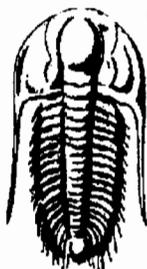


27-16s-7w

15-053-21124



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: Rupe Oil Co, Inc

P.O. Box 783010  
Wichita, Ks 67278

**ORIGINAL**

ATTN: Jim Musgrove

27-~~26~~s-7w Ellsworth

Reed 1-27

Start Date: 2004.01.26 @ 01:35:02

End Date: 2004.01.26 @ 09:20:59

Job Ticket #: 17219 DST #: 1

15-053-21124

RECEIVED  
JUN 10 2004  
KCC WICHITA

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

Rupe Oil Co, Inc

Reed 1-27

27-26s-7w Ellsworth

DST # 1

Grand Haven

2004.01.26

27-16s-07w

27-16s-07w

WT-26s-7w



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Rupe Oil Co, Inc  
 P.O. Box 783010  
 Wichita, Ks 67278  
 ATTN: Jim Musgrove

**Reed 1-27**  
**27-26s-7w Ellsworth**  
 Job Ticket: 17219      **DST#: 1**  
 Test Start: 2004.01.26 @ 01:35:02

**GENERAL INFORMATION:**

Formation: **Grand Haven**  
 Deviated: No Whipstock:      ft (CF)  
 Time Tool Opened: 03:42:59  
 Time Test Ended: 09:20:59

**RECEIVED**  
**JUN 10 2004**

Test Type: Conventional Bottom Hole  
 Tester: Nick Budig  
 Unit No: 17

Interval: **1796.00 ft (CF) To 1830.00 ft (CF) (TVD)**  
 Total Depth: 1830.00 ft (CF) (TVD)  
 Hole Diameter: 7.78 inches Hole Condition: Fair

**KCC WICHITA**

Reference Elevations: 1606.00 ft (KB)  
 1598.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 6771**

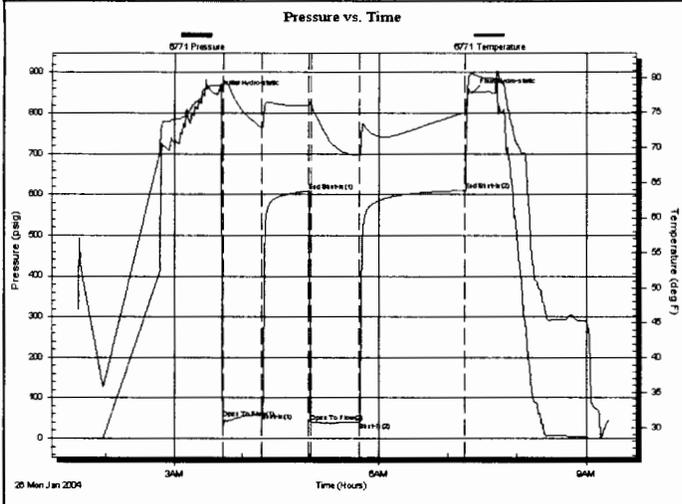
**Inside**

Press@RunDepth: 40.07 psig @ 1797.00 ft (CF)  
 Start Date: 2004.01.26      End Date: 2004.01.26  
 Start Time: 01:35:07      End Time: 09:20:59

Capacity: 7000.00 psig  
 Last Calib.: 2004.01.26  
 Time On Btm: 2004.01.26 @ 03:37:59  
 Time Off Btm: 2004.01.26 @ 07:21:19

TEST COMMENT: IF- Strong Blow obb in 30 sec, GTS in  
 IS- No Blow  
 FF- Stong Blow obb as soon as tool opened  
 FS- No Blow

**ORIGINAL**



**PRESSURE SUMMARY**

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 846.92          | 78.85        | Initial Hydro-static |
| 5           | 49.14           | 79.21        | Open To Flow (1)     |
| 40          | 63.53           | 72.89        | Shut-In(1)           |
| 81          | 608.48          | 76.09        | End Shut-In(1)       |
| 84          | 39.18           | 76.47        | Open To Flow (2)     |
| 125         | 40.07           | 69.01        | Shut-In(2)           |
| 217         | 610.14          | 75.01        | End Shut-In(2)       |
| 224         | 851.14          | 80.49        | Final Hydro-static   |

**Recovery**

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 30.00       | Mud         | 0.15         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

**Gas Rates**

|                | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.13           | 1.50            | 5.95             |
| Last Gas Rate  | 0.13           | 5.50            | 7.45             |
| Max. Gas Rate  | 0.13           | 7.00            | 8.01             |



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Rupe Oil Co, Inc

**Reed 1-27**

P.O. Box 783010  
Wichita, Ks 67278

**27-26s-7w Ellsworth**

Job Ticket: 17219

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2004.01.26 @ 01:35:02

**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 1631.00 ft | Diameter: 3.38 inches | Volume: 18.10 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: 179.00 ft  | Diameter: 2.25 inches | Volume: 0.88 bbl               | Weight to Pull Loose: 45000.00 lb  |
|                           |                    |                       | <u>Total Volume: 18.98 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 34.00 ft           |                       |                                | String Weight: Initial 45000.00 lb |
| Depth to Top Packer:      | 1796.00 ft         |                       |                                | Final 41000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 34.00 ft           |                       |                                |                                    |
| Tool Length:              | 54.00 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         |            |          | 1777.00    |                               |
| Shut In Tool              | 5.00         |            |          | 1782.00    |                               |
| Hydraulic tool            | 5.00         |            |          | 1787.00    |                               |
| Packer                    | 5.00         |            |          | 1792.00    | 20.00 Bottom Of Top Packer    |
| Packer                    | 4.00         |            |          | 1796.00    |                               |
| Stubb                     | 1.00         |            |          | 1797.00    |                               |
| Recorder                  | 0.00         | 6771       | Inside   | 1797.00    |                               |
| Perforations              | 30.00        |            |          | 1827.00    |                               |
| Recorder                  | 0.00         | 13761      | Inside   | 1827.00    |                               |
| Bullnose                  | 3.00         |            |          | 1830.00    | 34.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>54.00</b> |            |          |            |                               |

**RECEIVED**  
**JUN 10 2004**  
**KCC WICHITA**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Rupe Oil Co, Inc

**Reed 1-27**

P.O. Box 783010  
Wichita, Ks 67278

**27-26s-7w Ellsworth**

Job Ticket: 17219

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2004.01.26 @ 01:35:02

## 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: 39.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 9.19 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                 |         |
| Salinity: 5000.00 ppm            |                            |                 |         |
| Filter Cake: inches              |                            |                 |         |

## Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 30.00        | Mud         | 0.148         |

Total Length: 30.00 ft      Total Volume: 0.148 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

**RECEIVED  
JUN 10 2004  
KCC WICHITA**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Rupe Oil Co, Inc

**Reed 1-27**

P.O. Box 783010  
Wichita, Ks 67278

**27-26s-7w Ellsworth**

Job Ticket: 17219

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2004.01.26 @ 01:35:02

### Gas Rates Information

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

Gas Rates Table

| Flow Period | Elapsed Time | Choke (mm) | Pressure (kPaa) | Gas Rate (m <sup>3</sup> /d) |
|-------------|--------------|------------|-----------------|------------------------------|
| 1           | 10           | 0.13       | 1.50            | 5.95                         |
| 1           | 10           | 0.13       | 1.50            | 5.95                         |
| 1           | 20           | 0.13       | 4.00            | 6.89                         |
| 2           | 10           | 0.13       | 7.00            | 8.01                         |
| 2           | 20           | 0.13       | 6.00            | 7.63                         |
| 2           | 30           | 0.13       | 5.50            | 7.45                         |
| 2           | 40           | 0.13       | 5.50            | 7.45                         |

**RECEIVED  
JUN 10 2004  
KCC WICHITA**

DST Test Number: 1

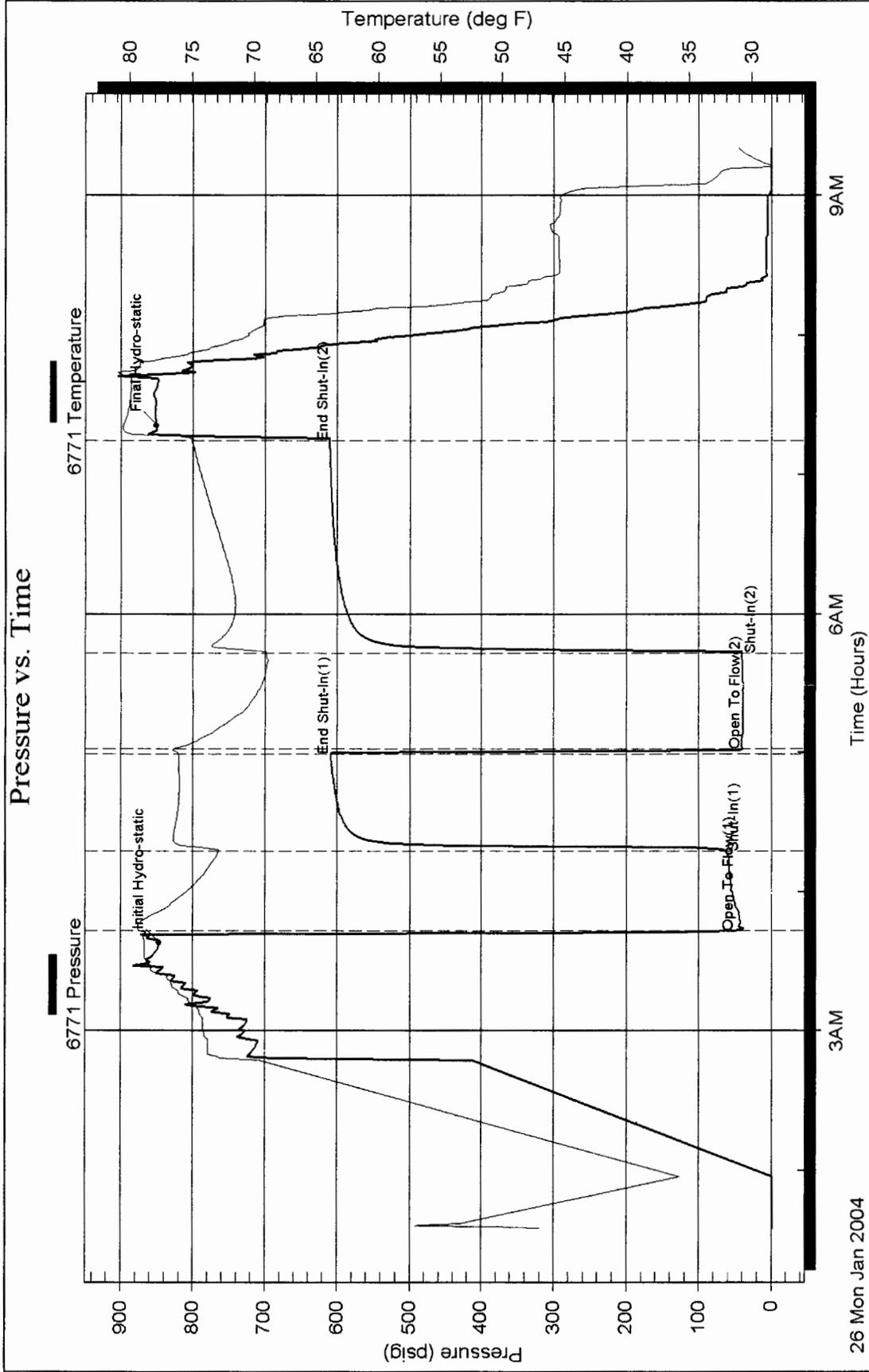
27-26s-7w Elsworth

Rupe Oil Co, Inc

Inside

Serial #: 6771

### Pressure vs. Time



RECEIVED

JUN 10 2004

KCC WICHITA

Ref. No: 17219

Trilobite Testing, Inc

Printed: 2004.01.29 @ 12:45:42 Page 6