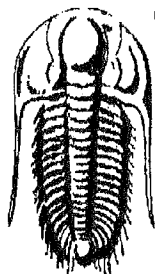


15-063-21763

23-15s-27w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

PO Box 2758
Wichita, KS
67202

ATTN: Kevin Kessler

23-15s-27w Gove,Ks

Albin #1-23

Start Date: 2009.01.18 @ 08:50:05

End Date: 2009.01.18 @ 15:20:44

Job Ticket #: 33321 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

KCC
MAR 09 2009
CONFIDENTIAL

Mull Drilling Co

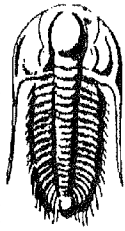
Albin #1-23

23-15s-27w Gove,Ks

DST # 1

H-I

2009.01.18



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mull Drilling Co
 PO Box 2758
 Wichita, KS
 67202
 ATTN: Kevin Kessler

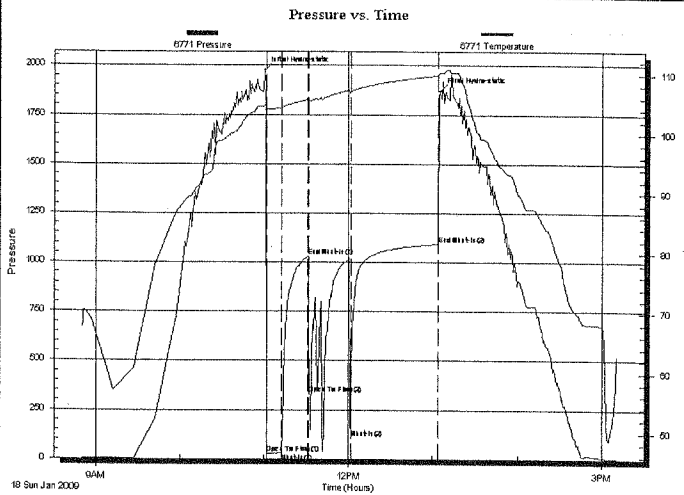
Albin #1-23
23-15s-27w Gove, Ks
 Job Ticket: 33321 **DST#: 1**
 Test Start: 2009.01.18 @ 08:50:05

GENERAL INFORMATION:

Formation: H-I
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:01:45
 Time Test Ended: 15:20:44
 Interval: **3865.00 ft (KB) To 3945.00 ft (KB) (TVD)**
 Total Depth: 3945.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Shane McBride
 Unit No: 40
 Reference Elevations: 2448.00 ft (KB)
 2438.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6771 **Outside**
 Press@RunDepth: 105.68 psig @ 3866.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2009.01.18 End Date: 2009.01.18 Last Calib.: 2009.01.18
 Start Time: 08:50:05 End Time: 15:10:44 Time On Btm: 2009.01.18 @ 11:00:30
 Time Off Btm: 2009.01.18 @ 13:05:30

TEST COMMENT: 1 1/2" in blow
 No return
 1/2" in blow
 No return



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1974.38 | 104.90 | Initial Hydro-static |
| 2 | 27.63 | 104.35 | Open To Flow (1) |
| 12 | 30.47 | 104.41 | Shut-In (1) |
| 31 | 1029.20 | 105.77 | End Shut-In (1) |
| 32 | 330.73 | 105.48 | Open To Flow (2) |
| 62 | 105.68 | 107.15 | Shut-In (2) |
| 124 | 1092.92 | 109.83 | End Shut-In (2) |
| 125 | 1868.12 | 110.22 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 30.00 | mud 100% m | 0.42 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33321

DST#: 1

ATTN: Kevin Kessler

Test Start: 2009.01.18 @ 08:50:05

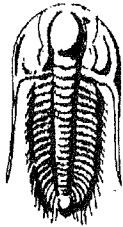
Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3870.00 ft | Diameter: 3.80 inches | Volume: 54.29 bbl | Tool Weight: 1500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 90000.00 lb |
| | | | Total Volume: 54.29 bbl | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 25.00 ft | | | String Weight: Initial 50000.00 lb |
| Depth to Top Packer: | 3865.00 ft | | | Final 51000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 80.00 ft | | | |
| Tool Length: | 100.00 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 | | | 3846.00 | |
| Shut In Tool | 5.00 | | | 3851.00 | |
| Hydraulic tool | 5.00 | | | 3856.00 | |
| Packer | 5.00 | | | 3861.00 | 20.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3865.00 | |
| Stubb | 1.00 | | | 3866.00 | |
| Recorder | 0.00 | 6667 | Inside | 3866.00 | |
| Recorder | 0.00 | 6771 | Outside | 3866.00 | |
| Anchor | 10.00 | | | 3876.00 | |
| Change Over Sub | 1.00 | | | 3877.00 | |
| Drill Pipe | 62.00 | | | 3939.00 | |
| Change Over Sub | 1.00 | | | 3940.00 | |
| Bullnose | 5.00 | | | 3945.00 | 80.00 Bottom Packers & Anchor |

Total Tool Length: 100.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

ATTN: Kevin Kessler

Job Ticket: 33321 **DST#: 1**

Test Start: 2009.01.18 @ 08:50:05

Mud and Cushion Information

| | | | |
|-----------------------------------|----------------------------|-----------------|-----------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | 0 deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | 0 ppm |
| Viscosity: 48.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 11.88 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 8000.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------------|---------------|
| 30.00 | mud 100% _m | 0.421 |

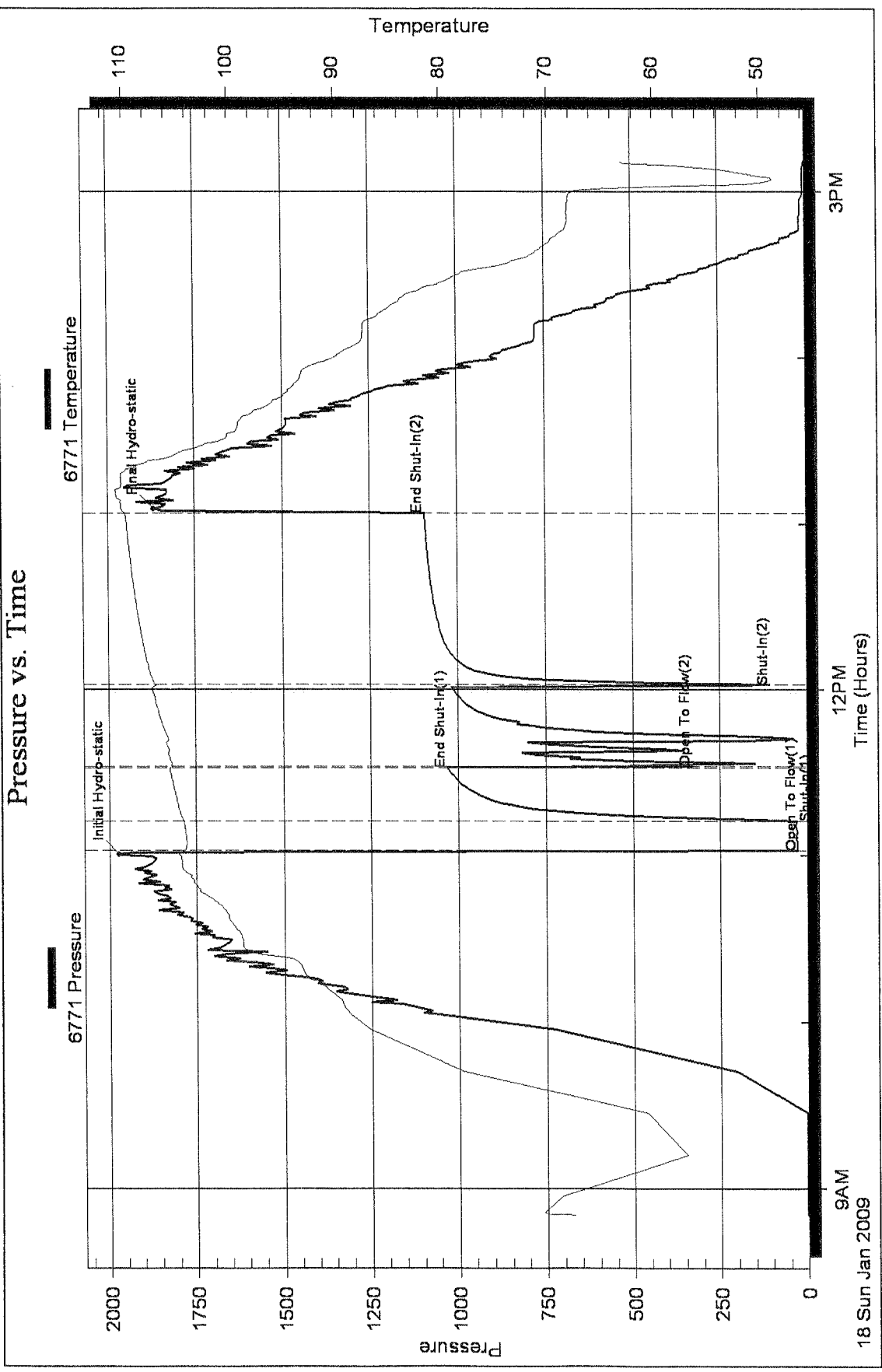
Total Length: 30.00 ft Total Volume: 0.421 bbl

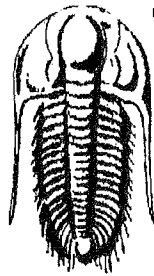
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

PO Box 2758
Wichita, KS
67202

ATTN: Kevin Kessler

23-15s-27w Gove,Ks

Albin #1-23

Start Date: 2009.01.19 @ 01:00:05

End Date: 2009.01.19 @ 07:15:29

Job Ticket #: 33322 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mull Drilling Co

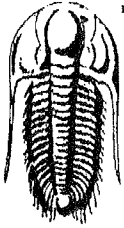
Albin #1-23

23-15s-27w Gove,Ks

DST # 2

K

2009.01.19



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mull Drilling Co
 PO Box 2758
 Wichita, KS
 67202
 ATTN: Kevin Kessler

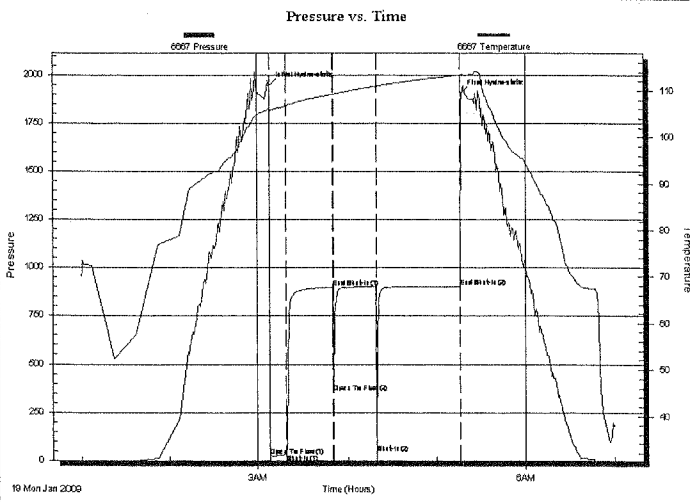
Albin #1-23
23-15s-27w Gove, Ks
 Job Ticket: 33322 **DST#: 2**
 Test Start: 2009.01.19 @ 01:00:05

GENERAL INFORMATION:

Formation: **K**
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**
 Time Tool Opened: **03:08:00** Tester: **Shane McBride**
 Time Test Ended: **07:15:29** Unit No: **40**
 Interval: **3955.00 ft (KB) To 4000.00 ft (KB) (TVD)** Reference Elevations: **2448.00 ft (KB)**
 Total Depth: **4000.00 ft (KB) (TVD)** **2438.00 ft (CF)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **10.00 ft**

Serial #: 6667 **Inside**
 Press@RunDepth: **37.78 psig @ 3956.00 ft (KB)** Capacity: **7000.00 psig**
 Start Date: **2009.01.19** End Date: **2009.01.19** Last Calib.: **2009.01.19**
 Start Time: **01:00:05** End Time: **07:00:29** Time On Btm: **2009.01.19 @ 03:07:45**
 Time Off Btm: **2009.01.19 @ 05:16:44**

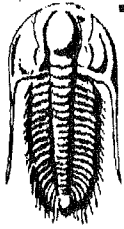
TEST COMMENT: 2" in blow
 No return
 1/4" in. blow, died back to a weak surface blow
 No return



| PRESSURE SUMMARY | | | |
|------------------|-----------------|--------------|----------------------|
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
| 0 | 1945.73 | 106.14 | Initial Hydro-static |
| 1 | 24.02 | 105.07 | Open To Flow (1) |
| 11 | 31.90 | 106.66 | Shut-In (1) |
| 43 | 898.07 | 109.21 | End Shut-In (1) |
| 43 | 351.05 | 109.15 | Open To Flow (2) |
| 72 | 37.78 | 110.53 | Shut-In (2) |
| 129 | 903.22 | 113.42 | End Shut-In (2) |
| 129 | 1904.23 | 113.61 | Final Hydro-static |

| Recovery | | |
|-------------|------------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| 30.00 | Heavy mud 100% m | 0.42 |
| | | |
| | | |
| | | |
| | | |

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33322

DST#: 2

ATTN: Kevin Kessler

Test Start: 2009.01.19 @ 01:00:05

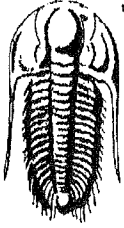
Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3959.00 ft | Diameter: 3.80 inches | Volume: 55.53 bbl | Tool Weight: 1500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 75000.00 lb |
| | | | Total Volume: 55.53 bbl | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 31.00 ft | | | String Weight: Initial 52000.00 lb |
| Depth to Top Packer: | 3955.00 ft | | | Final 53000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 45.00 ft | | | |
| Tool Length: | 72.00 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 | | | 3929.00 | |
| Shut In Tool | 5.00 | | | 3934.00 | |
| Hydraulic tool | 5.00 | | | 3939.00 | |
| Jars | 5.00 | | | 3944.00 | |
| Safety Joint | 2.00 | | | 3946.00 | |
| Packer | 5.00 | | | 3951.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3955.00 | |
| Stubb | 1.00 | | | 3956.00 | |
| Recorder | 0.00 | 6667 | Inside | 3956.00 | |
| Recorder | 0.00 | 6771 | Outside | 3956.00 | |
| Anchor | 5.00 | | | 3961.00 | |
| Change Over Sub | 1.00 | | | 3962.00 | |
| Drill Pipe | 32.00 | | | 3994.00 | |
| Change Over Sub | 1.00 | | | 3995.00 | |
| Bullnose | 5.00 | | | 4000.00 | 45.00 Bottom Packers & Anchor |

Total Tool Length: 72.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33322

DST#: 2

ATTN: Kevin Kessler

Test Start: 2009.01.19 @ 01:00:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.87 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|-----------------------------|----------------|
| 30.00 | Heavy mud 100% _m | 0.421 |

Total Length: 30.00 ft

Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

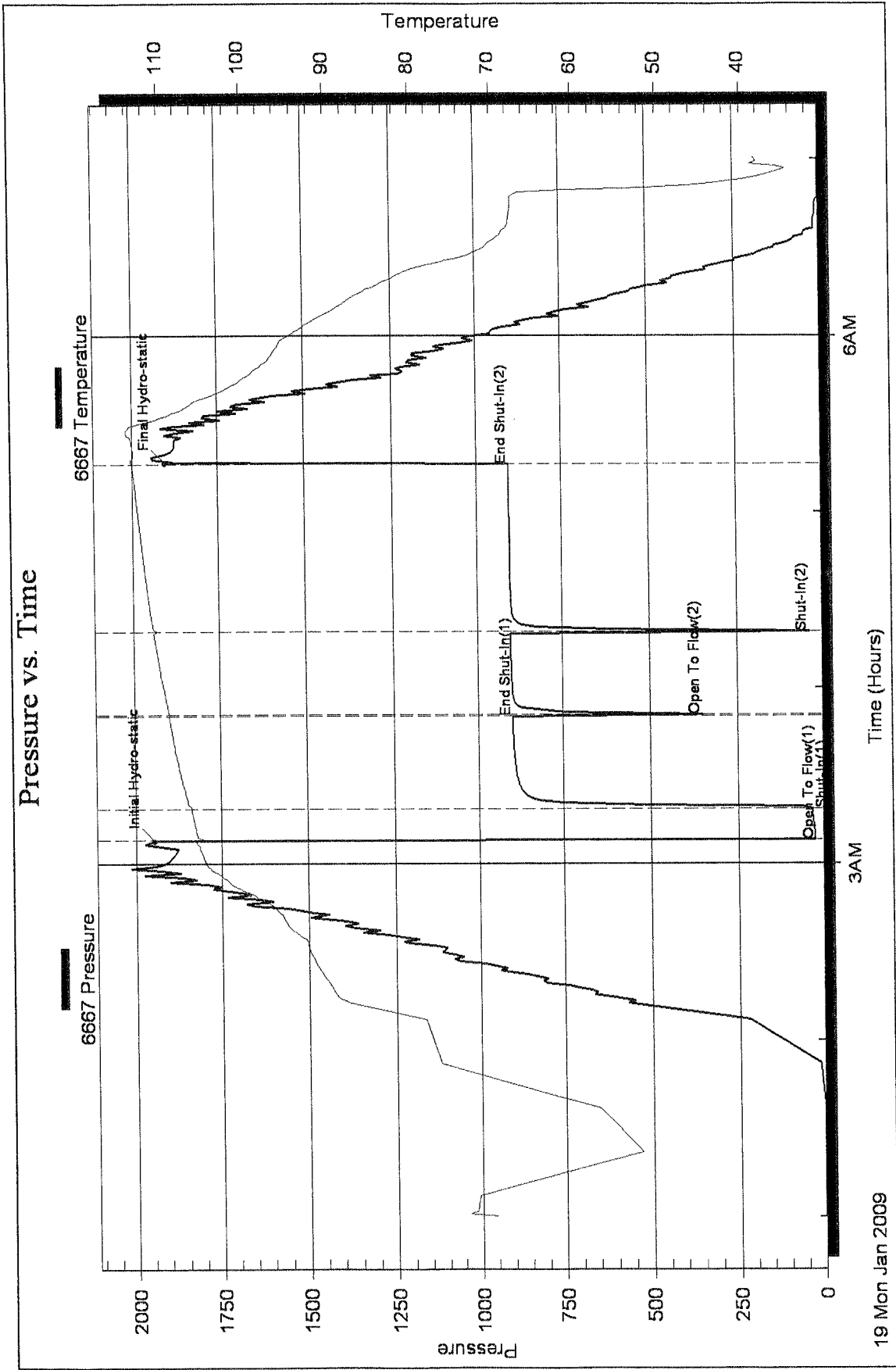
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

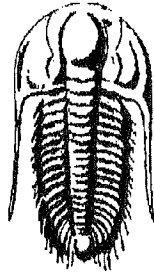


19 Mon Jan 2009

3AM

6AM

Time (Hours)



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

PO Box 2758
Wichita, KS
67202

ATTN: Kevin Kessler

23-15s-27w Gove, Ks

Albin #1-23

Start Date: 2009.01.20 @ 08:45:05

End Date: 2009.01.20 @ 15:10:00

Job Ticket #: 33323 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mull Drilling Co

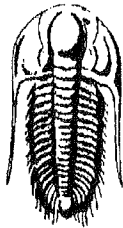
Albin #1-23

23-15s-27w Gove, Ks

DST # 3

Ft Scott

2009.01.20



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mull Drilling Co
PO Box 2758
Wichita, KS
67202
ATTN: Kevin Kessler

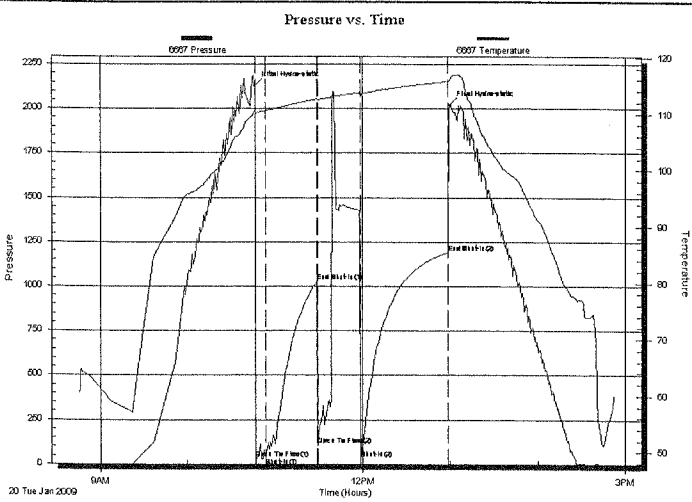
Albin #1-23
23-15s-27w Gove, Ks
Job Ticket: 33323 **DST#: 3**
Test Start: 2009.01.20 @ 08:45:05

GENERAL INFORMATION:

Formation: **Ft Scott**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:47:15
Time Test Ended: 15:10:00
Interval: **4170.00 ft (KB) To 4250.00 ft (KB) (TVD)**
Total Depth: 4250.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2448.00 ft (KB)
2438.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
Press@RunDepth: 33.73 psig @ 4171.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.01.20 End Date: 2009.01.20 Last Calib.: 2009.01.20
Start Time: 08:45:05 End Time: 14:52:29 Time On Btm: 2009.01.20 @ 10:46:45
Time Off Btm: 2009.01.20 @ 12:59:45

TEST COMMENT: 1/4" in. blow built to 1" in.
No return
Weak surface blow, Flush tool after 10 min. Good surge 1/2" in. blow, died back to a weak surface blow
No return



PRESSURE SUMMARY

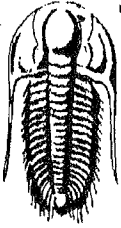
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2130.16 | 110.48 | Initial Hydro-static |
| 1 | 28.91 | 110.13 | Open To Flow (1) |
| 7 | 34.35 | 110.54 | Shut-In (1) |
| 43 | 1027.60 | 112.66 | End Shut-In (1) |
| 44 | 109.14 | 112.48 | Open To Flow (2) |
| 73 | 33.73 | 112.96 | Shut-In (2) |
| 132 | 1191.41 | 115.80 | End Shut-In (2) |
| 133 | 2021.39 | 116.02 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 20.00 | mud 100% m | 0.28 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202
ATTN: Kevin Kessler

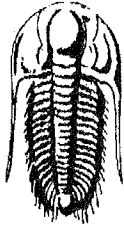
23-15s-27w Gove, Ks
Job Ticket: 33323 **DST#: 3**
Test Start: 2009.01.20 @ 08:45:05

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4147.00 ft | Diameter: 3.80 inches | Volume: 58.17 bbl | Tool Weight: 1500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 80000.00 lb |
| | | | <u>Total Volume: 58.17 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 4.00 ft | | | String Weight: Initial 52000.00 lb |
| Depth to Top Packer: | 4170.00 ft | | | Final 53000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 80.00 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 | | | 4144.00 | |
| Shut In Tool | 5.00 | | | 4149.00 | |
| Hydraulic tool | 5.00 | | | 4154.00 | |
| Jars | 5.00 | | | 4159.00 | |
| Safety Joint | 2.00 | | | 4161.00 | |
| Packer | 5.00 | | | 4166.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4170.00 | |
| Stubb | 1.00 | | | 4171.00 | |
| Recorder | 0.00 | 6667 | Inside | 4171.00 | |
| Recorder | 0.00 | 6771 | Outside | 4171.00 | |
| Anchor | 10.00 | | | 4181.00 | |
| Change Over Sub | 1.00 | | | 4182.00 | |
| Drill Pipe | 62.00 | | | 4244.00 | |
| Change Over Sub | 1.00 | | | 4245.00 | |
| Bullnose | 5.00 | | | 4250.00 | 80.00 Bottom Packers & Anchor |
| Total Tool Length: | 107.00 | | | | |



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co
PO Box 2758
Wichita, KS
67202
ATTN: Kevin Kessler

Albin #1-23
23-15s-27w Gove, Ks
Job Ticket: 33323 **DST#: 3**
Test Start: 2009.01.20 @ 08:45:05

Mud and Cushion Information

| | | | |
|-----------------------------------|----------------------------|-----------------|-----------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | 0 deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | 0 ppm |
| Viscosity: 52.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 13.82 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 9800.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

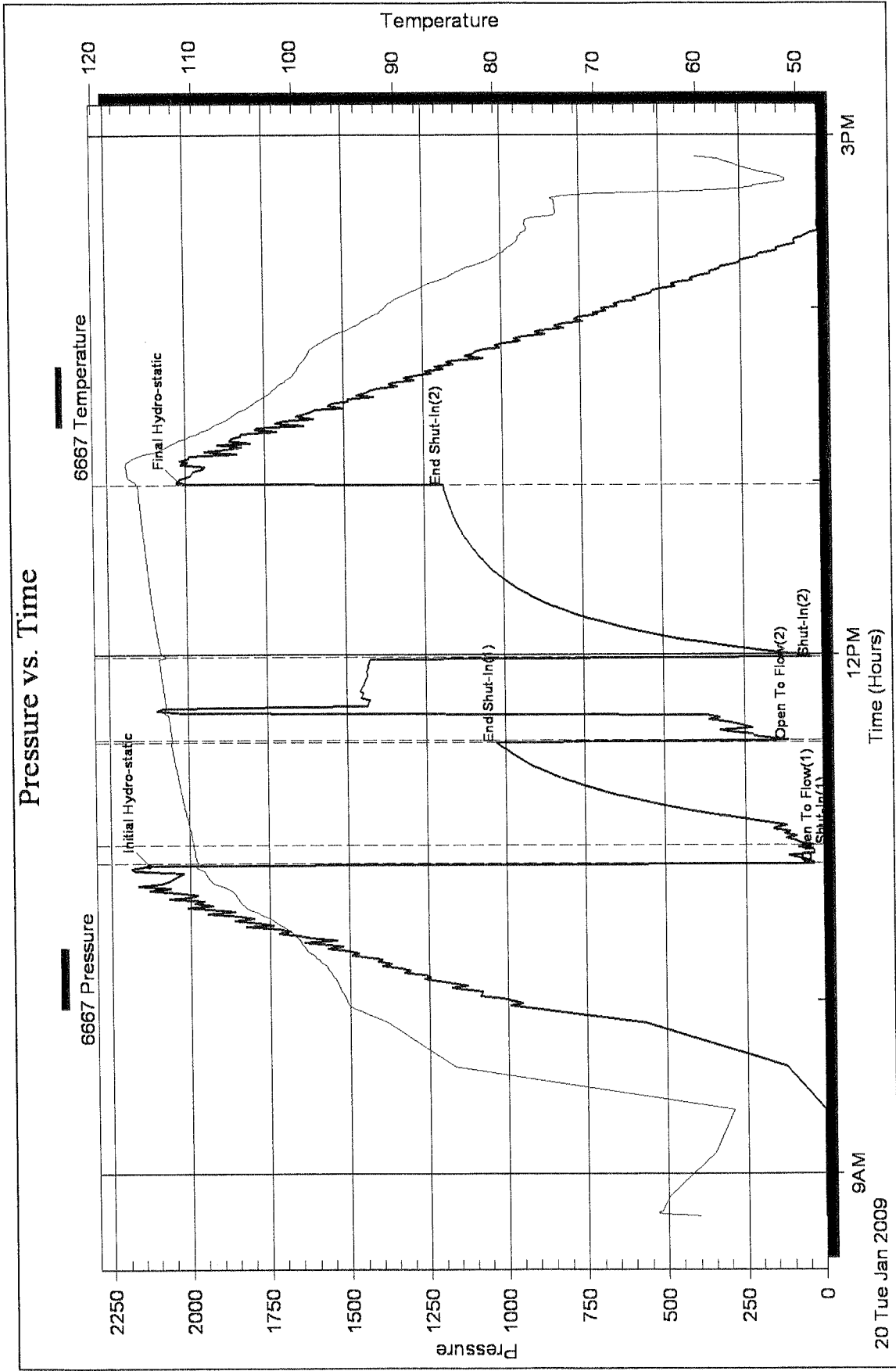
Recovery Information

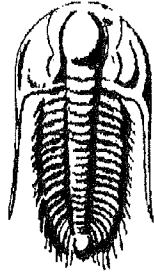
Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------------|---------------|
| 20.00 | mud 100% _m | 0.281 |

Total Length: 20.00 ft Total Volume: 0.281 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

PO Box 2758
Wichita , KS
67202

ATTN: Kevin Kessler

23-15s-27w Gove,Ks

Albin #1-23

Start Date: 2009.01.21 @ 02:45:05

End Date: 2009.01.21 @ 10:55:59

Job Ticket #: 33324 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mull Drilling Co

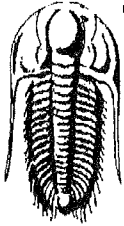
Albin #1-23

23-15s-27w Gove,Ks

DST # 4

Miss

2009.01.21



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mull Drilling Co
PO Box 2758
Wichita, KS
67202
ATTN: Kevin Kessler

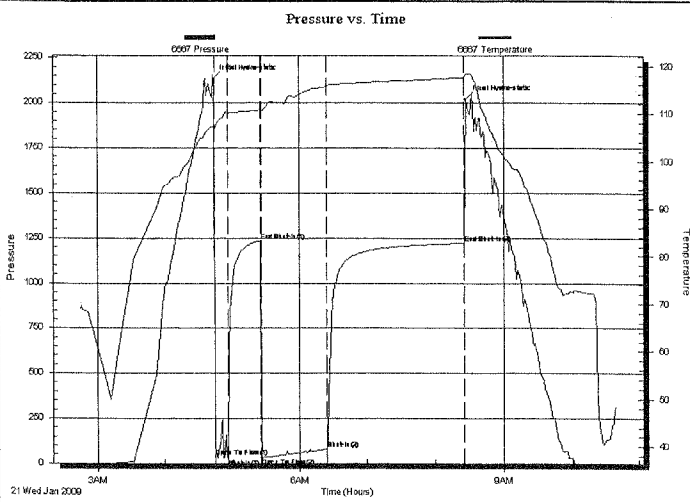
Albin #1-23
23-15s-27w Gove, Ks
Job Ticket: 33324 **DST#: 4**
Test Start: 2009.01.21 @ 02:45:05

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:44:15
Time Test Ended: 10:55:59
Interval: **4220.00 ft (KB) To 4315.00 ft (KB) (TVD)**
Total Depth: 4315.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Reference Elevations: 2448.00 ft (KB)
2438.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
Press@RunDepth: 79.24 psig @ 4221.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.01.21 End Date: 2009.01.21 Last Calib.: 2009.01.21
Start Time: 02:45:05 End Time: 10:39:59 Time On Btm: 2009.01.21 @ 04:43:30
Time Off Btm: 2009.01.21 @ 08:26:44

TEST COMMENT: 1/2" in. @ open built to 2 1/4" in.
No return
1/4" in. @ open built to 5" in.
No return



PRESSURE SUMMARY

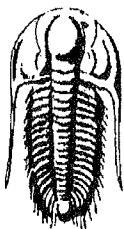
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2134.18 | 107.21 | Initial Hydro-static |
| 1 | 38.56 | 106.57 | Open To Flow (1) |
| 12 | 28.20 | 109.83 | Shut-In (1) |
| 42 | 1234.75 | 110.76 | End Shut-In (1) |
| 42 | 32.48 | 110.40 | Open To Flow (2) |
| 102 | 79.24 | 115.85 | Shut-In (2) |
| 223 | 1221.36 | 117.58 | End Shut-In (2) |
| 224 | 2020.82 | 118.22 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 40.00 | o c m 30% o 70% m | 0.56 |
| 90.00 | h o c m 40% o 60% m | 1.26 |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33324

DST#: 4

ATTN: Kevin Kessler

Test Start: 2009.01.21 @ 02:45:05

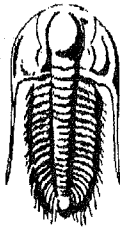
Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4207.00 ft | Diameter: 3.80 inches | Volume: 59.01 bbl | Tool Weight: 1500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 80000.00 lb |
| | | | <u>Total Volume: 59.01 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 14.00 ft | | | String Weight: Initial 50000.00 lb |
| Depth to Top Packer: | 4220.00 ft | | | Final 52000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 95.00 ft | | | |
| Tool Length: | 122.00 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 | | | 4194.00 | |
| Shut In Tool | 5.00 | | | 4199.00 | |
| Hydraulic tool | 5.00 | | | 4204.00 | |
| Jars | 5.00 | | | 4209.00 | |
| Safety Joint | 2.00 | | | 4211.00 | |
| Packer | 5.00 | | | 4216.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4220.00 | |
| Stubb | 1.00 | | | 4221.00 | |
| Recorder | 0.00 | 6667 | Inside | 4221.00 | |
| Recorder | 0.00 | 6771 | Outside | 4221.00 | |
| Perforations | 25.00 | | | 4246.00 | |
| Change Over Sub | 1.00 | | | 4247.00 | |
| Drill Pipe | 62.00 | | | 4309.00 | |
| Change Over Sub | 1.00 | | | 4310.00 | |
| Bullnose | 5.00 | | | 4315.00 | 95.00 Bottom Packers & Anchor |

Total Tool Length: 122.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33324

DST#: 4

ATTN: Kevin Kessler

Test Start: 2009.01.21 @ 02:45:05

Mud and Cushion Information

| | | | |
|-----------------------------------|----------------------------|-----------------|-----------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | 0 deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | 0 ppm |
| Viscosity: 50.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 16.72 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 9100.00 ppm | | | |
| Filter Cake: 2.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------------|---------------|
| 40.00 | o c m 30%o 70%m | 0.561 |
| 90.00 | h o c m 40%o 60%m | 1.262 |

Total Length: 130.00 ft Total Volume: 1.823 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 6667

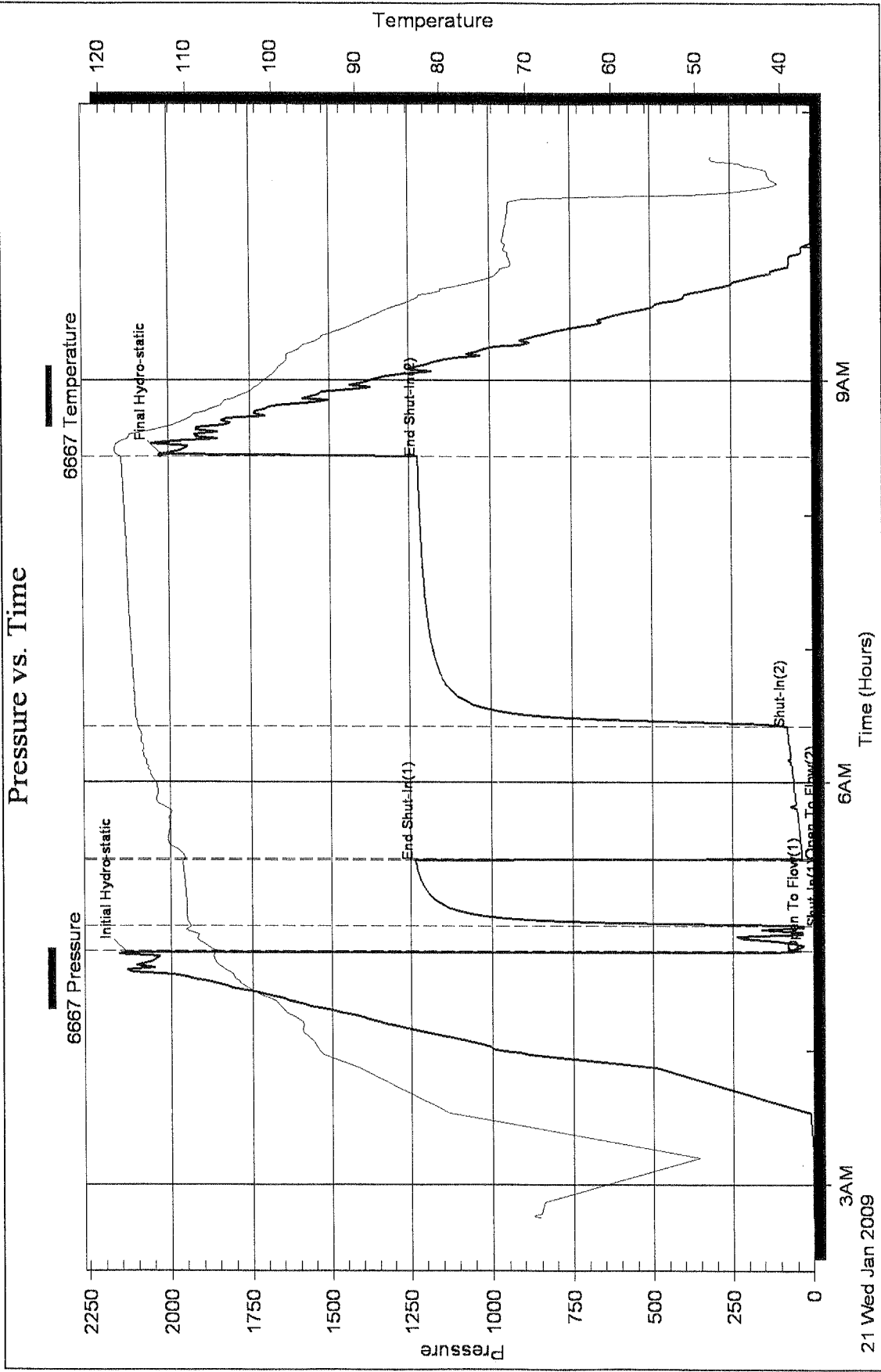
Inside

Mull Drilling Co

23-15s-27w Gove, Ks

DST Test Number: 4

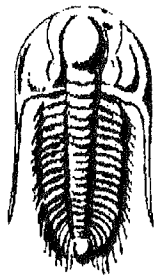
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 33324

Printed: 2009.01.27 @ 10:14:20 Page 5



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

PO Box 2758
Wichita, KS
67202

ATTN: Kevin Kessler

23-15s-27w Gove,Ks

Albin #1-23

Start Date: 2009.01.21 @ 17:00:05

End Date: 2009.01.22 @ 01:45:00

Job Ticket #: 33325 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mull Drilling Co

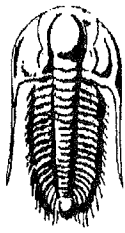
Albin #1-23

23-15s-27w Gove,Ks

DST # 5

Miss

2009.01.21



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mull Drilling Co
 PO Box 2758
 Wichita, KS
 67202
 ATTN: Kevin Kessler

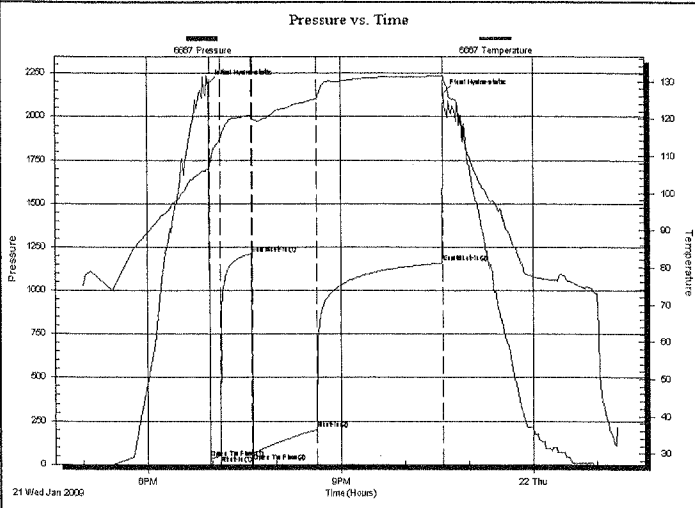
Albin #1-23
23-15s-27w Gove, Ks
 Job Ticket: 33325 **DST#: 5**
 Test Start: 2009.01.21 @ 17:00:05

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole
 Time Tool Opened: 18:57:45 Tester: Shane McBride
 Time Test Ended: 01:45:00 Unit No: 40
 Interval: **4315.00 ft (KB) To 4325.00 ft (KB) (TVD)** Reference Elevations: 2448.00 ft (KB)
 Total Depth: 4325.00 ft (KB) (TVD) 2438.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
 Press@RunDepth: 202.39 psig @ 4316.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2009.01.21 End Date: 2009.01.22 Last Calib.: 2009.01.22
 Start Time: 17:00:05 End Time: 01:18:44 Time On Btm: 2009.01.21 @ 18:57:30
 Time Off Btm: 2009.01.21 @ 22:36:59

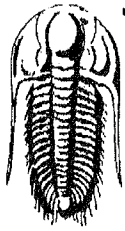
TEST COMMENT: B.O.B. in 10 min.
 Very weak surface return blow
 B.O.B. in 14 min.
 Return blow built to a weak 1/2" in. died in 65 min.



| PRESSURE SUMMARY | | | |
|------------------|-----------------|--------------|----------------------|
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
| 0 | 2192.08 | 106.47 | Initial Hydro-static |
| 1 | 36.04 | 106.49 | Open To Flow (1) |
| 11 | 56.63 | 114.23 | Shut-In(1) |
| 40 | 1213.67 | 120.87 | End Shut-In(1) |
| 41 | 67.06 | 120.20 | Open To Flow (2) |
| 101 | 202.39 | 125.22 | Shut-In(2) |
| 219 | 1158.80 | 131.38 | End Shut-In(2) |
| 220 | 2133.64 | 131.05 | Final Hydro-static |

| Recovery | | |
|-------------|---------------------------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| 415.00 | c g o 15%g 85%o | 5.82 |
| 60.00 | g w & m c o 10%g 25%w 30%m 35%o | 0.84 |
| | | |
| | | |
| | | |

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33325

DST#: 5

ATTN: Kevin Kessler

Test Start: 2009.01.21 @ 17:00:05

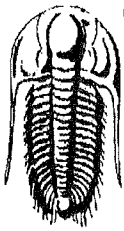
Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4302.00 ft | Diameter: 3.80 inches | Volume: 60.35 bbl | Tool Weight: 1500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 85000.00 lb |
| | | | <u>Total Volume: 60.35 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 14.00 ft | | | String Weight: Initial 51000.00 lb |
| Depth to Top Packer: | 4315.00 ft | | | Final 56000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 10.00 ft | | | |
| Tool Length: | 37.00 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 | | | 4289.00 | |
| Shut In Tool | 5.00 | | | 4294.00 | |
| Hydraulic tool | 5.00 | | | 4299.00 | |
| Jars | 5.00 | | | 4304.00 | |
| Safety Joint | 2.00 | | | 4306.00 | |
| Packer | 5.00 | | | 4311.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4315.00 | |
| Stubb | 1.00 | | | 4316.00 | |
| Recorder | 0.00 | 6667 | Inside | 4316.00 | |
| Recorder | 0.00 | 6771 | Outside | 4316.00 | |
| Perforations | 4.00 | | | 4320.00 | |
| Bullnose | 5.00 | | | 4325.00 | 10.00 Bottom Packers & Anchor |

Total Tool Length: 37.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202
ATTN: Kevin Kessler

23-15s-27w Gove, Ks
Job Ticket: 33325 **DST#: 5**
Test Start: 2009.01.21 @ 17:00:05

Mud and Cushion Information

| | | | | | |
|--------------|-----------------------|-----------------------|------|-----------------|------------|
| Mud Type: | Gel Chem | Cushion Type: | | Oil API: | 32 deg API |
| Mud Weight: | 9.00 lb/gal | Cushion Length: | ft | Water Salinity: | 0 ppm |
| Viscosity: | 52.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 16.73 in ³ | Gas Cushion Type: | | | |
| Resistivity: | 0.00 ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | 9100.00 ppm | | | | |
| Filter Cake: | 2.00 inches | | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------------------|---------------|
| 415.00 | c g o 15%g 85%o | 5.821 |
| 60.00 | g w & m c o 10%g 25%w 30%m 35%o | 0.842 |

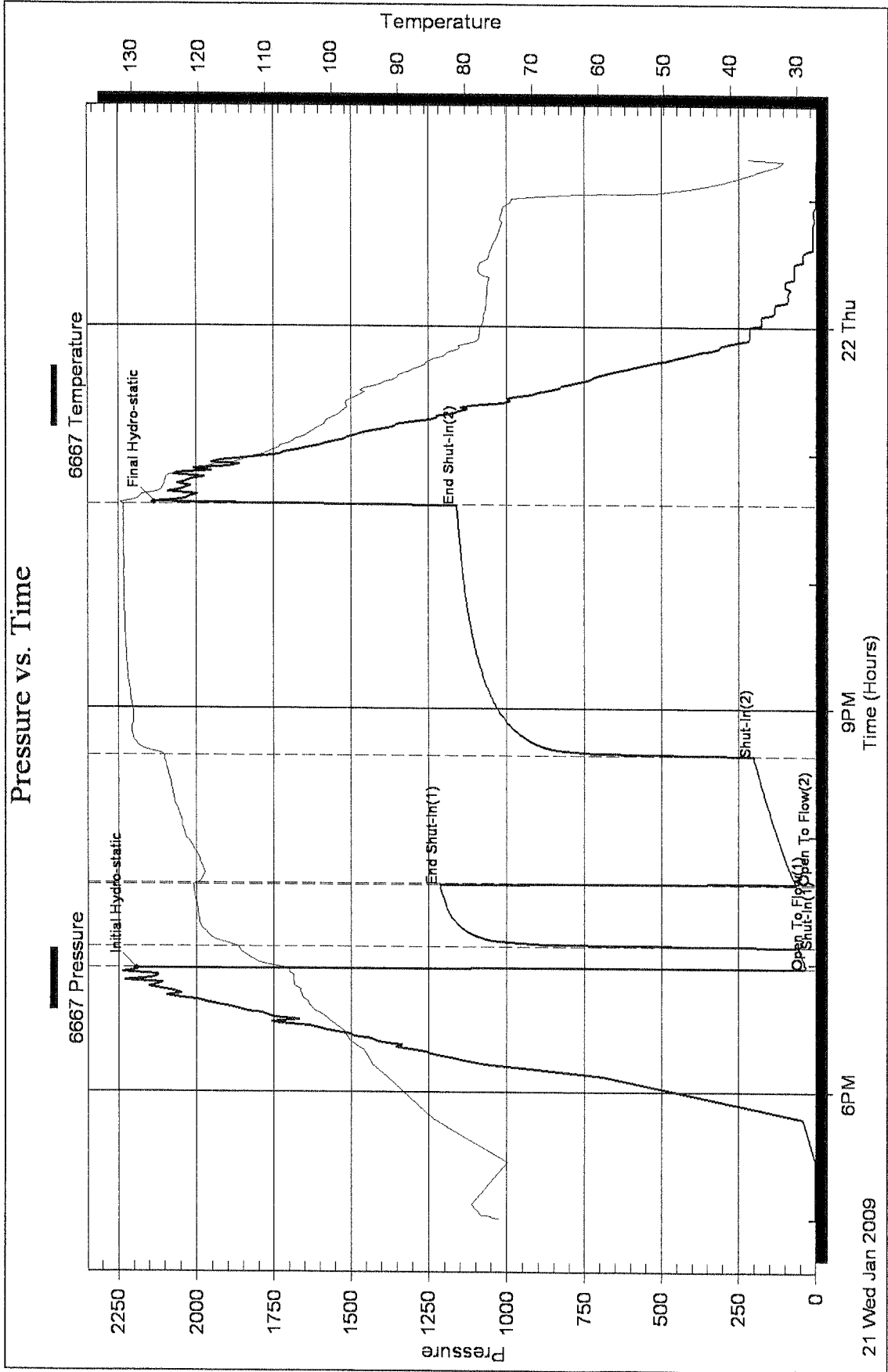
Total Length: 475.00 ft Total Volume: 6.663 bbl

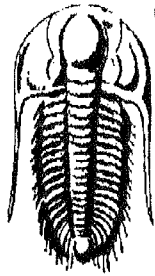
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co**

PO Box 2758
Wichita, KS
67202

ATTN: Kevin Kessler

23-15s-27w Gove, Ks

Albin #1-23

Start Date: 2009.01.22 @ 09:25:05

End Date: 2009.01.22 @ 16:20:14

Job Ticket #: 33326 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mull Drilling Co

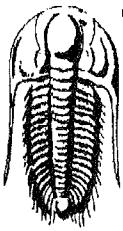
Albin #1-23

23-15s-27w Gove, Ks

DST # 6

Miss

2009.01.22



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mull Drilling Co
PO Box 2758
Wichita, KS
67202
ATTN: Kevin Kessler

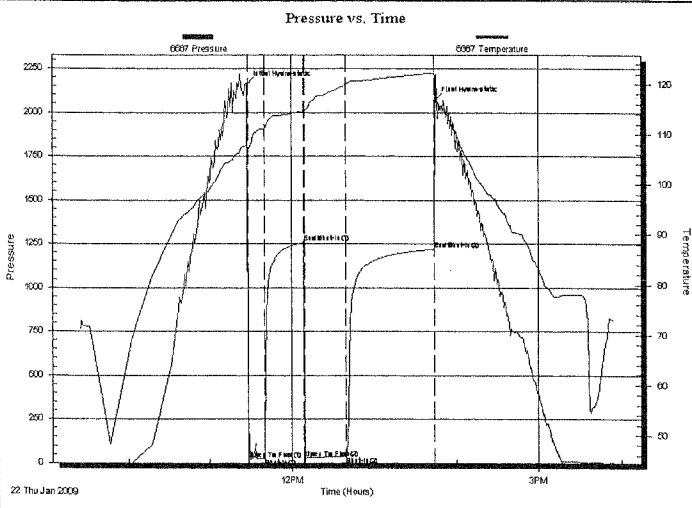
Albin #1-23
23-15s-27w Gove, Ks
Job Ticket: 33326 **DST#: 6**
Test Start: 2009.01.22 @ 09:25:05

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:28:00
Time Test Ended: 16:20:14
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Interval: **4325.00 ft (KB) To 4340.00 ft (KB) (TVD)**
Reference Elevations: 2448.00 ft (KB)
Total Depth: 4340.00 ft (KB) (TVD) 2438.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
Press@RunDepth: 38.95 psig @ 4326.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.01.22 End Date: 2009.01.22 Last Calib.: 2009.01.22
Start Time: 09:25:05 End Time: 15:55:14 Time On Btm: 2009.01.22 @ 11:27:45
Time Off Btm: 2009.01.22 @ 13:44:15

TEST COMMENT: 1/4" in @ open built to 1 3/4" in.
No return
1/2" in blow died back to a weak surface blow
No return



PRESSURE SUMMARY

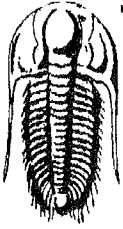
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2159.39 | 107.88 | Initial Hydro-static |
| 1 | 21.87 | 107.14 | Open To Flow (1) |
| 12 | 26.37 | 111.07 | Shut-In(1) |
| 41 | 1255.58 | 114.55 | End Shut-In(1) |
| 42 | 28.97 | 114.39 | Open To Flow(2) |
| 71 | 38.95 | 119.84 | Shut-In(2) |
| 136 | 1220.05 | 122.15 | End Shut-In(2) |
| 137 | 2067.77 | 121.69 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------------------|--------------|
| 2.00 | free oil 100% | 0.03 |
| 48.00 | s o c m w 5%o 40%m 55%w | 0.67 |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33326

DST#: 6

ATTN: Kevin Kessler

Test Start: 2009.01.22 @ 09:25:05

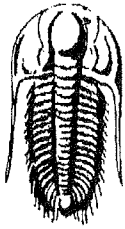
Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4329.00 ft | Diameter: 3.80 inches | Volume: 60.72 bbl | Tool Weight: 1500.00 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: 0.00 ft | Diameter: 0.00 inches | Volume: 0.00 bbl | Weight to Pull Loose: 80000.00 lb |
| | | | <u>Total Volume: 60.72 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 31.00 ft | | | String Weight: Initial 55000.00 lb |
| Depth to Top Packer: | 4325.00 ft | | | Final 55000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 15.00 ft | | | |
| Tool Length: | 42.00 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 | | | 4299.00 | |
| Shut In Tool | 5.00 | | | 4304.00 | |
| Hydraulic tool | 5.00 | | | 4309.00 | |
| Jars | 5.00 | | | 4314.00 | |
| Safety Joint | 2.00 | | | 4316.00 | |
| Packer | 5.00 | | | 4321.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4325.00 | |
| Stubb | 1.00 | | | 4326.00 | |
| Recorder | 0.00 | 6667 | Inside | 4326.00 | |
| Recorder | 0.00 | 6771 | Outside | 4326.00 | |
| Perforations | 9.00 | | | 4335.00 | |
| Bullnose | 5.00 | | | 4340.00 | 15.00 Bottom Packers & Anchor |

Total Tool Length: 42.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co

Albin #1-23

PO Box 2758
Wichita, KS
67202

23-15s-27w Gove, Ks

Job Ticket: 33326

DST#: 6

ATTN: Kevin Kessler

Test Start: 2009.01.22 @ 09:25:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

21000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|-------------------------|----------------|
| 2.00 | free oil 100%o | 0.028 |
| 48.00 | s o c m w 5%o 40%m 55%w | 0.673 |

Total Length: 50.00 ft Total Volume: 0.701 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .298 @ 75*f = 21,000

Pressure vs. Time

