

## DRILL STEM TEST REPORT

Prepared For: **RDH**

PO Box 716  
El Reno OK 73036

ATTN: Tom Farrell

**9-35s-16w Comanche**

**Diane #1-9**

Start Date: 2005.06.10 @ 07:49:07

End Date: 2005.06.10 @ 21:35:37

Job Ticket #: 22839      DST #: 1

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



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

## DRILL STEM TEST REPORT

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ATTN: Tom Farrell

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Job Ticket: 22839

**DST#: 1**

Test Start: 2005.06.10 @ 07:49:07

### GENERAL INFORMATION:

Formation: **Mississippi**

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

Time Tool Opened: 12:36:22

Time Test Ended: 21:35:37

Test Type:

Tester: **Michael**

Unit No: **15**

Interval: **5281.00 ft (KB) To 5350.00 ft (KB) (TVD)**

Total Depth: **5350.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1870.00 ft (KB)**

**1855.00 ft (CF)**

KB to GR/CF: **15.00 ft**

**Serial #: 8166**

**Inside**

Press@RunDepth: **68.09 psig @ 5282.00 ft (KB)**

Start Date: **2005.06.10**

End Date:

**2005.06.10**

Capacity: **7000.00 psig**

Last Calib.: **2005.06.10**

Start Time: **07:49:08**

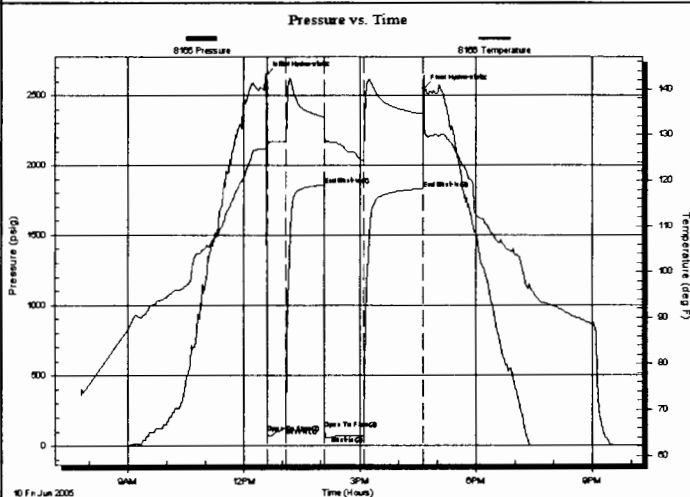
End Time:

**21:35:37**

Time On Btm: **2005.06.10 @ 12:35:07**

Time Off Btm: **2005.06.10 @ 16:39:22**

TEST COMMENT: **IF-Bottom of the bucket in 30s**  
**IS- No blow**  
**FF-Bottom of b 30s Gas to surface 2m**



### PRESSURE SUMMARY

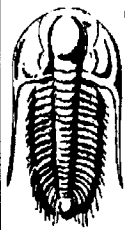
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2647.62         | 127.15       | Initial Hydro-static |
| 2           | 91.83           | 127.70       | Open To Flow (1)     |
| 31          | 129.89          | 128.50       | Shut-In (1)          |
| 90          | 1857.68         | 133.88       | End Shut-In (1)      |
| 91          | 119.96          | 130.14       | Open To Flow (2)     |
| 151         | 68.09           | 124.40       | Shut-In (2)          |
| 244         | 1831.97         | 134.58       | End Shut-In (2)      |
| 245         | 2550.79         | 143.14       | Final Hydro-static   |

### Recovery

| Length (ft) | Description  | Volume (bbl) |
|-------------|--------------|--------------|
| 65.00       | Drilling mud | 0.32         |
|             |              |              |
|             |              |              |
|             |              |              |
|             |              |              |
|             |              |              |

### Gas Rates

|                | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.25           | 13.00           | 43.47            |
| Last Gas Rate  | 0.25           | 12.60           | 42.83            |
| Max. Gas Rate  | 0.25           | 13.00           | 43.47            |



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## DRILL STEM TEST REPORT

TOOL DIAGRAM

RDH

Diane #1-9

PO Box 716  
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9-35s-16w Comanche

Job Ticket: 22839

DST#: 1

ATTN: Tom Farrell

Test Start: 2005.06.10 @ 07:49:07

### Tool Information

|                           |                    |                       |                         |                                    |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------------------|
| Drill Pipe:               | Length: 4745.00 ft | Diameter: 3.80 inches | Volume: 66.56 bbl       | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl        | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 527.00 ft  | Diameter: 2.25 inches | Volume: 2.59 bbl        | Weight to Pull Loose: 100000.0 lb  |
|                           |                    |                       | Total Volume: 69.15 bbl | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 20.00 ft           |                       |                         | String Weight: Initial 80000.00 lb |
| Depth to Top Packer:      | 5281.00 ft         |                       |                         | Final 81000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                         |                                    |
| Interval between Packers: | 69.00 ft           |                       |                         |                                    |
| Tool Length:              | 98.00 ft           |                       |                         |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                         |                                    |
| Tool Comments:            |                    |                       |                         |                                    |

| Tool Description   | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|--------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub    | 1.00        |            |          | 5253.00    |                               |
| Shut In Tool       | 5.00        |            |          | 5258.00    |                               |
| Hydraulic tool     | 5.00        |            |          | 5263.00    |                               |
| Jars               | 5.00        |            |          | 5268.00    |                               |
| Safety Joint       | 3.00        |            |          | 5271.00    |                               |
| Packer             | 5.00        |            |          | 5276.00    | 29.00 Bottom Of Top Packer    |
| Packer             | 5.00        |            |          | 5281.00    |                               |
| Blank Spacing      | 1.00        |            |          | 5282.00    |                               |
| Recorder           | 0.00        | 8166       | Inside   | 5282.00    |                               |
| Perforations       | 5.00        |            |          | 5287.00    |                               |
| Change Over Sub    | 1.00        |            |          | 5288.00    |                               |
| Drill Pipe         | 32.00       |            |          | 5320.00    |                               |
| Change Over Sub    | 1.00        |            |          | 5321.00    |                               |
| Perforations       | 26.00       |            |          | 5347.00    |                               |
| Recorder           | 0.00        | 11020      | Outside  | 5347.00    |                               |
| Bullnose           | 3.00        |            |          | 5350.00    | 69.00 Bottom Packers & Anchor |
| Total Tool Length: |             | 98.00      |          |            |                               |



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## DRILL STEM TEST REPORT

### FLUID SUMMARY

RDH

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**9-35s-16w Comanche**

Job Ticket: 22839

**DST#: 1**

ATTN: Tom Farrell

Test Start: 2005.06.10 @ 07:49:07

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description  | Volume<br>bbl |
|--------------|--------------|---------------|
| 65.00        | Drilling mud | 0.320         |

Total Length: 65.00 ft

Total Volume: 0.320 bbl

Num Fluid Samples: 0

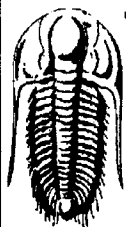
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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## DRILL STEM TEST REPORT

**GAS RATES**

RDH

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**DST#: 1**

ATTN: Tom Farrell

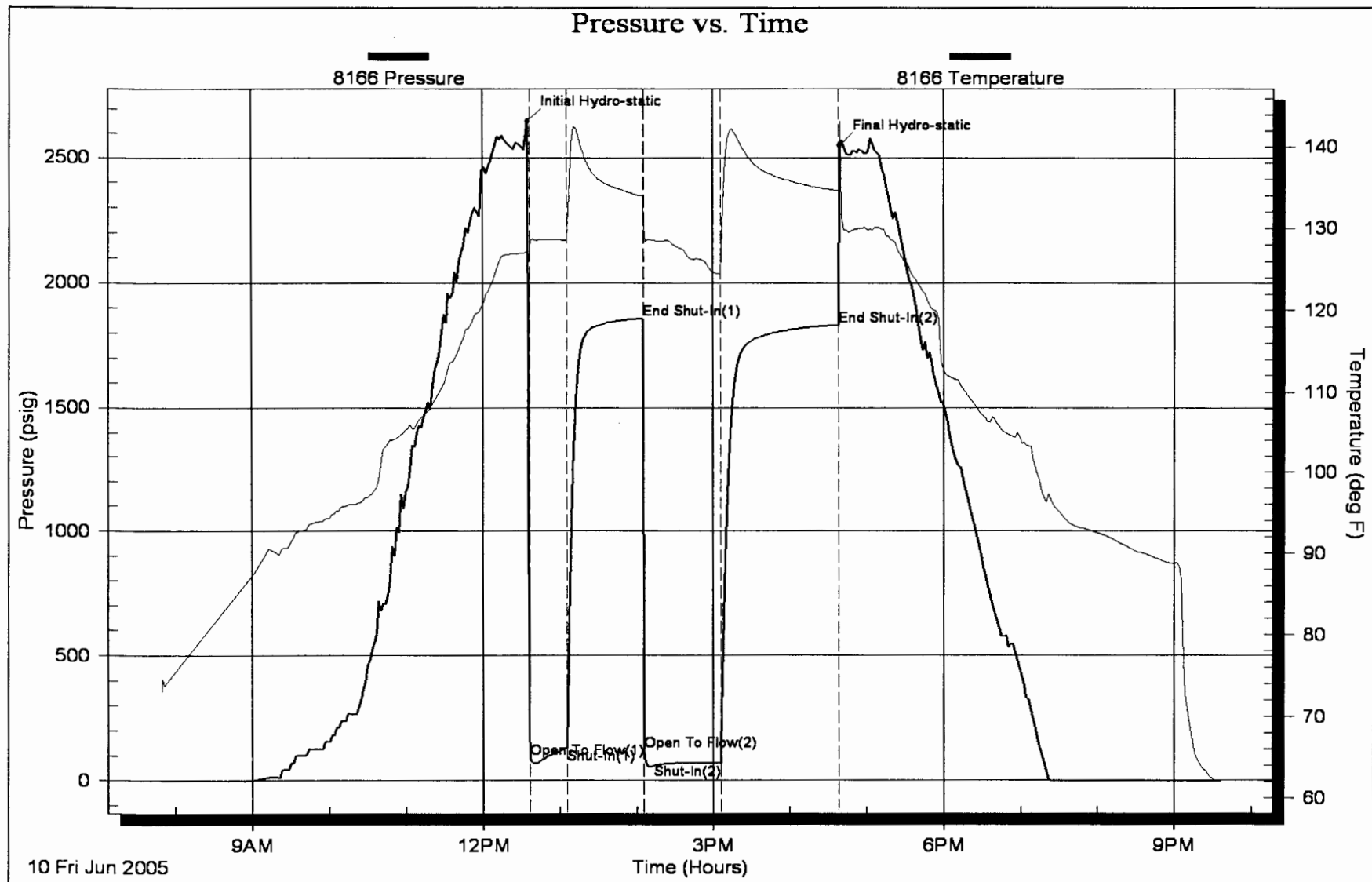
Test Start: 2005.06.10 @ 07:49:07

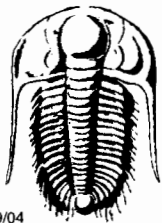
### Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

| Flow Period | Elapsed Time | Choke<br>(mm) | Pressure<br>(kPaa) | Gas Rate<br>(m <sup>3</sup> /d) |
|-------------|--------------|---------------|--------------------|---------------------------------|
| 1           | 5            | 0.25          | 13.00              | 43.47                           |
| 2           | 10           | 0.25          | 13.00              | 43.47                           |
| 3           | 20           | 0.25          | 13.00              | 43.47                           |
| 4           | 60           | 0.25          | 12.60              | 42.83                           |





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

7574

No 22839

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## Test Ticket

Well Name & No. Diane # 1-9 Test No. 1 Date 6-10-05  
 Company RDH Zone Tested Mississippi  
 Address PO Box 716 El Reno OK 73036 Elevation 1870 KB 1855 GL  
 Co. Rep / Geo. Tom Farrell Cont. Pioneer 48 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 9 Twp. 35s Rge. 16w Co. Comanche State KS  
 No. of Copies 15 Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 5281 - 5350 Initial Str Wt./Lbs. 80,000 Unseated Str Wt./Lbs. 80,000  
 Anchor Length 69 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 100,000  
 Top Packer Depth 5276 Tool Weight 2000  
 Bottom Packer Depth 5281 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 5350 Wt. Pipe Run 0 Drill Collar Run 527  
 Mud Wt. 9.2 LCM \_\_\_\_\_ Vis. 49 WL 10.8 Drill Pipe Size 4 1/2 Ft. Run 4745  
 Blow Description PF - Bottom of bucket 30sec.  
ISI - No Blow Back  
FF - Gas to Surface 1/4 - 13psi - 43,500 gpd  
FS - No Blow back

Recovery - Total Feet 65 GIP Surface Ft. in DC \_\_\_\_\_ Ft. in DP \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of Drilling Mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 100 %mud  
 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  
 BHT 143- °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm System

|                                  |                 |                            |                                |
|----------------------------------|-----------------|----------------------------|--------------------------------|
| AK-1                             | Alpine          | Recorder No.               | Test                           |
| (A) Initial Hydrostatic Mud      | <u>2648</u> PSI | <u>8166</u>                | <u>1150</u>                    |
| (B) First Initial Flow Pressure  | <u>92</u> PSI   | (depth) <u>5298</u>        | Jars <u>✓ Ran 200</u>          |
| (C) First Final Flow Pressure    | <u>130</u> PSI  | Recorder No. <u>110-20</u> | Safety Jt. <u>✓ Ran 50</u>     |
| (D) Initial Shut-In Pressure     | <u>1858</u> PSI | (depth) <u>5345</u>        | Circ Sub _____                 |
| (E) Second Initial Flow Pressure | <u>120</u> PSI  | Recorder No. _____         | Sampler _____                  |
| (F) Second Final Flow Pressure   | <u>68</u> PSI   | (depth) _____              | Straddle _____                 |
| (G) Final Shut-In Pressure       | <u>1832</u> PSI | Initial Opening <u>30</u>  | Ext. Packer _____              |
| (Q) Final Hydrostatic Mud        | <u>2551</u> PSI | Initial Shut-In <u>60</u>  | Shale Packer _____             |
|                                  |                 | Final Flow <u>60</u>       | Ruined Packer _____            |
|                                  |                 | Final Shut-In <u>90</u>    | Mileage <u>134</u>             |
|                                  |                 | T-On Location <u>7:20</u>  | Sub Total: <u>1534</u>         |
|                                  |                 | T-Started <u>7:50</u>      | Std. By <u>4 hrs 1:20</u>      |
|                                  |                 | T-Open <u>12:37</u>        | Other <u>150 Access Charge</u> |
|                                  |                 | T-Pulled <u>16:37</u>      | Total: <u>\$ 1684</u>          |
|                                  |                 | T-Out <u>21:20</u>         |                                |

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Approved By Thomas P. Jarner

Our Representative Michael Ambriester

1814

# **CHART PAGE**

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

