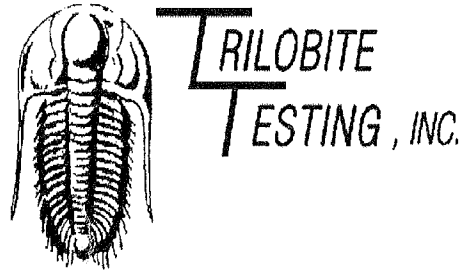


15-185-23333

11-21s-13w



## DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Company, Inc.**

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**11-21s-13w-Stafford**

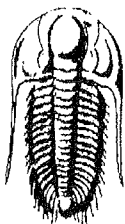
**Mcllvain #1-11**

Start Date: 2005.12.03 @ 22:03:16

End Date: 2005.12.04 @ 06:58:46

Job Ticket #: 23663      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

Mull Drilling Company, Inc.

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**McIlvain #1-11**

**11-21s-13w-Stafford**

Job Ticket: 23663

**DST#: 1**

Test Start: 2005.12.03 @ 22:03:16

### GENERAL INFORMATION:

Formation: **Lansing "A-F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:49:01

Time Test Ended: 06:58:46

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3274.00 ft (KB) To 3360.00 ft (KB) (TVD)**

Total Depth: 3360.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1885.00 ft (KB)

1875.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 6741 Inside**

Press@RunDepth: 45.68 psig @ 3279.00 ft (KB)

Start Date: 2005.12.03

End Date: 2005.12.04

Start Time: 22:03:18

End Time: 06:58:46

Capacity: 7000.00 psig

Last Calib.: 2005.12.04

Time On Btm: 2005.12.04 @ 00:48:46

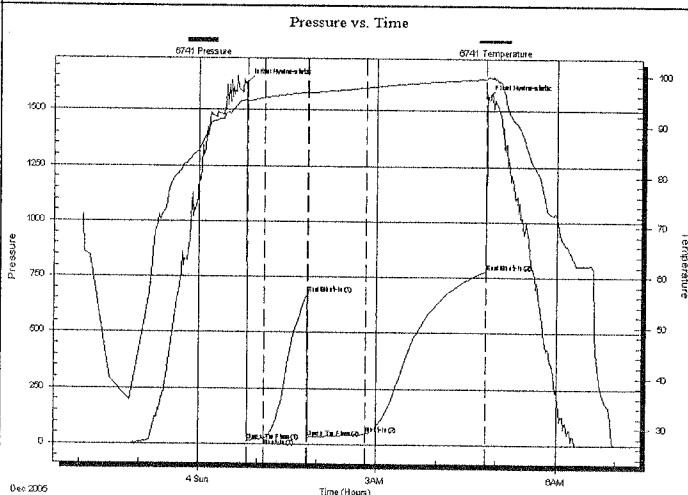
Time Off Btm: 2005.12.04 @ 04:49:46

TEST COMMENT: IFP-Weak Blow ,Built to 1-1/4"

IS-Dead

FFP-Weak Blow ,Built to 1"

FS-Dead



### PRESSURE SUMMARY

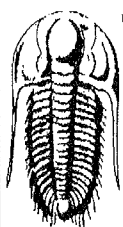
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1621.14         | 95.22        | Initial Hydro-static |
| 1           | 13.72           | 94.78        | Open To Flow (1)     |
| 18          | 23.92           | 95.57        | Shut-In(1)           |
| 62          | 672.10          | 96.70        | End Shut-In(1)       |
| 62          | 29.88           | 96.56        | Open To Flow (2)     |
| 121         | 45.68           | 97.64        | Shut-In(2)           |
| 241         | 778.34          | 99.46        | End Shut-In(2)       |
| 241         | 1558.64         | 99.69        | Final Hydro-static   |

### Recovery

| Length (ft) | Description     | Volume (bbl) |
|-------------|-----------------|--------------|
| 65.00       | Oil Specked Mud | 0.32         |
|             |                 |              |
|             |                 |              |
|             |                 |              |
|             |                 |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Company, Inc.

**McIlvain #1-11**

PO Box 2758  
Wichita, KS 67201

**11-21s-13w-Stafford**

Job Ticket: 23663

DST#: 1

ATTN: Roger Martin

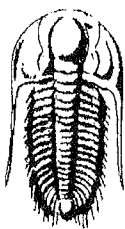
Test Start: 2005.12.03 @ 22:03:16

### Tool Information

|                           |                    |                       |                         |                        |             |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3028.00 ft | Diameter: 3.80 inches | Volume: 42.47 bbl       | Tool Weight:           | 2200.00 lb  |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl        | Weight set on Packer:  | 25000.00 lb |
| Drill Collar:             | Length: 248.00 ft  | Diameter: 2.25 inches | Volume: 1.22 bbl        | Weight to Pull Loose:  | 55000.00 lb |
|                           |                    |                       | Total Volume: 43.69 bbl | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 23.00 ft           |                       |                         | String Weight: Initial | 55000.00 lb |
| Depth to Top Packer:      | 3274.00 ft         |                       |                         | Final                  | 55000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                         |                        |             |
| Interval between Packers: | 86.00 ft           |                       |                         |                        |             |
| Tool Length:              | 107.00 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        |            |          | 3254.00    |                               |
| Shut In Tool       | 5.00        |            |          | 3259.00    |                               |
| Hydraulic tool     | 5.00        |            |          | 3264.00    |                               |
| Packer             | 5.00        |            |          | 3269.00    | 21.00 Bottom Of Top Packer    |
| Packer             | 5.00        |            |          | 3274.00    |                               |
| Stubb              | 1.00        |            |          | 3275.00    |                               |
| Perforations       | 3.00        |            |          | 3278.00    |                               |
| Change Over Sub    | 1.00        |            |          | 3279.00    |                               |
| Recorder           | 0.00        | 6741       | Inside   | 3279.00    |                               |
| Blank Spacing      | 62.00       |            |          | 3341.00    |                               |
| Change Over Sub    | 1.00        |            |          | 3342.00    |                               |
| Perforations       | 15.00       |            |          | 3357.00    |                               |
| Recorder           | 0.00        | 13221      | Outside  | 3357.00    |                               |
| Bullnose           | 3.00        |            |          | 3360.00    | 86.00 Bottom Packers & Anchor |
| Total Tool Length: |             | 107.00     |          |            |                               |



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

## DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Company, Inc.

**Mcllvain #1-11**

PO Box 2758  
Wichita, KS 67201

**11-21s-13w-Stafford**

Job Ticket: 23663

**DST#: 1**

ATTN: Roger Martin

Test Start: 2005.12.03 @ 22:03:16

### 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: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4200.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description     | Volume<br>bbl |
|--------------|-----------------|---------------|
| 65.00        | Oil Specked Mud | 0.320         |

Total Length: 65.00 ft

Total Volume: 0.320 bbl

Num Fluid Samples: 0

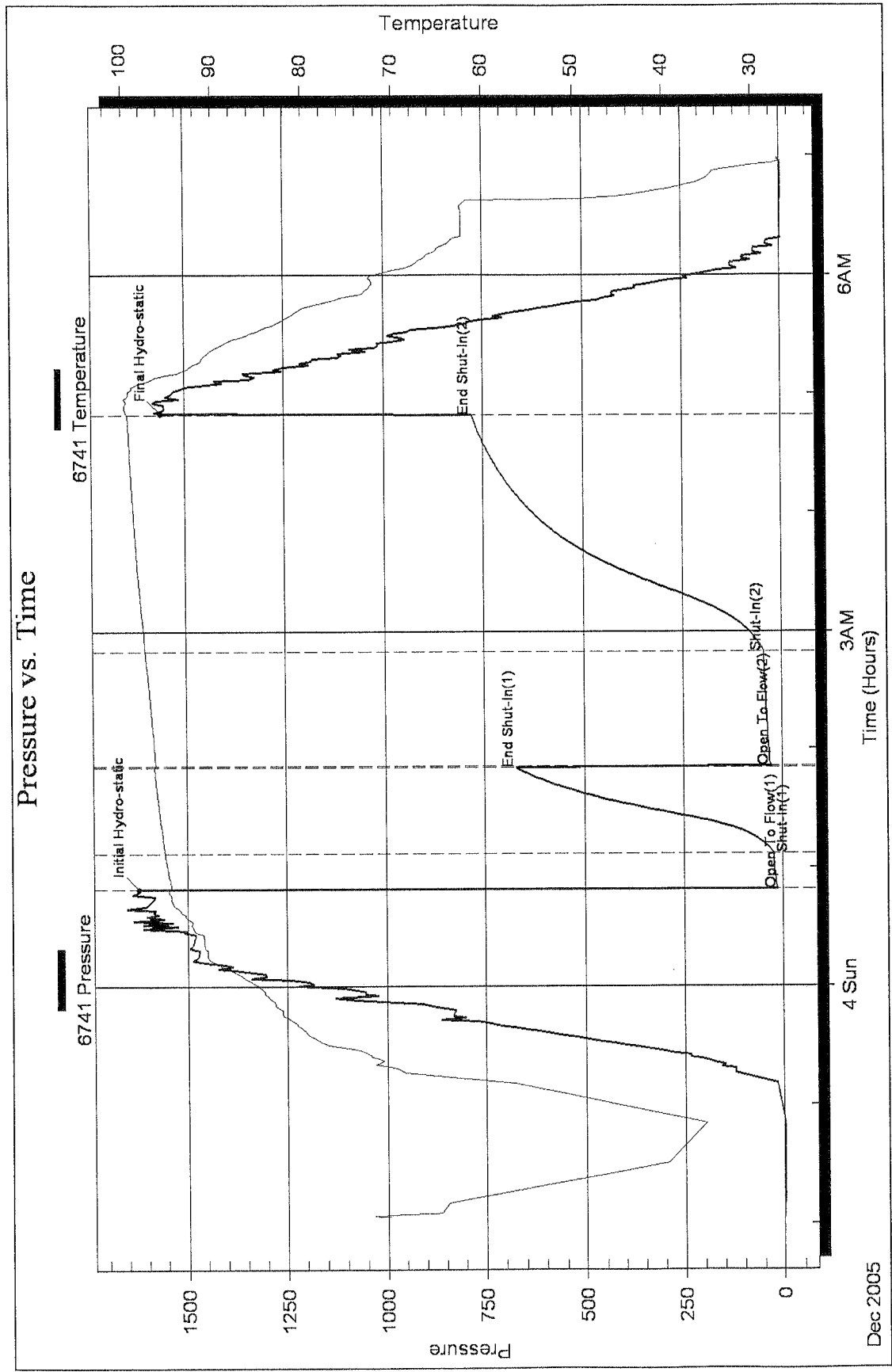
Num Gas Bombs: 0

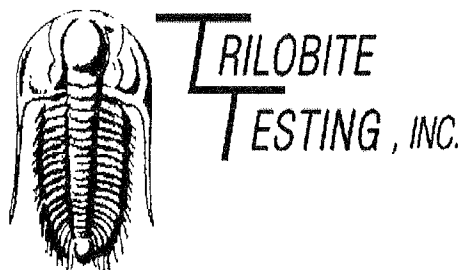
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Company, Inc.**

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**11-21s-13w-Stafford**

**Mcllvain #1-11**

Start Date: 2005.12.04 @ 20:00:16

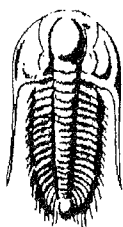
End Date: 2005.12.05 @ 05:27:16

Job Ticket #: 23664                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Mull Drilling Company, Inc.

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**McIlvain #1-11**

**11-21s-13w-Stafford**

Job Ticket: 23664

**DST#: 2**

Test Start: 2005.12.04 @ 20:00:16

### GENERAL INFORMATION:

Formation: **LKC-"G-H-I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:42:01

Time Test Ended: 05:27:16

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3366.00 ft (KB) To 3435.00 ft (KB) (TVD)**

Total Depth: 3435.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1885.00 ft (KB)

1875.00 ft (CF)

KB to GRVCF: 10.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 86.55 psig @ 3369.00 ft (KB)

Start Date: 2005.12.04

End Date:

2005.12.05

Start Time: 20:00:18

End Time:

05:27:16

Capacity: 7000.00 psig

Last Calib.: 2005.12.05

Time On Btmr 2005.12.04 @ 22:41:46

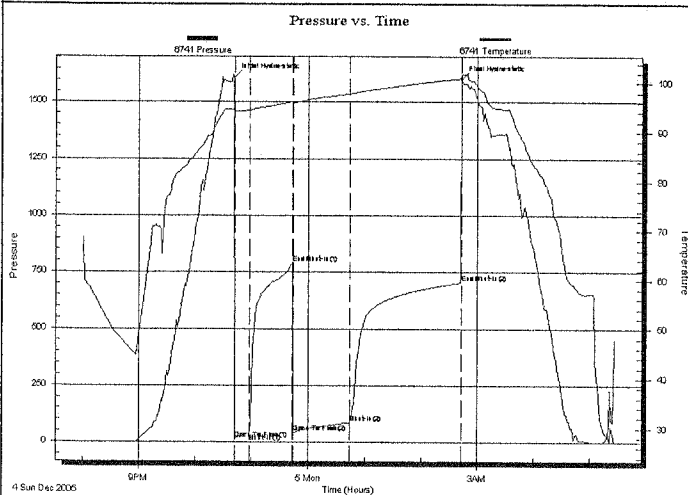
Time Off Btmr 2005.12.05 @ 02:43:31

**TEST COMMENT:** IFP-Weak Blow ,Built to 2-1/2"

ISI-Dead

FFP-Weak Blow ,Built to 2"

FSI-Dead



### PRESSURE SUMMARY

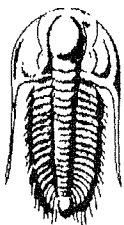
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1611.18         | 94.75        | Initial Hydro-static |
| 1           | 14.96           | 94.40        | Open To Flow (1)     |
| 16          | 38.77           | 94.43        | Shut-In(1)           |
| 62          | 787.92          | 96.24        | End Shut-In(1)       |
| 63          | 41.44           | 96.08        | Open To Flow (2)     |
| 123         | 86.55           | 97.79        | Shut-In(2)           |
| 242         | 704.40          | 100.99       | End Shut-In(2)       |
| 242         | 1602.82         | 101.64       | Final Hydro-static   |

### Recovery

| Length (ft) | Description                             | Volume (bbl) |
|-------------|-----------------------------------------|--------------|
| 30.00       | Mud With Oil Specks < 1%                | 0.15         |
| 120.00      | Watery Mud W/Oil Specks <1%O-42%W-0.59M |              |
|             |                                         |              |
|             |                                         |              |
|             |                                         |              |
|             |                                         |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Company, Inc.

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**McIlvain #1-11**

**11-21s-13w-Stafford**

Job Ticket: 23664

DST#: 2

Test Start: 2005.12.04 @ 20:00:16

### Tool Information

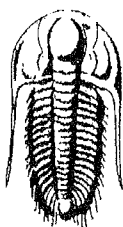
|                           |                    |                       |                         |                                    |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------------------|
| Drill Pipe:               | Length: 3125.00 ft | Diameter: 3.80 inches | Volume: 43.84 bbl       | Tool Weight: 2200.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl        | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 248.00 ft  | Diameter: 2.25 inches | Volume: 1.22 bbl        | Weight to Pull Loose: 60000.00 lb  |
|                           |                    |                       | Total Volume: 45.06 bbl | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 28.00 ft           |                       |                         | String Weight: Initial 55000.00 lb |
| Depth to Top Packer:      | 3366.00 ft         |                       |                         | Final 55000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                         |                                    |
| Interval between Packers: | 69.00 ft           |                       |                         |                                    |
| Tool Length:              | 90.00 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  |       |         | 3346.00 |                               |
| Shut In Tool    | 5.00  |       |         | 3351.00 |                               |
| Hydraulic tool  | 5.00  |       |         | 3356.00 |                               |
| Packer          | 5.00  |       |         | 3361.00 | 21.00 Bottom Of Top Packer    |
| Packer          | 5.00  |       |         | 3366.00 |                               |
| Stubb           | 1.00  |       |         | 3367.00 |                               |
| Perforations    | 1.00  |       |         | 3368.00 |                               |
| Change Over Sub | 1.00  |       |         | 3369.00 |                               |
| Recorder        | 0.00  | 6741  | Inside  | 3369.00 |                               |
| Blank Spacing   | 32.00 |       |         | 3401.00 |                               |
| Change Over Sub | 1.00  |       |         | 3402.00 |                               |
| Perforations    | 30.00 |       |         | 3432.00 |                               |
| Recorder        | 0.00  | 13221 | Outside | 3432.00 |                               |
| Bullnose        | 3.00  |       |         | 3435.00 | 69.00 Bottom Packers & Anchor |

**Total Tool Length: 90.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

### FLUID SUMMARY

Mull Drilling Company, Inc.

**McIlvain #1-11**

PO Box 2758  
Wichita, KS 67201

**11-21s-13w-Stafford**

Job Ticket: 23664

**DST#: 2**

ATTN: Roger Martin

Test Start: 2005.12.04 @ 20:00:16

### 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: 21000 ppm

Viscosity: 40.00 sec/qt

Cushion Volume: bbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 4700.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description                           | Volume<br>bbl |
|--------------|---------------------------------------|---------------|
| 30.00        | Mud With Oil Specks < 1%              | 0.148         |
| 120.00       | Watery Mud W/Oil Specks <1%O-42%W-58% | 0.590         |

Total Length: 150.00 ft

Total Volume: 0.738 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

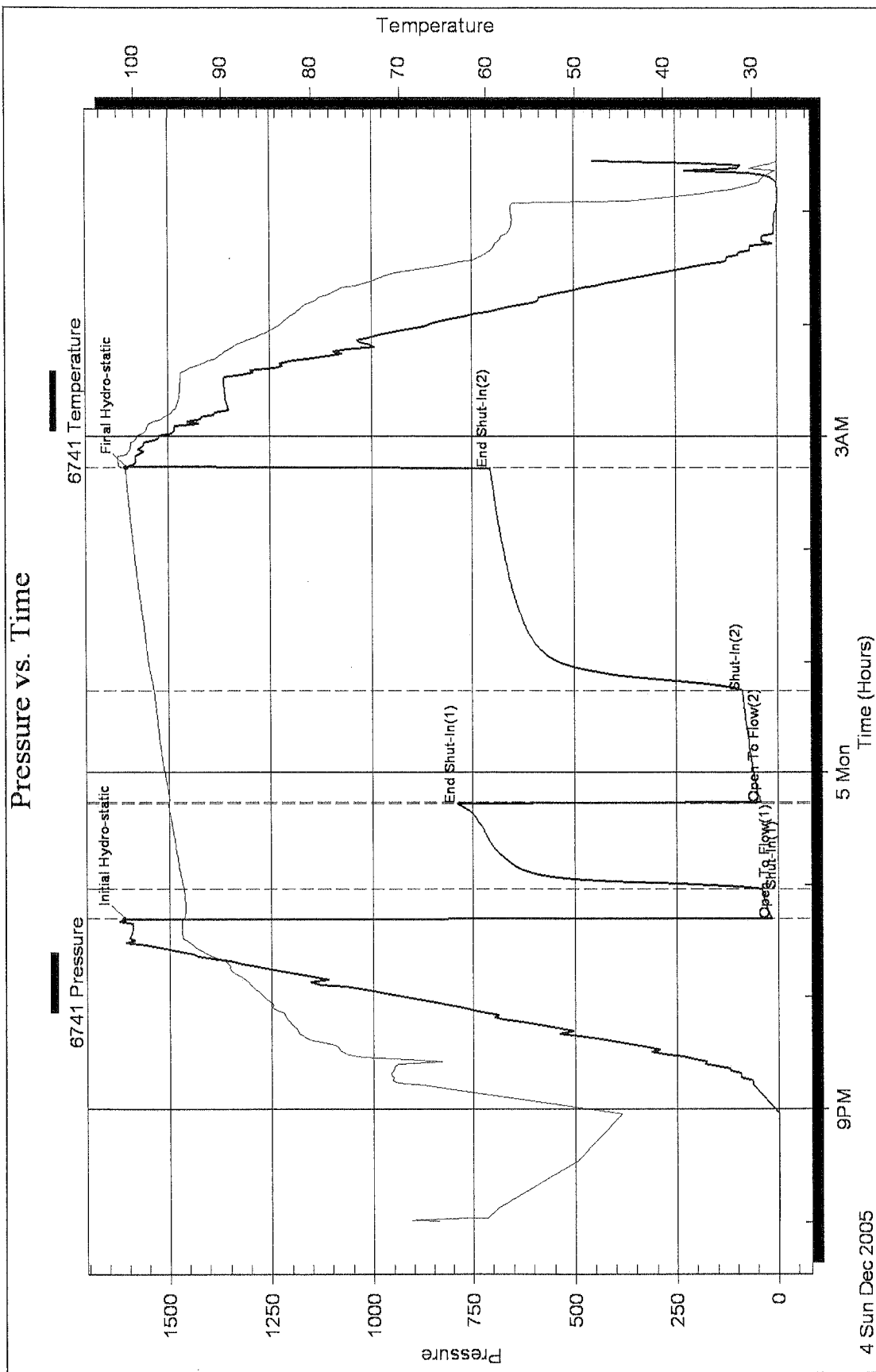
Serial #:

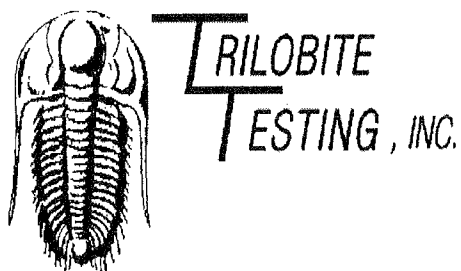
Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Company, Inc.**

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**11-21s-13w-Stafford**

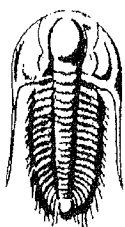
**Mcllvain #1-11**

Start Date: 2005.12.05 @ 22:59:35

End Date: 2005.12.06 @ 06:45:05

Job Ticket #: 23665                      DST #: 3

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Mull Drilling Company, Inc.

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**McIlvain #1-11**

**11-21s-13w-Stafford**

Job Ticket: 23665

DST#: 3

Test Start: 2005.12.05 @ 22:59:35

### GENERAL INFORMATION:

Formation: "J-K-L-Conglomerate"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:41:35

Time Test Ended: 06:45:05

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: 3433.00 ft (KB) To 3520.00 ft (KB) (TVD)

Total Depth: 3520.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1885.00 ft (KB)

1875.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 36.99 psig @ 3439.00 ft (KB)

Start Date: 2005.12.05

End Date:

2005.12.06

Capacity: 7000.00 psig

Last Calib.: 2005.12.06

Start Time: 22:59:37

End Time:

06:45:05

Time On Btm: 2005.12.06 @ 01:41:05

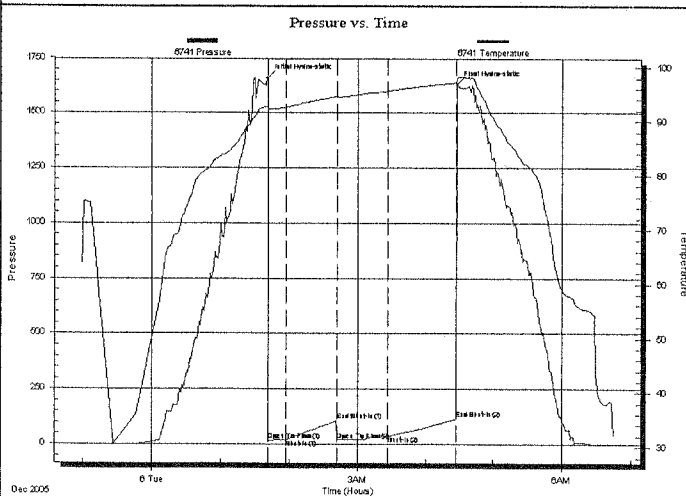
Time Off Btm: 2005.12.06 @ 04:27:50

TEST COMMENT: IFP-Weak Blow, Built to 1-1/2"

ISI-Dead

FFP-Surge On Opening, Died, ( Rig Air Froze ), Flush After 25 Min., 10 Sec. Surge Then Dead

FSI-Dead



### PRESSURE SUMMARY

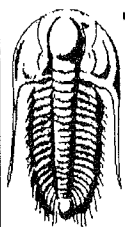
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1660.26         | 92.74        | Initial Hydro-static |
| 1           | 15.60           | 92.19        | Open To Flow (1)     |
| 16          | 21.12           | 92.60        | Shut-In(1)           |
| 61          | 106.25          | 94.61        | End Shut-In(1)       |
| 61          | 18.18           | 94.56        | Open To Flow (2)     |
| 106         | 36.99           | 95.63        | Shut-In(2)           |
| 167         | 116.36          | 97.21        | End Shut-In(2)       |
| 167         | 1628.81         | 97.76        | Final Hydro-static   |

### Recovery

| Length (ft) | Description    | Volume (bbl) |
|-------------|----------------|--------------|
| 30.00       | SOCM-10%O-90%M | 0.15         |
|             |                |              |
|             |                |              |
|             |                |              |
|             |                |              |
|             |                |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Company, Inc.

**McIlvain #1-11**

PO Box 2758  
Wichita, KS 67201

**11-21s-13w-Stafford**

Job Ticket: 23665

**DST#: 3**

ATTN: Roger Martin

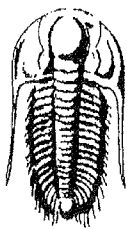
Test Start: 2005.12.05 @ 22:59:35

### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3189.00 ft | Diameter: 3.80 inches | Volume: 44.73 bbl              | Tool Weight: 2200.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.25 inches | Volume: 0.00 bbl               | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 248.00 ft  | Diameter: 2.25 inches | Volume: 1.22 bbl               | Weight to Pull Loose: 70000.00 lb  |
|                           |                    |                       | <u>Total Volume: 45.95 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 25.00 ft           |                       |                                | String Weight: Initial 56000.00 lb |
| Depth to Top Packer:      | 3433.00 ft         |                       |                                | Final 56000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 87.00 ft           |                       |                                |                                    |
| Tool Length:              | 108.00 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        |            |          | 3413.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3418.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3423.00    |                               |
| Packer           | 5.00        |            |          | 3428.00    | 21.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3433.00    |                               |
| Stubb            | 1.00        |            |          | 3434.00    |                               |
| Perforations     | 4.00        |            |          | 3438.00    |                               |
| Change Over Sub  | 1.00        |            |          | 3439.00    |                               |
| Recorder         | 0.00        | 6741       | Inside   | 3439.00    |                               |
| Blank Spacing    | 62.00       |            |          | 3501.00    |                               |
| Change Over Sub  | 1.00        |            |          | 3502.00    |                               |
| Perforations     | 15.00       |            |          | 3517.00    |                               |
| Recorder         | 0.00        | 13221      | Outside  | 3517.00    |                               |
| Bullnose         | 3.00        |            |          | 3520.00    | 87.00 Bottom Packers & Anchor |

**Total Tool Length: 108.00**



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

Mull Drilling Company, Inc.

**McIlvain #1-11**

PO Box 2758  
Wichita, KS 67201

**11-21s-13w-Stafford**

Job Ticket: 23665

**DST#: 3**

ATTN: Roger Martin

Test Start: 2005.12.05 @ 22:59:35

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 8.78 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 4200.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

### Recovery Information

Recovery Table

| Length<br>ft | Description    | Volume<br>bbl |
|--------------|----------------|---------------|
| 30.00        | SOCM-10%O-90%M | 0.148         |

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

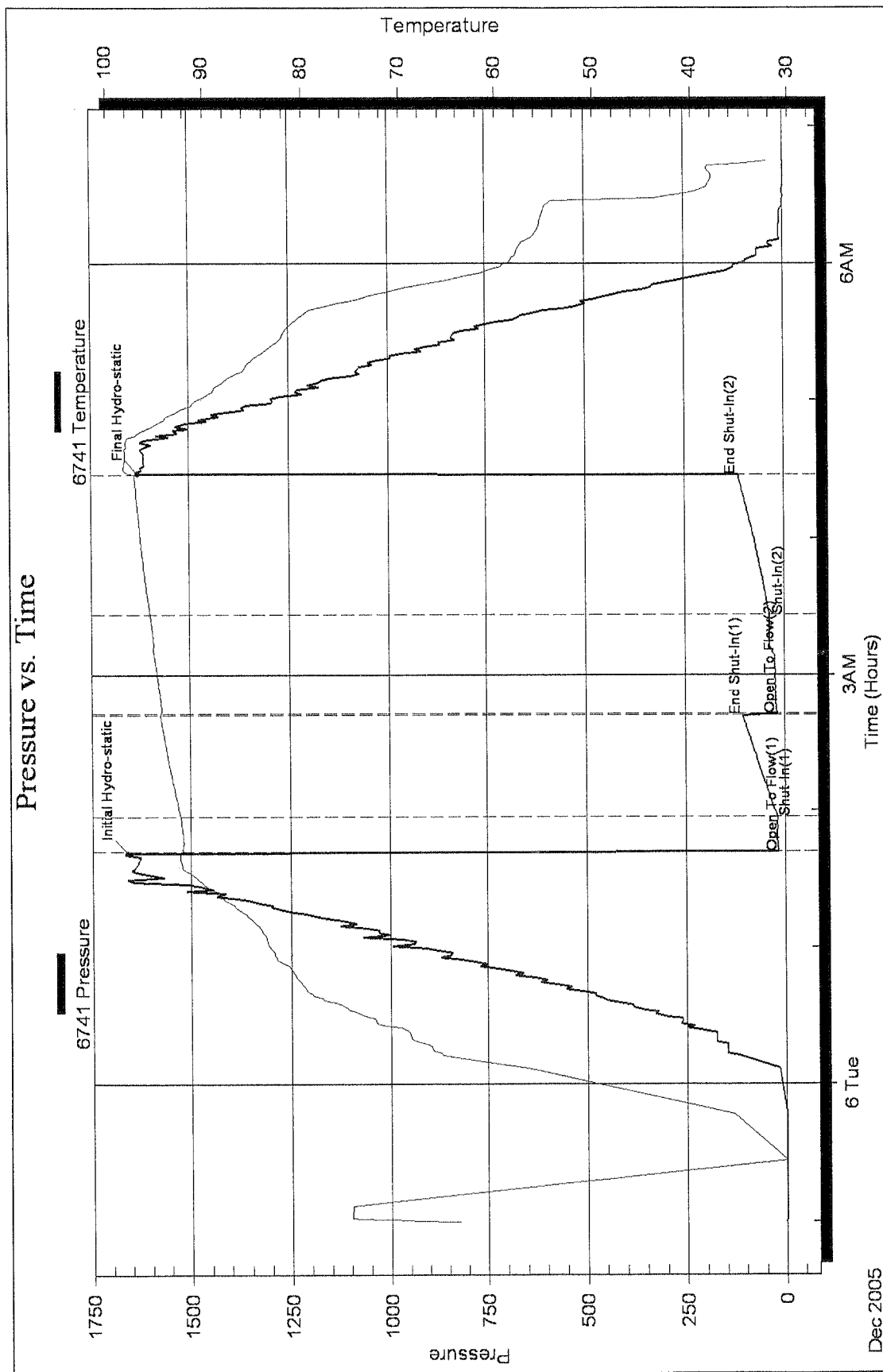
Serial #:

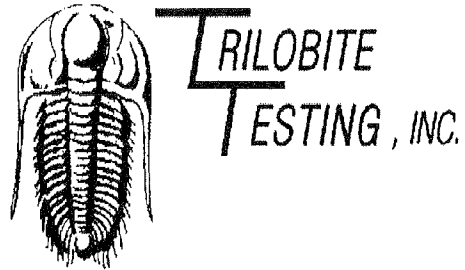
Laboratory Name:

Laboratory Location:

Recovery Comments: 60' GIP

# Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Company, Inc.**

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**11-21s-13w-Stafford**

**Mcllvain #1-11**

Start Date: 2005.12.07 @ 10:18:37

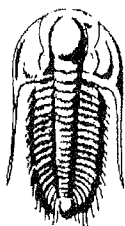
End Date: 2005.12.07 @ 23:55:37

Job Ticket #: 23666      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Mull Drilling Company, Inc.

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**Mcllvain #1-11**

**11-21s-13w-Stafford**

Job Ticket: 23666

**DST#: 4**

Test Start: 2005.12.07 @ 10:18:37

### GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:27:07

Time Test Ended: 23:55:37

Test Type: Conventional Straddle

Tester: Jason McLemore

Unit No: 32

Interval: **3564.00 ft (KB) To 3593.00 ft (KB) (TVD)**

Total Depth: 3711.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1885.00 ft (KB)

1875.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 216.20 psig @ 3565.00 ft (KB)

Start Date: 2005.12.07

End Date: 2005.12.07

Capacity: 7000.00 psig

Last Calib.: 2005.12.07

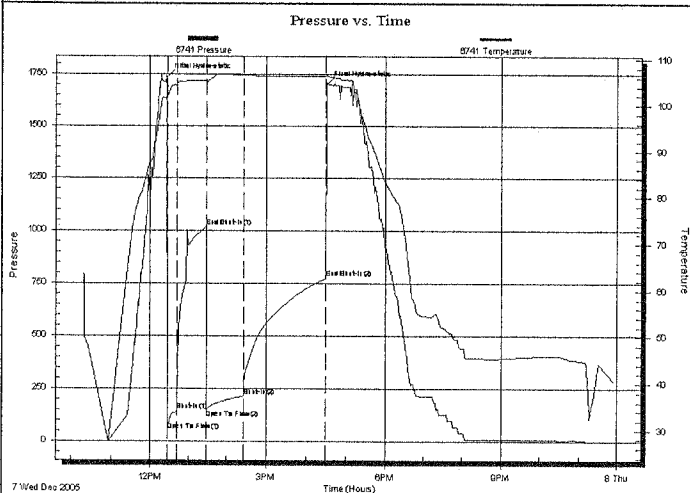
Start Time: 10:18:39

End Time: 23:55:37

Time On Btm: 2005.12.07 @ 12:26:22

Time Off Btm: 2005.12.07 @ 16:31:07

**TEST COMMENT:** IFF-Good Blow ,Built to 6" in 6 Min, Bubble Hose Froze Off.  
ISI-Dead  
FFP-Good Blow ,BOB in 13 Min.,Medium Roll Throughout  
FSI-Blow back After 4 Min.,Building to 1" in 20 Min.



### PRESSURE SUMMARY

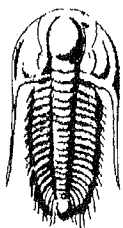
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1734.66         | 101.90       | Initial Hydro-static |
| 1           | 52.45           | 101.64       | Open To Flow (1)     |
| 15          | 144.56          | 104.73       | Shut-In(1)           |
| 61          | 1017.90         | 105.26       | End Shut-In(1)       |
| 61          | 152.40          | 105.03       | Open To Flow (2)     |
| 119         | 216.20          | 106.53       | Shut-In(2)           |
| 244         | 776.83          | 106.34       | End Shut-In(2)       |
| 245         | 1699.74         | 106.50       | Final Hydro-static   |

### Recovery

| Length (ft) | Description                        | Volume (bbl) |
|-------------|------------------------------------|--------------|
| 310.00      | Muddy Water/Oil Show <1%O-80%W-20% | 2.09         |
| 124.00      | GOCWM-5%G-5%O-15%W-75%M            | 1.74         |
| 10.00       | Clean Gassy Oil-10%G-90%O          | 0.14         |
|             |                                    |              |
|             |                                    |              |
|             |                                    |              |

### Gas Rates

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



**TRILOBITE**  
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## DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Company, Inc.

PO Box 2758  
Wichita, KS 67201

ATTN: Roger Martin

**McIlvain #1-11**

**11-21s-13w-Stafford**

Job Ticket: 23666

**DST#: 4**

Test Start: 2005.12.07 @ 10:18:37

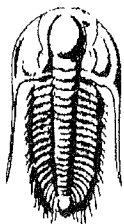
### Tool Information

|                           |                    |                         |                   |                                    |
|---------------------------|--------------------|-------------------------|-------------------|------------------------------------|
| Drill Pipe:               | Length: 3314.00 ft | Diameter: 3.80 inches   | Volume: 46.49 bbl | Tool Weight: 2200.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.25 inches   | Volume: 0.00 bbl  | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 248.00 ft  | Diameter: 2.25 inches   | Volume: 1.22 bbl  | Weight to Pull Loose: 64000.00 lb  |
|                           |                    | Total Volume: 47.71 bbl |                   | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 26.00 ft           |                         |                   | String Weight: Initial 60000.00 lb |
| Depth to Top Packer:      | 3564.00 ft         |                         |                   | Final 60000.00 lb                  |
| Depth to Bottom Packer:   | 3593.00 ft         |                         |                   |                                    |
| Interval between Packers: | 29.00 ft           |                         |                   |                                    |
| Tool Length:              | 175.00 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  |       |         | 3537.00 |                                |
| Shut In Tool    | 5.00  |       |         | 3542.00 |                                |
| Hydraulic tool  | 5.00  |       |         | 3547.00 |                                |
| Jars            | 5.00  |       |         | 3552.00 |                                |
| Safety Joint    | 2.00  |       |         | 3554.00 |                                |
| Packer          | 5.00  |       |         | 3559.00 | 28.00 Bottom Of Top Packer     |
| Packer          | 5.00  |       |         | 3564.00 |                                |
| Stubb           | 1.00  |       |         | 3565.00 |                                |
| Recorder        | 0.00  | 6741  | Inside  | 3565.00 |                                |
| Perforations    | 24.00 |       |         | 3589.00 |                                |
| Recorder        | 0.00  | 13252 | Outside | 3589.00 |                                |
| Blank Off Sub   | 1.00  |       |         | 3590.00 |                                |
| Blank Spacing   | 3.00  |       |         | 3593.00 | 29.00 Tool Interval            |
| Packer          | 1.00  |       |         | 3594.00 |                                |
| Stubb           | 1.00  |       |         | 3595.00 |                                |
| Perforations    | 11.00 |       |         | 3606.00 |                                |
| Change Over Sub | 1.00  |       |         | 3607.00 |                                |
| Recorder        | 0.00  | 13221 | Below   | 3607.00 |                                |
| Blank Spacing   | 95.00 |       |         | 3702.00 |                                |
| Change Over Sub | 1.00  |       |         | 3703.00 |                                |
| Perforations    | 5.00  |       |         | 3708.00 |                                |
| Bullnose        | 3.00  |       |         | 3711.00 | 118.00 Bottom Packers & Anchor |

**Total Tool Length: 175.00**



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## DRILL STEM TEST REPORT

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**Mcllvain #1-11**

PO Box 2758  
Wichita, KS 67201

**11-21s-13w-Stafford**

Job Ticket: 23666

**DST#: 4**

ATTN: Roger Martin

Test Start: 2005.12.07 @ 10:18:37

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API: 38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity: 21000 ppm

Viscosity: 42.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description                         | Volume<br>bbl |
|--------------|-------------------------------------|---------------|
| 310.00       | Muddy Water/Oil Show <1%O-80%W-20%M | 2.089         |
| 124.00       | GOCWM-5%G-5%O-15%W-75%M             | 1.739         |
| 10.00        | Clean Gassy Oil-10%G-90%O           | 0.140         |

Total Length: 444.00 ft

Total Volume: 3.968 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

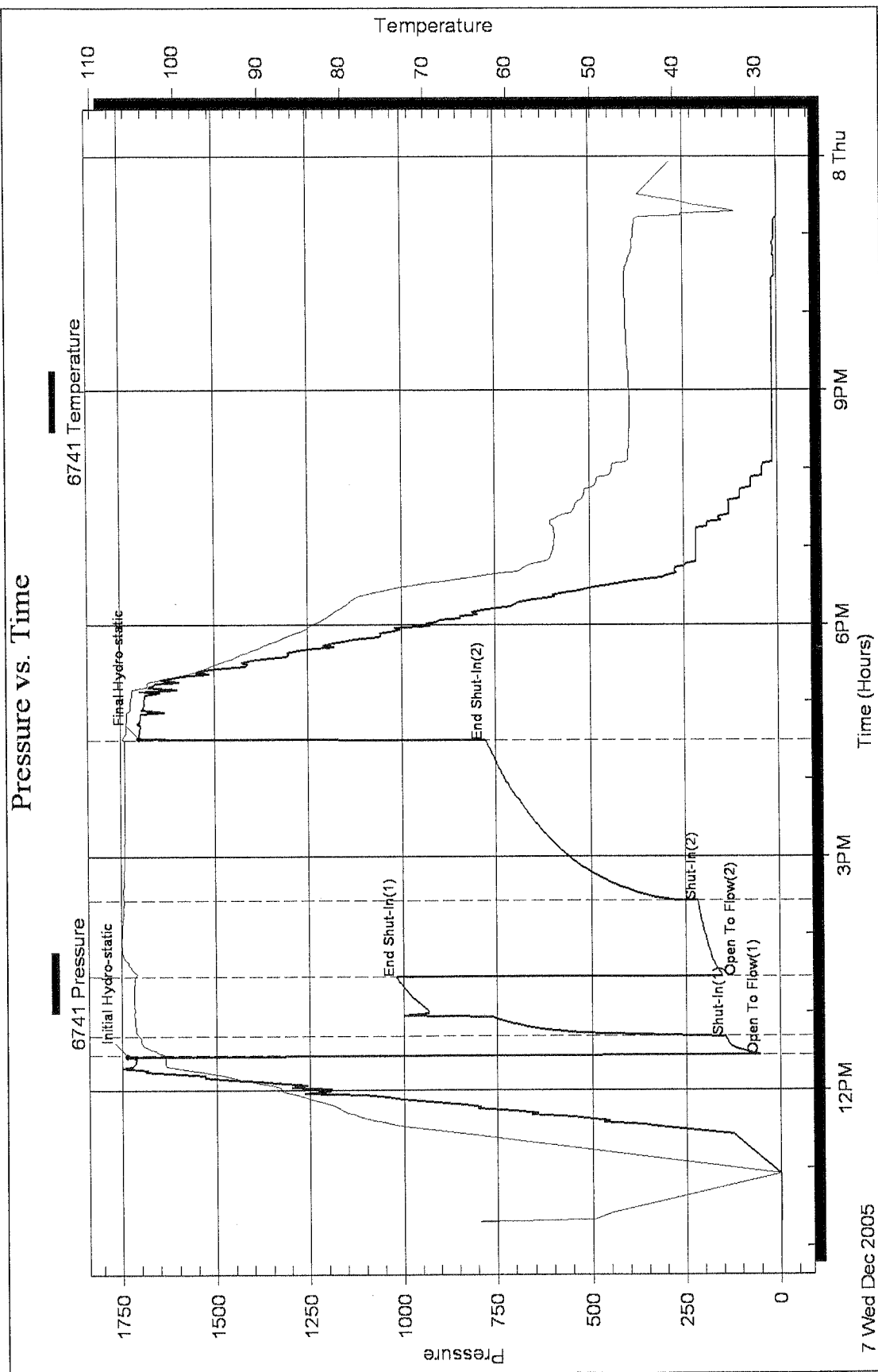
DST Test Number: 4

11-21s-13w-Stafford

Mull Drilling Company, Inc.

Inside

Serial #: 6741



Trilobite Testing, Inc

Ref. No: 23666

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