



## DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc**

PO Box 352  
Russell KS 67665

ATTN: John O Farmer IV

**2-9s-22w Graham**

**Buss Unit #1**

Start Date: 2006.02.04 @ 19:43:30

End Date: 2006.02.05 @ 02:57:59

Job Ticket #: 22699      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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

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PO Box 352  
Russell KS 67665

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Job Ticket: 22699

**DST#: 1**

Test Start: 2006.02.04 @ 19:43:30

### GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 21:15:29

Time Test Ended: 02:57:59

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3824.00 ft (KB) To 3853.00 ft (KB) (TVD)**

Total Depth: **3853.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2247.00 ft (KB)**

**2242.00 ft (CF)**

KB to GR/CF: **5.00 ft**

**Serial #: 8167**

**Inside**

Press@RunDepth: **153.22 psig @ 3834.01 ft (KB)**

Start Date: **2006.02.04**

End Date: **2006.02.05**

Capacity: **7000.00 psig**

Last Calib.: **2006.02.05**

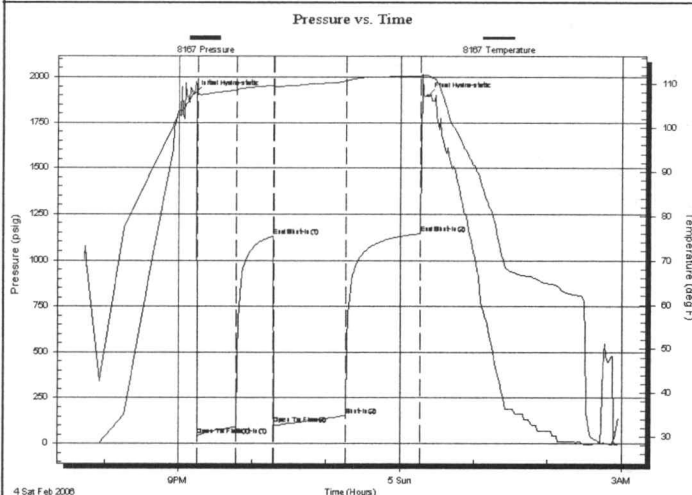
Start Time: **19:43:30**

End Time: **02:57:59**

Time On Btm: **2006.02.04 @ 21:12:29**

Time Off Btm: **2006.02.05 @ 00:21:59**

**TEST COMMENT:** IFF-w k to a gd bl 1/2" to 9" bl  
FFP-w k bl thru-out 1/4" to 1 1/2" bl  
Times 30-30-60-60  
no bl on shut-in



### PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1906.32         | 107.98       | Initial Hydro-static |
| 3           | 44.30           | 107.51       | Open To Flow (1)     |
| 34          | 90.16           | 108.57       | Shut-In(1)           |
| 64          | 1129.81         | 109.66       | End Shut-In(1)       |
| 65          | 103.83          | 109.42       | Open To Flow (2)     |
| 123         | 153.22          | 110.65       | Shut-In(2)           |
| 184         | 1143.82         | 111.91       | End Shut-In(2)       |
| 190         | 1896.55         | 111.99       | Final Hydro-static   |

### Recovery

| Length (ft) | Description           | Volume (bbl) |
|-------------|-----------------------|--------------|
| 124.00      | HO&GCM 10%G 40%O 50%M | 0.65         |
| 62.00       | HO&GCM 10%G 30%O 60%M | 0.87         |
| 190.00      | CO                    | 2.67         |
|             |                       |              |
|             |                       |              |
|             |                       |              |

### Gas Rates

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



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**TESTING, INC.**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer Inc

PO Box 352  
Russell KS 67665

ATTN: John O Farmer IV

Buss Unit #1

**2-9s-22w Graham**

Job Ticket: 22699

DST#: 1

Test Start: 2006.02.04 @ 19:43:30

### Tool Information

|                           |                    |                       |                   |                        |             |
|---------------------------|--------------------|-----------------------|-------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3700.00 ft | Diameter: 3.80 inches | Volume: 51.90 bbl | Tool Weight:           | 2200.00 lb  |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl  | Weight set on Packer:  | 25000.00 lb |
| Drill Collar:             | Length: 120.00 ft  | Diameter: 2.25 inches | Volume: 0.59 bbl  | Weight to Pull Loose:  | 60000.00 lb |
|                           |                    | Total Volume:         | 52.49 bbl         | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 17.00 ft           |                       |                   | String Weight: Initial | 46000.00 lb |
| Depth to Top Packer:      | 3824.00 ft         |                       |                   | Final                  | 50000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                   |                        |             |
| Interval between Packers: | 83.03 ft           |                       |                   |                        |             |
| Tool Length:              | 104.03 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        |            |          | 3804.00    |                                    |
| Shut In Tool       | 5.00        |            |          | 3809.00    |                                    |
| Hydraulic tool     | 5.00        |            |          | 3814.00    |                                    |
| Packer             | 5.00        |            |          | 3819.00    | 21.00 Bottom Of Top Packer         |
| Packer             | 5.00        |            |          | 3824.00    |                                    |
| Stubb              | 1.00        |            |          | 3825.00    |                                    |
| Perforations       | 9.00        |            |          | 3834.00    |                                    |
| Recorder           | 0.01        | 8167       | Inside   | 3834.01    |                                    |
| Perforations       | 3.00        |            |          | 3837.01    |                                    |
| Recorder           | 0.01        | 13534      | Outside  | 3837.02    |                                    |
| Perforations       | 12.00       |            |          | 3849.02    |                                    |
| Blank Off Sub      | 1.00        |            |          | 3850.02    |                                    |
| Blank Spacing      | 3.00        |            |          | 3853.02    | 83.03 Tool Interval                |
| Packer             | 5.00        |            |          | 3858.02    |                                    |
| Stubb              | 1.00        |            |          | 3859.02    |                                    |
| Perforations       | 12.00       |            |          | 3871.02    |                                    |
| Recorder           | 0.01        | 13547      | Below    | 3871.03    |                                    |
| Blank Spacing      | 33.00       |            |          | 3904.03    |                                    |
| Bullnose           | 3.00        |            |          | 3907.03    | 1000103.03 Bottom Packers & Anchor |
| Total Tool Length: |             | 104.03     |          |            |                                    |



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## DRILL STEM TEST REPORT

### FLUID SUMMARY

John O Farmer Inc

**Buss Unit #1**

PO Box 352  
Russell KS 67665

**2-9s-22w Graham**

Job Ticket: 22699

**DST#: 1**

ATTN: John O Farmer IV

Test Start: 2006.02.04 @ 19:43:30

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

21 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description           | Volume<br>bbl |
|--------------|-----------------------|---------------|
| 124.00       | HO&GCM 10%G 40%O 50%M | 0.646         |
| 62.00        | HO&GCM 10%G 30%O 60%M | 0.870         |
| 190.00       | CO                    | 2.665         |

Total Length: 376.00 ft

Total Volume: 4.181 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8167

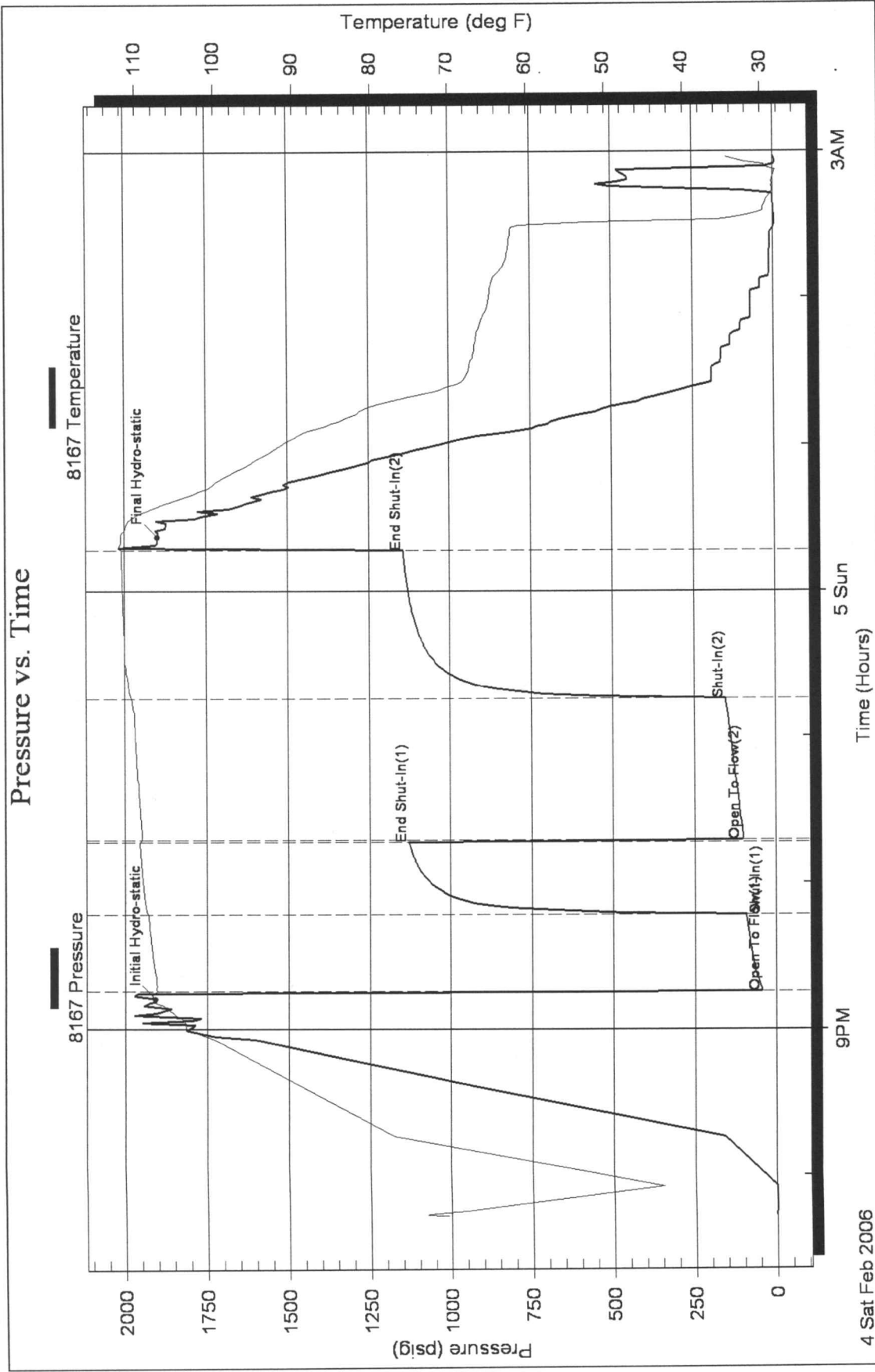
Inside

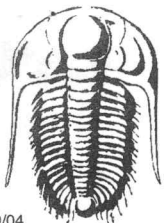
John O Farmer Inc

2-9s-22w Graham

DST Test Number: 1

## Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

8389

No 22699

9/04

## Test Ticket

Well Name & No. Buss Unit #1 Test No. 1 Date 2-4-06  
 Company John O. Farmer Inc Zone Tested Arbuckle  
 Address P.O. Box 352 Russell, KS 67665 Elevation 2242 KB 2242 GL  
 Co. Rep / Geo. Brad Hutchinson Cont. WW rig 2 Est. Ft. of Pay — Por. — %  
 Location: Sec. 2 Twp. 9S Rge. 22W Co. Graham State Ko  
 No. of Copies Reg Distribution Sheet (Y, N) — Turnkey (Y, N) — Evaluation (Y, N) —

Interval Tested 3824-3853 Initial Str Wt./Lbs. 46000 Unseated Str Wt./Lbs. 50000  
 Anchor Length 29 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000  
 Top Packer Depth 3824-3819 Tool Weight 2200  
 Bottom Packer Depth 3853 Hole Size 7 7/8" — Rubber Size 6 3/4" —  
 Total Depth 3902 Wt. Pipe Run — Drill Collar Run 120  
 Mud Wt. 9.5 LCM — Vis. 52 WL 7.4 Drill Pipe Size 4 1/2 XH Ft. Run 3700  
 Blow Description IFP - Weak to a Good Blow 1/2" to 9" Blow  
FFP - Weak Blow Thru-out 1/4" to 1 1/2" Blow  
No Blow on shut-in

Recovery - Total Feet 376 GIP — Ft. in DC 120 Ft. in DP 256  
 Rec. 190 Feet of CO %gas — %oil — %water — %mud —  
 Rec. 62 Feet of H0+6CM 10 %gas 40 %oil — %water 50 %mud —  
 Rec. 124 Feet of H0+6CM 10 %gas 30 %oil — %water 60 %mud —  
 Rec. — Feet of — %gas — %oil — %water — %mud —  
 Rec. — Feet of — %gas — %oil — %water — %mud —  
 BHT 112 °F Gravity 21 °API D @ 60 °F Corrected Gravity 21 °API  
 RW — @ — °F Chlorides — ppm Recovery — Chlorides 3800 ppm System

|                                  |      |        |      |     |                 |       |              |   |      |
|----------------------------------|------|--------|------|-----|-----------------|-------|--------------|---|------|
| (A) Initial Hydrostatic Mud      | AK-1 | Alpine | 1906 | PSI | Recorder No.    | 8167  | Test         | ✓ | 1000 |
| (B) First Initial Flow Pressure  |      |        | 44   | PSI | (depth)         | 3834  | Jars         |   |      |
| (C) First Final Flow Pressure    |      |        | 90   | PSI | Recorder No.    | 13534 | Safety Jt.   |   |      |
| (D) Initial Shut-In Pressure     |      |        | 1129 | PSI | (depth)         | 3837  | Circ Sub     |   |      |
| (E) Second Initial Flow Pressure |      |        | 103  | PSI | Recorder No.    | 13547 | Sampler      |   |      |
| (F) Second Final Flow Pressure   |      |        | 153  | PSI | (depth)         | 3866  | Straddle     | ✓ | 250  |
| (G) Final Shut-In Pressure       |      |        | 1143 | PSI | Initial Opening | 30    | Ext. Packer  | ✓ | 150  |
| (Q) Final Hydrostatic Mud        |      |        | 1896 | PSI | Initial Shut-In | 30    | Shale Packer |   |      |

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Approved By Brad Hutchinson

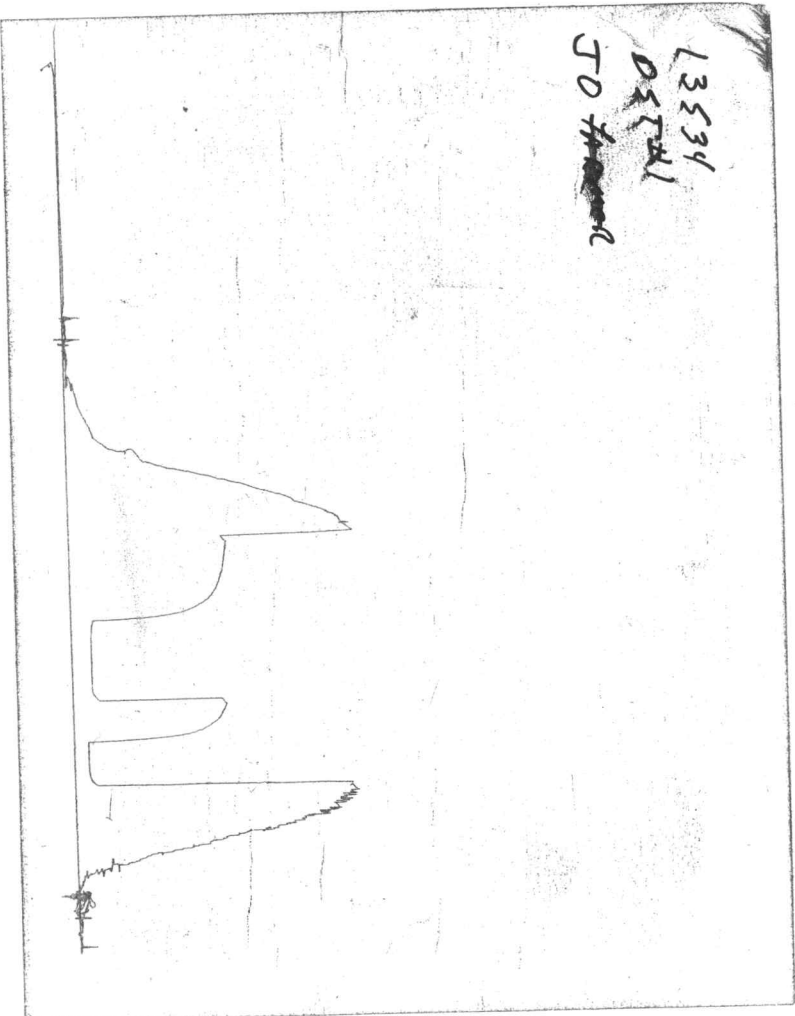
Our Representative Ray Schwager Thank you

Final Flow 60  
 Final Shut-In 60  
 T-On Location 1900  
 T-Started 1943  
 T-Open 2115  
 T-Pulled 0015  
 T-Out 0257

Test ✓ 1000  
 Jars —  
 Safety Jt. —  
 Circ Sub —  
 Sampler —  
 Straddle ✓ 250  
 Ext. Packer ✓ 150  
 Shale Packer —  
 Ruined Packer —  
 Mileage ✓ 106 RT 106  
 Sub Total: 1506  
 Std. By —  
 Other —  
 Total: —

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.



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This is a photocopy of the actual AK-1 recorder chart.

