



KANSAS CORPORATION COMMISSION 1084178  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

June 2009

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
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or 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

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

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

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

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

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

Total 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**

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



1084178

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

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

**INSTRUCTIONS:** Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

|   |   |
|---|---|
| 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>Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(If no, Submit Copy)</i><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 |
| _____ Perforate<br>_____ Protect Casing<br>_____ Plug Back TD<br>_____ Plug Off Zone |                  |                |              |                            |
|  |                  |                |              |                            |

| 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:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing    Pumping    Gas Lift    Other (Explain) \_\_\_\_\_

|                                   |           |         |             |               |         |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
|-----------------------------------|-----------|---------|-------------|---------------|---------|

|   |   |  |
|---|---|--|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<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> <i>(Submit ACO-4)</i><br><input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL:<br>_____<br>_____ |
|---|---|--|

# ALLIED CEMENTING CO., LLC. 038162

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Russell Ks.

|                                |                   |  |                  |            |                      |                          |                           |
|--------------------------------|-------------------|--|------------------|------------|----------------------|--------------------------|---------------------------|
| DATE <u>8/26/01</u>            | SEC. <u>8</u>     | TWP. <u>9 S</u>                        | RANGE <u>24W</u> | CALLED OUT | ON LOCATION          | JOB START <u>4:00 AM</u> | JOB FINISH <u>4:30 AM</u> |
| LEASE <u>RONALD</u>            | WELL # <u>1-8</u> | LOCATION <u>Waterbury, Ks. 15x8x34</u> |                  |            | COUNTY <u>Graham</u> | STATE <u>KANSAS</u>      |                           |
| OLD OR <u>NEW</u> (Circle one) |                   | <u>34 W 1/4 N 17th</u>                 |                  |            |                      |                          |                           |

CONTRACTOR MAVACK DRUG Rig #108 OWNER \_\_\_\_\_  
 TYPE OF JOB Cement Suberc CEMENT \_\_\_\_\_  
 HOLE SIZE 12 1/4 T.D. 345' AMOUNT ORDERED 200 sq Comm.  
 CASING SIZE 8 5/8 DEPTH 344' 3%CC  
 TUBING SIZE New 24# csg DEPTH \_\_\_\_\_ 28 bbl  
 DRILL PIPE DEPTH \_\_\_\_\_  
 TOOL DEPTH \_\_\_\_\_  
 PRES. MAX MINIMUM \_\_\_\_\_  
 MEAS. LINE SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. 20'  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 20 3/4 BBL

EQUIPMENT \_\_\_\_\_  
 PUMP TRUCK CEMENTER Gleny  
 # 417 HELPER Woody  
 BULK TRUCK \_\_\_\_\_  
 # 378 DRIVER Roy  
 BULK TRUCK \_\_\_\_\_  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_  
 HANDLING 2.10 @ 2.25 472.50  
 MILEAGE 111.50/1.1 @ 15 1732.50  
 TOTAL 5926.15

REMARKS:

Ran 8 hrs of New 24 # 8%CCSG.  
Set @ 34' Received Circulation &  
Cement of 100 sq Comm. 342' Release  
Plug & Displace to 34 BBL 1/2" Shift  
in @ 350#.  
Cement DID Circulate  
to SUR FACE  
THANKS

SERVICE

DEPTH OF JOB \_\_\_\_\_  
 PUMP TRUCK CHARGE \_\_\_\_\_ 1125.00  
 EXTRA FOOTAGE @ \_\_\_\_\_  
 MILEAGE 150 @ 7.00 1050.00  
 MANIFOLD @ \_\_\_\_\_  
Cur 150 @ 4.00 600.00

TOTAL 2775.00

CHARGE TO: Curceath Oil  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PLUG & FLOAT EQUIPMENT

8 5/8 WOODEN PLUG @ 64.00  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 TOTAL 64.00

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 8765.15  
 DISCOUNT 50/50 IF PAID IN 30 DAYS

PRINTED NAME Jeremy Stuckey  
 SIGNATURE [Signature]

# ALLIED CEMENTING CO., LLC. 038256

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Russell

|                         |                  |   |                 |            |                      |                          |                           |
|-------------------------|------------------|---|-----------------|------------|----------------------|--------------------------|---------------------------|
| DATE <u>9/4/11</u>      | SEC. <u>8</u>    | TWP <u>9</u>                            | RANGE <u>24</u> | CALLED OUT | ON LOCATION          | JOB START <u>7:00 AM</u> | JOB FINISH <u>9:00 AM</u> |
| LEASE <u>Ronald</u>     | WELL# <u>1-8</u> | LOCATION <u>Wakeney N to Kalline SW</u> |                 |            | COUNTY <u>Graham</u> | STATE <u>Ks.</u>         |                           |
| OLD OR NEW (Circle one) |                  | <u>3N 1 1/2 W N1/4</u>                  |                 |            |                      |                          |                           |

|  |                          |
|--|--------------------------|
| CONTRACTOR <u>Maurick Drilling Ry #108</u> | OWNER                    |
| TYPE OF JOB <u>Production String</u>       |                          |
| HOLE SIZE <u>2 3/8</u>                     | T.D. <u>4094'</u>        |
| CASING SIZE <u>5 1/2 12"</u>               | DEPTH <u>4089.45'</u>    |
| TUBING SIZE                                | DEPTH                    |
| DRILL PIPE                                 | DEPTH                    |
| TOOL <u>OV Tool</u>                        | DEPTH <u>2157'</u>       |
| PRES. MAX                                  | MINIMUM                  |
| MEAS. LINE                                 | SHOE JOINT <u>42.57'</u> |
| CEMENT LEFT IN CSG. <u>42.57'</u>          |                          |
| PERFS.                                     |                          |
| DISPLACEMENT <u>96.31661</u>               |                          |

|                            |                                |                |                       |
|----------------------------|--------------------------------|----------------|-----------------------|
| CEMENT                     |                                |                |                       |
| AMOUNT ORDERED             | <u>175 Con 102.5 salt 22.6</u> |                |                       |
|                            | <u>450 Cite 1/4 # F/</u>       |                |                       |
|                            | <u>500 Gal WFR-2</u>           |                |                       |
| COMMON                     | <u>175</u>                     | @ <u>16.25</u> | <u>2843.75</u>        |
| POZMIX                     |                                | @              |                       |
| GEL                        | <u>5</u>                       | @ <u>21.25</u> | <u>63.75</u>          |
| CHLORIDE                   |                                | @              |                       |
| ASC                        |                                | @              |                       |
|                            | <u>Cite 450</u>                | @ <u>14.50</u> | <u>6525.00</u>        |
|                            | <u>Flo Seal 112"</u>           | @ <u>2.70</u>  | <u>302.40</u>         |
|                            |                                | @              |                       |
|                            | <u>Salt 15</u>                 | @ <u>23.95</u> | <u>359.25</u>         |
|                            |                                | @              |                       |
|                            | <u>WFR-2 500 Gal</u>           | @ <u>1.10</u>  | <u>550.00</u>         |
|                            |                                | @              |                       |
|                            |                                | @              |                       |
| HANDLING                   | <u>643</u>                     | @ <u>2.25</u>  | <u>1446.75</u>        |
| MILEAGE <u>111.56/mile</u> |                                |                | <u>5304.75</u>        |
|                            |                                |                | TOTAL <u>17395.60</u> |

**EQUIPMENT**

|              |                              |
|--------------|------------------------------|
| PUMP TRUCK   | CEMENTER <u>Shane, Heath</u> |
| # <u>409</u> | HELPER <u>Tool</u>           |
| BULK TRUCK   |                              |
| # <u>341</u> | DRIVER <u>Tony</u>           |
| BULK TRUCK   |                              |
| # <u>473</u> | DRIVER <u>Cody H.</u>        |

**REMARKS:**

Rot Hole 300s Mouse Hole 150s  
Insert @ 4046.88, Est Circulation  
Mixed 500 Gal (WFR-2) Mixed 175s  
down 5 1/2 Shot for Washed pump &  
Cover. Displaced 36.661  
Water 54.661 Mud 6.31661 Water Land  
ply @ 1800 psi Released Dried up.  
Opened OV tool @ 1000 psi Mixed  
ski to Circulate Cement  
Closed OV tool 1800psi

CHARGE TO: Culbreath Oil  
 STREET 1532 S Peoria Ave.  
 CITY Tulsa STATE OK ZIP 74120

**SERVICE**

|                   |            |               |                      |
|-------------------|------------|---------------|----------------------|
| DEPTH OF JOB      |            |               |                      |
| PUMP TRUCK CHARGE |            |               | <u>2225.00</u>       |
| EXTRA FOOTAGE     |            | @             |                      |
| MILEAGE           | <u>150</u> | @ <u>7.00</u> | <u>1050.00</u>       |
| MANIFOLD          |            | @             |                      |
|                   | <u>600</u> | @ <u>4.00</u> | <u>600.00</u>        |
|                   |            | @             |                      |
|                   |            |               | TOTAL <u>3875.00</u> |

**PLUG & FLOAT EQUIPMENT**

|                             |   |              |                |
|-----------------------------|---|--------------|----------------|
| <u>OV Tool</u>              | @ |              | <u>2605.00</u> |
| <u>R 24 Recip Scrachers</u> | @ | <u>83.00</u> | <u>1992.00</u> |
| <u>R 8 - Centralizers</u>   | @ | <u>34.00</u> | <u>272.00</u>  |
| <u>APU - Float Shoe</u>     | @ |              | <u>245.00</u>  |

*Thanks!*

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Culbreath Oil & Gas Company**

1532 S. Peoria Avenue  
Tulsa, OK 74120

ATTN: Pat Deenihan

**8-9s-24w Graham,KS**

**Ronald #1-8**

Start Date: 2011.08.30 @ 18:57:49

End Date: 2011.08.31 @ 02:20:04

Job Ticket #: 43571      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Culbreath Oil & Gas Company  
 1532 S. Peoria Avenue  
 Tulsa, OK 74120  
 ATTN: Pat Deenihan

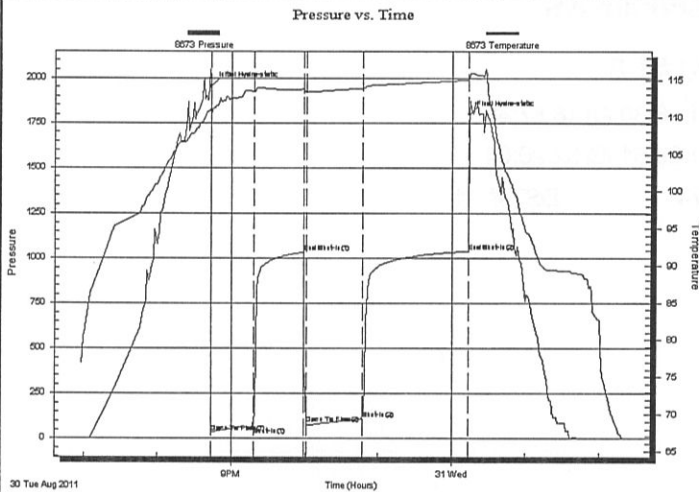
**Ronald #1-8**  
**8-9s-24w Graham,KS**  
 Job Ticket: 43571      **DST#: 1**  
 Test Start: 2011.08.30 @ 18:57:49

**GENERAL INFORMATION:**

Formation: **B-D**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:43:49  
 Time Test Ended: 02:20:04  
 Interval: **3813.00 ft (KB) To 3865.00 ft (KB) (TVD)**  
 Total Depth: 3865.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 54  
 Reference Elevations: 2452.00 ft (KB)  
 2444.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8673**      **Inside**  
 Press@RunDepth: 110.40 psig @ 3849.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2011.08.30      End Date: 2011.08.31      Last Calib.: 2011.08.31  
 Start Time: 18:57:51      End Time: 02:20:04      Time On Btmr: 2011.08.30 @ 20:43:34  
 Time Off Btmr: 2011.08.31 @ 00:13:49

**TEST COMMENT:** IFP-Weak Blow ,Built to 3-1/4"  
 ISI-Dead  
 FFP-Weak Blow ,Built to 3"  
 FSI-Dead



**PRESSURE SUMMARY**

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1956.18         | 111.15       | Initial Hydro-static |
| 1           | 35.20           | 110.45       | Open To Flow (1)     |
| 35          | 68.46           | 113.47       | Shut-In(1)           |
| 75          | 1034.41         | 113.76       | End Shut-In(1)       |
| 78          | 80.45           | 113.32       | Open To Flow (2)     |
| 124         | 110.40          | 113.87       | Shut-In(2)           |
| 210         | 1040.32         | 115.01       | End Shut-In(2)       |
| 211         | 1799.41         | 115.26       | Final Hydro-static   |

**Recovery**

| Length (ft) | Description          | Volume (bbl) |
|-------------|----------------------|--------------|
| 160.00      | VSOCMW-1%O-49%W-50%M | 2.24         |
| 5.00        | Free Oil             | 0.07         |
|             |                      |              |
|             |                      |              |
|             |                      |              |

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43571

**DST#: 1**

ATTN: Pat Deenihan

Test Start: 2011.08.30 @ 18:57:49

### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3802.00 ft | Diameter: 3.80 inches | Volume: 53.33 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.70 inches | Volume: 0.00 bbl               | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl               | Weight to Pull Loose: 65000.00 lb  |
|                           |                    |                       | <b>Total Volume: 53.33 bbl</b> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 17.00 ft           |                       |                                | String Weight: Initial 56000.00 lb |
| Depth to Top Packer:      | 3813.00 ft         |                       |                                | Final 61000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 52.00 ft           |                       |                                |                                    |
| Tool Length:              | 80.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

| Tool Description          | Length (ft)  | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub           | 1.00         |            |          | 3786.00    |                               |
| Shut In Tool              | 5.00         |            |          | 3791.00    |                               |
| Hydraulic tool            | 5.00         |            |          | 3796.00    |                               |
| Jars                      | 5.00         |            |          | 3801.00    |                               |
| Safety Joint              | 2.00         |            |          | 3803.00    |                               |
| Packer                    | 5.00         |            |          | 3808.00    | 28.00 Bottom Of Top Packer    |
| Packer                    | 5.00         |            |          | 3813.00    |                               |
| Stubb                     | 1.00         |            |          | 3814.00    |                               |
| Perforations              | 2.00         |            |          | 3816.00    |                               |
| Change Over Sub           | 1.00         |            |          | 3817.00    |                               |
| Blank Spacing             | 31.00        |            |          | 3848.00    |                               |
| Change Over Sub           | 1.00         |            |          | 3849.00    |                               |
| Recorder                  | 0.00         | 8673       | Inside   | 3849.00    |                               |
| Recorder                  | 0.00         | 6755       | Outside  | 3849.00    |                               |
| Perforations              | 13.00        |            |          | 3862.00    |                               |
| Bullnose                  | 3.00         |            |          | 3865.00    | 52.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>80.00</b> |            |          |            |                               |



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43571

DST#: 1

ATTN: Pat Deenihan

Test Start: 2011.08.30 @ 18:57:49

### 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:

49000 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description          | Volume<br>bbl |
|--------------|----------------------|---------------|
| 160.00       | VSOCMM-1%O-49%W-50%M | 2.244         |
| 5.00         | Free Oil             | 0.070         |

Total Length: 165.00 ft

Total Volume: 2.314 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

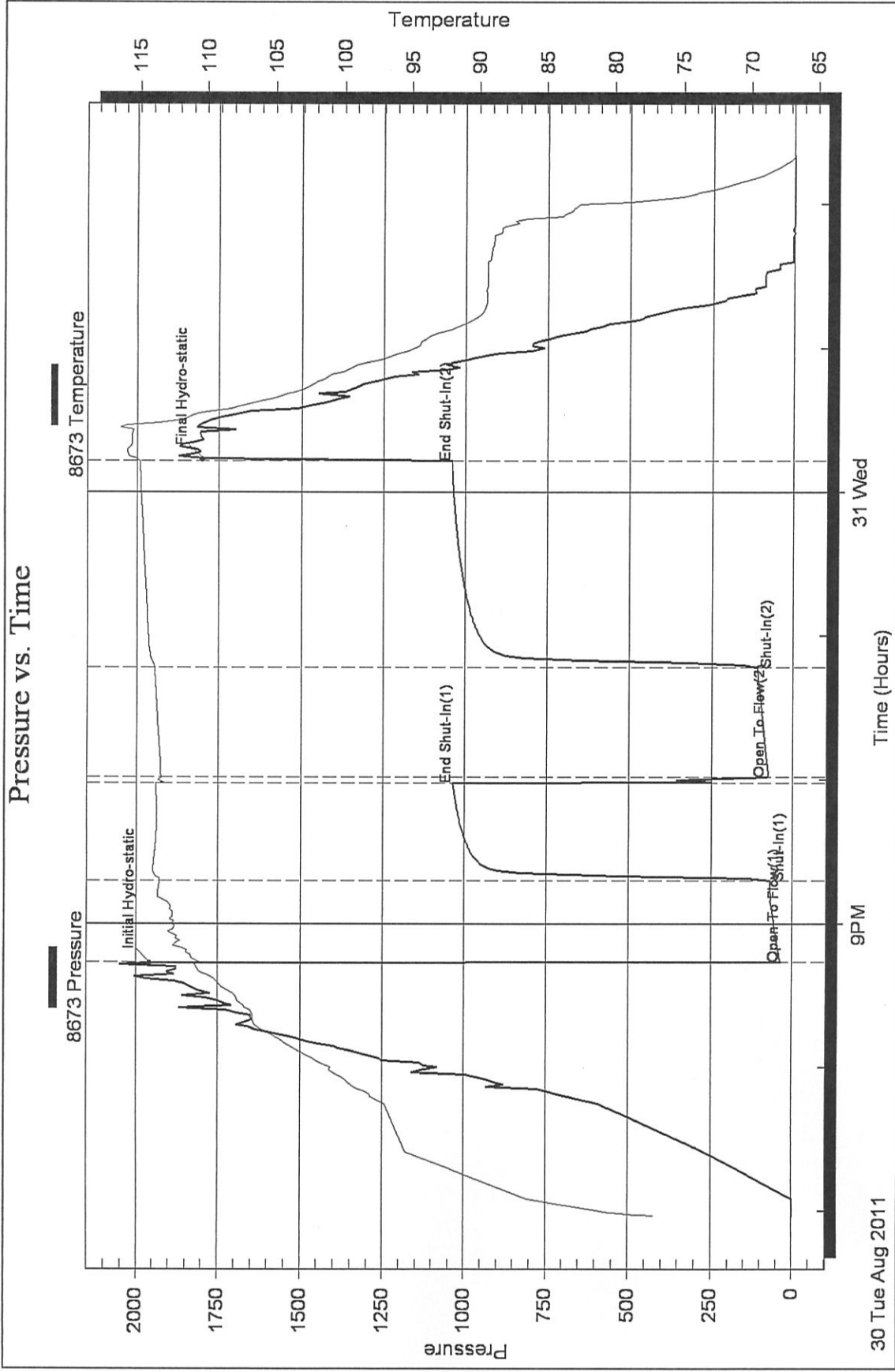
Laboratory Name:

Laboratory Location:

Recovery Comments:



### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Culbreath Oil & Gas Company**

1532 S. Peoria Avenue  
Tulsa, OK 74120

ATTN: Pat Deenihan

**8-9s-24w Graham,KS**

**Ronald #1-8**

Start Date: 2011.08.31 @ 17:50:46

End Date: 2011.09.01 @ 02:56:01

Job Ticket #: 43572                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Culbreath Oil & Gas Company

Ronald #1-8

8-9s-24w Graham,KS

DST # 2

H

2011.08.31



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK. 74120

**8-9s-24w Graham,KS**

Job Ticket: 43572

**DST#: 2**

ATTN: Pat Deenihan

Test Start: 2011.08.31 @ 17:50:46

### GENERAL INFORMATION:

Formation: **H**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 21:11:01  
 Time Test Ended: 02:56:01

Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 54

Interval: **3897.00 ft (KB) To 3950.00 ft (KB) (TVD)**  
 Total Depth: 3950.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2452.00 ft (KB)  
 2444.00 ft (CF)  
 KB to GR/CF: 8.00 ft

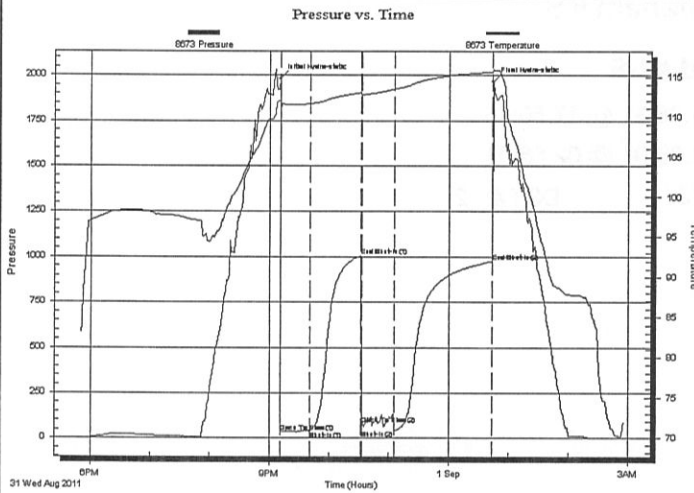
### Serial #: 8673

Inside

Press@RunDepth: 43.33 psig @ 3934.00 ft (KB)  
 Start Date: 2011.08.31 End Date: 2011.09.01  
 Start Time: 17:50:48 End Time: 02:56:01

Capacity: 8000.00 psig  
 Last Calib.: 2011.09.01  
 Time On Btmr: 2011.08.31 @ 21:10:46  
 Time Off Btmr: 2011.09.01 @ 00:44:31

TEST COMMENT: IFP-Weak Blow, Built to 3"  
 ISI-Dead  
 FFP-Weak, Built to 1-1/4"  
 FSI-Dead



### PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1985.56         | 112.05       | Initial Hydro-static |
| 1           | 35.17           | 110.77       | Open To Flow (1)     |
| 30          | 39.52           | 111.63       | Shut-In(1)           |
| 82          | 1005.28         | 113.05       | End Shut-In(1)       |
| 82          | 74.98           | 112.64       | Open To Flow (2)     |
| 115         | 43.33           | 113.47       | Shut-In(2)           |
| 214         | 972.78          | 115.64       | End Shut-In(2)       |
| 214         | 1969.91         | 115.97       | Final Hydro-static   |

### Recovery

| Length (ft) | Description    | Volume (bbl) |
|-------------|----------------|--------------|
| 45.00       | VSOCM-2%O-98%M | 0.63         |
|             |                |              |
|             |                |              |
|             |                |              |
|             |                |              |

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43572

**DST#: 2**

ATTN: Pat Deenihan

Test Start: 2011.08.31 @ 17:50:46

### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3897.00 ft | Diameter: 3.80 inches | Volume: 54.66 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.70 inches | Volume: 0.00 bbl               | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl               | Weight to Pull Loose: 60000.00 lb  |
|                           |                    |                       | <u>Total Volume: 54.66 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 23.00 ft           |                       |                                | String Weight: Initial 57000.00 lb |
| Depth to Top Packer:      | 3897.00 ft         |                       |                                | Final 57000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 53.00 ft           |                       |                                |                                    |
| Tool Length:              | 76.00 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        |            |          | 3875.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3880.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3885.00    |                               |
| Safety Joint     | 2.00        |            |          | 3887.00    |                               |
| Packer           | 5.00        |            |          | 3892.00    | 23.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3897.00    |                               |
| Stubb            | 1.00        |            |          | 3898.00    |                               |
| Perforations     | 3.00        |            |          | 3901.00    |                               |
| Change Over Sub  | 1.00        |            |          | 3902.00    |                               |
| Blank Spacing    | 31.00       |            |          | 3933.00    |                               |
| Change Over Sub  | 1.00        |            |          | 3934.00    |                               |
| Recorder         | 0.00        | 8673       | Inside   | 3934.00    |                               |
| Recorder         | 0.00        | 6755       | Outside  | 3934.00    |                               |
| Perforations     | 13.00       |            |          | 3947.00    |                               |
| Bullnose         | 3.00        |            |          | 3950.00    | 53.00 Bottom Packers & Anchor |

**Total Tool Length: 76.00**



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Culbreath Oil & Gas Company  
1532 S. Peoria Avenue  
Tulsa, OK 74120  
ATTN: Pat Deenihan

**Ronald #1-8**  
**8-9s-24w Graham,KS**  
Job Ticket: 43572      **DST#: 2**  
Test Start: 2011.08.31 @ 17:50:46

## Mud and Cushion Information

|                                  |                            |                 |         |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API:        | deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 67.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 6.78 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                 |         |
| Salinity: 1100.00 ppm            |                            |                 |         |
| Filter Cake: inches              |                            |                 |         |

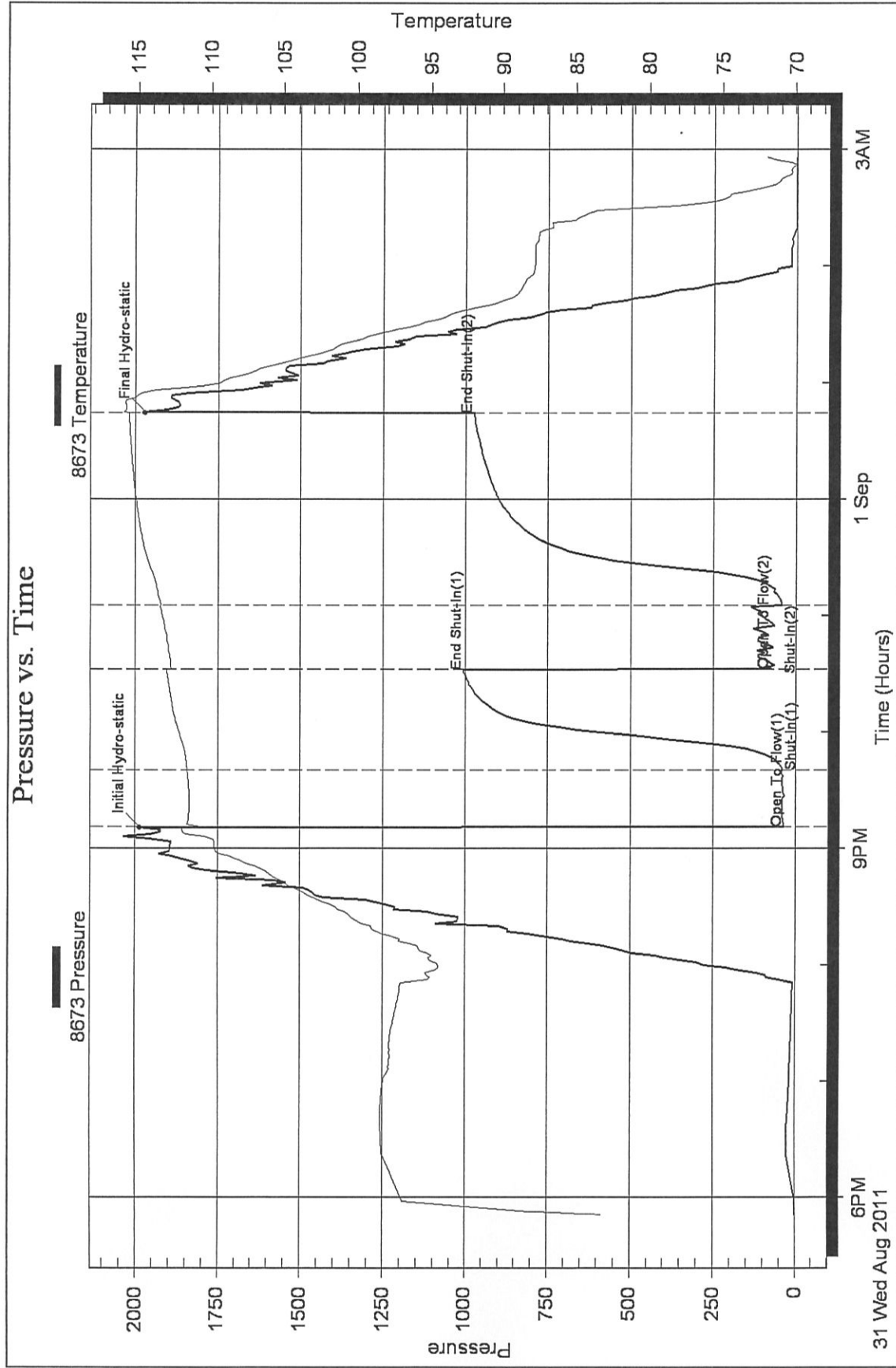
## Recovery Information

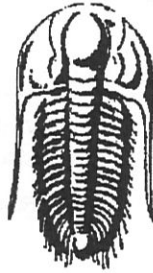
Recovery Table

| Length ft | Description    | Volume bbl |
|-----------|----------------|------------|
| 45.00     | VSOCM-2%O-98%M | 0.631      |

Total Length: 45.00 ft      Total Volume: 0.631 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Culbreath Oil & Gas Company**

1532 S. Peoria Avenue  
Tulsa, OK 74120

ATTN: Pat Deenihan

**8-9s-24w Graham,KS**

**Ronald #1-8**

Start Date: 2011.09.01 @ 12:04:23

End Date: 2011.09.01 @ 19:39:38

Job Ticket #: 43573                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

ATTN: Pat Deenihan

Job Ticket: 43573

**DST#: 3**

Test Start: 2011.09.01 @ 12:04:23

### GENERAL INFORMATION:

Formation: **I-J**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 13:44:38  
 Time Test Ended: 19:39:38

Test Type: **Conventional Bottom Hole**  
 Tester: **Jason McLemore**  
 Unit No: **54**

Interval: **3948.00 ft (KB) To 3978.00 ft (KB) (TVD)**  
 Total Depth: **3978.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2452.00 ft (KB)**  
**2444.00 ft (CF)**  
 KB to GR/CF: **8.00 ft**

### Serial #: 8673

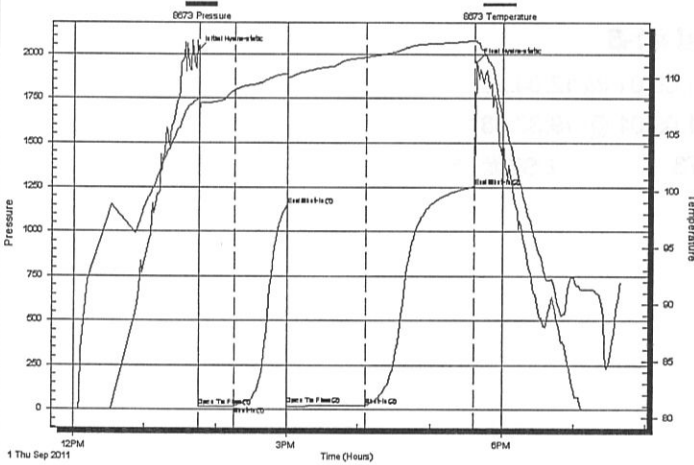
**Inside**

Press@RunDepth: **24.57 psig @ 3952.00 ft (KB)**  
 Start Date: **2011.09.01** End Date: **2011.09.01**  
 Start Time: **12:04:25** End Time: **19:39:38**

Capacity: **8000.00 psig**  
 Last Calib.: **2011.09.01**  
 Time On Btm: **2011.09.01 @ 13:44:08**  
 Time Off Btm: **2011.09.01 @ 17:37:23**

TEST COMMENT: **I-FP-Weak Blow ,Built to 2-1/8"**  
**ISI-Dead**  
**FFP-Weak Blow Started at 1-1/4", Built to 4-1/2"**  
**FSI-Dead**

Pressure vs. Time



### PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2021.81         | 108.18       | Initial Hydro-static |
| 1           | 16.72           | 106.88       | Open To Flow (1)     |
| 31          | 17.62           | 108.92       | Shut-In(1)           |
| 76          | 1148.49         | 110.35       | End Shut-In(1)       |
| 77          | 28.06           | 109.84       | Open To Flow (2)     |
| 143         | 24.57           | 111.81       | Shut-In(2)           |
| 232         | 1255.80         | 113.28       | End Shut-In(2)       |
| 234         | 1954.67         | 113.25       | Final Hydro-static   |

### Recovery

| Length (ft) | Description      | Volume (bbl) |
|-------------|------------------|--------------|
| 20.00       | MCO-45%O-55%M    | 0.28         |
| 5.00        | Free Oil         | 0.07         |
| 0.00        | 120' Gas In Pipe | 0.00         |
|             |                  |              |
|             |                  |              |

### Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43573

**DST#: 3**

ATTN: Pat Deenihan

Test Start: 2011.09.01 @ 12:04:23

**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3929.00 ft | Diameter: 3.80 inches | Volume: 55.11 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.70 inches | Volume: 0.00 bbl               | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl               | Weight to Pull Loose: 60000.00 lb  |
|                           |                    |                       | <u>Total Volume: 55.11 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 4.00 ft            |                       |                                | String Weight: Initial 58000.00 lb |
| Depth to Top Packer:      | 3948.00 ft         |                       |                                | Final 59000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 30.00 ft           |                       |                                |                                    |
| Tool Length:              | 53.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |
| Tool Comments:            |                    |                       |                                |                                    |

| <b>Tool Description</b> | <b>Length (ft)</b> | <b>Serial No.</b> | <b>Position</b> | <b>Depth (ft)</b> | <b>Accum. Lengths</b> |
|-------------------------|--------------------|-------------------|-----------------|-------------------|-----------------------|
|-------------------------|--------------------|-------------------|-----------------|-------------------|-----------------------|

| <b>Tool Description</b> | <b>Length (ft)</b> | <b>Serial No.</b> | <b>Position</b> | <b>Depth (ft)</b> | <b>Accum. Lengths</b>         |
|-------------------------|--------------------|-------------------|-----------------|-------------------|-------------------------------|
| Change Over Sub         | 1.00               |                   |                 | 3926.00           |                               |
| Shut In Tool            | 5.00               |                   |                 | 3931.00           |                               |
| Hydraulic tool          | 5.00               |                   |                 | 3936.00           |                               |
| Safety Joint            | 2.00               |                   |                 | 3938.00           |                               |
| Packer                  | 5.00               |                   |                 | 3943.00           | 23.00 Bottom Of Top Packer    |
| Packer                  | 5.00               |                   |                 | 3948.00           |                               |
| Stubb                   | 1.00               |                   |                 | 3949.00           |                               |
| Perforations            | 3.00               |                   |                 | 3952.00           |                               |
| Recorder                | 0.00               | 8673              | Inside          | 3952.00           |                               |
| Recorder                | 0.00               | 6755              | Outside         | 3952.00           |                               |
| Perforations            | 23.00              |                   |                 | 3975.00           |                               |
| Bullnose                | 3.00               |                   |                 | 3978.00           | 30.00 Bottom Packers & Anchor |

**Total Tool Length: 53.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43573

**DST#: 3**

ATTN: Pat Deenihan

Test Start: 2011.09.01 @ 12:04:23

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description      | Volume<br>bbl |
|--------------|------------------|---------------|
| 20.00        | MCO-45%O-55%M    | 0.281         |
| 5.00         | Free Oil         | 0.070         |
| 0.00         | 120' Gas In Pipe | 0.000         |

Total Length: 25.00 ft

Total Volume: 0.351 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

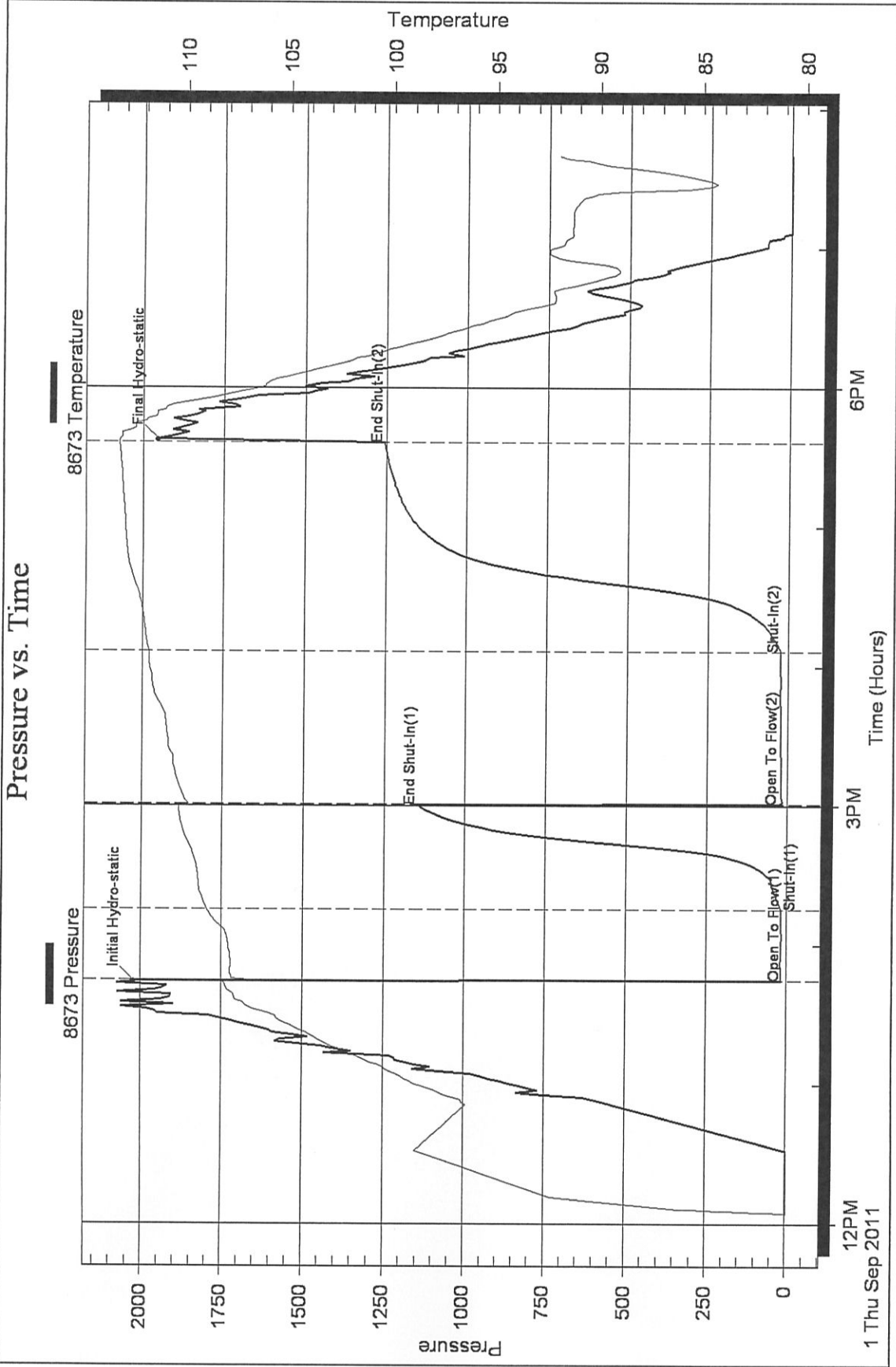
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Culbreath Oil & Gas Company**

1532 S. Peoria Avenue  
Tulsa, OK 74120

ATTN: Pat Deenihan

**8-9s-24w Graham,KS**

**Ronald #1-8**

Start Date: 2011.09.02 @ 03:37:56

End Date: 2011.09.02 @ 12:07:41

Job Ticket #: 43574                      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43574

**DST#: 4**

ATTN: Pat Deenihan

Test Start: 2011.09.02 @ 03:37:56

### GENERAL INFORMATION:

Formation: **K**  
 Deviated: **No** Whipstock: **ft (KB)**  
 Time Tool Opened: 06:11:11  
 Time Test Ended: 12:07:41

Test Type: **Conventional Bottom Hole**  
 Tester: **Jason McLemore**  
 Unit No: **54**

Interval: **3978.00 ft (KB) To 4000.00 ft (KB) (TVD)**  
 Total Depth: **4000.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2452.00 ft (KB)**  
**2444.00 ft (CF)**  
 KB to GR/CF: **8.00 ft**

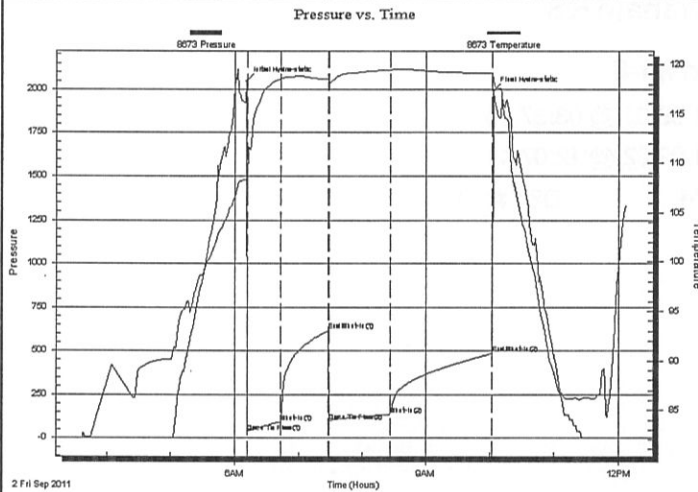
### Serial #: 8673

**Inside**

Press@RunDepth: **135.53 psig @ 3992.00 ft (KB)**  
 Start Date: **2011.09.02** End Date: **2011.09.02**  
 Start Time: **03:37:58** End Time: **12:07:41**

Capacity: **8000.00 psig**  
 Last Calib.: **2011.09.02**  
 Time On Btm: **2011.09.02 @ 06:10:56**  
 Time Off Btm: **2011.09.02 @ 10:02:56**

TEST COMMENT: IFF-Good Blow ,BOB in 8 Min.  
 ISI-Dead  
 FFP-Fair Blow ,Built to 6"  
 FSI-Dead



### PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2047.11         | 108.26       | Initial Hydro-static |
| 1           | 34.42           | 106.85       | Open To Flow (1)     |
| 32          | 91.50           | 118.57       | Shut-In(1)           |
| 77          | 614.16          | 118.53       | End Shut-In(1)       |
| 78          | 96.08           | 118.26       | Open To Flow (2)     |
| 136         | 135.53          | 119.46       | Shut-In(2)           |
| 231         | 486.48          | 119.12       | End Shut-In(2)       |
| 232         | 1993.92         | 118.55       | Final Hydro-static   |

### Recovery

| Length (ft) | Description          | Volume (bbl) |
|-------------|----------------------|--------------|
| 60.00       | VSOCMMV-1%O-94%W-5%M | 0.84         |
| 120.00      | OCMMV-15%O-20%W-65%M | 1.68         |
| 75.00       | MMCO-55%O-10%W-35%M  | 1.05         |
| 0.00        | 120' Gas In Pipe     | 0.00         |
|             |                      |              |
|             |                      |              |

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43574

**DST#: 4**

ATTN: Pat Deenihan

Test Start: 2011.09.02 @ 03:37:56

**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3968.00 ft | Diameter: 3.80 inches | Volume: 55.66 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.70 inches | Volume: 0.00 bbl               | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl               | Weight to Pull Loose: 62000.00 lb  |
|                           |                    |                       | <u>Total Volume: 55.66 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 3.00 ft            |                       |                                | String Weight: Initial 58000.00 lb |
| Depth to Top Packer:      | 3988.00 ft         |                       |                                | Final 60000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 22.00 ft           |                       |                                |                                    |
| Tool Length:              | 45.00 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        |            |          | 3966.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3971.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3976.00    |                               |
| Safety Joint     | 2.00        |            |          | 3978.00    |                               |
| Packer           | 5.00        |            |          | 3983.00    | 23.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3988.00    |                               |
| Stubb            | 1.00        |            |          | 3989.00    |                               |
| Perforations     | 3.00        |            |          | 3992.00    |                               |
| Recorder         | 0.00        | 8673       | Inside   | 3992.00    |                               |
| Recorder         | 0.00        | 6755       | Outside  | 3992.00    |                               |
| Perforations     | 15.00       |            |          | 4007.00    |                               |
| Bullnose         | 3.00        |            |          | 4010.00    | 22.00 Bottom Packers & Anchor |

**Total Tool Length: 45.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Culbreath Oil & Gas Company

**Ronald #1-8**

1532 S. Peoria Avenue  
Tulsa, OK 74120

**8-9s-24w Graham,KS**

Job Ticket: 43574

**DST#: 4**

ATTN: Pat Deenihan

Test Start: 2011.09.02 @ 03:37:56

### 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:

31500 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

dbl

Water Loss: 6.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description          | Volume<br>dbl |
|--------------|----------------------|---------------|
| 60.00        | VSOCMMV-1%O-94%W-5%M | 0.842         |
| 120.00       | OCMMV-15%O-20%W-65%M | 1.683         |
| 75.00        | MMCO-55%O-10%W-35%M  | 1.052         |
| 0.00         | 120' Gas In Pipe     | 0.000         |

Total Length: 255.00 ft

Total Volume: 3.577 dbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

