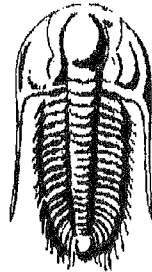


15-009-25043

14-20s-13w



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

## DRILL STEM TEST REPORT

Prepared For: **American Warrior**

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**14 20 13W Barton KS**

*Gaunt*  
**Cooper-Grant 1-14**

Start Date: 2007.04.29 @ 04:38:12

End Date: 2007.04.29 @ 09:27:21

Job Ticket #: 27869      DST #: 1

**KCC**  
**JUL 17 2007**  
**CONFIDENTIAL**

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**JUL 19 2007**

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

American Warrior

Cooper-Grant 1-14

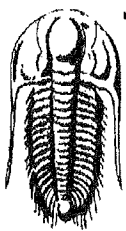
14 20 13W Barton KS

DST # 1

LKC "A-D"

2007.04.29

*Name is Cooper-Grant*



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

## DRILL STEM TEST REPORT

American Warrior

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**Cooper-Grant 1-14**

**14 20 13W Barton KS**

Job Ticket: 27869

**DST#: 1**

Test Start: 2007.04.29 @ 04:38:12

### GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:10:22

Time Test Ended: 09:27:21

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **3211.00 ft (KB) To 3277.00 ft (KB) (TVD)**

Total Depth: 3277.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1870.00 ft (KB)

1862.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 6771 Inside**

Press@RunDepth: 22.36 psig @ 3216.01 ft (KB)

Start Date: 2007.04.29

End Date:

2007.04.29

Start Time: 04:38:12

End Time:

09:27:21

Capacity: 7000.00 psig

Last Calib.: 2007.04.29

Time On Btm: 2007.04.29 @ 06:10:07

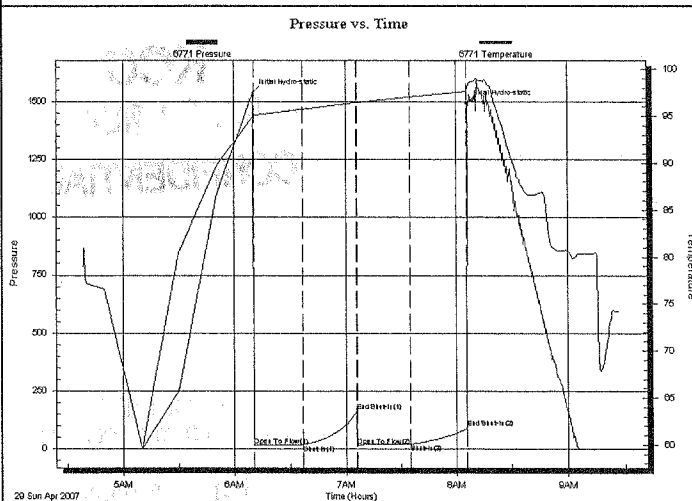
Time Off Btm: 2007.04.29 @ 08:06:07

**TEST COMMENT:** IFP Weak blow throughout 1/4 " - 1 "

ISI No blow back

FFP Weak blow throughout 1/4 " - 3/4 " - died to 1/2 "

FSI No blow back



### PRESSURE SUMMARY

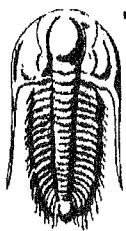
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1536.66         | 94.90        | Initial Hydro-static |
| 1           | 15.17           | 95.07        | Open To Flow (1)     |
| 27          | 18.83           | 95.74        | Shut-In(1)           |
| 56          | 161.75          | 96.47        | End Shut-In(1)       |
| 56          | 13.99           | 96.44        | Open To Flow(2)      |
| 85          | 22.36           | 97.07        | Shut-In(2)           |
| 116         | 90.73           | 97.65        | End Shut-In(2)       |
| 116         | 1491.07         | 98.12        | Final Hydro-static   |

### Recovery

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

### Gas Rates

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



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

## DRILL STEM TEST REPORT

### TOOL DIAGRAM

American Warrior  
PO Box 399  
Garden City KS 67646  
  
ATTN: Marc Downing

**Cooper-Grant 1-14**  
**14 20 13W Barton KS**  
Job Ticket: 27869      **DST#: 1**  
Test Start: 2007.04.29 @ 04:38:12

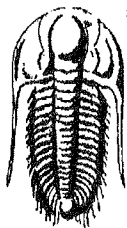
#### Tool Information

|                           |                    |                       |                                |                        |             |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3199.00 ft | Diameter: 3.80 inches | Volume: 44.87 bbl              | Tool Weight:           | 2500.00 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:  | 55000.00 lb |
|                           |                    |                       | <b>Total Volume: 44.87 bbl</b> | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 8.00 ft            |                       |                                | String Weight: Initial | 48000.00 lb |
| Depth to Top Packer:      | 3211.00 ft         |                       |                                | Final                  | 49000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                                |                        |             |
| Interval between Packers: | 66.02 ft           |                       |                                |                        |             |
| Tool Length:              | 86.02 ft           |                       |                                |                        |             |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                        |             |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                     |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Shut In Tool     | 5.00        |            |          | 3196.00    |                                    |
| Hydraulic tool   | 5.00        |            |          | 3201.00    |                                    |
| Packer           | 5.00        |            |          | 3206.00    | 20.00      Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3211.00    |                                    |
| Stubb            | 1.00        |            |          | 3212.00    |                                    |
| Perforations     | 3.00        |            |          | 3215.00    |                                    |
| Change Over Sub  | 1.00        |            |          | 3216.00    |                                    |
| Recorder         | 0.01        | 6771       | Inside   | 3216.01    |                                    |
| Blank Spacing    | 32.00       |            |          | 3248.01    |                                    |
| Change Over Sub  | 1.00        |            |          | 3249.01    |                                    |
| Perforations     | 25.00       |            |          | 3274.01    |                                    |
| Recorder         | 0.01        | 13548      | Outside  | 3274.02    |                                    |
| Bullnose         | 3.00        |            |          | 3277.02    | 66.02      Bottom Packers & Anchor |

**Total Tool Length: 86.02**



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

American Warrior

**Cooper-Grant 1-14**

PO Box 399  
Garden City KS 67646

**14 20 13W Barton KS**

Job Ticket: 27869

**DST#: 1**

ATTN: Marc Downing

Test Start: 2007.04.29 @ 04:38:12

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.90 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 20.00        | 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:

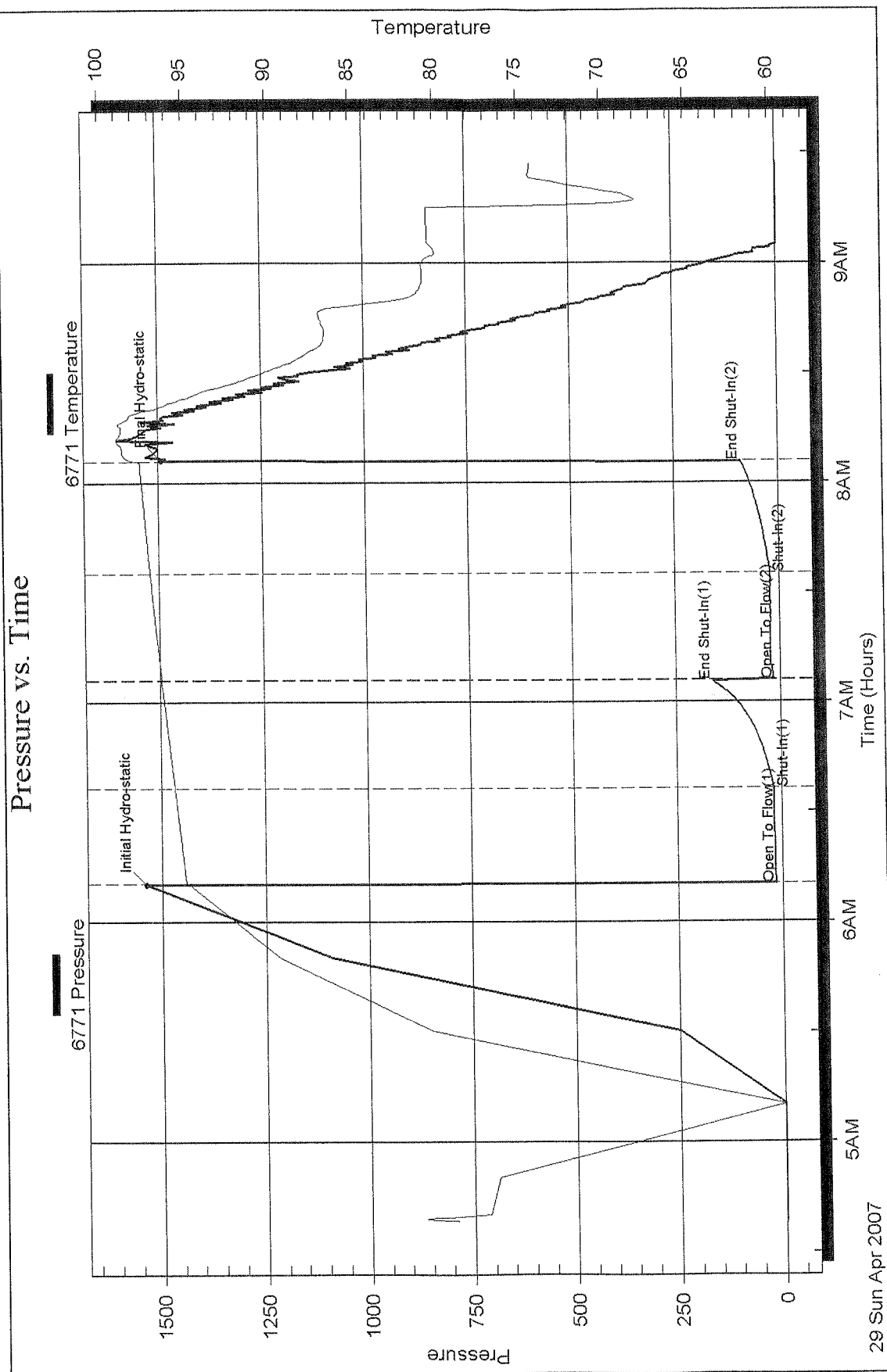
DST Test Number: 1

14 20 13W Barton KS

Inside American Warrior

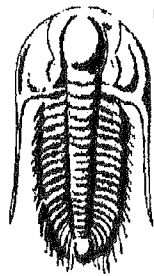
Serial #: 6771

# Pressure vs. Time



Ref. No: 27869

Trilobite Testing, Inc



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

## DRILL STEM TEST REPORT

Prepared For: **American Warrior**

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**14 20 13W Barton KS**

**Cooper-Grant 1-14**

Start Date: 2007.04.29 @ 20:39:00

End Date: 2007.04.30 @ 01:53:09

Job Ticket #: 27870                      DST #: 2

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**JUL 19 2007**

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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

## DRILL STEM TEST REPORT

American Warrior

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**Cooper-Grant 1-14**

**14 20 13W Barton KS**

Job Ticket: 27870

**DST#: 2**

Test Start: 2007.04.29 @ 20:39:00

### GENERAL INFORMATION:

Formation: **LKC "H-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:26:40

Time Test Ended: 01:53:09

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

**Interval: 3341.00 ft (KB) To 3398.00 ft (KB) (TVD)**

Total Depth: 3398.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1870.00 ft (KB)

1862.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 6771 Inside**

Press@RunDepth: 18.61 psig @ 3348.01 ft (KB)

Start Date: 2007.04.29

End Date:

2007.04.30

Start Time: 20:39:00

End Time:

01:53:09

Capacity: 7000.00 psig

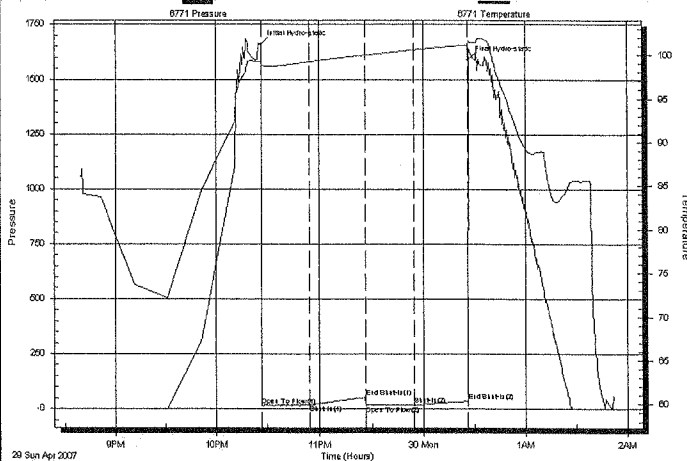
Last Calib.: 2007.04.30

Time On Btm: 2007.04.29 @ 22:26:25

Time Off Btm: 2007.04.30 @ 00:26:40

TEST COMMENT: IFP Weak to fair blow sur - 4 "  
ISI No blow back  
FFP Weak blow throughout 1" - 2" - died to 1 1/2 "  
FSI No blow back

Pressure vs. Time



PRESSURE SUMMARY

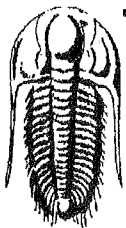
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1658.95         | 99.29        | Initial Hydro-static |
| 1           | 15.18           | 98.81        | Open To Flow(1)      |
| 28          | 16.64           | 99.22        | Shut-In(1)           |
| 60          | 51.87           | 99.98        | End Shut-In(1)       |
| 60          | 15.72           | 99.97        | Open To Flow(2)      |
| 89          | 18.61           | 100.59       | Shut-In(2)           |
| 120         | 34.89           | 101.18       | End Shut-In(2)       |
| 121         | 1588.50         | 101.66       | Final Hydro-static   |

Recovery

| Length (ft) | Description    | Volume (bbl) |
|-------------|----------------|--------------|
| 20.00       | VSOCM 3%O 97%M | 0.28         |
|             |                |              |
|             |                |              |
|             |                |              |
|             |                |              |
|             |                |              |

Gas Rates

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



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

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior

**Cooper-Grant 1-14**

PO Box 399  
Garden City KS 67646

**14 20 13W Barton KS**

Job Ticket: 27870

**DST#: 2**

ATTN: Marc Downing

Test Start: 2007.04.29 @ 20:39:00

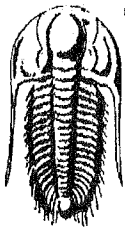
### Tool Information

|                           |                    |                       |                                |                        |             |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3324.00 ft | Diameter: 3.80 inches | Volume: 46.63 bbl              | Tool Weight:           | 2500.00 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:  | 55000.00 lb |
|                           |                    |                       | <b>Total Volume: 46.63 bbl</b> | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 3.00 ft            |                       |                                | String Weight: Initial | 49000.00 lb |
| Depth to Top Packer:      | 3341.00 ft         |                       |                                | Final                  | 49000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                                |                        |             |
| Interval between Packers: | 57.02 ft           |                       |                                |                        |             |
| Tool Length:              | 77.02 ft           |                       |                                |                        |             |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                        |             |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool     | 5.00        |            |          | 3326.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3331.00    |                               |
| Packer           | 5.00        |            |          | 3336.00    | 20.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3341.00    |                               |
| Stubb            | 1.00        |            |          | 3342.00    |                               |
| Perforations     | 5.00        |            |          | 3347.00    |                               |
| Change Over Sub  | 1.00        |            |          | 3348.00    |                               |
| Recorder         | 0.01        | 6771       | Inside   | 3348.01    |                               |
| Blank Spacing    | 31.00       |            |          | 3379.01    |                               |
| Change Over Sub  | 1.00        |            |          | 3380.01    |                               |
| Perforations     | 15.00       |            |          | 3395.01    |                               |
| Recorder         | 0.01        | 13548      | Outside  | 3395.02    |                               |
| Bullnose         | 3.00        |            |          | 3398.02    | 57.02 Bottom Packers & Anchor |

**Total Tool Length: 77.02**



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

American Warrior

**Cooper-Grant 1-14**

PO Box 399  
Garden City KS 67646

**14 20 13W Barton KS**

Job Ticket: 27870

**DST#: 2**

ATTN: Marc Downing

Test Start: 2007.04.29 @ 20:39:00

### 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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.93 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6400.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description    | Volume<br>bbl |
|--------------|----------------|---------------|
| 20.00        | VSOCM 3%O 97%M | 0.281         |

Total Length: 20.00 ft

Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

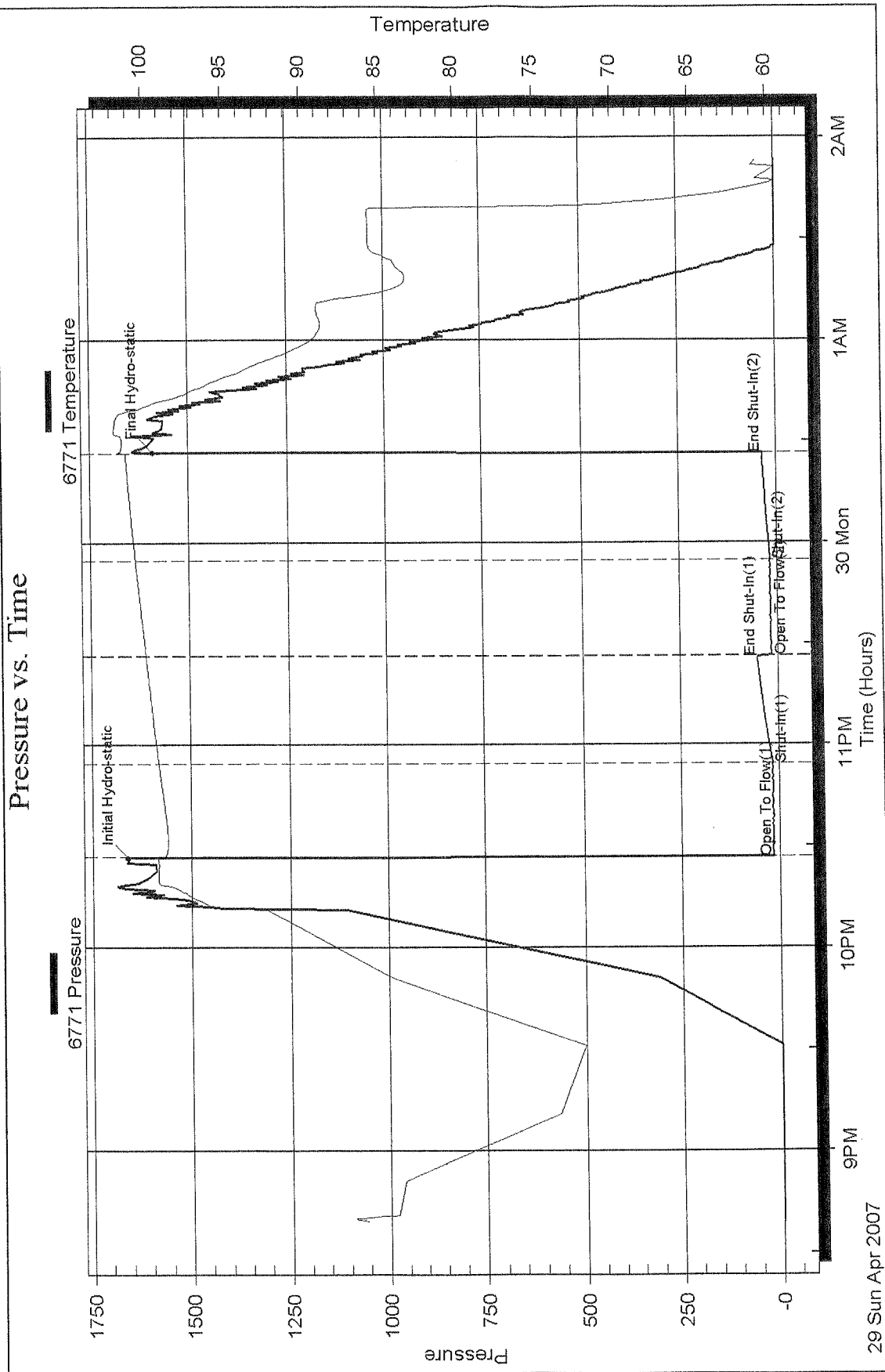
Serial #:

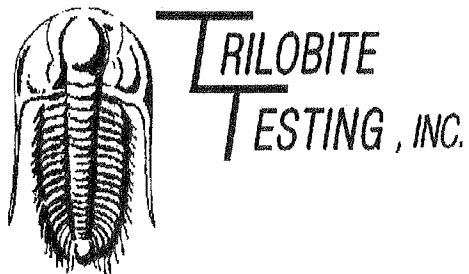
Laboratory Name:

Laboratory Location:

Recovery Comments: 45' GIP

Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **American Warrior**

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**14 20 13W Barton KS**

**Cooper-Grant 1-14**

Start Date: 2007.04.30 @ 11:27:02

End Date: 2007.04.30 @ 16:15:47

Job Ticket #: 27871      DST #: 3

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KANSAS CORPORATION COMMISSION

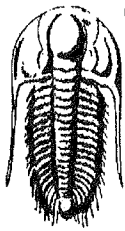
JUL 19 2007

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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

## DRILL STEM TEST REPORT

American Warrior

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**Cooper-Grant 1-14**

**14 20 13W Barton KS**

Job Ticket: 27871

**DST#: 3**

Test Start: 2007.04.30 @ 11:27:02

### GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:01:17

Time Test Ended: 16:15:47

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **3437.00 ft (KB) To 3481.00 ft (KB) (TVD)**

Total Depth: 3481.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1870.00 ft (KB)

1862.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 6771**

**Inside**

Press@RunDepth: 19.29 psig @ 3444.01 ft (KB)

Start Date: 2007.04.30

End Date:

2007.04.30

Start Time: 11:27:25

End Time:

16:15:47

Capacity: 7000.00 psig

Last Calib.: 2007.04.30

Time On Btm: 2007.04.30 @ 13:01:02

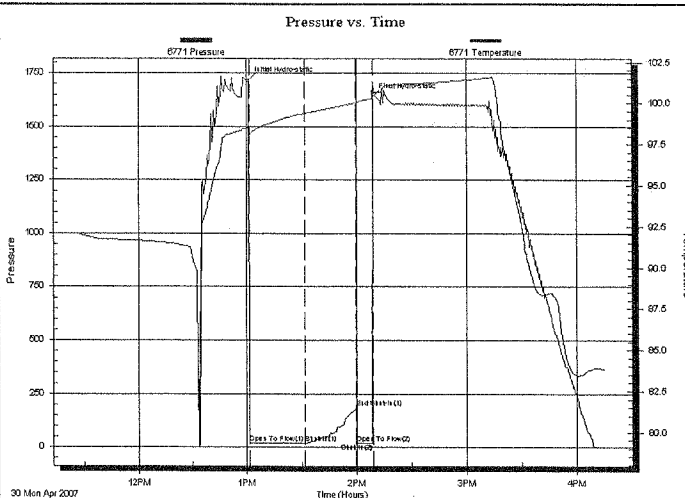
Time Off Btm: 2007.04.30 @ 14:08:47

TEST COMMENT: IFF 1/4 " blow died 23 min.

ISI No blow back

FFP No blow - pull tool

TIME 30 30 5



### PRESSURE SUMMARY

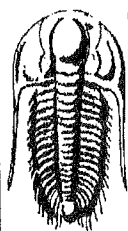
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1716.76         | 98.51        | Initial Hydro-static |
| 1           | 17.52           | 98.01        | Open To Flow (1)     |
| 31          | 19.29           | 99.38        | Shut-In(1)           |
| 59          | 183.82          | 100.02       | End Shut-In(1)       |
| 59          | 19.97           | 100.03       | Open To Flow (2)     |
| 68          | 18.16           | 100.28       | Shut-In(2)           |
| 68          | 1640.29         | 101.30       | Final Hydro-static   |

### Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 1.00        | Oil 100%O   | 0.01         |
| 14.00       | Mud 100%M   | 0.20         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior

**Cooper-Grant 1-14**

PO Box 399  
Garden City KS 67646

**14 20 13W Barton KS**

ATTN: Marc Downing

Job Ticket: 27871

**DST#: 3**

Test Start: 2007.04.30 @ 11:27:02

### Tool Information

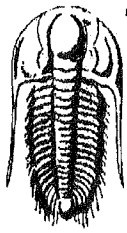
|                           |                    |                       |                                |                        |             |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3448.00 ft | Diameter: 3.80 inches | Volume: 48.37 bbl              | Tool Weight:           | 2500.00 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:  | 60000.00 lb |
|                           |                    |                       | <b>Total Volume: 48.37 bbl</b> | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 31.00 ft           |                       |                                | String Weight: Initial | 51000.00 lb |
| Depth to Top Packer:      | 3437.00 ft         |                       |                                | Final                  | 51000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                                |                        |             |
| Interval between Packers: | 44.02 ft           |                       |                                |                        |             |
| Tool Length:              | 64.02 ft           |                       |                                |                        |             |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                        |             |

### Tool Comments:

work on cat head 30 min. on blank w/ bit  
work on cat head 60 min. after pull tool loose

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool     | 5.00        |            |          | 3422.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3427.00    |                               |
| Packer           | 5.00        |            |          | 3432.00    | 20.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3437.00    |                               |
| Stubb            | 1.00        |            |          | 3438.00    |                               |
| Perforations     | 5.00        |            |          | 3443.00    |                               |
| Change Over Sub  | 1.00        |            |          | 3444.00    |                               |
| Recorder         | 0.01        | 6771       | Inside   | 3444.01    |                               |
| Blank Spacing    | 31.00       |            |          | 3475.01    |                               |
| Change Over Sub  | 1.00        |            |          | 3476.01    |                               |
| Perforations     | 2.00        |            |          | 3478.01    |                               |
| Recorder         | 0.01        | 13548      | Outside  | 3478.02    |                               |
| Bullnose         | 3.00        |            |          | 3481.02    | 44.02 Bottom Packers & Anchor |

**Total Tool Length: 64.02**



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

American Warrior

**Cooper-Grant 1-14**

PO Box 399  
Garden City KS 67646

**14 20 13W Barton KS**

Job Ticket: 27871

**DST#: 3**

ATTN: Marc Downing

Test Start: 2007.04.30 @ 11:27:02

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.92 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 1.00         | Oil 100%O   | 0.014         |
| 14.00        | Mud 100%M   | 0.196         |

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

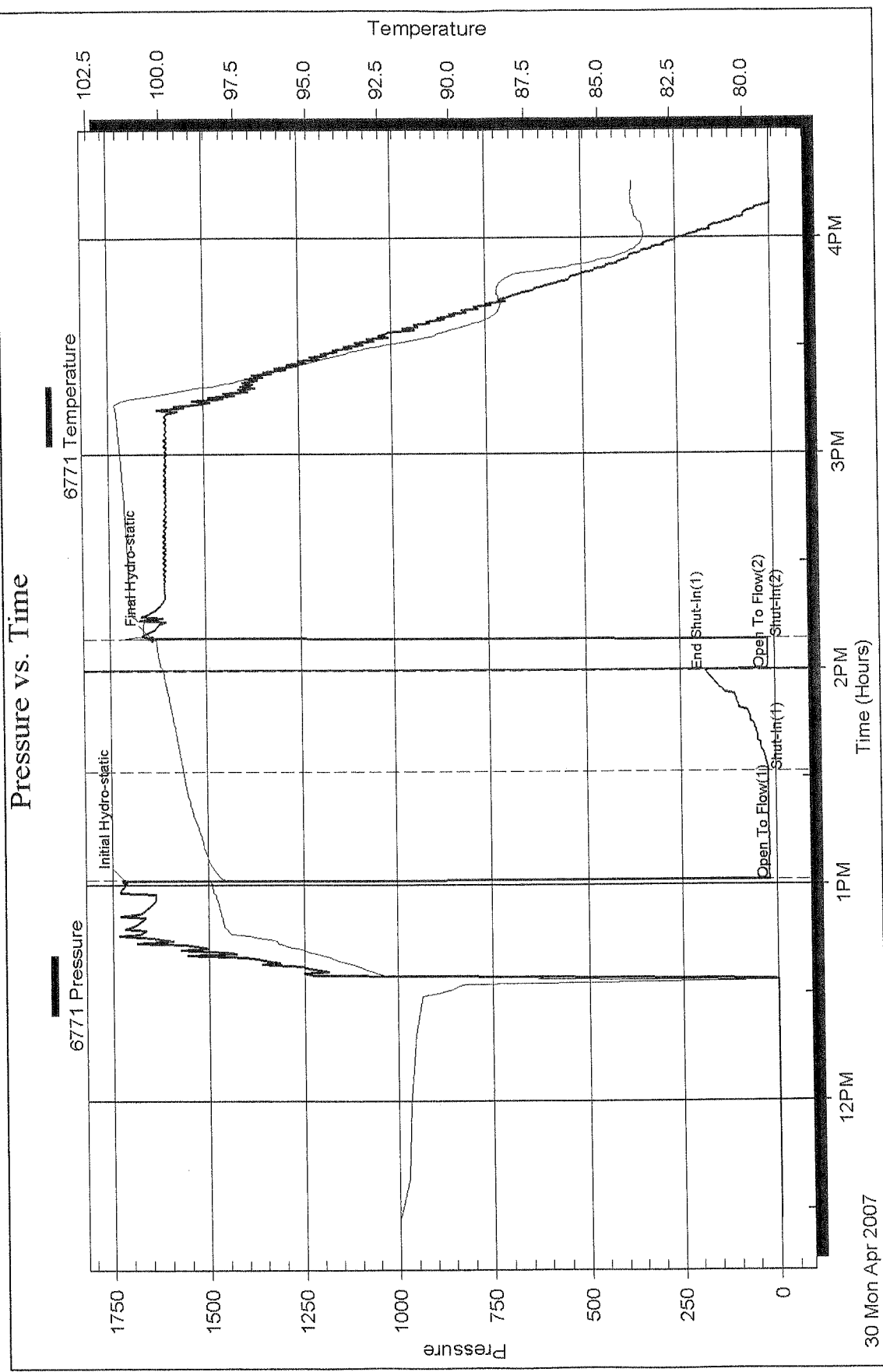
Serial #:

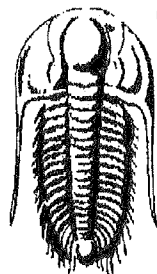
Laboratory Name:

Laboratory Location:

Recovery Comments: 30' GIP

# Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **American Warrior**

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**14 20 13W Barton KS**

**Cooper-Grant 1-14**

Start Date: 2007.05.01 @ 07:35:30

End Date: 2007.05.01 @ 14:08:54

Job Ticket #: 27872                      DST #: 4

RECEIVED  
KANSAS CORPORATION COMMISSION

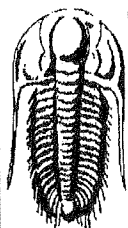
**JUL 19 2007**

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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

## DRILL STEM TEST REPORT

American Warrior

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**Cooper-Grant 1-14**

**14 20 13W Barton KS**

Job Ticket: 27872

**DST#: 4**

Test Start: 2007.05.01 @ 07:35:30

### GENERAL INFORMATION:

Formation: **Arbuckle (2)**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:07:40

Time Test Ended: 14:08:54

Test Type: Conventional Straddle

Tester: Brian Fairbank

Unit No: 41

Interval: **3483.00 ft (KB) To 3495.00 ft (KB) (TVD)**

Total Depth: 3540.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1870.00 ft (KB)

1862.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 6771** Inside

Press@RunDepth: 49.33 psig @ 3484.01 ft (KB)

Start Date: 2007.05.01

End Date:

2007.05.01

Start Time: 07:35:30

End Time:

14:08:54

Capacity: 7000.00 psig

Last Calib.: 2007.05.01

Time On Btm: 2007.05.01 @ 08:47:25

Time Off Btm: 2007.05.01 @ 12:28:54

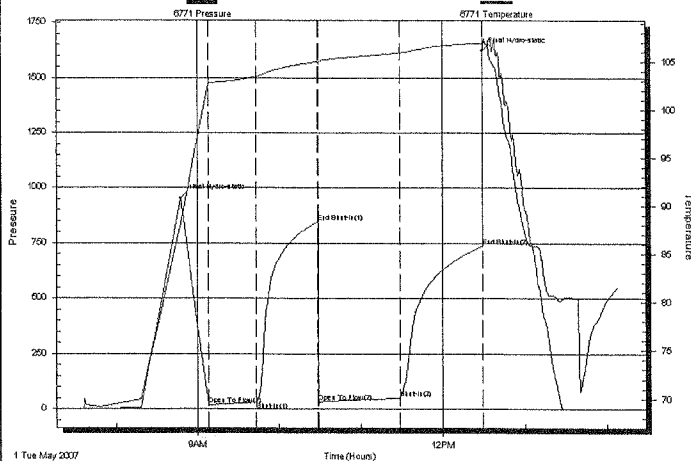
TEST COMMENT: IFP Weak to good blow 1/4" - 7 1/2"

ISI No blow back

FFP Weak to fair blow sur - 5

FSI No blow back

Pressure vs. Time



### PRESSURE SUMMARY

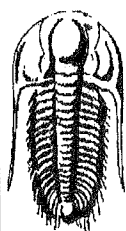
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 953.07          | 88.19        | Initial Hydro-static |
| 21          | 17.66           | 102.76       | Open To Flow (1)     |
| 56          | 30.05           | 103.48       | Shut-In(1)           |
| 101         | 847.14          | 105.02       | End Shut-In(1)       |
| 102         | 32.91           | 104.84       | Open To Flow (2)     |
| 161         | 49.33           | 105.95       | Shut-In(2)           |
| 222         | 737.68          | 106.96       | End Shut-In(2)       |
| 222         | 1620.61         | 107.43       | Final Hydro-static   |

### Recovery

| Length (ft) | Description            | Volume (bbl) |
|-------------|------------------------|--------------|
| 30.00       | VSO & GCM 5%G 5%O 90%M | 0.42         |
| 65.00       | G Free Oil 10%G 90%O   | 0.91         |
|             |                        |              |
|             |                        |              |
|             |                        |              |
|             |                        |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

### TOOL DIAGRAM

American Warrior

PO Box 399  
Garden City KS 67646

ATTN: Marc Downing

**Cooper-Grant 1-14**

**14 20 13W Barton KS**

Job Ticket: 27872

**DST#: 4**

Test Start: 2007.05.01 @ 07:35:30

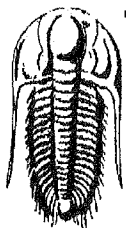
### Tool Information

|                           |                    |                       |                         |                        |             |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3479.00 ft | Diameter: 3.80 inches | Volume: 48.80 bbl       | Tool Weight:           | 2500.00 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:  | 65000.00 lb |
|                           |                    |                       | Total Volume: 48.80 bbl | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 16.00 ft           |                       |                         | String Weight: Initial | 52000.00 lb |
| Depth to Top Packer:      | 3483.00 ft         |                       |                         | Final                  | 55000.00 lb |
| Depth to Bottom Packer:   | 3496.02 ft         |                       |                         |                        |             |
| Interval between Packers: | 13.02 ft           |                       |                         |                        |             |
| Tool Length:              | 82.03 ft           |                       |                         |                        |             |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                         |                        |             |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool     | 5.00        |            |          | 3468.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3473.00    |                               |
| Packer           | 5.00        |            |          | 3478.00    | 20.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3483.00    |                               |
| Stubb            | 1.00        |            |          | 3484.00    |                               |
| Recorder         | 0.01        | 6771       | Inside   | 3484.01    |                               |
| Perforations     | 6.00        |            |          | 3490.01    |                               |
| Recorder         | 0.01        | 13548      | Outside  | 3490.02    |                               |
| Blank Off Sub    | 1.00        |            |          | 3491.02    |                               |
| Blank Spacing    | 5.00        |            |          | 3496.02    | 13.02 Tool Interval           |
| Packer           | 5.00        |            |          | 3501.02    |                               |
| Perforations     | 5.00        |            |          | 3506.02    |                               |
| Change Over Sub  | 1.00        |            |          | 3507.02    |                               |
| Blank Spacing    | 31.00       |            |          | 3538.02    |                               |
| Change Over Sub  | 1.00        |            |          | 3539.02    |                               |
| Perforations     | 3.00        |            |          | 3542.02    |                               |
| Recorder         | 0.01        | 13760      | Below    | 3542.03    |                               |
| Bullnose         | 3.00        |            |          | 3545.03    | 49.01 Bottom Packers & Anchor |

**Total Tool Length: 82.03**



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

American Warrior

**Cooper-Grant 1-14**

PO Box 399  
Garden City KS 67646

**14 20 13W Barton KS**

Job Ticket: 27872

**DST#: 4**

ATTN: Marc Downing

Test Start: 2007.05.01 @ 07:35:30

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.75 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9200.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description            | Volume<br>bbl |
|--------------|------------------------|---------------|
| 30.00        | VSO & GCM 5%G 5%O 90%M | 0.421         |
| 65.00        | G Free Oil 10%G 90%O   | 0.912         |

Total Length: 95.00 ft

Total Volume: 1.333 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 30' GIP

DST Test Number: 4

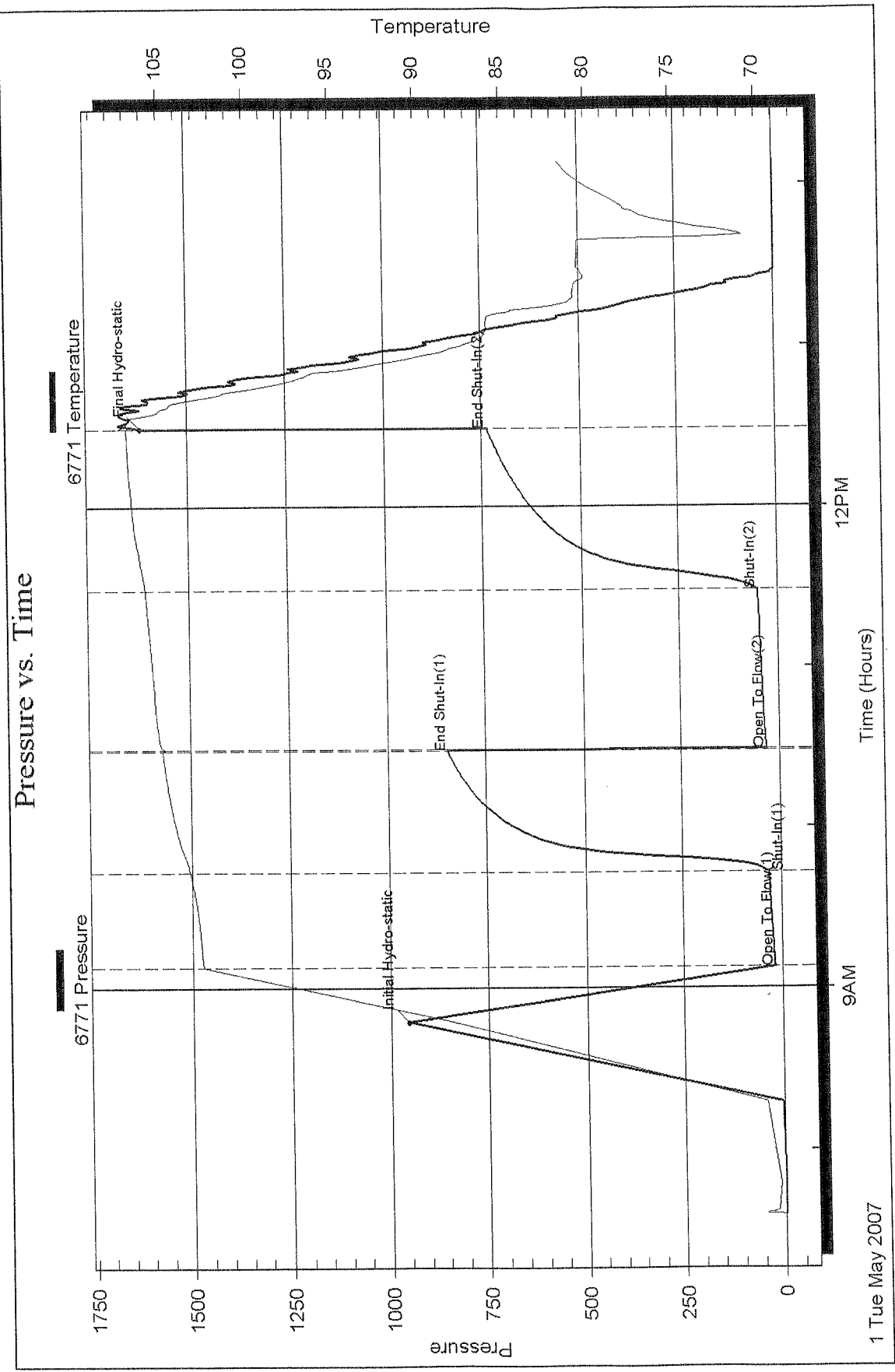
14 20 13W Barton KS

American Warrior

Inside

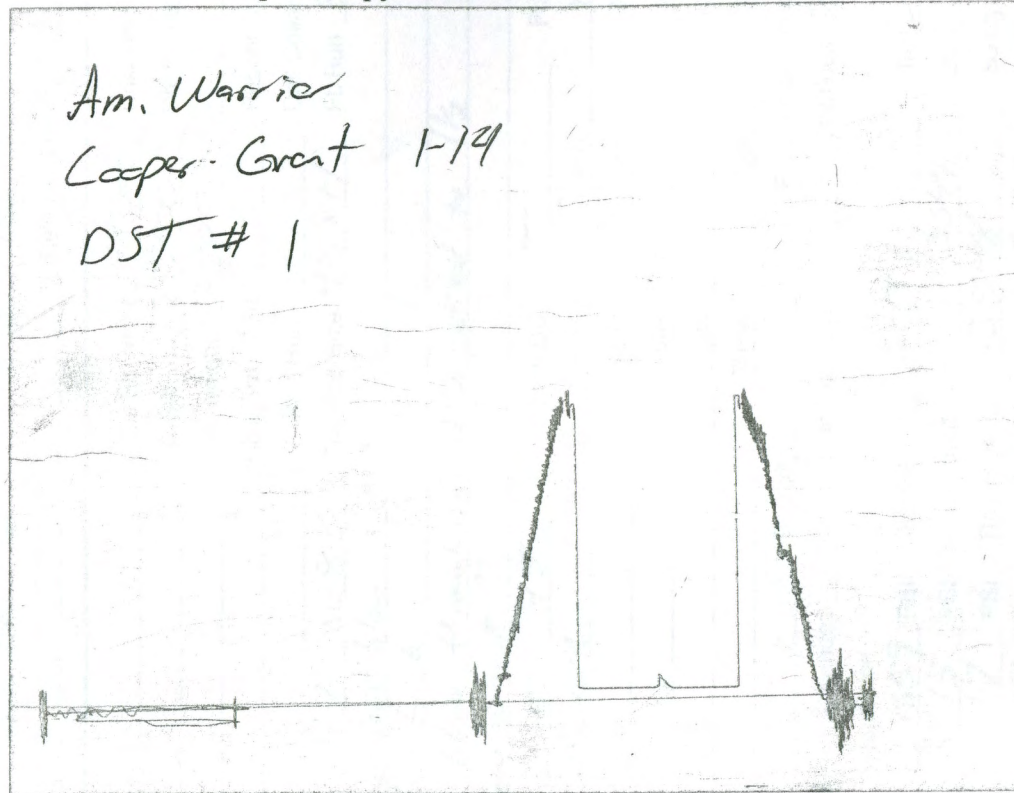
Serial #: 6771

# Pressure vs. Time



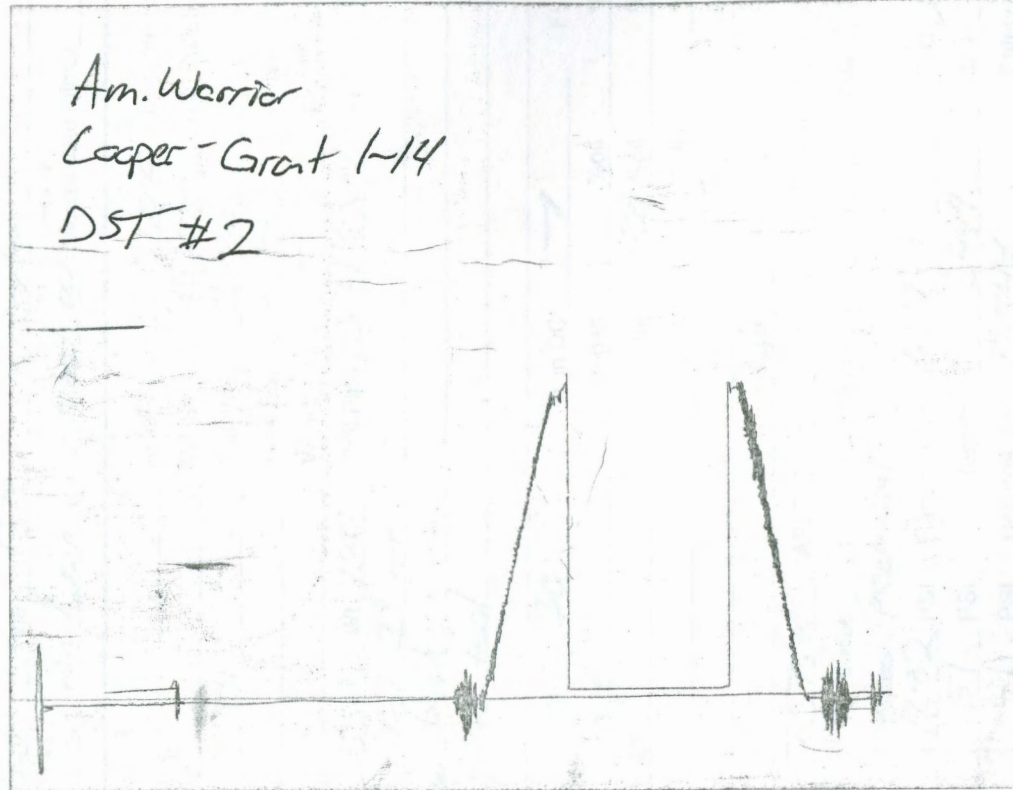
# CHART PAGE

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



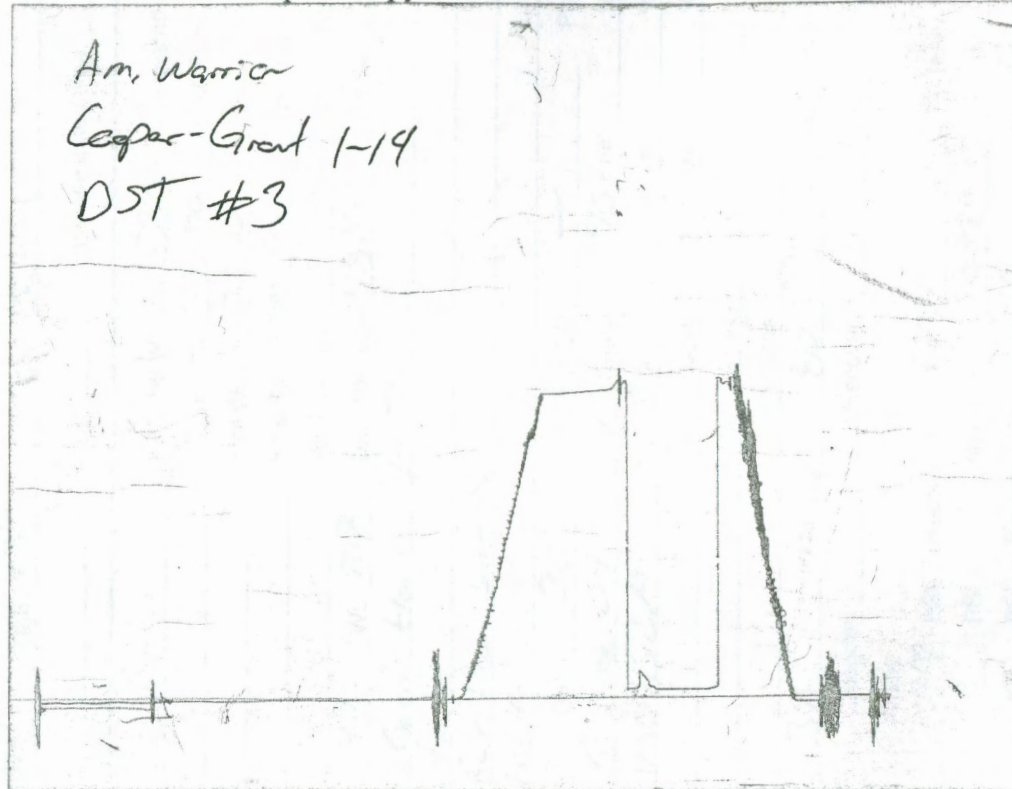
# CHART PAGE

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



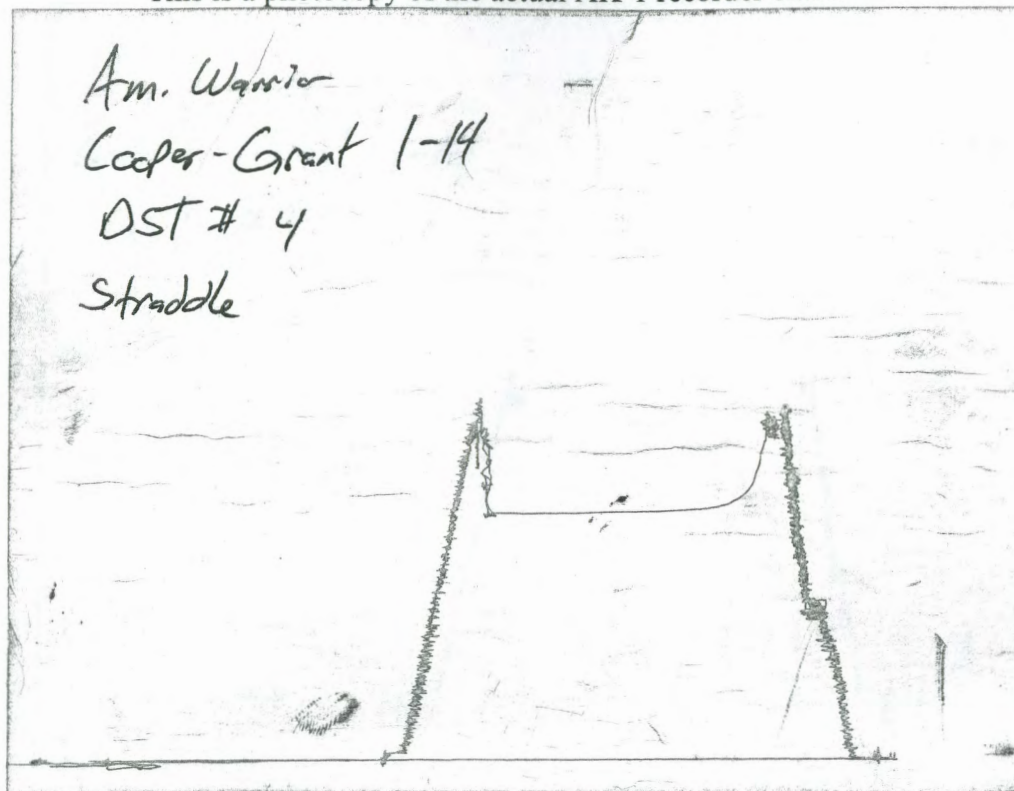
# CHART PAGE

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



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