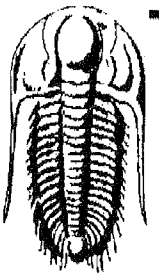
29-21s-12w



TRILOBITE TESTING, INC.



# DRILL STEM TEST REPORT

Prepared For: **Berenenergy**

3333 S Wadsworth Blvd
Lakewood Co 80227

ORIGINAL

ATTN: Dave Braden

API # 15-185-23192-00-00

**29-21s-12w Stafford**

**Fisher #7** 'A'

Start Date: 2003.07.25 @ 22:10:33

End Date: 2003.07.26 @ 05:46:42

Job Ticket #: 17091 DST #: 1

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

ORIGINAL

# DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Berenenergy

3333 S Wadsw orth Blvd
Lakew ood Co 80227

ATTN: Dave Braden

**Fisher #7**

**29-21s-12w Stafford**

Job Ticket: 17091 **DST#: 1**

Test Start: 2003.07.25 @ 22:10:33

## GENERAL INFORMATION:

Formation: **Lansing A-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:16:58
Time Test Ended: 05:46:42

Test Type: Conventional Bottom Hole
Tester: Paul/Nathan
Unit No: 24

**Interval: 3280.00 ft (KB) To 3346.00 ft (KB) (TVD)**
Total Depth: 3346.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1871.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 8.00 ft

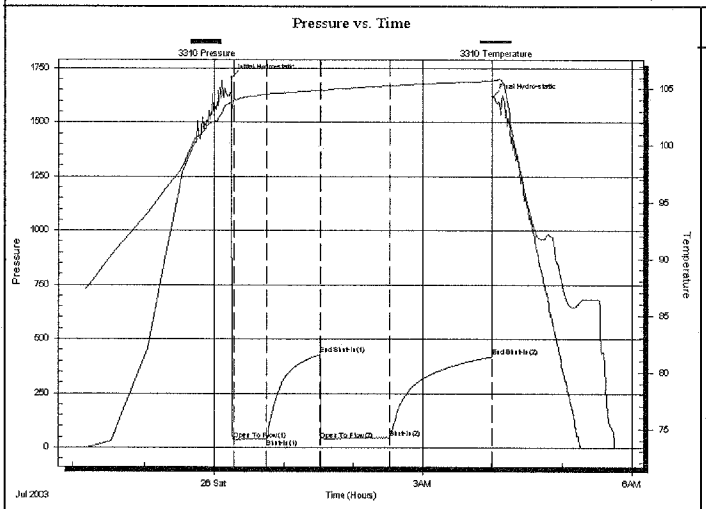
**Serial #: 3310** **Inside**

Press@RunDepth: 46.36 psig @ 3319.00 ft (KB)
Start Date: 2003.07.25 End Date: 2003.07.26
Start Time: 22:10:33 End Time: 05:46:42

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2003.07.26 @ 00:14:28
Time Off Btm: 2003.07.26 @ 04:00:43

TEST COMMENT: IF- 1" blow building to bottom of bucket in 90 seconds
ISI- no blow
FF- strong bottom of bucket as soon as tool opened: gas to surface in 40min tstm
FSI- no blow






## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1705.20 | 103.80 | Initial Hydro-static |
| 3 | 35.97 | 104.08 | Open To Flow (1) |
| 31 | 38.67 | 104.55 | Shut-In(1) |
| 77 | 429.18 | 104.87 | End Shut-In(1) |
| 77 | 36.09 | 104.96 | Open To Flow (2) |
| 137 | 46.36 | 105.29 | Shut-In(2) |
| 226 | 419.01 | 105.70 | End Shut-In(2) |
| 227 | 1617.80 | 105.67 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 40.00 | gassy mud | 0.56 |
| | | |
| | | |
| | | |
| | | |
| | | |

## Gas Rates

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

ORIGINAL

TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Berenenergy

3333 S Wadsworth Blvd
Lakewood Co 80227

ATTN: Dave Braden

**Fisher #7**

**29-21s-12w Stafford**

Job Ticket: 17091 **DST#: 1**

Test Start: 2003.07.25 @ 22:10:33

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3281.00 ft | Diameter: | 3.80 inches | Volume: | 46.02 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 2.70 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 0.00 ft | Diameter: | 2.25 inches | Volume: | 0.00 bbl | |
| | | | | | Total Volume: | 46.02 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 23.00 ft |
| Depth to Top Packer: | 3280.00 ft |
| Depth to Bottom Packer: | ft |
| Interval between Packers: | 66.00 ft |
| Tool Length: | 88.00 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | |
|---|---|
| Tool Weight: | 2400.00 lb |
| Weight set on Packer: | 22000.00 lb |
| Weight to Pull Loose: | 54000.00 lb |
| Tool Chased | ft |
| String Weight: Initial | 54000.00 lb |
| Final | 54000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 3259.00 | | |
| Shut In Tool | 5.00 | | | 3264.00 | | |
| Hydraulic tool | 5.00 | | | 3269.00 | | |
| Safety Joint | 2.00 | | | 3271.00 | | |
| Packer | 4.00 | | | 3275.00 | 22.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 3280.00 | | |
| Stubb | 1.00 | | | 3281.00 | | |
| Perforations | 5.00 | | | 3286.00 | | |
| Change Over Sub | 1.00 | | | 3287.00 | | |
| Blank Spacing | 31.00 | | | 3318.00 | | |
| Change Over Sub | 1.00 | | | 3319.00 | | |
| Recorder | 0.00 | 3310 | Inside | 3319.00 | | |
| Perforations | 25.00 | | | 3344.00 | | |
| Recorder | 0.00 | 10242 | Outside | 3344.00 | | |
| Bullnose | 2.00 | | | 3346.00 | 66.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **88.00** | | | | | |

JAN 2 9 2004

TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berenenergy

3333 S Wadsw orth Blvd
Lakew ood Co 80227

ATTN: Dave Braden

**Fisher #7**

**29-21s-12w Stafford**

Job Ticket: 17091 **DST#: 1**

Test Start: 2003.07.25 @ 22:10:33

## 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: | 45.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.18 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | ppm | | | | |
| Filter Cake: | inches | | | | |

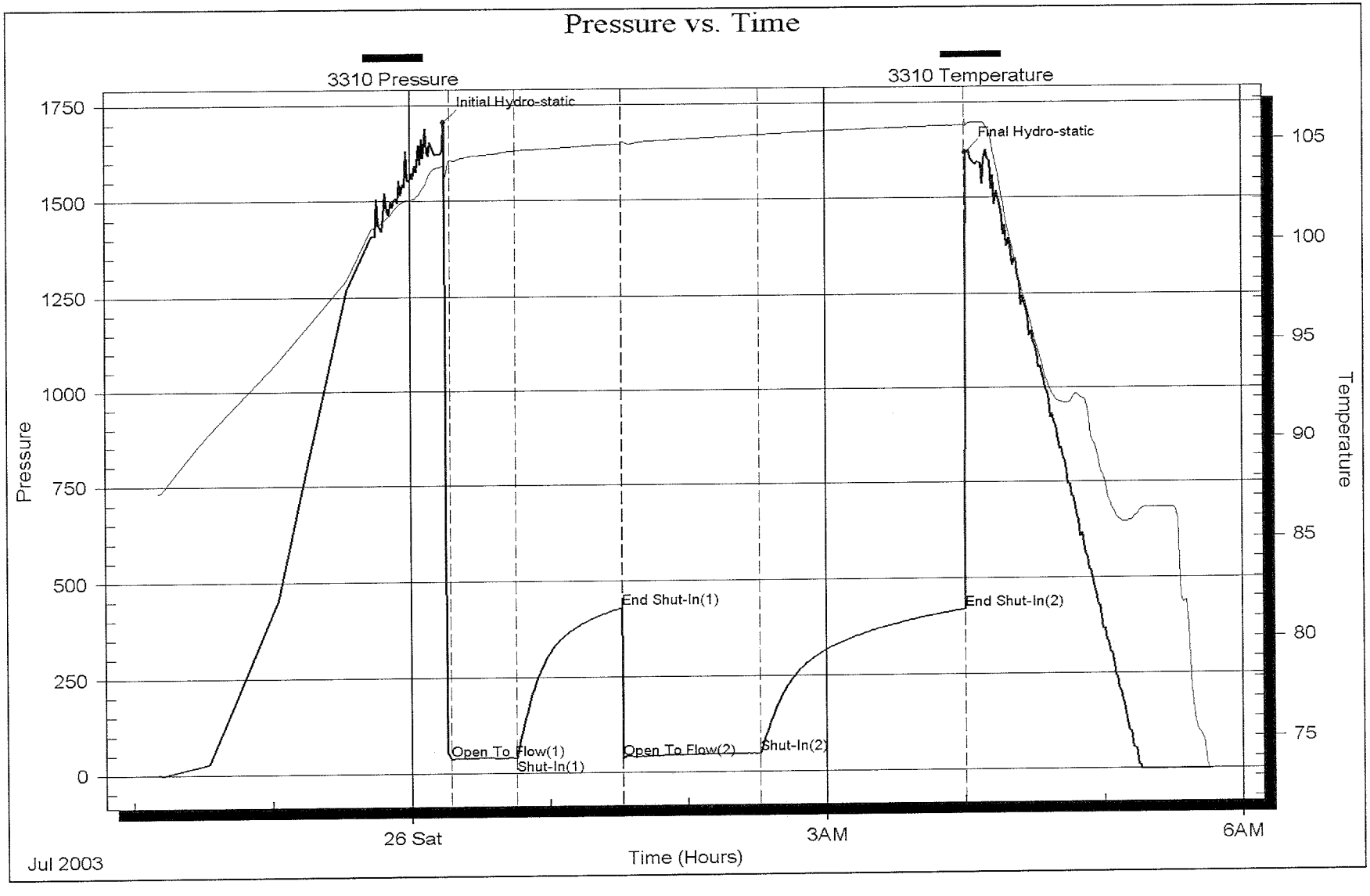
## Recovery Information

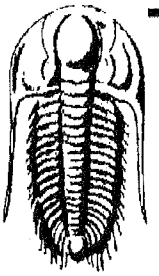
Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 40.00 | gassy mud | 0.561 |

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
3310 Pressure
3310 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
1750
1500
1250
1000
750
500
250
0
Pressure
105
100
95
90
85
80
75
Temperature
26 Sat
3AM
6AM
Jul 2003
Time (Hours)



TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **Berenenergy**

3333 S Wadsworth Blvd
Lakewood Co 80227

ATTN: Dave Braden

## 29-21s-12w Stafford

## Fisher #7

Start Date: 2003.07.26 @ 16:36:18

End Date: 2003.07.26 @ 23:19:33

Job Ticket #: 17092 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

# DRILL STEM TEST REPORT

Berenenergy

3333 S Wadsw orth Blvd
Lakew ood Co 80227

ATTN: Dave Braden

**Fisher #7**

**29-21s-12w Stafford**

Job Ticket: 17092 **DST#: 2**

Test Start: 2003.07.26 @ 16:36:18

## GENERAL INFORMATION:

Formation: **Kansas City H,I,J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:56:03
Time Test Ended: 23:19:33

Test Type: Conventional Bottom Hole
Tester: Paul/Nathan
Unit No: 24

**Interval: 3390.00 ft (KB) To 3442.00 ft (KB) (TVD)**
Total Depth: 3442.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

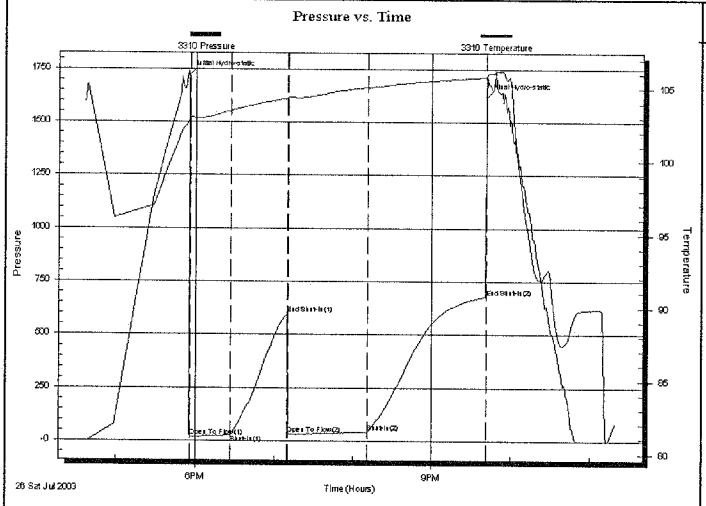
Reference Elevations: 1871.00 ft (KB)
1863.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 3310** **Inside**

Press@RunDepth: 41.34 psig @ 3397.00 ft (KB)
Start Date: 2003.07.26 End Date: 2003.07.26
Start Time: 16:36:23 End Time: 23:19:32

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2003.07.26 @ 17:55:18
Time Off Btm: 2003.07.26 @ 21:42:03

TEST COMMENT: IF- Strong surface blow ; off bottom of bucket in 11 min
ISI- No Blow
FF- Strong Blow ; off bottom of bucket as soon as tool opened
FSI- No Blow




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1723.24 | 102.85 | Initial Hydro-static |
| 1 | 20.53 | 103.07 | Open To Flow (1) |
| 31 | 25.63 | 103.50 | Shut-In(1) |
| 74 | 597.59 | 104.35 | End Shut-In(1) |
| 75 | 30.74 | 104.46 | Open To Flow (2) |
| 136 | 41.34 | 105.10 | Shut-In(2) |
| 227 | 679.14 | 105.81 | End Shut-In(2) |
| 227 | 1619.02 | 105.80 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 60.00 | hocm 40%o 60% m | 0.84 |
| 1.00 | socm 10%o 90% m | 0.01 |
| 0.00 | 1400' Gip | 0.00 |
| | | |
| | | |
| | | |

## Gas Rates

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

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Berenenergy

3333 S Wadsw orth Blvd
Lakew ood Co 80227

ATTN: Dave Braden

**Fisher #7**

**29-21s-12w Stafford**

Job Ticket: 17092 **DST#: 2**

Test Start: 2003.07.26 @ 16:36:18

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3376.00 ft | Diameter: | 3.80 inches | Volume: | 47.36 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 2.70 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 0.00 ft | Diameter: | 2.25 inches | Volume: | 0.00 bbl | |
| | | | | | Total Volume: | 47.36 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 8.00 ft |
| Depth to Top Packer: | 3390.00 ft |
| Depth to Bottom Packer: | ft |
| Interval betw een Packers: | 52.00 ft |
| Tool Length: | 74.00 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | |
|---|---|
| Tool Weight: | 2200.00 lb |
| Weight set on Packer: | 20000.00 lb |
| Weight to Pull Loose: | 54000.00 lb |
| Tool Chased | ft |
| String Weight: Initial | 54000.00 lb |
| Final | 54000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 3369.00 | | |
| Shut In Tool | 5.00 | | | 3374.00 | | |
| Hydraulic tool | 5.00 | | | 3379.00 | | |
| Safety Joint | 2.00 | | | 3381.00 | | |
| Packer | 4.00 | | | 3385.00 | 22.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 3390.00 | | |
| Stubb | 1.00 | | | 3391.00 | | |
| Perforations | 5.00 | | | 3396.00 | | |
| Change Over Sub | 1.00 | | | 3397.00 | | |
| Recorder | 0.00 | 3310 | Inside | 3397.00 | | |
| Blank Spacing | 32.00 | | | 3429.00 | | |
| Change Over Sub | 1.00 | | | 3430.00 | | |
| Perforations | 10.00 | | | 3440.00 | | |
| Recorder | 0.00 | 10242 | Outside | 3440.00 | | |
| Bullnose | 2.00 | | | 3442.00 | 52.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **74.00** | | | | | |

TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berenenergy

3333 S Wadsworth Blvd
Lakewood Co 80227

ATTN: Dave Braden

**Fisher #7**

**29-21s-12w Stafford**

Job Ticket: 17092 **DST#: 2**

Test Start: 2003.07.26 @ 16:36:18

## 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: | 51.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.98 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | ppm | | | | |
| Filter Cake: | inches | | | | |

## Recovery Information

Recovery Table

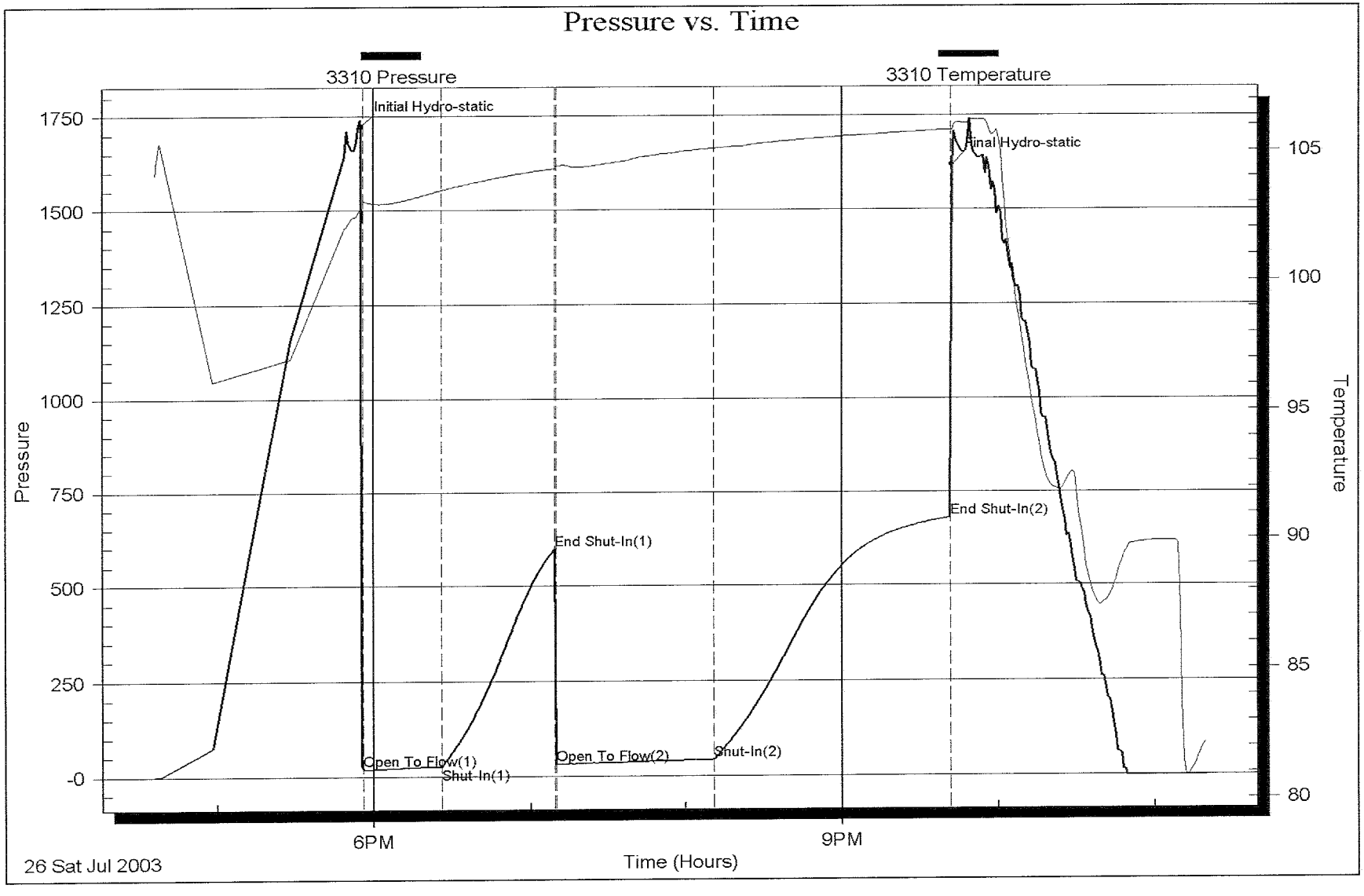
| Length ft | Description | Volume bbl |
|---|---|---|
| 60.00 | hocm 40%o 60% m | 0.842 |
| 1.00 | socm 10%o 90% m | 0.014 |
| 0.00 | 1400' Gip | 0.000 |

Total Length: 61.00 ft Total Volume: 0.856 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: clean oil in tool


Pressure vs. Time
3310 Pressure
3310 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
1750
1500
1250
1000
750
500
250
-0
Pressure
105
100
95
90
85
80
Temperature
6PM
9PM
Time (Hours)
26 Sat Jul 2003