15-163-23441

17-10s-20



TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **Mai Oil Operations**

Box 33
Russell KS 67665

ATTN: Kurt Mai

**17-10s-20w Rooks**

**Darnall #1**

Start Date: 2005.01.16 @ 05:52:24
End Date: 2005.01.16 @ 11:42:24
Job Ticket #: 21171 DST #: 1

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

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Mai Oil Operations

Box 33
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ATTN: Kurt Mai

**Darnall #1**

**17-10s-20w Rooks**

Job Ticket: 21171 **DST#: 1**

Test Start: 2005.01.16 @ 05:52:24

## GENERAL INFORMATION:

Formation: **Arbukle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:00:24
Time Test Ended: 11:42:24

Test Type: Conventional Bottom Hole
Tester: Paul Simpson
Unit No:

**Interval: 3736.00 ft (KB) To 3835.00 ft (KB) (TVD)**
Total Depth: 3835.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

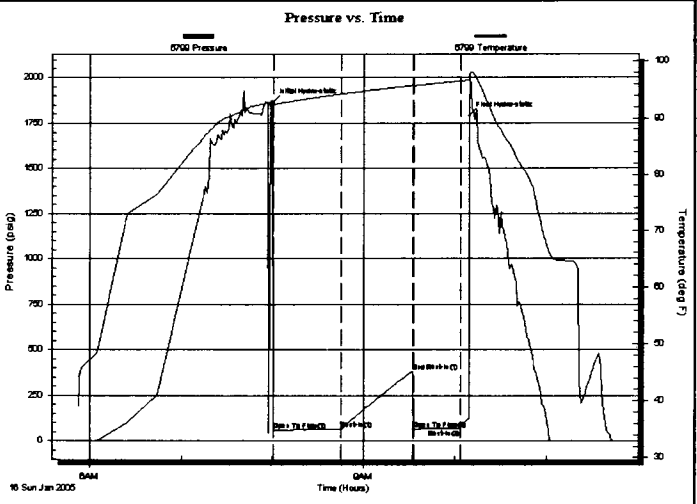
Reference Elevations: 2240.00 ft (KB)
2235.00 ft (CF)
KB to GR/CF: 5.00 ft

**Serial #: 6799** **Inside**

Press@RunDepth: 62.80 psig @ 3741.00 ft (KB)
Start Date: 2005.01.16 End Date: 2005.01.16
Start Time: 05:52:25 End Time: 11:42:24

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2005.01.16 @ 07:59:54
Time Off Btm: 2005.01.16 @ 10:09:24

TEST COMMENT: IF- weak 1" blow decreasing to 1/4"
FF- surface blow died in 8 minutes
45-45-30-out




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1866.06 | 93.02 | Initial Hydro-static |
| 1 | 57.09 | 92.54 | Open To Flow (1) |
| 46 | 62.80 | 94.27 | Shut-In(1) |
| 92 | 382.47 | 95.75 | End Shut-In(1) |
| 93 | 64.58 | 95.71 | Open To Flow (2) |
| 124 | 64.71 | 96.53 | Shut-In(2) |
| 130 | 1789.37 | 97.48 | Final Hydro-static |

## Recovery

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

## Gas Rates

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

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mai Oil Operations

Box 33
Russell KS 67665

ATTN: Kurt Mai

**Darnall #1**

**17-10s-20w Rooks**

Job Ticket: 21171 **DST#: 1**

Test Start: 2005.01.16 @ 05:52:24

## Tool Information

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3620.00 ft | Diameter: | 3.80 | inches | Volume: | 50.78 | bbl | |
| Heavy Wt. Pipe: | Length: | ft | Diameter: | | inches | Volume: | - | bbl | |
| Drill Collar: | Length: | 124.00 ft | Diameter: | 2.25 | inches | Volume: | 0.61 | bbl | |
| | | | | | | Total Volume: | - | bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 29.00 ft |
| Depth to Top Packer: | 3736.00 ft |
| Depth to Bottom Packer: | ft |
| Interval between Packers: | 99.00 ft |
| Tool Length: | 120.00 ft |
| Number of Packers: | 2 |
| Diameter: | 6.75 inches |

| | |
|---|---|
| Tool Weight: | 2000.00 lb |
| Weight set on Packer: | 20000.00 lb |
| Weight to Pull Loose: | 42000.00 lb |
| Tool Chased | ft |
| String Weight: Initial | 39000.00 lb |
| Final | 40000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 3716.00 | | |
| Shut In Tool | 5.00 | | | 3721.00 | | |
| Hydraulic tool | 5.00 | | | 3726.00 | | |
| Packer | 5.00 | | | 3731.00 | 21.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 3736.00 | | |
| Stubb | 1.00 | | | 3737.00 | | |
| Perforations | 3.00 | | | 3740.00 | | |
| Change Over Sub | 1.00 | | | 3741.00 | | |
| Recorder | 0.00 | 6799 | Inside | 3741.00 | | |
| Drill Pipe | 90.00 | | | 3831.00 | | |
| Change Over Sub | 1.00 | | | 3832.00 | | |
| Recorder | 0.00 | 13254 | Outside | 3832.00 | | |
| Bullnose | 3.00 | | | 3835.00 | 99.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **120.00** | | | | | |

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Mai Oil Operations

Box 33
Russell KS 67665

ATTN: Kurt Mai

**Darnall #1**

**17-10s-20w Rooks**

Job Ticket: 21171 **DST#: 1**

Test Start: 2005.01.16 @ 05:52:24

## 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: | 24000 ppm |
| Viscosity: | 51.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.99 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | ppm | | | | |
| Filter Cake: | inches | | | | |

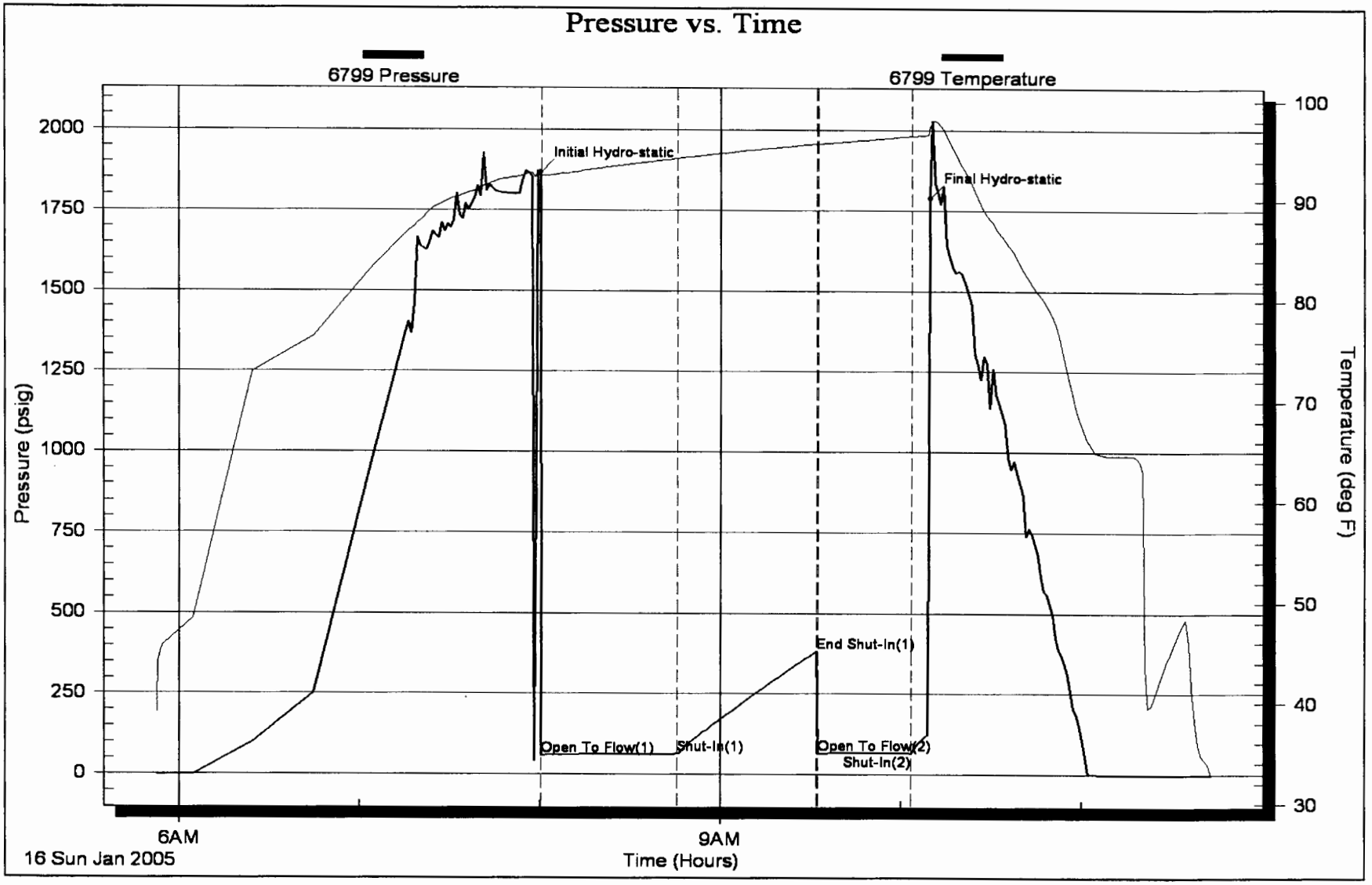
## Recovery Information

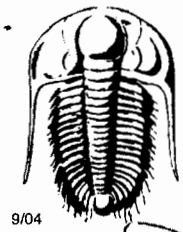
Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 65.00 | thin 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: .4@40


Pressure vs. Time
6799 Pressure
6799 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
100
90
80
70
60
50
40
30
6AM
16 Sun Jan 2005
9AM
Time (Hours)



9/04

# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 7114

№ 21171

## Test Ticket

Well Name & No. Orrell #1 Test No. 1 Date 1-16-05

Company MAI Oil Operations Zone Tested A/B

Address _____ Elevation 2240 KB 2235 GL

Co. Rep / Geo. Dave Shoemaker Cont. Murfin #16 Est. Ft. of Pay _____ Por. _____ %

Location: Sec. 17 Twp. 10S Rge. 20W Co. Murfin #16 State _____

No. of Copies _____ Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3736-3835 Initial Str Wt./Lbs. 39,000 Unseated Str Wt/Lbs. 40,000

Anchor Length 99 Wt. Set Lbs. _____ Wt. Pulled Loose/Lbs. 40,000

Top Packer Depth 3731 Tool Weight 2000

Bottom Packer Depth 3736 Hole Size 7 7/8" Rubber Size 6 3/4"

Total Depth 3835 Wt. Pipe Run _____ Drill Collar Run 124

Mud Wt. 9.1+ LCM _____ Vis. 51 WL 8.0 Drill Pipe Size 4 1/2 XH Ft. Run 3620

Blow Description Weak 1" blow decreasing to ½"

FB Surface - blow - died in 8 minutes

Recovery - Total Feet 65 GIP _____ Ft. in DC 65 Ft. in DP _____

Rec. 65 Feet of thin mud %gas %oil %water %mud

Rec. _____ Feet of few oil specks in bail %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 95 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

| | AK-1 | Alpine | | | | |
|---|---|---|---|---|---|---|
| (A) Initital Hydrostatic Mud | | 1866 | PSI | Recorder No. | 6799 | Test |
| (B) First Initial Flow Pressure | | 57 | PSI | (depth) | 3740 | Jars |
| (C) First Final Flow Pressure | | 63 | PSI | Recorder No. | 13254 | Safety Jt. |
| (D) Initial Shut-In Pressure | | 382 | PSI | (depth) | 3832 | Circ Sub |
| (E) Second Initial Flow Pressure | | 64 | PSI | Recorder No. | | Sampler |
| (F) Second Final Flow Pressure | | 64 | PSI | (depth) | | Straddle |
| (G) Final Shut-In Pressure | | | PSI | **Initial Opening** | | Ext. Packer |
| (Q) Final Hydrostatic Mud | | 1789 | PSI | Initial Shut-In | | Shale Packer |
| | | | | Final Flow | | Ruined Packer |
| | | | | Final Shut-In | | Mileage 42 |
| | | | | **T-On Location** | 0345 | Sub Total: |
| | | | | T-Started | 0552 | Std. By |
| | | | | T-Open | 0800 | Other |
| | | | | T-Pulled | 1000 | Total: |
| | | | | T-Out | 1142 | |

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Approved By _____

Our Representative _____

# CHART PAGE

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

