

## DRILL STEM TEST REPORT

Prepared For: **RL Investments LLC**

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**18-8-24-Graham-Ks**

**Culley # 1**

Start Date: 2005.05.16 @ 13:25:39

End Date: 2005.05.16 @ 19:59:09

Job Ticket #: 22811      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

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22811

DST#: 1

Test Start: 2005.05.16 @ 13:25:39

### GENERAL INFORMATION:

Formation: **B LKC**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 15:28:09

Time Test Ended: 19:59:09

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3672.00 ft (KB) To 3700.00 ft (KB) (TVD)**

Total Depth: **3700.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2324.00 ft (KB)**

**2319.00 ft (CF)**

KB to GR/CF: **5.00 ft**

**Serial #: 6799**

**Inside**

Press@RunDepth: **38.86 psig @ 3673.00 ft (KB)**

Start Date: **2005.05.16**

End Date: **2005.05.16**

Start Time: **13:25:40**

End Time: **19:59:09**

Capacity: **7000.00 psig**

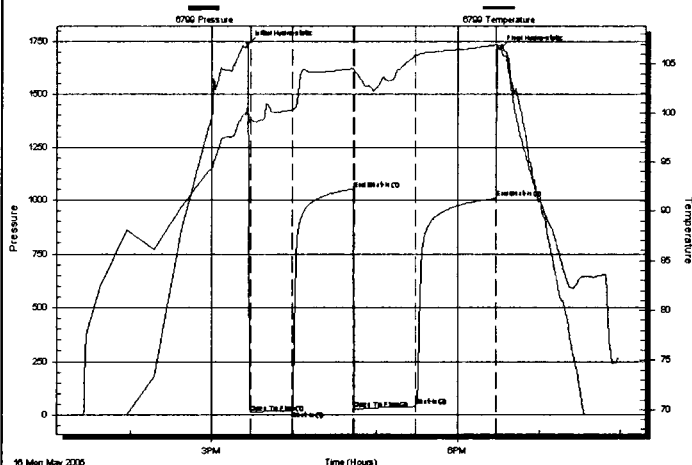
Last Calib.: **2005.05.16**

Time On Btm: **2005.05.16 @ 15:26:09**

Time Off Btm: **2005.05.16 @ 18:30:39**

**TEST COMMENT:** F-Weak 1/4" steady blow  
FF-Weak steady surface blow  
Times-30-45-45-60

Pressure vs. Time



### PRESSURE SUMMARY

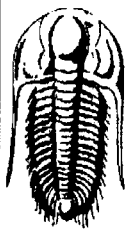
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1735.80         | 100.32       | Initial Hydro-static |
| 2           | 11.36           | 99.57        | Open To Flow (1)     |
| 33          | 19.00           | 100.30       | Shut-In(1)           |
| 77          | 1052.06         | 104.55       | End Shut-In(1)       |
| 78          | 26.37           | 104.22       | Open To Flow (2)     |
| 123         | 38.86           | 105.94       | Shut-In(2)           |
| 182         | 1008.82         | 106.93       | End Shut-In(2)       |
| 185         | 1713.79         | 106.91       | Final Hydro-static   |

### Recovery

| Length (ft) | Description          | Volume (bbl) |
|-------------|----------------------|--------------|
| 55.00       | DMw/ oil show on top | 0.77         |
|             |                      |              |
|             |                      |              |
|             |                      |              |
|             |                      |              |

### Gas Rates

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

TOOL DIAGRAM

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22811

**DST#: 1**

Test Start: 2005.05.16 @ 13:25:39

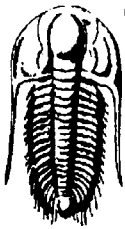
### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3662.00 ft | Diameter: 3.80 inches | Volume: 51.37 bbl              | Tool Weight: 1800.00 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  |
|                           |                    |                       | <u>Total Volume: 51.37 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 11.00 ft           |                       |                                | String Weight: Initial 42000.00 lb |
| Depth to Top Packer:      | 3672.00 ft         |                       |                                | Final 42000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 28.00 ft           |                       |                                |                                    |
| Tool Length:              | 49.00 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         |       |         | 3652.00 |                               |
| Shut In Tool              | 5.00         |       |         | 3657.00 |                               |
| Hydraulic tool            | 5.00         |       |         | 3662.00 |                               |
| Packer                    | 5.00         |       |         | 3667.00 | 21.00 Bottom Of Top Packer    |
| Packer                    | 5.00         |       |         | 3672.00 |                               |
| Stubb                     | 1.00         |       |         | 3673.00 |                               |
| Recorder                  | 0.00         | 6799  | Inside  | 3673.00 |                               |
| Perforations              | 24.00        |       |         | 3697.00 |                               |
| Recorder                  | 0.00         | 13254 | Outside | 3697.00 |                               |
| Bullnose                  | 3.00         |       |         | 3700.00 | 28.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>49.00</b> |       |         |         |                               |



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

RL Investments LLC

Culley # 1

217 Saint Peter St  
Morland Ks 67650

18-8-24-Graham-Ks

Job Ticket: 22811

DST#: 1

ATTN: Leon Pfeifer

Test Start: 2005.05.16 @ 13:25:39

### 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: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description            | Volume<br>bbl |
|--------------|------------------------|---------------|
| 55.00        | DM w / oil show on top | 0.772         |

Total Length: 55.00 ft

Total Volume: 0.772 bbl

Num Fluid Samples: 0

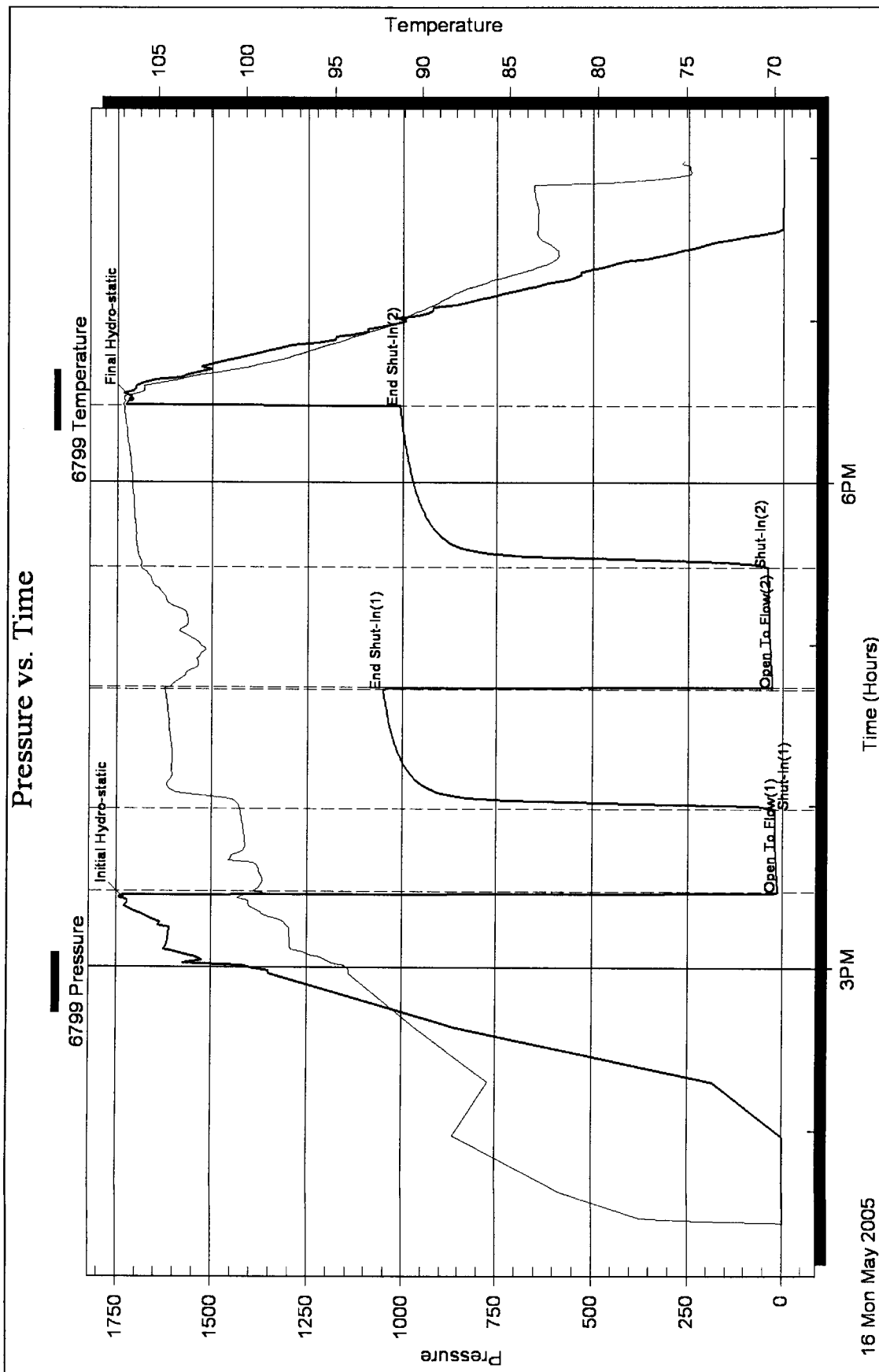
Num Gas Bombs: 0

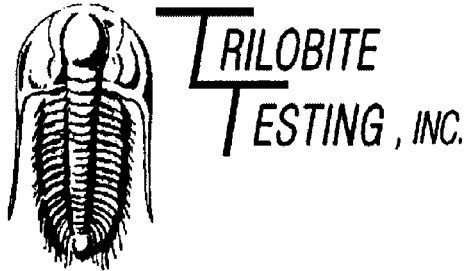
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **RL Investments LLC**

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**18-8-24-Graham-Ks**

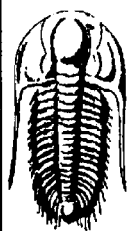
**Culley # 1**

Start Date: 2005.05.17 @ 13:00:04

End Date: 2005.05.17 @ 18:03:04

Job Ticket #: 22812      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

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22812

DST#: 2

Test Start: 2005.05.17 @ 13:00:04

### GENERAL INFORMATION:

Formation: J LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:40:04

Time Test Ended: 18:03:04

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3812.00 ft (KB) To 3832.00 ft (KB) (TVD)

Total Depth: 3832.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2324.00 ft (KB)

2319.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 6799**

Inside

Press@RunDepth: 10.99 psig @ 3813.00 ft (KB)

Start Date: 2005.05.17

End Date:

2005.05.17

Capacity: 7000.00 psig

Last Calib.: 2005.05.17

Start Time: 13:00:05

End Time:

18:03:04

Time On Btm: 2005.05.17 @ 14:38:04

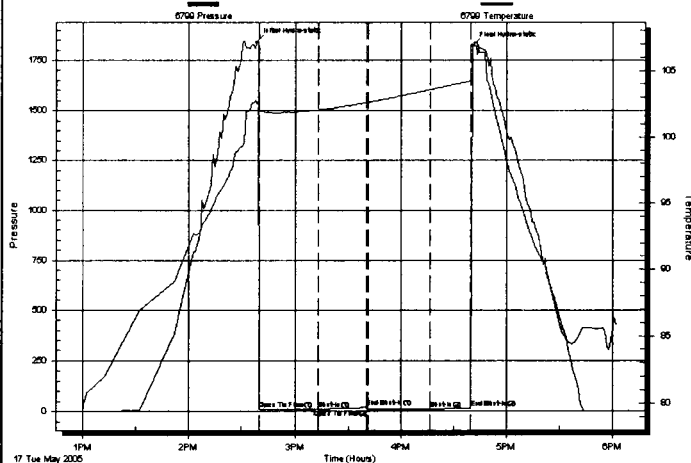
Time Off Btm: 2005.05.17 @ 16:40:34

TEST COMMENT: IF-Weak died in 10 min

FF-No blow

Times-30-30-30-30

Pressure vs. Time



### PRESSURE SUMMARY

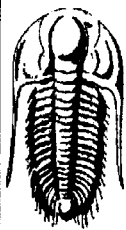
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1841.18         | 102.60       | Initial Hydro-static |
| 2           | 10.15           | 101.94       | Open To Flow (1)     |
| 35          | 10.89           | 102.04       | Shut-In(1)           |
| 63          | 17.60           | 102.61       | End Shut-In(1)       |
| 63          | 10.51           | 102.62       | Open To Flow (2)     |
| 99          | 10.99           | 103.56       | Shut-In(2)           |
| 122         | 14.42           | 104.22       | End Shut-In(2)       |
| 123         | 1823.06         | 106.93       | Final Hydro-static   |

### Recovery

| Length (ft) | Description               | Volume (bbl) |
|-------------|---------------------------|--------------|
| 2.00        | Mud w / oil spots in tool | 0.03         |
|             |                           |              |
|             |                           |              |
|             |                           |              |
|             |                           |              |
|             |                           |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

TOOL DIAGRAM

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22812

**DST#: 2**

Test Start: 2005.05.17 @ 13:00:04

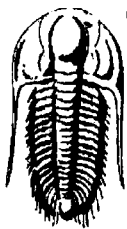
### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3797.00 ft | Diameter: 3.80 inches | Volume: 53.26 bbl              | Tool Weight: 1600.00 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: 53.26 bbl</b> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 6.00 ft            |                       |                                | String Weight: Initial 44000.00 lb |
| Depth to Top Packer:      | 3812.00 ft         |                       |                                | Final 44000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 20.00 ft           |                       |                                |                                    |
| Tool Length:              | 41.00 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         |       |         | 3792.00 |                               |
| Shut In Tool              | 5.00         |       |         | 3797.00 |                               |
| Hydraulic tool            | 5.00         |       |         | 3802.00 |                               |
| Packer                    | 5.00         |       |         | 3807.00 | 21.00 Bottom Of Top Packer    |
| Packer                    | 5.00         |       |         | 3812.00 |                               |
| Stubb                     | 1.00         |       |         | 3813.00 |                               |
| Recorder                  | 0.00         | 6799  | Inside  | 3813.00 |                               |
| Perforations              | 16.00        |       |         | 3829.00 |                               |
| Recorder                  | 0.00         | 13254 | Outside | 3829.00 |                               |
| Bullnose                  | 3.00         |       |         | 3832.00 | 20.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>41.00</b> |       |         |         |                               |



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

## DRILL STEM TEST REPORT

### FLUID SUMMARY

RL Investments LLC

**Culley # 1**

217 Saint Peter St  
Morland Ks 67650

**18-8-24-Graham-Ks**

Job Ticket: 22812

**DST#: 2**

ATTN: Leon Pfeifer

Test Start: 2005.05.17 @ 13:00:04

### 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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description               | Volume<br>bbl |
|--------------|---------------------------|---------------|
| 2.00         | Mud w / oil spots in tool | 0.028         |

Total Length: 2.00 ft

Total Volume: 0.028 bbl

Num Fluid Samples: 0

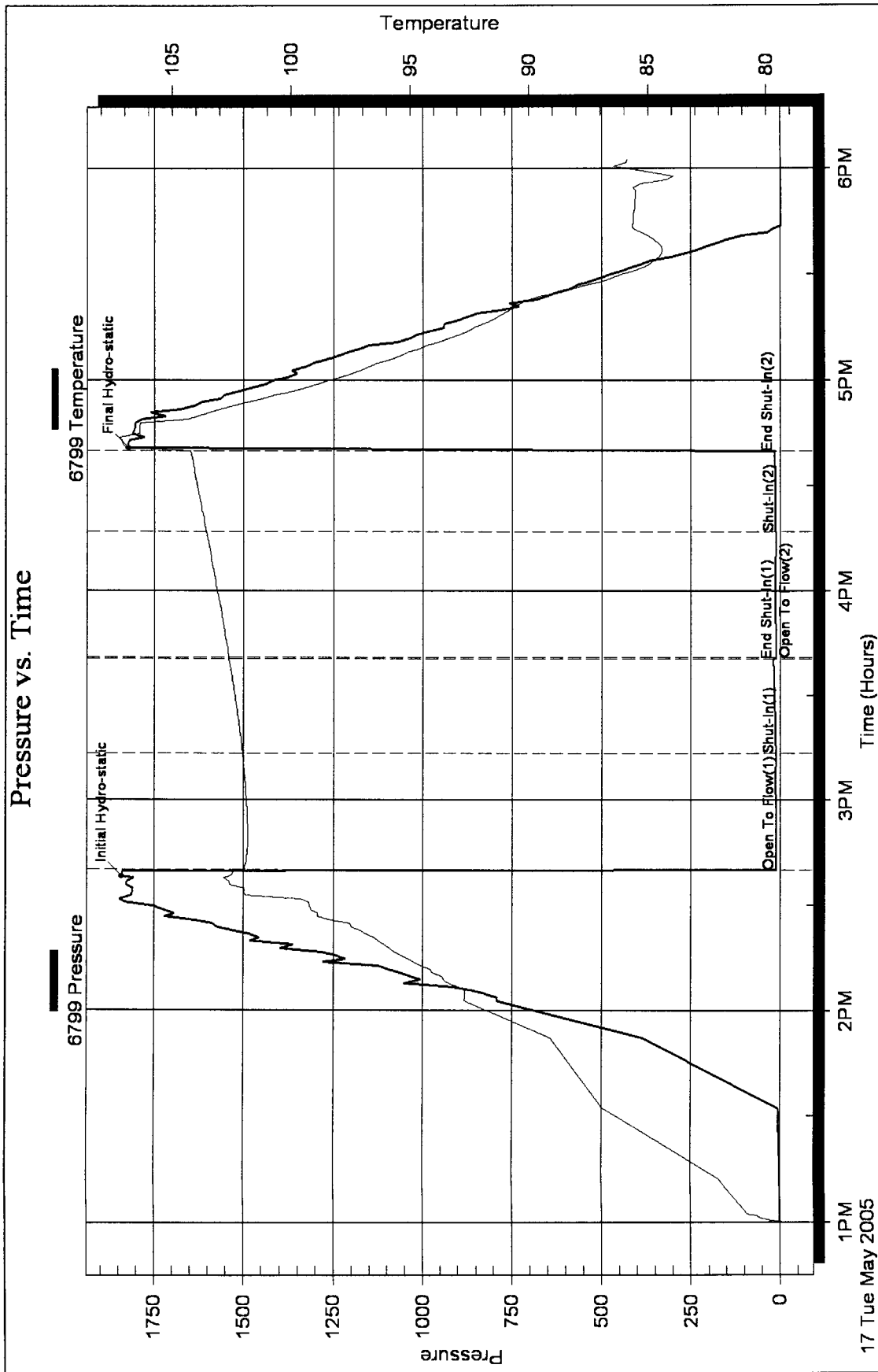
Num Gas Bombs: 0

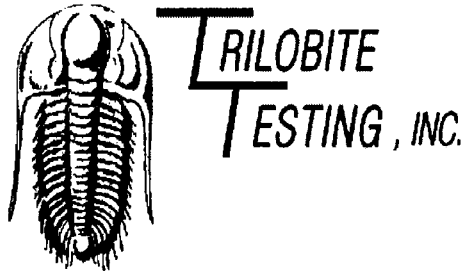
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **RL Investments LLC**

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**18-8-24-Graham-Ks**

**Culley # 1**

Start Date: 2005.05.18 @ 00:41:41

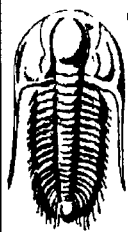
End Date: 2005.05.18 @ 04:39:41

Job Ticket #: 22813                      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

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22813

**DST#: 3**

Test Start: 2005.05.18 @ 00:41:41

### GENERAL INFORMATION:

Formation: **K LKC**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 02:35:00

Time Test Ended: 04:39:41

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **3828.00 ft (KB) To 3850.00 ft (KB) (TVD)**

Total Depth: **3850.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2324.00 ft (KB)**

**2319.00 ft (CF)**

**KB to GR/CF: 5.00 ft**

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

Press@RunDepth: **psig @ 3829.00 ft (KB)**

Start Date: **2005.05.18**

End Date:

**2005.05.18**

Start Time: **00:41:42**

End Time:

**04:39:41**

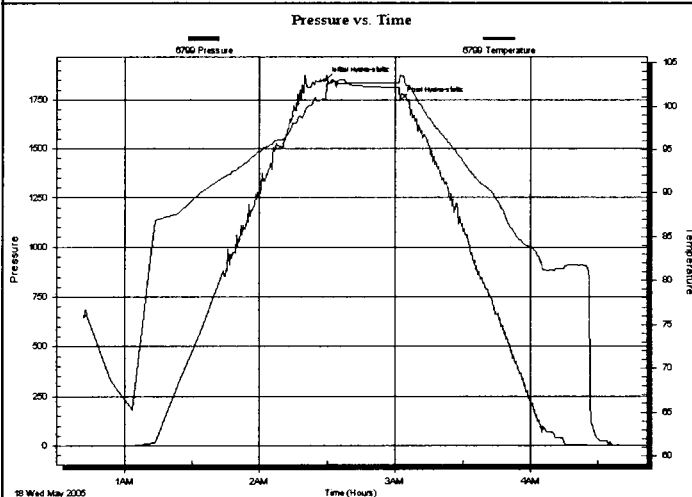
Capacity: **7000.00 psig**

Last Calib.: **2005.05.18**

Time On Btm: **2005.05.18 @ 02:28:41**

Time Off Btm: **2005.05.18 @ 03:02:11**

TEST COMMENT: Could not get packers to hold



### PRESSURE SUMMARY

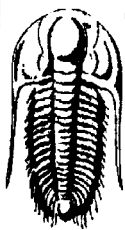
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1848.62         | 100.85       | Initial Hydro-static |
| 34          | 1744.67         | 103.59       | Final Hydro-static   |

### Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 124.00      | DM          | 1.74         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

TOOL DIAGRAM

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22813

**DST#: 3**

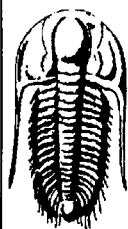
Test Start: 2005.05.18 @ 00:41:41

### Tool Information

|                           |         |            |           |             |                      |                  |                        |             |
|---------------------------|---------|------------|-----------|-------------|----------------------|------------------|------------------------|-------------|
| Drill Pipe:               | Length: | 3828.00 ft | Diameter: | 3.80 inches | Volume:              | 53.70 bbl        | Tool Weight:           | 1700.00 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:  | 44000.00 lb |
|                           |         |            |           |             | <u>Total Volume:</u> | <u>53.70 bbl</u> | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      |         | 21.00 ft   |           |             |                      |                  | String Weight: Initial | 44000.00 lb |
| Depth to Top Packer:      |         | 3828.00 ft |           |             |                      |                  | Final                  | 44000.00 lb |
| Depth to Bottom Packer:   |         | ft         |           |             |                      |                  |                        |             |
| Interval between Packers: |         | 22.00 ft   |           |             |                      |                  |                        |             |
| Tool Length:              |         | 43.00 ft   |           |             |                      |                  |                        |             |
| Number of Packers:        |         | 2          | Diameter: | 6.75 inches |                      |                  |                        |             |
| Tool Comments:            |         |            |           |             |                      |                  |                        |             |

### Tool Description

| Tool Description          | Length (ft)  | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub           | 1.00         |            |          | 3808.00    |                               |
| Shut In Tool              | 5.00         |            |          | 3813.00    |                               |
| Hydraulic tool            | 5.00         |            |          | 3818.00    |                               |
| Packer                    | 5.00         |            |          | 3823.00    | 21.00 Bottom Of Top Packer    |
| Packer                    | 5.00         |            |          | 3828.00    |                               |
| Stubb                     | 1.00         |            |          | 3829.00    |                               |
| Recorder                  | 0.00         | 6799       | Inside   | 3829.00    |                               |
| Perforations              | 18.00        |            |          | 3847.00    |                               |
| Recorder                  | 0.00         | 13254      | Outside  | 3847.00    |                               |
| Bullnose                  | 3.00         |            |          | 3850.00    | 22.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>43.00</b> |            |          |            |                               |



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

## DRILL STEM TEST REPORT

FLUID SUMMARY

RL Investments LLC

Culley # 1

217 Saint Peter St  
Morland Ks 67650

18-8-24-Graham-Ks

Job Ticket: 22813

DST#: 3

ATTN: Leon Pfeifer

Test Start: 2005.05.18 @ 00:41:41

### 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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 124.00       | DM          | 1.739         |

Total Length: 124.00 ft

Total Volume: 1.739 bbl

Num Fluid Samples: 0

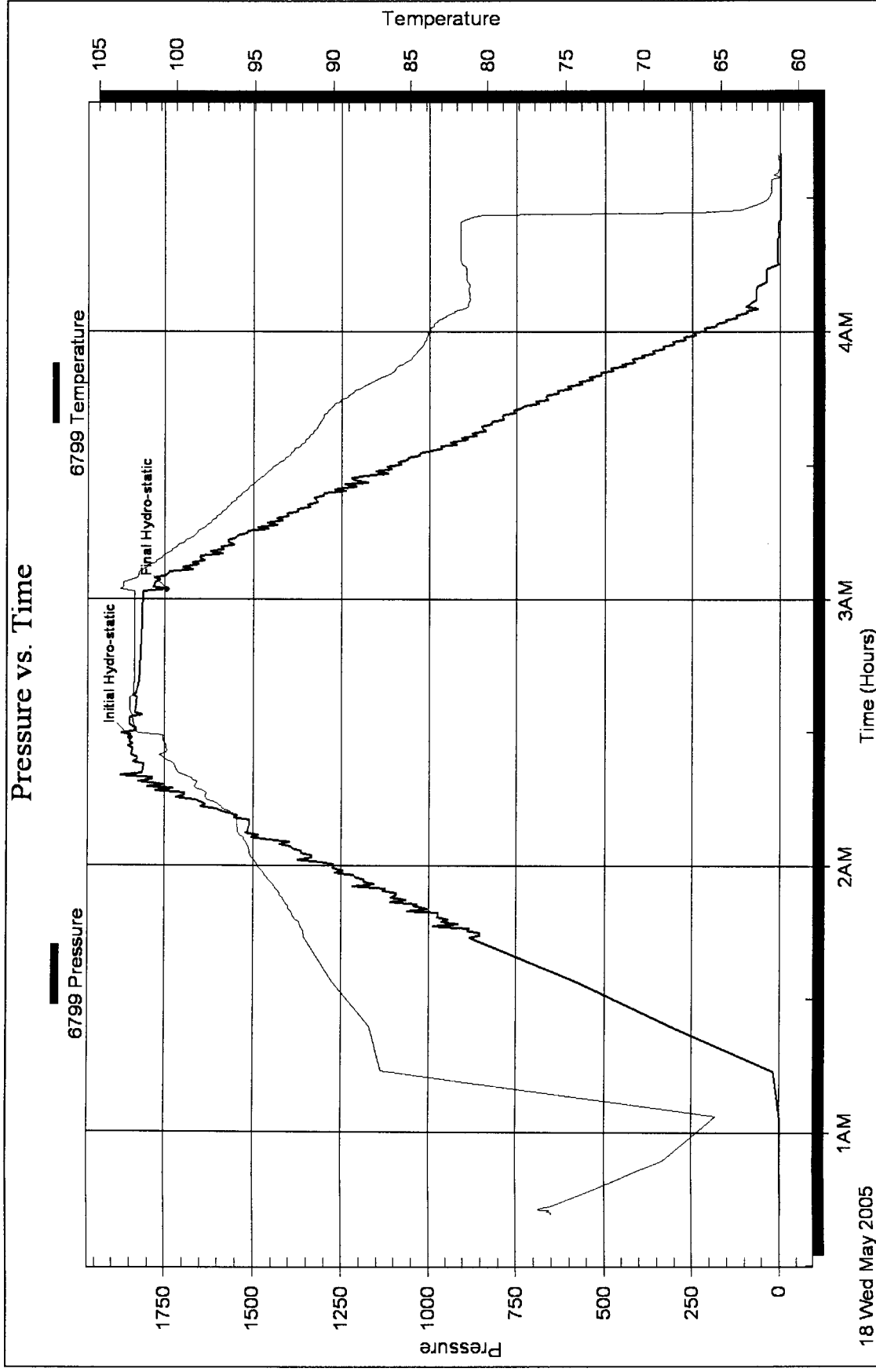
Num Gas Bombs: 0

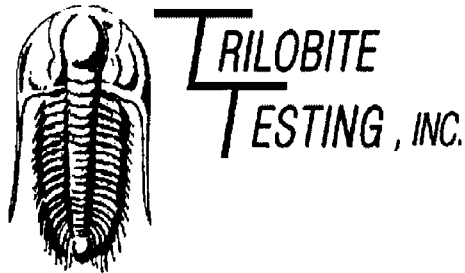
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

Prepared For: **RL Investments LLC**

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**18-8-24-Graham-Ks**

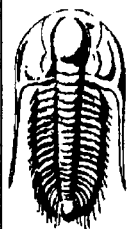
**Culley # 1**

Start Date: 2005.05.18 @ 04:47:16

End Date: 2005.05.18 @ 10:04:46

Job Ticket #: 22814                      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

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22814

**DST#: 4**

Test Start: 2005.05.18 @ 04:47:16

### GENERAL INFORMATION:

Formation: K LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:23:46

Time Test Ended: 10:04:46

Interval: 3812.00 ft (KB) To 3850.00 ft (KB) (TVD)

Total Depth: 3850.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Reference Elevations: 2324.00 ft (KB)

2319.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 6799**

**Inside**

Press@RunDepth: 13.96 psig @ 3813.00 ft (KB)

Start Date: 2005.05.18

End Date: 2005.05.18

Start Time: 04:47:17

End Time: 10:04:46

Capacity: 7000.00 psig

Last Calib.: 2005.05.18

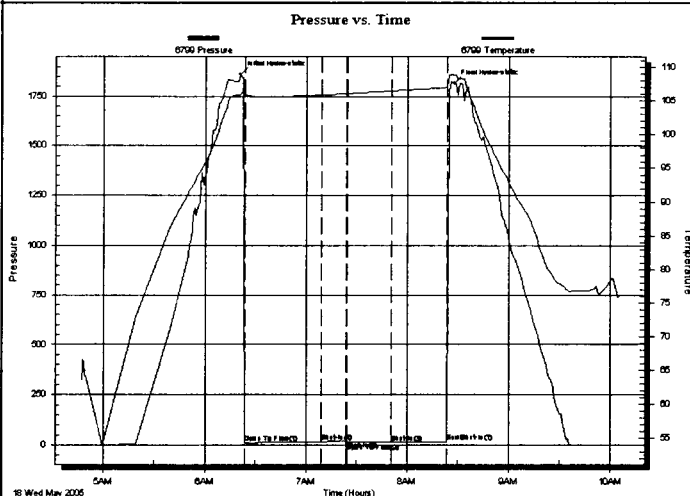
Time On Btm: 2005.05.18 @ 06:20:46

Time Off Btm: 2005.05.18 @ 08:27:46

**TEST COMMENT:** F-Weak died in 15 min

FF-No blow

Times-30-30-30-30



### PRESSURE SUMMARY

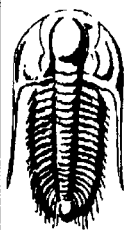
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1860.01         | 105.96       | Initial Hydro-static |
| 3           | 11.29           | 105.85       | Open To Flow (1)     |
| 49          | 13.96           | 105.87       | Shut-In(1)           |
| 63          | 19.99           | 106.06       | Shut-In(2)           |
| 64          | 12.15           | 106.06       | Open To Flow (2)     |
| 90          | 12.54           | 106.49       | Shut-In(3)           |
| 123         | 16.68           | 106.99       | End Shut-In(1)       |
| 127         | 1815.86         | 108.92       | Final Hydro-static   |

### Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00        | DM          | 0.07         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

### Gas Rates

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



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

## DRILL STEM TEST REPORT

TOOL DIAGRAM

RL Investments LLC

217 Saint Peter St  
Morland Ks 67650

ATTN: Leon Pfeifer

**Culley # 1**

**18-8-24-Graham-Ks**

Job Ticket: 22814

**DST#: 4**

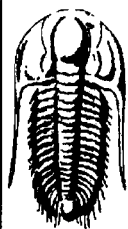
Test Start: 2005.05.18 @ 04:47:16

### Tool Information

|                           |                    |                       |                         |                                    |
|---------------------------|--------------------|-----------------------|-------------------------|------------------------------------|
| Drill Pipe:               | Length: 3797.00 ft | Diameter: 3.80 inches | Volume: 53.26 bbl       | Tool Weight: 2200.00 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  |
|                           |                    |                       | Total Volume: 53.26 bbl | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 6.00 ft            |                       |                         | String Weight: Initial 44000.00 lb |
| Depth to Top Packer:      | 3812.00 ft         |                       |                         | Final 44000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                         |                                    |
| Interval between Packers: | 38.00 ft           |                       |                         |                                    |
| Tool Length:              | 59.00 ft           |                       |                         |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                         |                                    |
| Tool Comments:            |                    |                       |                         |                                    |

### Tool Description

| Tool Description          | Length (ft)  | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|---------------------------|--------------|------------|----------|------------|-------------------------------|
| Change Over Sub           | 1.00         |            |          | 3792.00    |                               |
| Shut In Tool              | 5.00         |            |          | 3797.00    |                               |
| Hydraulic tool            | 5.00         |            |          | 3802.00    |                               |
| Packer                    | 5.00         |            |          | 3807.00    | 21.00 Bottom Of Top Packer    |
| Packer                    | 5.00         |            |          | 3812.00    |                               |
| Stubb                     | 1.00         |            |          | 3813.00    |                               |
| Recorder                  | 0.00         | 6799       | Inside   | 3813.00    |                               |
| Perforations              | 34.00        |            |          | 3847.00    |                               |
| Recorder                  | 0.00         | 13254      | Outside  | 3847.00    |                               |
| Bullnose                  | 3.00         |            |          | 3850.00    | 38.00 Bottom Packers & Anchor |
| <b>Total Tool Length:</b> | <b>59.00</b> |            |          |            |                               |



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

## DRILL STEM TEST REPORT

FLUID SUMMARY

RL Investments LLC

**Culley # 1**

217 Saint Peter St  
Morland Ks 67650

**18-8-24-Graham-Ks**

Job Ticket: 22814

**DST#: 4**

ATTN: Leon Pfeifer

Test Start: 2005.05.18 @ 04:47:16

### 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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 5.00         | DM          | 0.070         |

Total Length: 5.00 ft

Total Volume: 0.070 bbl

Num Fluid Samples: 0

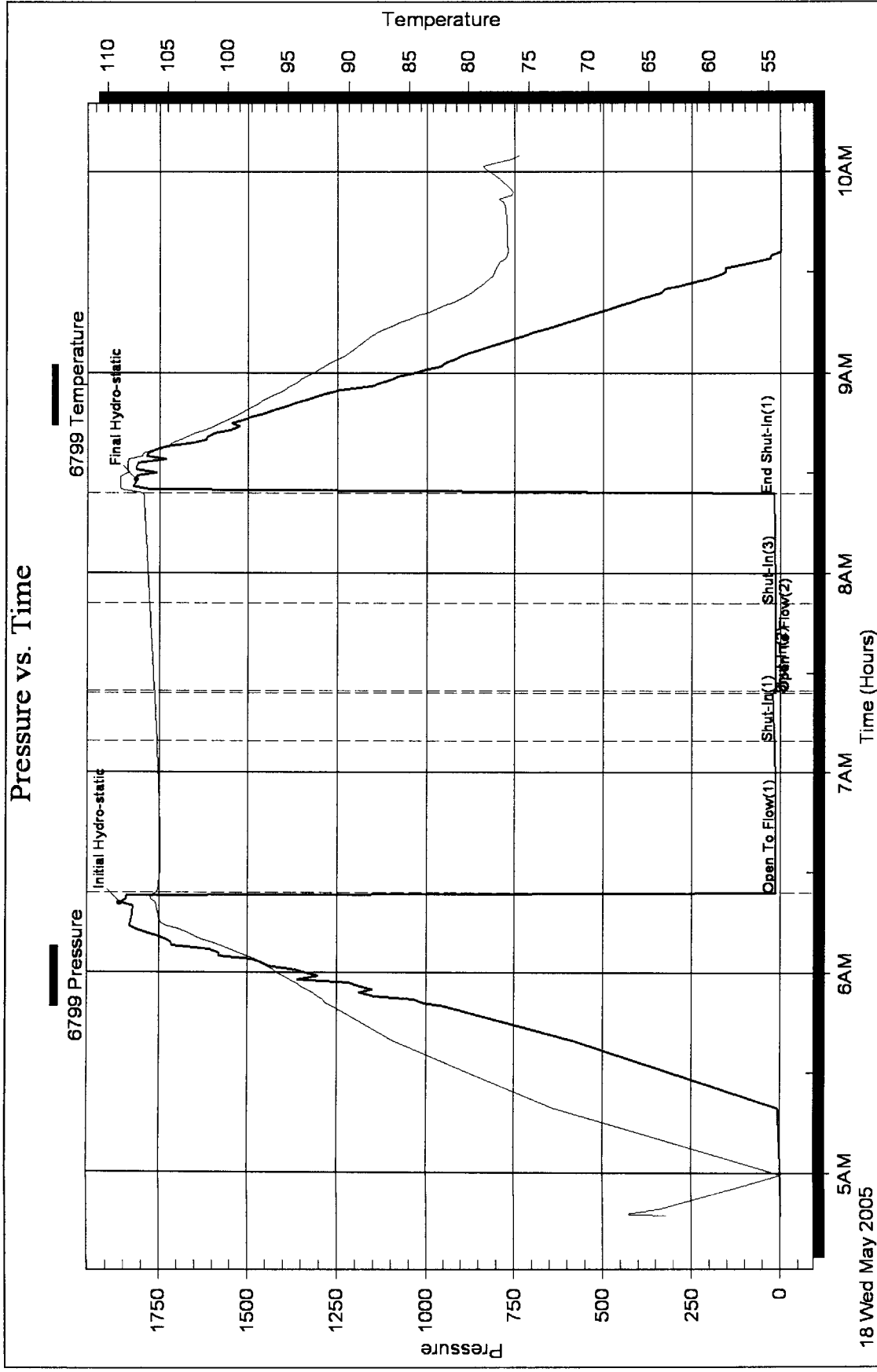
Num Gas Bombs: 0

Serial #:

Laboratory Name:

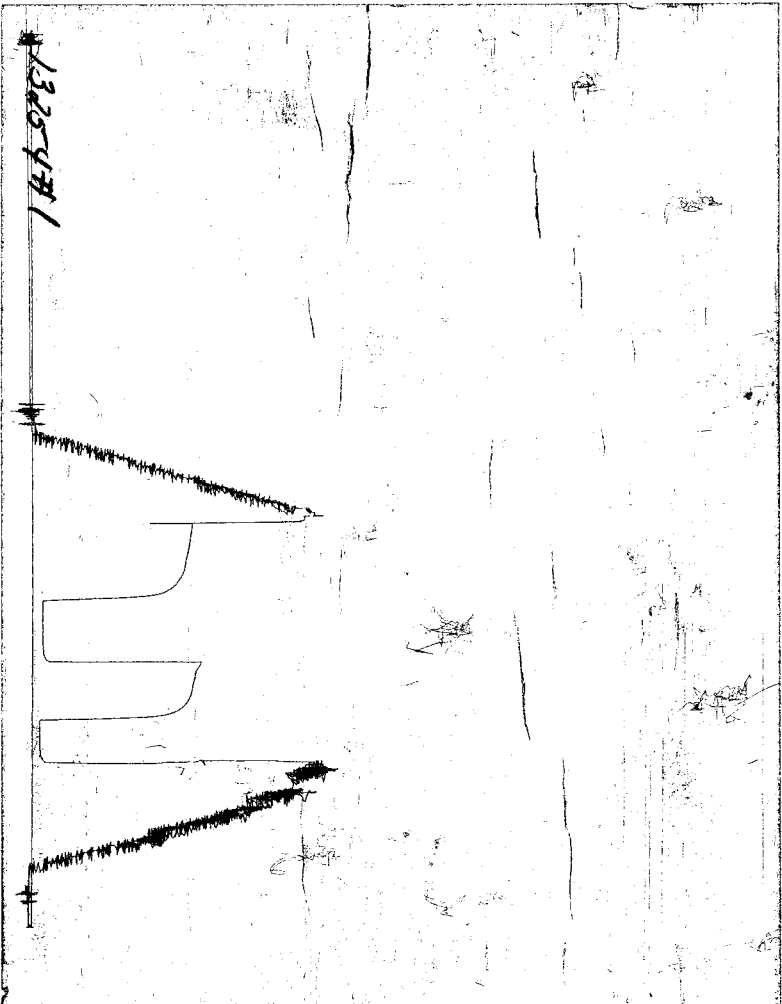
Laboratory Location:

Recovery Comments:

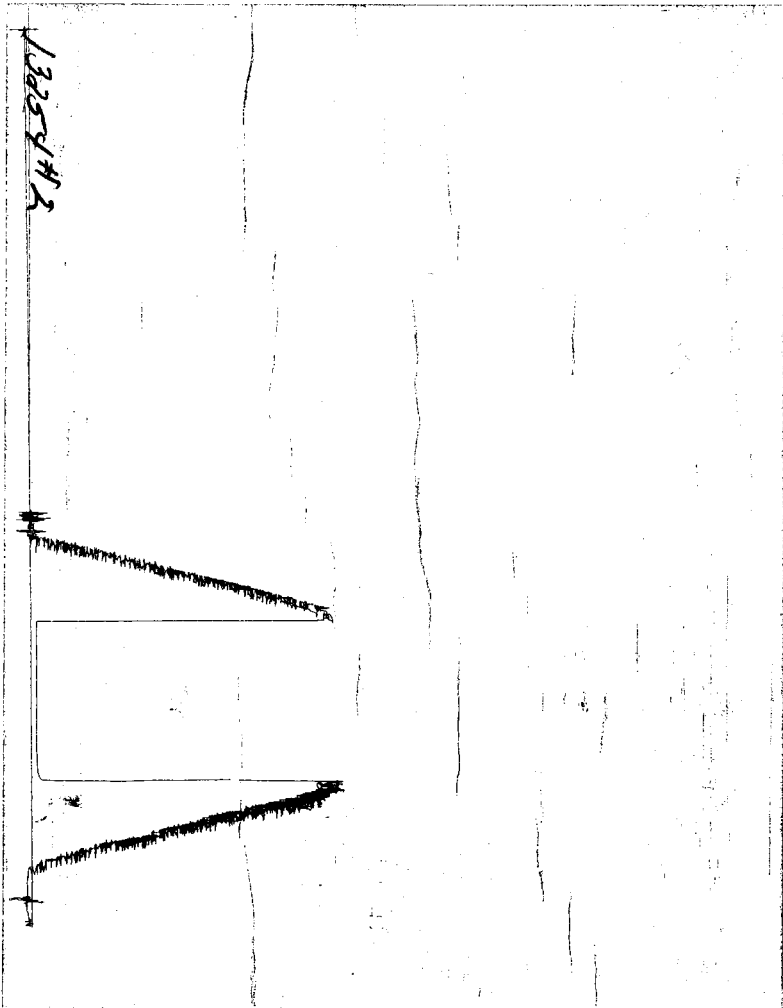


# CHART PAGE

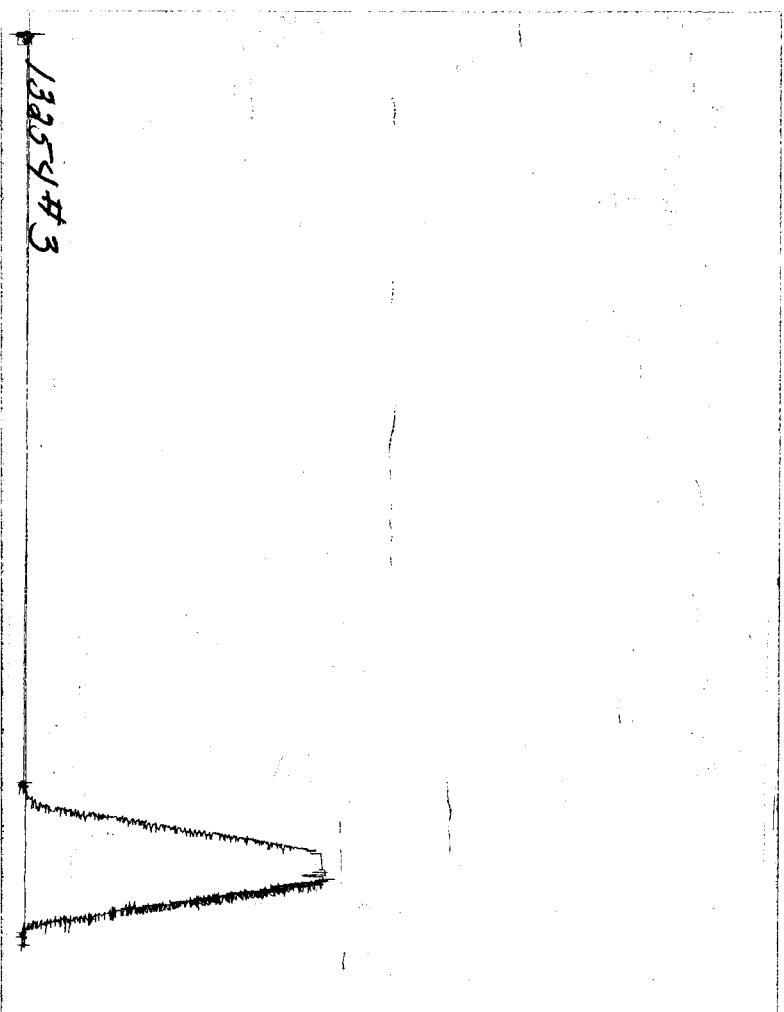
This is a photocopy of the actual AK-1 recorder chart.



**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.



# CHART PAGE

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

