-21-14  
 Company MURFIN DRILG Co. Inc. Elevation 1804 KB 1793 GL  
 Address 250 N WATERZ, STE. 300, WICHITA Ks. 67202  
 Co. Rep / Geo. CHUCK SCHMALTZ Rig MURFIN DRILG #21  
 Location: Sec. 11 Twp. 23S Rge. 11W Co. STAFFORD State Ks.

Interval Tested 3286 - 3360' Zone Tested LAAS - D, E, F  
 Anchor Length 74' Drill Pipe Run 3010 Mud Wt. 9.4  
 Top Packer Depth 3281' Drill Collars Run 278' Vis 50  
 Bottom Packer Depth 3286' Wt. Pipe Run 0 WL 10.4cc  
 Total Depth 3360' Chlorides 11,500 ppm System LCM 1#

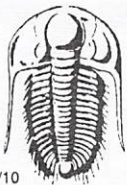
Blow Description IF: Fair to strong blow. B.O.B. in 9 mins. -  
ISI; No blow.  
FF: Strong blow. B.O.B. in 4 1/2 mins. FSI; No blow.

| Rec        | Feet of                    | %gas     | %oil      | %water | %mud      |
|------------|----------------------------|----------|-----------|--------|-----------|
| <u>300</u> | <u>Feet of Gas in pipe</u> |          |           |        |           |
| <u>130</u> | <u>Feet of GOCM</u>        | <u>8</u> | <u>17</u> |        | <u>75</u> |
|            |                            |          |           |        |           |
|            |                            |          |           |        |           |
|            |                            |          |           |        |           |

Rec Total 130 BHT 108° Gravity N/A API RW Nic.@ ~ °F Chlorides 11,500 ppm

(A) Initial Hydrostatic 1615  Test 1150 T-On Location 1907  
 (B) First Initial Flow 30  Jars 250 T-Started 2002  
 (C) First Final Flow 48  Safety Joint 75 T-Open 2210  
 (D) Initial Shut-In 755  Circ Sub \_\_\_\_\_ T-Pulled 0213  
 (E) Second Initial Flow 51  Hourly Standby \_\_\_\_\_ T-Out 0401  
 (F) Second Final Flow 78  Mileage (90) 124 Comments \_\_\_\_\_  
 (G) Final Shut-In 783  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1610  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 60  Day Standby \_\_\_\_\_ Total 1599  
 Final Flow 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 90 Sub Total 1599

Approved By \_\_\_\_\_ Our Representative Cory Wolcott  
 TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 54234

4/10

Well Name & No. HORNBAKER # 1-11 Test No. 2 Date 7-22-14  
 Company MURFIN DRUG Co. Inc. Elevation 1804 KB 1793 GL  
 Address 250 N. WATER, STE. 300, WICHITA Ks. 67202  
 Co. Rep / Geo. CHUCK SCHMALTZ Rig MURFIN DRUG #21  
 Location: Sec. 11 Twp. 23S Rge. 11W Co. STAFFORD State Ks.

Interval Tested 3394-3504' Zone Tested LANS.  
 Anchor Length 110' Drill Pipe Run 3104' Mud Wt. 9.4  
 Top Packer Depth 3389' Drill Collars Run 278' Vis 57  
 Bottom Packer Depth 3394' Wt. Pipe Run 0 WL 10.4cc  
 Total Depth 3504' Chlorides 10,500 ppm System LCM 1#

Blow Description IF: Strong blow. B.O.B. in 3 1/2 mins. -

ISI: No blow.

FF: Strong blow. B.O.B. in 1 min. GTS in 22 mins. TSTM.

FSI: Weak blow. 1-4".

| Rec        | Feet of         | %gas | %oil      | %water    | %mud |
|------------|-----------------|------|-----------|-----------|------|
| <u>105</u> | <u>Only Mud</u> |      |           |           |      |
| <u>250</u> | <u>MW</u>       |      | <u>60</u> | <u>32</u> |      |
|            |                 |      |           |           |      |
|            |                 |      |           |           |      |
|            |                 |      |           |           |      |

Rec Total 355 BHT 109.7 Gravity N/A API RW .06 @ 96 °F Chlorides 95,000 ppm

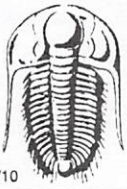
(A) Initial Hydrostatic 1217  Test 1150 T-On Location 1610  
 (B) First Initial Flow 29  Jars 250 T-Started 1629  
 (C) First Final Flow 104  Safety Joint 75 T-Open 1815  
 (D) Initial Shut-In 1270  Circ Sub \_\_\_\_\_ T-Pulled 2216  
 (E) Second Initial Flow 66  Hourly Standby \_\_\_\_\_ T-Out 0021  
 (F) Second Final Flow 169  Mileage 207 124 Comments \_\_\_\_\_  
 (G) Final Shut-In 1269  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1680  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1599  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90

Approved By \_\_\_\_\_ Our Representative Cony Puroteaux

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 54235

4/10

Well Name & No. HORNBAKER #1-11 Test No. 3 Date 7-23-14  
 Company MURFIN DRUG Co. Inc. Elevation 1804 KB 1793 GL  
 Address 250 N. WATER, Ste. 300, WICHITA Ks. 67202  
 Co. Rep / Geo. CHUCK SCHMALTZ Rig MURFIN DRUG #21  
 Location: Sec. 11 Twp. 23S Rge. 11W Co. STAFFORD State KS.

Interval Tested 3596 - 3657' Zone Tested VIOLA  
 Anchor Length 61' Drill Pipe Run 3203' Mud Wt. 9.3  
 Top Packer Depth 3591' Drill Collars Run 278' Vis 57  
 Bottom Packer Depth 3596' Wt. Pipe Run 0 WL 9.2cc  
 Total Depth 3657' Chlorides 9700 ppm System LCM 1#

Blow Description IF: Weak blow 1/2 - 3/4". Decreasing. IST: No blow.  
FF: No blow. FSI: No blow.

| Rec       | Feet of                     | %gas | %oil | %water | %mud |
|-----------|-----------------------------|------|------|--------|------|
| <u>20</u> | <u>Dry Mud. (Good OVER)</u> |      |      |        |      |
| Rec       | Feet of                     | %gas | %oil | %water | %mud |
| Rec       | Feet of                     | %gas | %oil | %water | %mud |
| Rec       | Feet of                     | %gas | %oil | %water | %mud |
| Rec       | Feet of                     | %gas | %oil | %water | %mud |

Rec Total 20 BHT 110° Gravity N/A API RW NC. @ ✓ °F Chlorides 9700 ppm

(A) Initial Hydrostatic 1811  Test 1150 T-On Location 1050  
 (B) First Initial Flow 20  Jars 250 T-Started ~~1050~~ 1114  
 (C) First Final Flow 25  Safety Joint 75 T-Open 12 47  
 (D) Initial Shut-In 115  Circ Sub \_\_\_\_\_ T-Pulled 1355  
 (E) Second Initial Flow 27  Hourly Standby \_\_\_\_\_ T-Out 1226  
 (F) Second Final Flow 45  Mileage (80) 124 Comments \_\_\_\_\_  
 (G) Final Shut-In 95  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1768  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 30  
 Final Shut-In 60

Sub Total 1599 Total 1599 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Cary Rotarian  
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 54236

4/10

Well Name & No. HORNBAKER #1-11 Test No. 4 Date 7-24-14  
 Company MURFIN DRILLING Co. Inc. Elevation 1804 KB 1793 GL  
 Address WICHITA Ks. 67202  
 Co. Rep / Geo. CHUCK SCHULTZ Rig MURFIN DRILLING #21  
 Location: Sec. 11 Twp. 23S Rge. 11W Co. STAFFORD State Ks.

Interval Tested 3636 ~ 3726' Zone Tested SIMPSON / ARBUCKLE  
 Anchor Length 90' Drill Pipe Run 3355' Mud Wt. 9.3  
 Top Packer Depth 3631' Drill Collars Run 278' Vis 57  
 Bottom Packer Depth 3636' Wt. Pipe Run 0 WL 9.2cc  
 Total Depth 3726' Chlorides 9,700 ppm System LCM 1#

Blow Description IF: Strong blow. B.O.B. in 3 mins. ISI No blow.

FF: Strong blow. B.O.B. in 4 mins. FSI No blow.

| Rec         | Feet of   | %gas | %oil      | %water    | %mud |
|-------------|-----------|------|-----------|-----------|------|
| <u>280</u>  | <u>MW</u> |      | <u>81</u> | <u>19</u> |      |
| <u>2000</u> | <u>SW</u> |      |           |           |      |
|             |           |      |           |           |      |
|             |           |      |           |           |      |
|             |           |      |           |           |      |

Rec Total 2280 BHT 114° Gravity N/A API RW .15 @ 91 °F Chlorides 39,000 ppm

- (A) Initial Hydrostatic 1849  Test 1150
- (B) First Initial Flow 67  Jars 250
- (C) First Final Flow 541  Safety Joint 75
- (D) Initial Shut-In 1299  Circ Sub
- (E) Second Initial Flow 519  Hourly Standby
- (F) Second Final Flow 1027  Mileage (80) 124
- (G) Final Shut-In 1299  Sampler
- (H) Final Hydrostatic 1823  Straddle
- Shale Packer 250
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility

T-On Location 0319  
 T-Started 0341  
 T-Open 0524  
 T-Pulled 0930  
 T-Out 1138

Comments \_\_\_\_\_  
 Ruined Shale Packer  
 Ruined Packer  
 Extra Copies  
 Sub Total 0  
 Total 1849  
 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_

Our Representative Coan Swolensky

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



LOCATION: 2310 ESL 2310 FWL  
SEC: 11 TWP: 23 S R11 W  
COUNTY: STAFFORD  
STATE: KANSAS  
AP # 15-185-23889  
MUD/LOG/SERVICE MUD LOG  
MUREIN DRILLING CO. RIG #21  
CONTRACT NO. 18 NOV 2014  
DATE: 25 JULY 2014  
CASSING RECORD: TRILABITE TESTING, INC.  
BUREAU OF MINES: RHEINER ENERGY SER.  
DIP: 8% @ 209'

PRODUCTION: 1804  
ELEVATION: 2800'  
DIP: 8% @ 209'

FORMATION TOPS & STRUCTURAL POSITIONS  
FORMATION TOP POSITION  
ANHYDRITE -100'  
ANHYDRITE -BASE 525'

| FORMATION   | SHAPE | ELECTRIC LOG TYPE | SIG-SEA POSITION | STRUCTURAL POSITION |
|-------------|-------|-------------------|------------------|---------------------|
| OREAD       | 2997  | 2997              | -1188            | +8                  |
| HEEBNER     | 3097  | 3097              | -1290            | +5                  |
| TORONTO     | 3114  | 3114              | -1306            | +7                  |
| DDUGLAS     | 3132  | 3132              | -1326            | +5                  |
| LANSING     | 3241  | 3241              | -1434            | +5                  |
| STARK       | 3478  | 3478              | -1648            | 0                   |
| BKC         | 3533  | 3533              | -1728            | -1                  |
| VIOLEA      | 3654  | 3654              | -1893            | +2                  |
| SIMPSON     | 3717  | 3717              | -1908            | +5                  |
| ARBuckle    | 3817  | 3817              | -1908            | +8                  |
| TOTAL DEPTH | 3817  | 3817              | -2013            | -50                 |

| NO | SIZE   | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|--------|-------|-------|----------|--------|--------|---------|
| 1  | 1 1/4" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 2  | 1 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 3  | 1 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE  | THICK | DEPTH | QUANTITY | PREP  | STRIPS | REMARKS |
|----|-------|-------|-------|----------|-------|--------|---------|
| 4  | 3/8"  | 1/8"  | 1299' | 51"      | 1299' | 0.011  | SHOBT   |
| 5  | 3/16" | 1/8"  | 1299' | 51"      | 1299' | 0.011  | SHOBT   |
| 6  | 3/16" | 1/8"  | 1299' | 51"      | 1299' | 0.011  | SHOBT   |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 7  | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 8  | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 9  | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 10 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 11 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 12 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 13 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 14 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 15 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 16 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 17 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 18 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 19 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 20 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 21 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 22 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 23 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 24 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 25 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 26 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 27 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 28 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 29 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 30 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 31 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 32 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 33 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 34 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 35 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 36 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 37 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 38 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 39 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 40 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 41 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 42 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 43 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 44 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 45 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 46 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 47 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 48 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 49 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 50 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 51 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 52 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 53 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 54 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 55 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 56 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 57 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 58 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 59 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 60 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 61 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 62 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 63 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 64 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 65 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 66 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 67 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 68 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 69 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 70 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 71 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 72 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 73 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 74 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 75 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 76 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 77 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 78 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 79 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 80 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 81 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 82 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 83 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 84 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 85 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 86 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP   | STRIPS | REMARKS |
|----|------|-------|-------|----------|--------|--------|---------|
| 87 | 1/8" | 1/8"  | 310'  | 30'      | 2 3/4  | 0.011  | SHOBT   |
| 88 | 1/8" | 1/8"  | 2100' | 230'     | 2 1/2  | 0.011  | SUKLES  |
| 89 | 1/8" | 1/8"  | 325'  | 1125'    | 33 3/4 | 0.011  | SUKLES  |

| NO | SIZE | THICK | DEPTH | QUANTITY | PREP | STRIPS | REMARKS |
|----|------|-------|-------|----------|------|--------|---------|
| 90 | 1/8" | 1/    |       |          |      |        |         |





acct.  
Pratt-MG

# BASIO OPERATOR PAY MDC

ENERGY SERVICES

LEASE: BM

|                |         |        |              |
|----------------|---------|--------|--------------|
| PAGE           | CUST NO | YARD # | INVOICE DATE |
| 1 of 1         | 1002852 | 1718   | 07/23/2014   |
| INVOICE NUMBER |         |        |              |
| 91548353       |         |        |              |

Pratt (620) 672-1201  
 B MURFIN DRILLING  
 I PO Box: 288  
 L RUSSELL  
 L KS US 67665  
 T  
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Hornbaker 1-11  
 O LOCATION \_\_\_\_\_  
 B COUNTY Stafford BM  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T JOB CONTACT  
 E

| JOB #    | EQUIPMENT # | PURCHASE ORDER NO. | TERMS         | DUE DATE   |
|----------|-------------|--------------------|---------------|------------|
| 40746355 | 20920       |                    | Net - 30 days | 08/22/2014 |

|  | QTY    | U of M | UNIT PRICE | INVOICE AMOUNT |
|--|--------|--------|------------|----------------|
| <b>For Service Dates: 07/19/2014 to 07/19/2014</b> |        |        |            |                |
| 0040746355   |        |        |            |                |
| 171810855A Cement-New Well Casing/Pi 07/19/2014    |        |        |            |                |
| A-Con Blend Common                                 | 100.00 | EA     | 13.50      | 1,350.09 T     |
| Common Cement                                      | 150.00 | EA     | 12.00      | 1,800.11 T     |
| Celloflake   | 63.00  | EA     | 2.78       | 174.84 T       |
| Calcium Chloride                                   | 564.00 | EA     | 0.79       | 444.18 T       |
| "Wooden Cmt Plug, 8 5/8" "                         | 1.00   | EA     | 120.01     | 120.01         |
| "Unit Mileage Chg (PU, cars one way)"              | 35.00  | MI     | 3.19       | 111.57         |
| Heavy Equipment Mileage                            | 70.00  | MI     | 5.25       | 367.52         |
| "Proppant & Bulk Del. Chgs., per ton mil           | 411.00 | EA     | 1.65       | 678.19         |
| Depth Charge; 0-500'                               | 1.00   | EA     | 750.05     | 750.05         |
| Blending & Mixing Service Charge                   | 250.00 | BAG    | 1.05       | 262.52         |
| Plug Container Util. Chg.                          | 1.00   | EA     | 187.51     | 187.51         |
| "Service Supervisor, first 8 hrs on loc.           | 1.00   | EA     | 131.26     | 131.26         |

USED FOR \_\_\_\_\_  
 APPROVED \_\_\_\_\_

|                           |                               |               |          |
|---------------------------|-------------------------------|---------------|----------|
| PLEASE REMIT TO:          | SEND OTHER CORRESPONDENCE TO: | SUB TOTAL     | 6,377.85 |
| BASIC ENERGY SERVICES, LP | BASIC ENERGY SERVICES, LP     | TAX           | 269.50   |
| PO BOX 841903             | 801 CHERRY ST, STE 2100       | INVOICE TOTAL | 6,647.35 |
| DALLAS, TX 75284-1903     | FORT WORTH, TX 76102          |               |          |







|                                      |                            |                                      |                      |
|--------------------------------------|----------------------------|--------------------------------------|----------------------|
| Customer<br><i>MURFIN Dally</i>      | Lease No.                  | Date<br><i>07-19-14</i>              |                      |
| Lease<br><i>HORNBAKER</i>            | Well #<br><i>1-11</i>      |                                      |                      |
| Field Order #<br><i>10855</i>        | Station<br><i>PRA # KS</i> | Casing<br><i>8 5/8</i>               | Depth<br><i>309'</i> |
| Type Job<br><i>CNW 8 5/8 SURFACE</i> | Formation                  | County<br><i>STAFFORD</i>            | State<br><i>KS</i>   |
|                                      |                            | Legal Description<br><i>11-23-11</i> |                      |

| PIPE DATA                     |              | PERFORATING DATA |    | FLUID USED |            | TREATMENT RESUME |                  |
|-------------------------------|--------------|------------------|----|------------|------------|------------------|------------------|
| Casing Size                   | Tubing Size  | Shots/Ft         |    | Acid       | RATE       | PRESS            | ISIP             |
| <i>8 5/8</i>                  |              |                  |    |            |            |                  |                  |
| Depth<br><i>309'</i>          | Depth        | From             | To | Pre Pad    | Max        |                  | 5 Min.           |
| Volume<br><i>18</i>           | Volume       | From             | To | Pad        | Min        |                  | 10 Min.          |
| Max Press<br><i>300</i>       | Max Press    | From             | To | Frac       | Avg        |                  | 15 Min.          |
| Well Connection<br><i>P.C</i> | Annulus Vol. | From             | To |            | HHP Used   |                  | Annulus Pressure |
| Plug Depth<br><i>284</i>      | Packer Depth | From             | To | Flush      | Gas Volume |                  | Total Load       |

|                         |                                      |                                   |
|-------------------------|--------------------------------------|-----------------------------------|
| Customer Representative | Station Manager<br><i>DAVE SCOTT</i> | Treater<br><i>Robert Sullivan</i> |
|-------------------------|--------------------------------------|-----------------------------------|

|               |                 |              |              |                      |              |  |  |  |  |
|---------------|-----------------|--------------|--------------|----------------------|--------------|--|--|--|--|
| Service Units | <i>37900</i>    | <i>33708</i> | <i>20920</i> | <i>19831</i>         | <i>19862</i> |  |  |  |  |
| Driver Names  | <i>Sullivan</i> | <i>Erwin</i> |              | <i>G. G. S. O. N</i> |              |  |  |  |  |

| Time              | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate       | Service Log                               |
|-------------------|-----------------|-----------------|--------------|------------|---|
| <i>10:00 P.m.</i> |                 |                 |              |            | <i>ON bc</i>                              |
|                   |                 |                 |              |            | <i>Run 8 5/8 csp.</i>                     |
|                   |                 |                 |              |            | <i>CARD ON BOTTOM</i>                     |
| <i>12:10</i>      |                 |                 |              |            | <i>Hook Rig circ csp.</i>                 |
| <i>12:15</i>      |                 |                 | <i>3</i>     | <i>3</i>   | <i>At SPACER</i>                          |
|                   |                 |                 | <i>44</i>    | <i>4.5</i> | <i>Mix 100 SK A-COM cont 3%cc 1/4cf</i>   |
|                   |                 |                 | <i>32</i>    |            | <i>mix Tail 150 SK Common. 2%cc 1/4cf</i> |
|                   |                 |                 |              |            | <i>cont mix D shut down</i>               |
|                   |                 |                 |              |            | <i>Release Plug</i>                       |
| <i>12:45</i>      |                 |                 | <i>18</i>    | <i>4</i>   | <i>At Disp plug down</i>                  |
|                   |                 |                 |              |            | <i>1 circ 10 BBL cont PIT</i>             |
|                   |                 |                 |              |            | <i>JOB complete</i>                       |
|                   |                 |                 |              |            | <i>Thank you</i>                          |



**BASIC**  
ENERGY SERVICES

*Prod - MG*

**OPERATOR PAY MDC**

LEASE: \_\_\_\_\_

PAGE

1 of 1

CUST NO

1002852

YARD #

1718

INVOICE DATE

07/28/2014

INVOICE NUMBER

91551676

Pratt

(620) 672-1201

J  
O  
B  
S  
I  
T  
E

LEASE NAME

Hornbaker 1-11

LOCATION

COUNTY

Stafford

STATE

KS

JOB DESCRIPTION

Cement-New Well Casing/Pi

JOB CONTACT

B MURFIN DRILLING

I PO Box: 288

L RUSSELL

L KS US 67665

T O ATTN:

**OPERATOR PAY MDC**

LEASE: BM

ACCOUNTS PAYABLE

| JOB #    | EQUIPMENT # | PURCHASE ORDER NO. | TERMS         | DUE DATE   |
|----------|-------------|--------------------|---------------|------------|
| 40748385 | 19905       |                    | Net - 30 days | 08/27/2014 |

|  | QTY    | U of M | UNIT PRICE | INVOICE AMOUNT |
|--|--------|--------|------------|----------------|
| <b>For Service Dates: 07/25/2014 to 07/25/2014</b>               |        |        |            |                |
| 0040748385   |        |        |            |                |
| 171811017A Cement-New Well Casing/Pi 07/25/2014<br>Cement P.T.A. |        |        |            |                |
| 60/40 POZ  | 245.00 | EA     | 9.00       | 2,205.16 T     |
| Celloflake   | 62.00  | EA     | 2.78       | 172.06 T       |
| Cement Gel   | 422.00 | EA     | 0.19       | 79.13 T        |
| "Unit Mileage Chg (PU, cars one way)"                            | 35.00  | MI     | 3.19       | 111.57         |
| Heavy Equipment Mileage  | 70.00  | MI     | 5.25       | 367.53         |
| "Proppant & Bulk Del. Chgs., per ton mil                         | 369.00 | EA     | 1.65       | 608.90         |
| Depth Charge; 3001-4000'   | 1.00   | EA     | 1,620.12   | 1,620.12       |
| Blending & Mixing Service Charge                                 | 245.00 | BAG    | 1.05       | 257.27         |
| "Service Supervisor, first 8 hrs on loc.                         | 1.00   | EA     | 131.26     | 131.26         |

*Plug  
Ba*

USED FOR \_\_\_\_\_  
APPROVED \_\_\_\_\_

PLEASE REMIT TO:

BASIC ENERGY SERVICES, LP  
PO BOX 841903  
DALLAS, TX 75284-1903

SEND OTHER CORRESPONDENCE TO:

BASIC ENERGY SERVICES, LP  
801 CHERRY ST, STE 2100  
FORT WORTH, TX 76102

SUB TOTAL

5,553.00

TAX

175.63

INVOICE TOTAL

5,728.63

*Handwritten signature*





**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET  
1718 11017 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

| DATE OF JOB: 7/25/04         |     | DISTRICT: Pratt         |     | NEW WELL <input type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.: |     |                            |         |       |      |
|------------------------------|-----|-------------------------|-----|---|-----|----------------------------|---------|-------|------|
| CUSTOMER: [Handwritten]      |     | LEASE: [Handwritten]    |     | WELL NO.:   |     |                            |         |       |      |
| ADDRESS: [Handwritten]       |     | COUNTY: [Handwritten]   |     | STATE: [Handwritten]  |     |                            |         |       |      |
| CITY: [Handwritten]          |     | STATE: [Handwritten]    |     | SERVICE CREW: [Handwritten]   |     |                            |         |       |      |
| AUTHORIZED BY: [Handwritten] |     | JOB TYPE: [Handwritten] |     |   |     |                            |         |       |      |
| EQUIPMENT#                   | HRS | EQUIPMENT#              | HRS | EQUIPMENT#  | HRS | TRUCK CALLED               | DATE    | AM/PM | TIME |
| 27796                        | 3   |                         |     |   |     |                            | 7/25/04 | AM    | 8:00 |
| 77636                        | 3   |                         |     |   |     |                            | 7/25/04 | AM    | 8:00 |
| 17806                        | 1   |                         |     |   |     |                            | 7/25/04 | AM    | 3:00 |
| 17826                        | 1   |                         |     |   |     |                            | 7/25/04 | AM    | 6:00 |
| 17866                        | 3   |                         |     |   |     |                            | 7/25/04 | AM    | 7:00 |
|                              |     |                         |     |   |     | MILES FROM STATION TO WELL | 40      |       |      |

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

| ITEM/PRICE REF. NO. | MATERIAL, EQUIPMENT AND SERVICES USED | UNIT | QUANTITY | UNIT PRICE | \$ AMOUNT |
|---------------------|---------------------------------------|------|----------|------------|-----------|
| CG103               | 60110 PUM                             | SK   | 2117     |            | 2540.00   |
| CG102               | [Handwritten]                         | LB   | 62       |            | 229.46    |
| CG100               | [Handwritten]                         | LN   | 464      |            | 160.00    |
| 1100                | [Handwritten]                         | M    | 30       |            | 144.20    |
| 1101                | [Handwritten]                         | M    | 70       |            | 190.00    |
| 1102                | [Handwritten]                         | LN   | 369      |            | 814.00    |
| CG104               | [Handwritten]                         | LN   | 1        |            | 2160.00   |
| CG105               | [Handwritten]                         | SK   | 2117     |            | 312.00    |
| CG106               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG107               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG108               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG109               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG110               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG111               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG112               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG113               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG114               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG115               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG116               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG117               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG118               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG119               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG120               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG121               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG122               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG123               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG124               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG125               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG126               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG127               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG128               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG129               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG130               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG131               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG132               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG133               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG134               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG135               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG136               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG137               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG138               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG139               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG140               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG141               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG142               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG143               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG144               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG145               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG146               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG147               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG148               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG149               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG150               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG151               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG152               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG153               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG154               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG155               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG156               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG157               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG158               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG159               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG160               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG161               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG162               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG163               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG164               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG165               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG166               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG167               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG168               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG169               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG170               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG171               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG172               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG173               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG174               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG175               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG176               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG177               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG178               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG179               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG180               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG181               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG182               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG183               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG184               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG185               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG186               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG187               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG188               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG189               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG190               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG191               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG192               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG193               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG194               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG195               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG196               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG197               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG198               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG199               | [Handwritten]                         | LN   | 1        |            | 17.00     |
| CG200               | [Handwritten]                         | LN   | 1        |            | 17.00     |

| CHEMICAL / ACID DATA: |  |  |  |
|-----------------------|--|--|--|
|                       |  |  |  |
|                       |  |  |  |
|                       |  |  |  |

|                     |            |       |    |
|---------------------|------------|-------|----|
| SUB TOTAL           |            | 46.32 | 00 |
| SERVICE & EQUIPMENT | %TAX ON \$ |       |    |
| MATERIALS           | %TAX ON \$ |       |    |
| TOTAL               |            |       |    |

|                        |   |
|------------------------|---|
| SERVICE REPRESENTATIVE | THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: |
|------------------------|---|

FIELD SERVICE ORDER NO. \_\_\_\_\_ (WELL OWNER OPERATOR CONTRACTOR OR AGENT)

|                                    |                            |                                      |
|------------------------------------|----------------------------|--------------------------------------|
| Customer<br><i>Murkin Drilling</i> | Lease No.                  | Date<br><i>7-25-2014</i>             |
| Lease<br><i>Hoinbaker</i>          | Well #<br><i>1-11</i>      |                                      |
| Field Order #<br><i>11017</i>      | Station<br><i>Post, KS</i> | Casing<br><i>4 1/2</i>               |
| Type Job<br><i>CNW PTA</i>         | Formation                  | Depth<br><i>3712</i>                 |
|                                    |                            | County<br><i>St Louis</i>            |
|                                    |                            | State<br><i>KS</i>                   |
|                                    |                            | Legal Description<br><i>11-23-11</i> |

| PIPE DATA         |              | PERFORATING DATA |    | FLUID USED | TREATMENT RESUME |       |                  |
|-------------------|--------------|------------------|----|------------|------------------|-------|------------------|
| Casing Size       | Tubing Size  | Shots/Ft         |    | Acid       | RATE             | PRESS | ISIP             |
| Depth <i>3712</i> | Depth        | From             | To | Pre Pad    | Max              |       | 5 Min.           |
| Volume            | Volume       | From             | To | Pad        | Min              |       | 10 Min.          |
| Max Press         | Max Press    | From             | To | Frac       | Avg              |       | 15 Min.          |
| Well Connection   | Annulus Vol. | From             | To |            | HHP Used         |       | Annulus Pressure |
| Plug Depth        | Packer Depth | From             | To | Flush      | Gas Volume       |       | Total Load       |

|  |   |                                  |
|--|---|----------------------------------|
| Customer Representative<br><i>Justin J. Nolo</i> | Station Manager<br><i>Kevin Goreley</i> | Treater<br><i>Darin Franklin</i> |
|--|---|----------------------------------|

|               |              |               |               |              |              |  |  |  |  |
|---------------|--------------|---------------|---------------|--------------|--------------|--|--|--|--|
| Service Units | <i>27283</i> | <i>77686</i>  | <i>19905</i>  | <i>19826</i> | <i>19860</i> |  |  |  |  |
| Driver Names  | <i>Darin</i> | <i>McGraw</i> | <i>McGraw</i> | <i>Coie</i>  | <i>Coie</i>  |  |  |  |  |

| Time          | Casing Pressure | Tubing Pressure | Bbls. Pumped | Rate     | Service Log                         |
|---------------|-----------------|-----------------|--------------|----------|-------------------------------------|
| <i>3:00pm</i> |                 |                 |              |          | <i>on location / safety meeting</i> |
|               |                 |                 |              |          | <i>1st plus - 3712 - 50sr</i>       |
| <i>3:45pm</i> | <i>300</i>      |                 | <i>8</i>     | <i>5</i> | <i>8 bbls water</i>                 |
|               | <i>300</i>      |                 | <i>13</i>    | <i>5</i> | <i>50sr cement</i>                  |
|               | <i>300</i>      |                 | <i>3</i>     | <i>5</i> | <i>3 bbls water</i>                 |
|               | <i>300</i>      |                 | <i>43</i>    | <i>5</i> | <i>43 bbls mud</i>                  |
|               |                 |                 |              |          | <i>2nd plus - 630 - 50sr</i>        |
|               | <i>300</i>      |                 | <i>15</i>    |          | <i>15 bbls water</i>                |
|               | <i>300</i>      |                 | <i>13</i>    |          | <i>50sr cement</i>                  |
|               | <i>300</i>      |                 | <i>5</i>     |          | <i>5 bbls water</i>                 |
|               |                 |                 |              |          | <i>3rd plus - 300 - 75sr</i>        |
|               | <i>200</i>      |                 | <i>3</i>     |          | <i>3 bbls water</i>                 |
|               | <i>200</i>      |                 | <i>19</i>    |          | <i>75sr cement</i>                  |
|               | <i>200</i>      |                 | <i>1</i>     |          | <i>1 water</i>                      |
|               | <i>100</i>      |                 | <i>5</i>     | <i>3</i> | <i>60 - 70sr</i>                    |
|               | <i>100</i>      |                 | <i>7</i>     | <i>3</i> | <i>Reg - 30sr</i>                   |
|               | <i>100</i>      |                 | <i>5</i>     | <i>3</i> | <i>Mud - 20sr</i>                   |

Hornbaker #1-11  
 Daily Drilling Report  
 Page Two

7/23/14 Depth 3622'. Cut 242'. DT: None. CT: 15hrs. Dev.: None. **DST #2 3394 - 3504 (LKC H-K):** 30-60-60-90. IF: strong blw BOB in 3½ mins. FF: strong blw BOB in 1 min, GTS in 22mins. FSI: wk blw 1-4". Rec.: 250'MW (32%M, 68%W /Rw .06 @ 96°), 105'Drlg M. HP: 1717-1680. FP: 29/104, 66/169. SIP: 1270-1269. BHT: 111°. **Viola:** Chert: wh, tan, lt grey, fresh, op/semi-trans, spotty fluor & st on faces & edges, some weathered, scat tripolitic, pr - fr ppt vuggy por, pr - fr fluor & cut, spotty to full st & sat, SS ppts FO on break, w/ S-Exc show gas bubbles, ft odor. **DST #3 3596-3657 (Viola):**

7/24/14 Depth 3726'. Cut 104'. DT: None. CT: 19 ¼ hrs. Dev.: None. **DST #3 3596-3657 (Viola):** 30-60-30-60, IFP: surf blow bldg to 3/4" then dec to surf blow, FFP: no blow, REC: 20' Mud, HSP: 1811-1768, FP: 20-25/27-45, SIP: 115-95, BHT: 111°. **Simpson (upper)** was a wh, vfnxtln, sandy (vfngrnd), dense dolomite - drld 3-4.5"/ft. Lower in the zone there was some ss: grey, clear, vfn - fngrained, most w/ calc/dolo cement & no vis por, 2-3 clusters/tray w/ tr vry pr intergrained por, pr spotty fluor, vry wk slow cut, tr pr st, few ppts FO & few gas bubbles on break, no odor. **Arb** 3' cut. Dolo: off wh, lt grey, some tan, vfn - fnxtln, scat pr interxtln por, most barren, few pcs w/ ppts bright fluor, ft cut, SSFO, pr st, no odor. **DST #4 3636-3726' (Simp-Arb):** 30-60-60-90, IFP: BOB in 3", ISIP: no blow, FFP: BOB in 4", FSIP: no blow, REC: 280' MW (19%M, 81%W), 2000' W (Chl: 39000 ppm, Sys: 9700 ppm), HSP: 1849-1823, FP: 67/541, 519/1027, SIP: 1299-1299, BHT: 114°.

7/25/14 RTD: 3825'. Cut 99'. DT: None. CT: 21 ¼ hrs. Dev.: 1° @ 3825'. HC @ 4:15PM 7/24. Pioneer logged 7:45PM-11:45PM 7/24. LTD: 3817'.

7/26/14 RTD: 3825'. CT: 3 ¾ hrs. B E plugged hole, 3:30AM-6:45AM 6/25, as follows using 60/40Poz, 4%Gel, ¼#Flo seal, 50sxs @ 3712', 50sxs @ 630', 75sxs @ 300', 20sxs @ 60', 30sxs RH, 20sxs MH. Orders Nathan Willis KCC. RR @ 10:45AM 7/25. FINAL REPORT

| MDCI<br>Hornbaker #1-11<br>2310' FSL 2310' FWL<br>Sec. 11-23S-11W<br>1804' KB |            |       |     |          |       |     | Western Petr Co<br>Lichte #1<br>SE NE NE<br>Sec. 10-T23S-R11W<br>1799' KB |       |  |
|---|------------|-------|-----|----------|-------|-----|---|-------|--|
| Formation   | Sample top | Datum | Ref | Log tops | Datum | Ref | Log tops  | Datum |  |
| Anhydrite   |            |       |     | 504      | +1300 | +7  | 506   | +1293 |  |
| B/Anhydrite   | 518        | +1286 | +12 | 520      | +1284 | +10 | 525   | +1274 |  |
| Oread   | 2997       | -1193 | +3  | 2998     | -1194 | +2  | 2995  | -1196 |  |
| Topeka  |            |       |     |          |       |     |   |       |  |
| Heebner   | 3097       | -1293 | +2  | 3094     | -1290 | +5  | 3094  | -1295 |  |
| Lansing   | 3241       | -1437 | +2  | 3238     | -1434 | +5  | 3238  | -1439 |  |
| Stark   | 3473       | -1669 | -1  | 3473     | -1669 | -1  | 3467  | -1668 |  |
| BKC   | 3533       | -1729 | -2  | 3532     | -1728 | -1  | 3526  | -1727 |  |
| Viola   | 3614       | -1810 | -6  | 3606     | -1802 | +2  | 3604  | -1804 |  |
| Simpson   | 3654       | -1850 | +1  | 3650     | -1846 | +5  | 3650  | -1851 |  |
| Arbuckle  | 3717       | -1913 | +3  | 3713     | -1909 | +7  | 3715  | -1916 |  |
| RTD   | 3825       | -2021 |     |          |       |     | 3752  |       |  |
| LTD   |            |       |     | 3817     | -2013 |     |   |       |  |