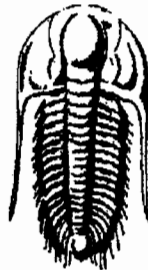


15-171-20618

KCC
JUN 15 2006
CONFIDENTIAL



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

PO 783188
Wichita KS 67278-3188

ATTN: Mike Engelbrecht

13 17s 31w Scott KS

McClellan #1-13C

Start Date: 2006.03.28 @ 19:08:01

End Date: 2006.03.29 @ 03:25:15

Job Ticket #: 23236 DST #: 1

RECEIVED
JUN 16 2006
KCC WICHITA

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

Ritchie Exploration

McClellan #1-13C

13 17s 31w Scott KS

DST # 1

LKC "C"

2006.03.28



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

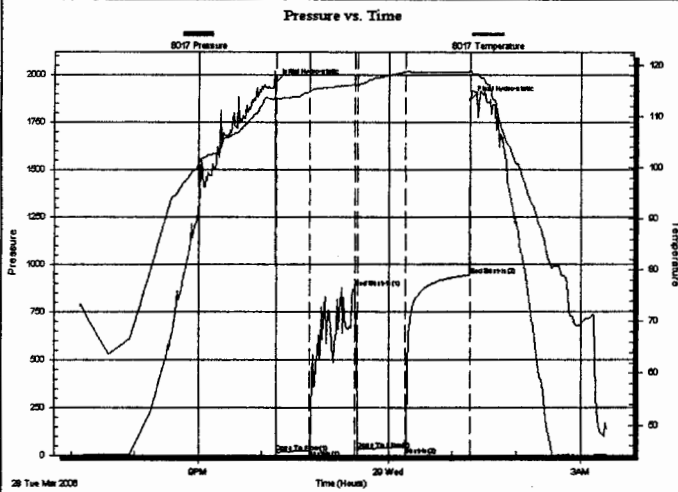
McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23236 **DST#: 1**
Test Start: 2006.03.28 @ 19:08:01

GENERAL INFORMATION:

Formation: **LKC "C"**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**
Time Tool Opened: **22:13:45** Tester: **Chuck Smith**
Time Test Ended: **03:25:15** Unit No: **18**
Interval: **3936.00 ft (KB) To 3966.00 ft (KB) (TVD)** Reference Elevations: **2913.00 ft (KB)**
Total Depth: **3966.00 ft (KB) (TVD)** **2903.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **10.00 ft**

Serial #: 8017 **Inside**
Press@RunDepth: **45.00 psig @ 3941.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2006.03.28** End Date: **2006.03.29** Last Calib.: **2006.03.29**
Start Time: **19:08:01** End Time: **03:25:15** Time On Btm: **2006.03.28 @ 22:13:30**
Time Off Btm: **2006.03.29 @ 01:16:45**

TEST COMMENT: IF Surface blow built to 1 1/2" over 30 min
IS No return over 45 min
FF Weak surface blow over 45 min
FS No return over 60 min



PRESSURE SUMMARY

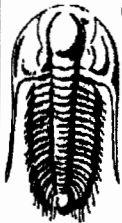
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1963.66 | 113.92 | Initial Hydro-static |
| 1 | 15.80 | 112.96 | Open To Flow (1) |
| 33 | 26.71 | 114.77 | Shut-In(1) |
| 75 | 877.69 | 116.23 | End Shut-In(1) |
| 78 | 30.88 | 116.07 | Open To Flow (2) |
| 123 | 45.00 | 118.73 | Shut-In(2) |
| 183 | 942.36 | 118.65 | End Shut-In(2) |
| 184 | 1870.35 | 119.05 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 5.00 | M 100%M | 0.07 |
| 60.00 | WCM 30%W 70%M | 0.84 |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23236 **DST#: 1**

ATTN: Mike Engelbrecht

Test Start: 2006.03.28 @ 19:08:01

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3937.00 ft | Diameter: 3.80 inches | Volume: 55.23 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: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 70000.00 lb |
| | | | <u>Total Volume: 55.23 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 20.00 ft | | | String Weight: Initial 58000.00 lb |
| Depth to Top Packer: | 3936.00 ft | | | Final 59000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 30.00 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 |
|---------------------------|--------------|------------|----------|------------|------------------------------------|
| Shut In Tool | 5.00 | | | 3922.00 | |
| Hydraulic tool | 5.00 | | | 3927.00 | |
| Packer | 5.00 | | | 3932.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3936.00 | |
| Stubb | 1.00 | | | 3937.00 | |
| Perforations | 4.00 | | | 3941.00 | |
| Recorder | 0.00 | 8017 | inside | 3941.00 | |
| Perforations | 20.00 | | | 3961.00 | |
| Recorder | 0.00 | 13276 | inside | 3961.00 | |
| Bullnose | 5.00 | | | 3966.00 | 30.00 Bottom Packers & Anchor |
| Total Tool Length: | 49.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23236 **DST#: 1**
Test Start: 2006.03.28 @ 19:08:01

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: | 26000 ppm |
| Viscosity: 54.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 7.15 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 2100.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------|---------------|
| 5.00 | M 100%M | 0.070 |
| 60.00 | WCM 30%W 70%M | 0.842 |

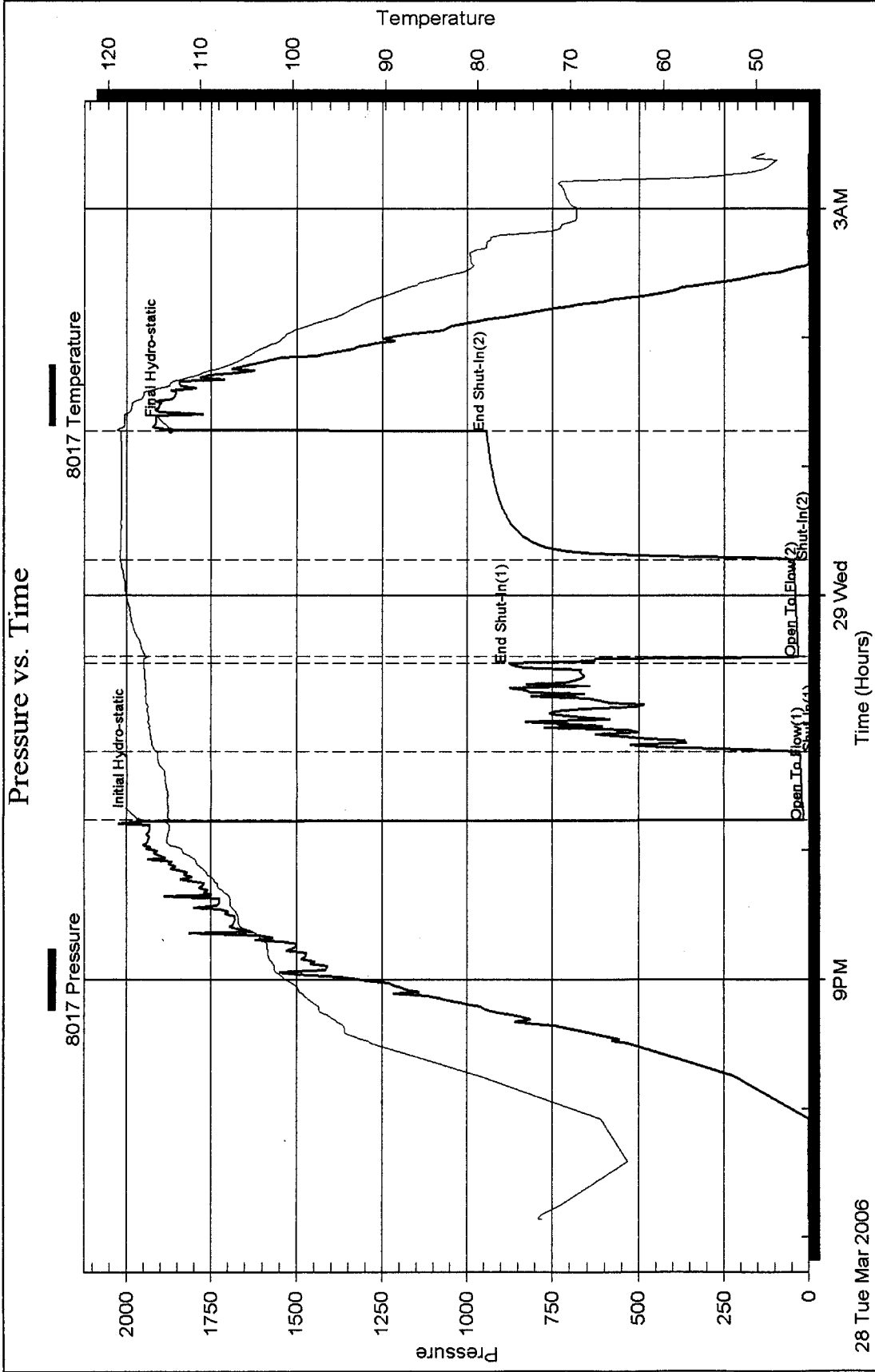
Total Length: 65.00 ft Total Volume: 0.912 bbl

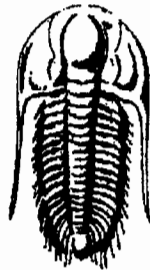
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW 422 @ 51 degrees F = 26000
Scum of oil in 5 feet of mud

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

PO 783188
Wichita KS 67278-3188

ATTN: Mike Engelbrecht

13 17s 31w Scott KS

McClellan #1-13C

Start Date: 2006.03.29 @ 13:44:01

End Date: 2006.03.29 @ 20:00:00

Job Ticket #: 23237 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Ritchie Exploration

McClellan #1-13C

13 17s 31w Scott KS

DST # 2

LKC "E"

2006.03.29



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

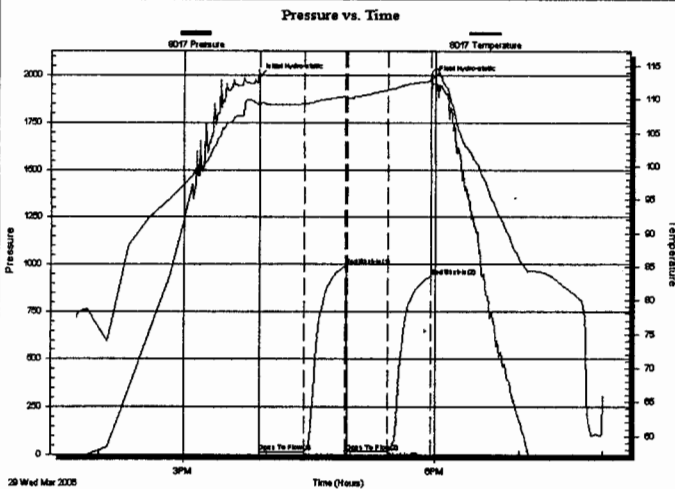
McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23237 **DST#: 2**
Test Start: 2006.03.29 @ 13:44:01

GENERAL INFORMATION:

Formation: **LKC "E"**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**
Time Tool Opened: **15:55:00** Tester: **Chuck Smith**
Time Test Ended: **20:00:00** Unit No: **18**
Interval: **3997.00 ft (KB) To 4020.00 ft (KB) (TVD)** Reference Elevations: **2913.00 ft (KB)**
Total Depth: **4020.00 ft (KB) (TVD)** **2903.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **10.00 ft**

Serial #: 8017 **Inside**
Press@RunDepth: **18.27 psig @ 4000.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2006.03.29** End Date: **2006.03.29** Last Calib.: **2006.03.29**
Start Time: **13:44:01** End Time: **20:00:00** Time On Btm: **2006.03.29 @ 15:54:15**
Time Off Btm: **2006.03.29 @ 17:57:15**

TEST COMMENT: IF Weak blow that died in 10 min over 30 min
IS No return over 30 min
FF Flushed tool after opening no blow over 30 min
FS No return over 30 min



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1989.41 | 109.45 | Initial Hydro-static |
| 1 | 12.82 | 108.81 | Open To Flow (1) |
| 33 | 16.30 | 109.31 | Shut-in (1) |
| 62 | 989.01 | 110.44 | End Shut-in (1) |
| 63 | 16.47 | 110.23 | Open To Flow (2) |
| 93 | 18.27 | 111.41 | Shut-in (2) |
| 123 | 935.92 | 112.73 | End Shut-in (2) |
| 123 | 1979.44 | 113.43 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------|--------------|
| 6.00 | OCM 20% O 80% M | 0.08 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23237 **DST#: 2**

ATTN: Mike Engelbrecht

Test Start: 2006.03.29 @ 13:44:01

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3997.00 ft | Diameter: 3.80 inches | Volume: 56.07 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: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 60000.00 lb |
| | | | <u>Total Volume: 56.07 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 20.00 ft | | | String Weight: Initial 52000.00 lb |
| Depth to Top Packer: | 3997.00 ft | | | Final 52000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 23.00 ft | | | |
| Tool Length: | 43.00 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 | | | 3978.00 | |
| Shut In Tool | 5.00 | | | 3983.00 | |
| Hydraulic tool | 5.00 | | | 3988.00 | |
| Packer | 5.00 | | | 3993.00 | 20.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3997.00 | |
| Stubb | 1.00 | | | 3998.00 | |
| Perforations | 2.00 | | | 4000.00 | |
| Recorder | 0.00 | 8017 | Inside | 4000.00 | |
| Perforations | 15.00 | | | 4015.00 | |
| Recorder | 0.00 | 13276 | Inside | 4015.00 | |
| Bullnose | 5.00 | | | 4020.00 | 23.00 Bottom Packers & Anchor |

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23237

DST#: 2

ATTN: Mike Engelbrecht

Test Start: 2006.03.29 @ 13:44:01

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: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.57 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------|---------------|
| 6.00 | OCM 20%O 80%M | 0.084 |

Total Length: 6.00 ft

Total Volume: 0.084 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8017

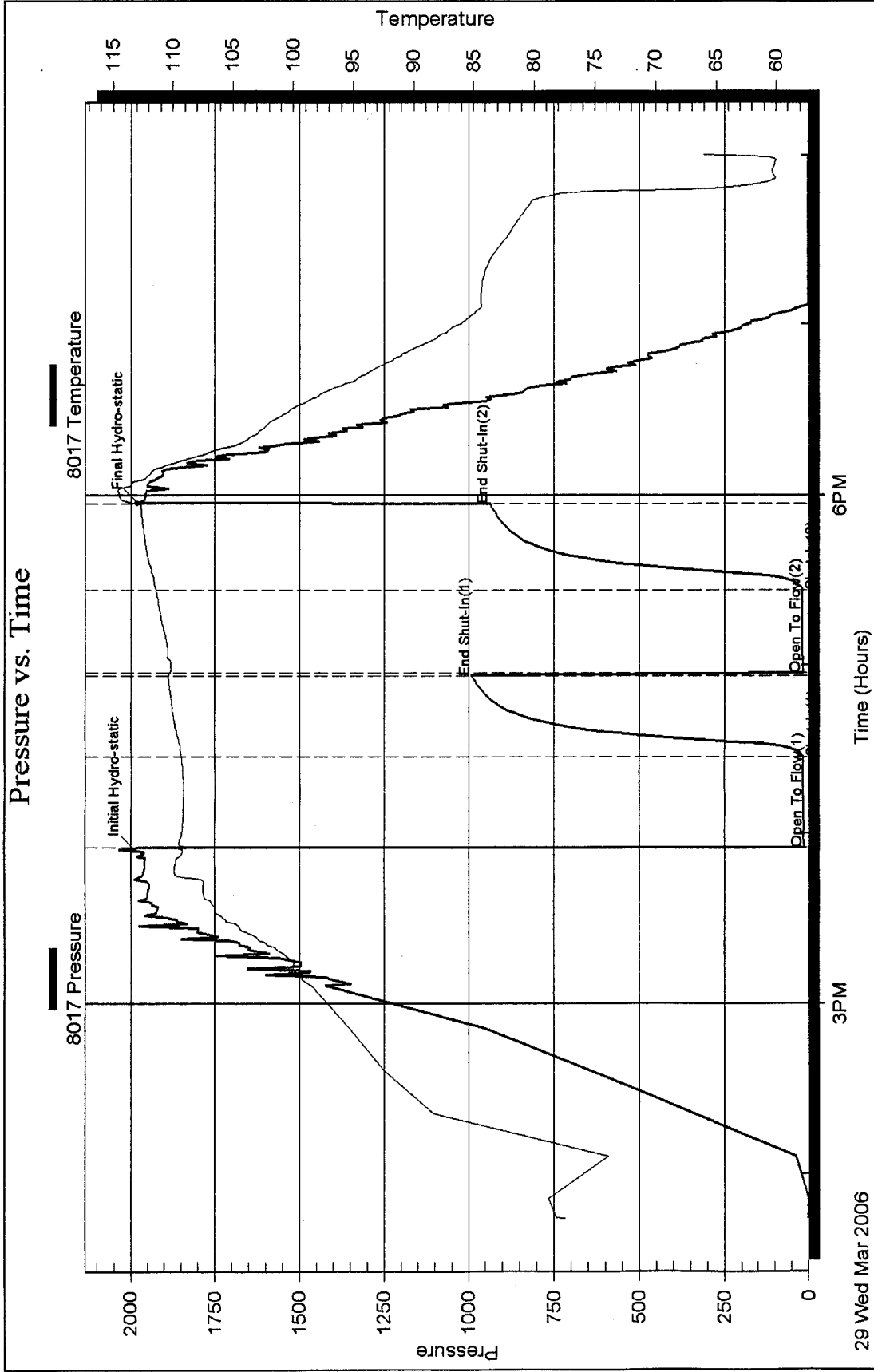
Inside

Ritchie Exploration

13 17s 31w Scott KS

DST Test Number: 2

Pressure vs. Time



29 Wed Mar 2006

3PM

6PM



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

PO 783188
Wichita KS 67278-3188

ATTN: Mike Engelbrecht

13 17s 31w Scott KS

McClellan #1-13C

Start Date: 2006.03.30 @ 16:09:01

End Date: 2006.03.30 @ 22:46:00

Job Ticket #: 23238 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Ritchie Exploration

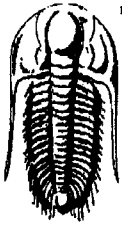
McClellan #1-13C

13 17s 31w Scott KS

DST # 3

LKC "H & I"

2006.03.30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

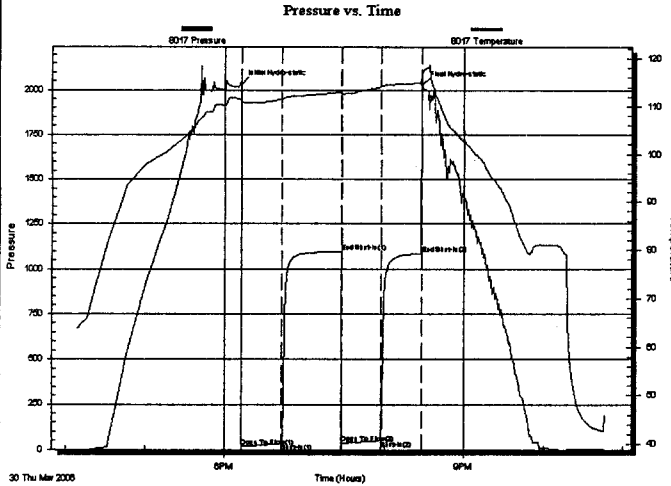
McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23238 **DST#: 3**
Test Start: 2006.03.30 @ 16:09:01

GENERAL INFORMATION:

Formation: **LKC "H & I"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:12:30
 Time Test Ended: 22:46:00
 Interval: **4089.00 ft (KB) To 4160.00 ft (KB) (TVD)**
 Total Depth: 4160.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole
 Tester: Chuck Smith
 Unit No: 18
 Reference Elevations: 2913.00 ft (KB)
 2903.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8017 Inside
 Press@RunDepth: 50.51 psig @ 4093.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2006.03.30 End Date: 2006.03.30 Last Calib.: 2006.03.30
 Start Time: 16:09:01 End Time: 22:46:00 Time On Btrm: 2006.03.30 @ 18:12:15
 Time Off Btrm: 2006.03.30 @ 20:28:45

TEST COMMENT: IF Surface blow built to "1"+ over 30 min
 IS No return over 45 min
 FF Weak surface blow @ 27 min over 30 min
 FS No return over 30 min



PRESSURE SUMMARY

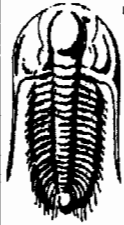
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2032.11 | 111.49 | Initial Hydro-static |
| 1 | 16.94 | 110.94 | Open To Flow (1) |
| 31 | 33.91 | 111.46 | Shut-In(1) |
| 75 | 1093.84 | 112.92 | End Shut-In(1) |
| 76 | 34.99 | 112.66 | Open To Flow (2) |
| 105 | 50.51 | 114.12 | Shut-In(2) |
| 136 | 1084.43 | 114.91 | End Shut-In(2) |
| 137 | 2027.32 | 116.60 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 65.00 | MCW 50%M 50%W | 0.91 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23238

DST#: 3

ATTN: Mike Engelbrecht

Test Start: 2006.03.30 @ 16:09:01

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4096.00 ft | Diameter: 3.80 inches | Volume: 57.46 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: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 64000.00 lb |
| | | | <u>Total Volume: 57.46 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 26.00 ft | | | String Weight: Initial 54000.00 lb |
| Depth to Top Packer: | 4089.00 ft | | | Final 55000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 71.00 ft | | | |
| Tool Length: | 90.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool | 5.00 | | | 4075.00 | |
| Hydraulic tool | 5.00 | | | 4080.00 | |
| Packer | 5.00 | | | 4085.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4089.00 | |
| Stubb | 1.00 | | | 4090.00 | |
| Perforations | 3.00 | | | 4093.00 | |
| Recorder | 0.00 | 8017 | Inside | 4093.00 | |
| Perforations | 30.00 | | | 4123.00 | |
| Change Over Sub | 1.00 | | | 4124.00 | |
| Drill Pipe | 30.00 | | | 4154.00 | |
| Change Over Sub | 1.00 | | | 4155.00 | |
| Recorder | 0.00 | 13276 | Inside | 4155.00 | |
| Bullnose | 5.00 | | | 4160.00 | 71.00 Bottom Packers & Anchor |

Total Tool Length: 90.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23238 **DST#: 3**
Test Start: 2006.03.30 @ 16:09:01

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: 48.00 sec/qt | Cushion Volume: bbl | |
| Water Loss: 6.37 in ³ | Gas Cushion Type: | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | |
| Salinity: 2300.00 ppm | | |
| Filter Cake: 1.00 inches | | |

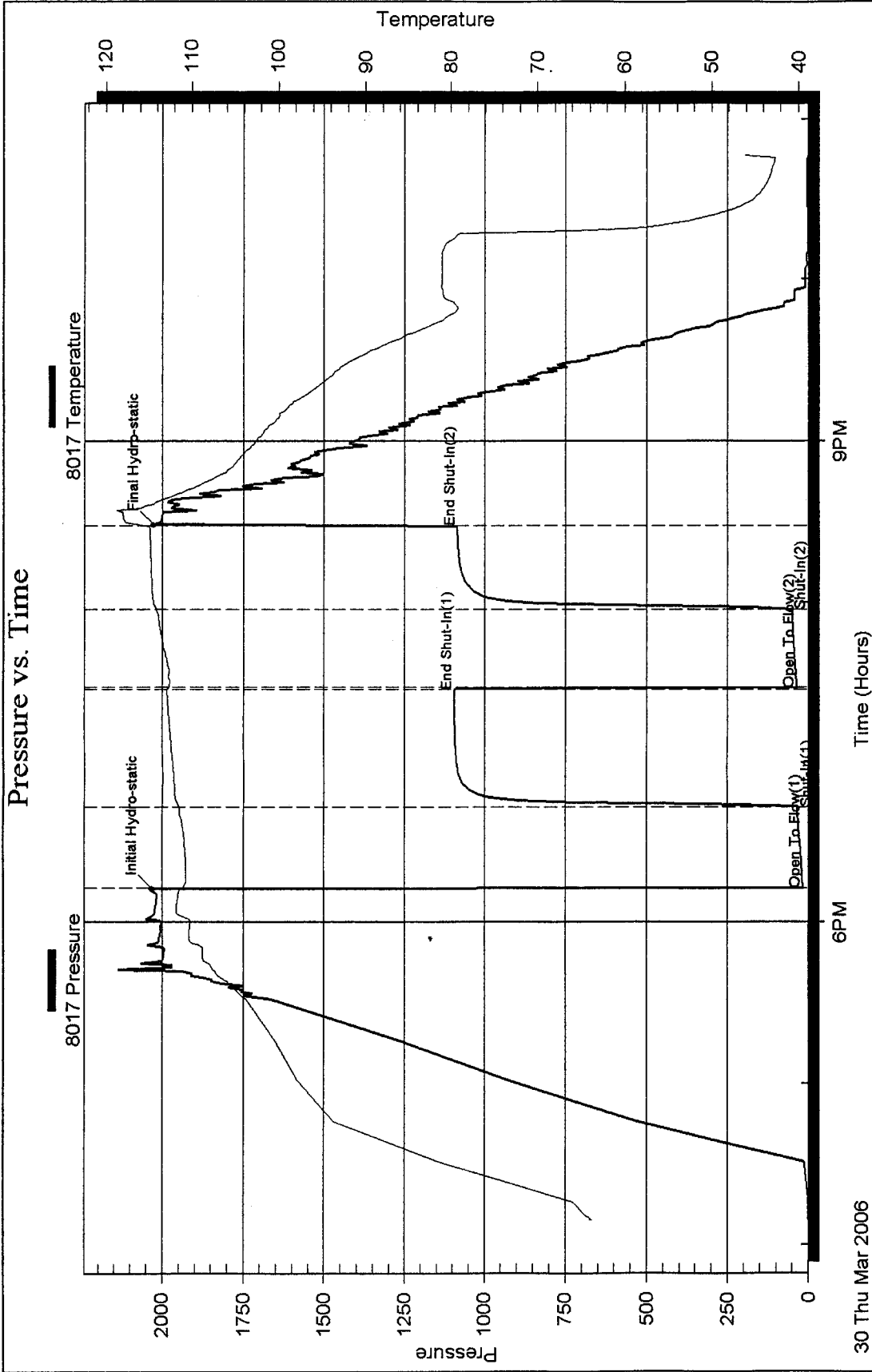
Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------|---------------|
| 65.00 | MCW 50%M 50%W | 0.912 |

Total Length: 65.00 ft Total Volume: 0.912 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: RW537 @ 50 degree F = 21,000
Scum of oil

Pressure vs. Time

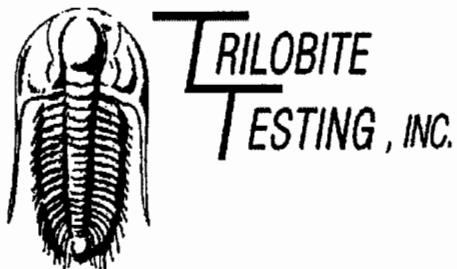


30 Thu Mar 2006

6PM

Time (Hours)

9PM



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

PO 783188
Wichita KS 67278-3188

ATTN: Mike Engelbrecht

13 17s 31w Scott KS

McClellan #1-13C

Start Date: 2006.03.31 @ 09:18:01

End Date: 2006.03.31 @ 15:30:30

Job Ticket #: 23239 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

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23239

DST#: 4

ATTN: Mike Engelbrecht

Test Start: 2006.03.31 @ 09:18:01

GENERAL INFORMATION:

Formation: **LKC "J"**

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

Test Type: **Conventional Bottom Hole**

Time Tool Opened: **11:30:45**

Tester: **Chuck Smith**

Time Test Ended: **15:30:30**

Unit No: **18**

Interval: **4148.00 ft (KB) To 4185.00 ft (KB) (TVD)**

Reference Elevations: **2913.00 ft (KB)**

Total Depth: **4185.00 ft (KB) (TVD)**

2903.00 ft (CF)

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

KB to GR/CF: **10.00 ft**

Serial #: 8017

Inside

Press@RunDepth: **23.58 psig @ 4151.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2006.03.31**

End Date:

2006.03.31

Last Calib.: **2006.03.31**

Start Time: **09:18:01**

End Time:

15:30:30

Time On Btm: **2006.03.31 @ 11:30:15**

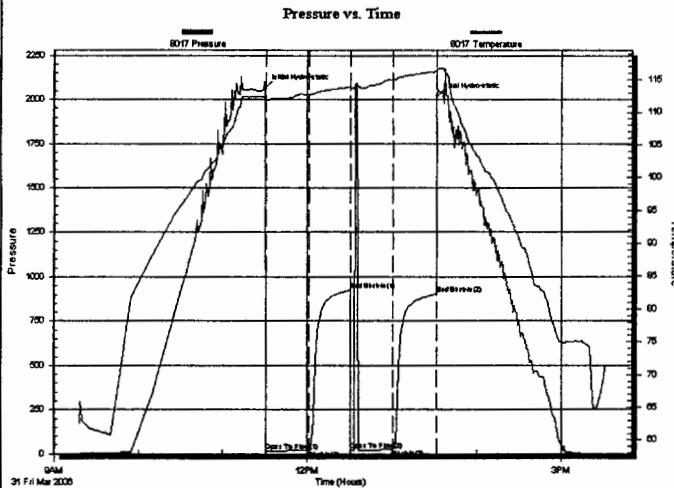
Time Off Btm: **2006.03.31 @ 13:31:45**

TEST COMMENT: IF Weak blow died at 14 min over 30 min

IS No return over 30 min

FF Flushed tool after one minute (two attempts) no blow over 30 min

FS No return over 30 min



PRESSURE SUMMARY

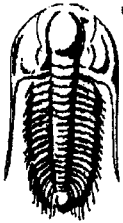
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2065.70 | 112.25 | Initial Hydro-static |
| 1 | 15.25 | 111.72 | Open To Flow (1) |
| 31 | 19.44 | 112.76 | Shut-in(1) |
| 60 | 924.10 | 113.89 | End Shut-in(1) |
| 61 | 20.23 | 113.50 | Open To Flow (2) |
| 91 | 23.58 | 115.02 | Shut-in(2) |
| 122 | 903.50 | 116.29 | End Shut-in(2) |
| 122 | 2017.76 | 116.64 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 15.00 | M 100%M | 0.21 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23239

DST#: 4

ATTN: Mike Engelbrecht

Test Start: 2006.03.31 @ 09:18:01

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4158.00 ft | Diameter: 3.80 inches | Volume: 58.33 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: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: lb |
| | | | <u>Total Volume: 58.33 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 29.00 ft | | | String Weight: Initial 56000.00 lb |
| Depth to Top Packer: | 4148.00 ft | | | Final lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 37.00 ft | | | |
| Tool Length: | 56.00 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 | | | 4134.00 | |
| Hydraulic tool | 5.00 | | | 4139.00 | |
| Packer | 5.00 | | | 4144.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4148.00 | |
| Stubb | 1.00 | | | 4149.00 | |
| Perforations | 2.00 | | | 4151.00 | |
| Recorder | 0.00 | 8017 | Inside | 4151.00 | |
| Perforations | 29.00 | | | 4180.00 | |
| Recorder | 0.00 | 13276 | Inside | 4180.00 | |
| Bullnose | 5.00 | | | 4185.00 | 37.00 Bottom Packers & Anchor |
| Total Tool Length: | 56.00 | | | | |



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23239 **DST#: 4**

ATTN: Mike Engelbrecht

Test Start: 2006.03.31 @ 09:18:01

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: 58.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 6.38 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 2100.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 15.00 | M 100%M | 0.210 |

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: Scum of oil

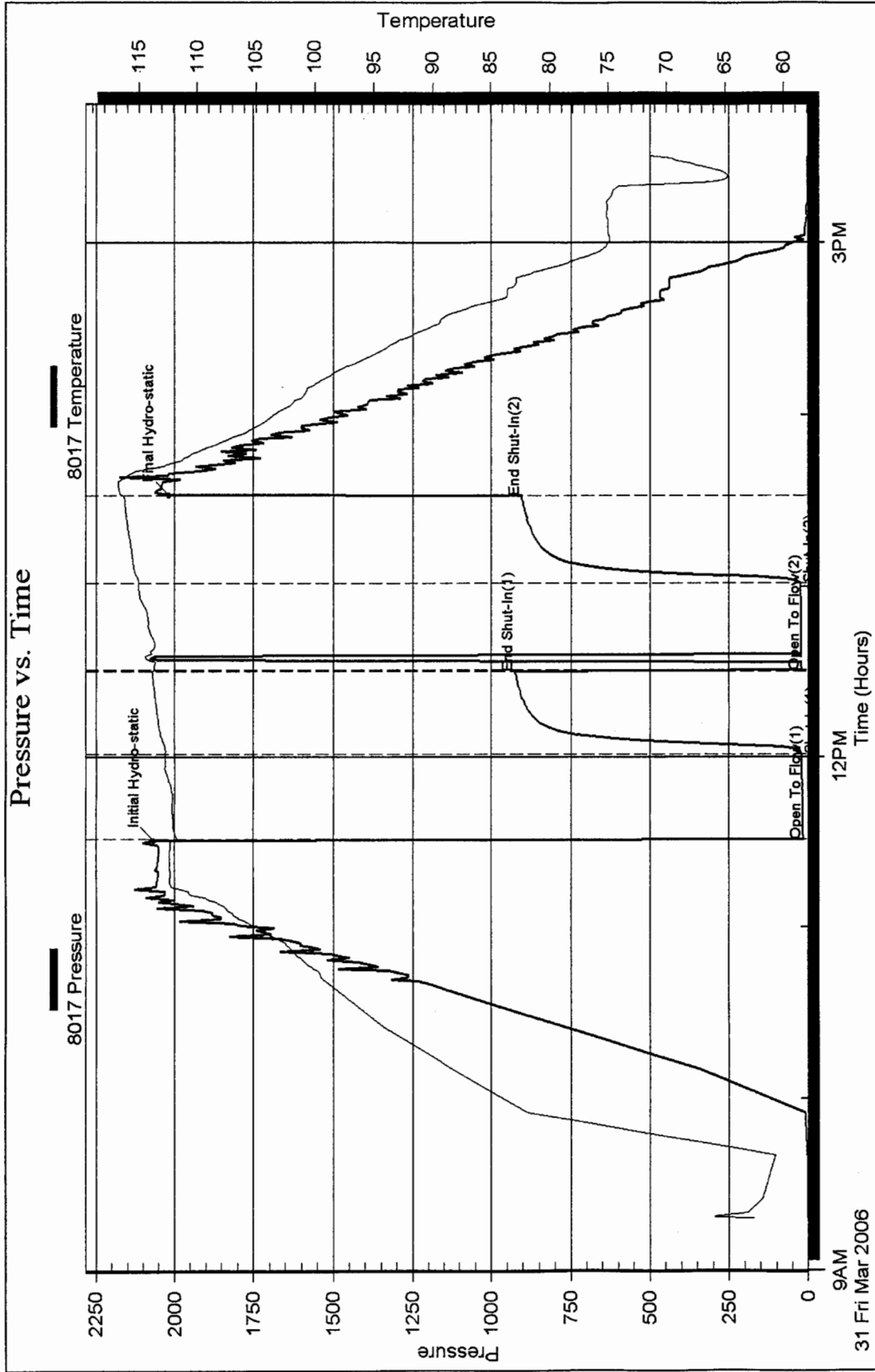
Serial #: 8017

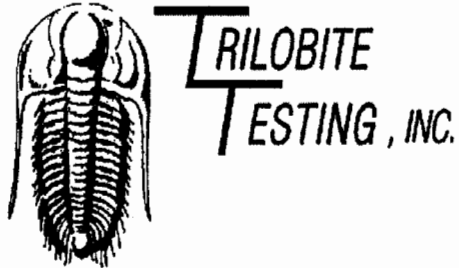
Inside

Ritchie Exploration

13 17s 31w Scott KS

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

PO 783188
Wichita KS 67278-3188

ATTN: Mike Engelbrecht

13 17s 31w Scott KS

McClellan #1-13C

Start Date: 2006.04.01 @ 15:12:01

End Date: 2006.04.01 @ 22:01:45

Job Ticket #: 23240 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Ritchie Exploration

McClellan #1-13C

13 17s 31w Scott KS

DST # 5

Altamont

2006.04.01



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

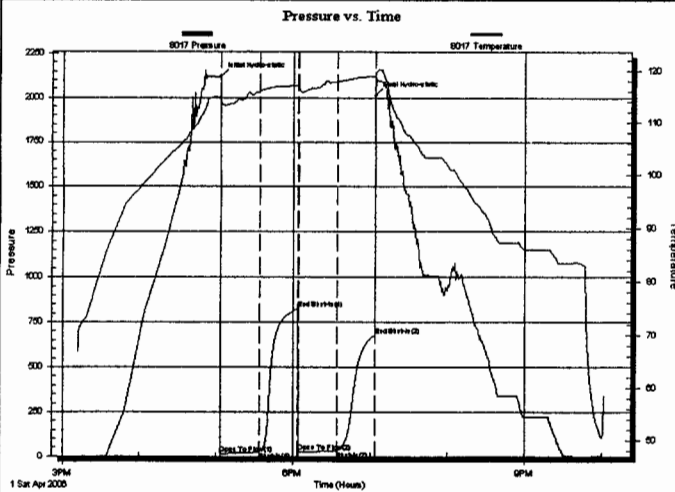
McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23240 **DST#: 5**
Test Start: 2006.04.01 @ 15:12:01

GENERAL INFORMATION:

Formation: **Altamont**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:03:15
Time Test Ended: 22:01:45
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 18
Interval: **4301.00 ft (KB) To 4366.00 ft (KB) (TVD)**
Reference Elevations: 2913.00 ft (KB)
Total Depth: 4366.00 ft (KB) (TVD) 2903.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8017 Inside
Press@RunDepth: 30.47 psig @ 4302.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.04.01 End Date: 2006.04.01 Last Calib.: 2006.04.01
Start Time: 15:12:01 End Time: 22:01:45 Time On Btm: 2006.04.01 @ 17:03:00
Time Off Btm: 2006.04.01 @ 19:03:45

TEST COMMENT: IF Surface blow built to 1/2" then receded to 1/4" over 30 min
IS No return over 30 min
FF Flushed tool after one min (two attempts) no blow over 30 min
FS No return over 30 min



PRESSURE SUMMARY

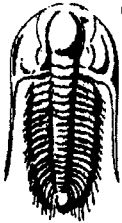
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2118.24 | 114.71 | Initial Hydro-static |
| 1 | 15.05 | 113.47 | Open To Flow (1) |
| 31 | 23.75 | 115.85 | Shut-In(1) |
| 61 | 823.03 | 117.04 | End Shut-In(1) |
| 62 | 24.99 | 116.74 | Open To Flow (2) |
| 91 | 30.47 | 117.80 | Shut-In(2) |
| 121 | 678.05 | 118.90 | End Shut-In(2) |
| 121 | 2012.68 | 119.53 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------|--------------|
| 35.00 | VSOCM3%O 97%M | 0.49 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23240 **DST#: 5**

ATTN: Mike Engelbrecht

Test Start: 2006.04.01 @ 15:12:01

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4313.00 ft | Diameter: 3.80 inches | Volume: 60.50 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: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 80000.00 lb |
| | | | <u>Total Volume: 60.50 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 31.00 ft | | | String Weight: Initial 56000.00 lb |
| Depth to Top Packer: | 4301.00 ft | | | Final 56000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 65.00 ft | | | |
| Tool Length: | 84.00 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 | | | 4287.00 | |
| Hydraulic tool | 5.00 | | | 4292.00 | |
| Packer | 5.00 | | | 4297.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4301.00 | |
| Stubb | 1.00 | | | 4302.00 | |
| Recorder | 0.00 | 8017 | Inside | 4302.00 | |
| Perforations | 25.00 | | | 4327.00 | |
| Change Over Sub | 1.00 | | | 4328.00 | |
| Drill Pipe | 32.00 | | | 4360.00 | |
| Change Over Sub | 1.00 | | | 4361.00 | |
| Recorder | 0.00 | 13276 | Inside | 4361.00 | |
| Bullnose | 5.00 | | | 4366.00 | 65.00 Bottom Packers & Anchor |

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23240 **DST#: 5**
Test Start: 2006.04.01 @ 15:12:01

Mud and Cushion Information

| | | | |
|----------------------------------|----------------------------|-----------------|-----------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | 0 deg API |
| Mud Weight: 10.00 lb/gal | Cushion Length: ft | Water Salinity: | 0 ppm |
| Viscosity: 63.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 7.97 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 2800.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------|---------------|
| 35.00 | VSOCM 3%O 97%M | 0.491 |

Total Length: 35.00 ft Total Volume: 0.491 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

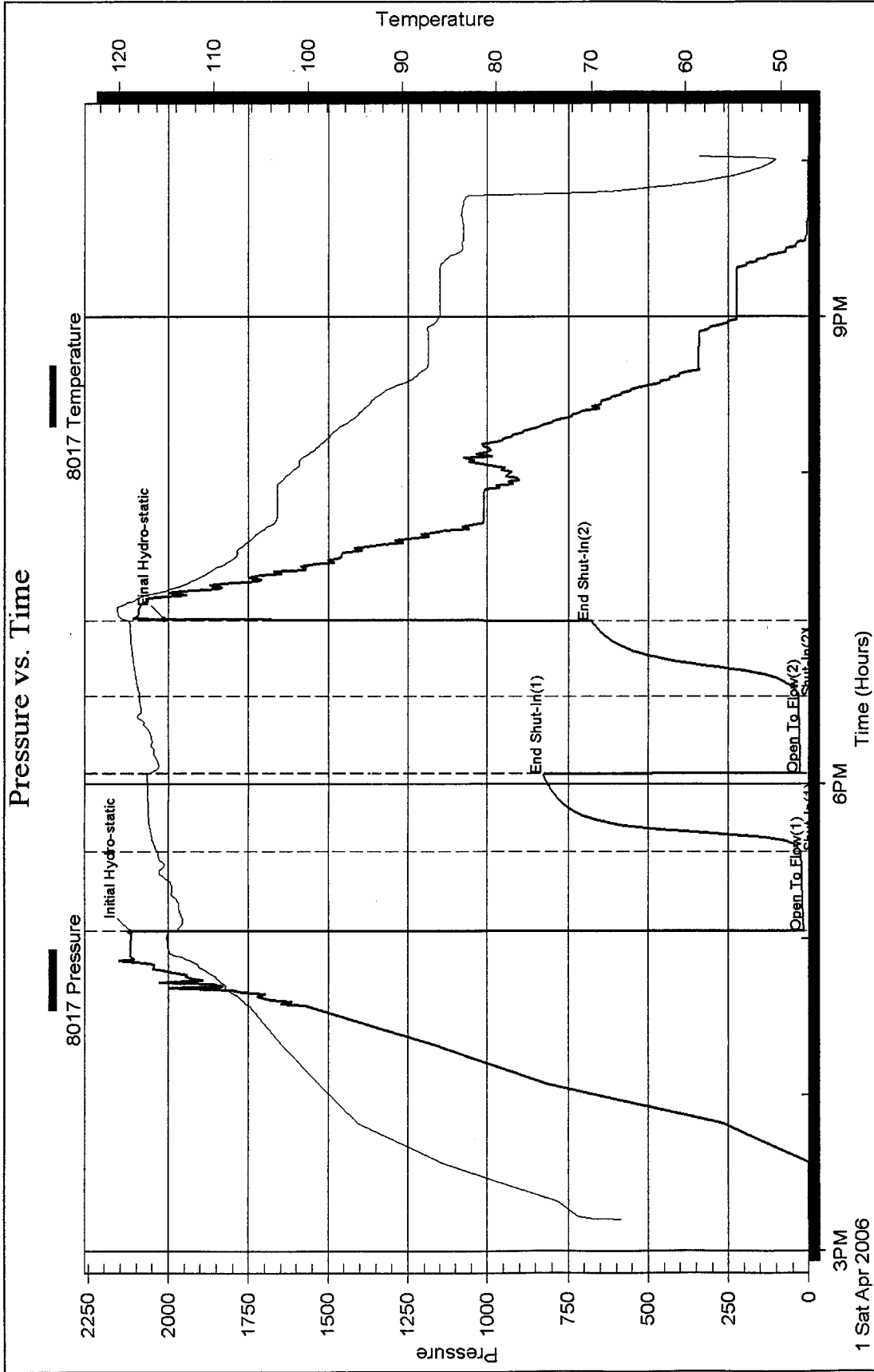
Serial #: 8017

Inside

Ritchie Exploration

13 17s 31w Scott KS

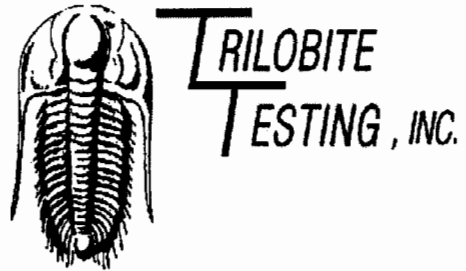
DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 23240

Printed: 2006.04.06 @ 09:58:49 Page 5



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

PO 783188
Wichita KS 67278-3188

ATTN: Mike Engelbrecht

13 17s 31w Scott KS

McClellan #1-13C

Start Date: 2006.04.02 @ 19:26:01

End Date: 2006.04.03 @ 03:38:00

Job Ticket #: 23241 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Ritchie Exploration

McClellan #1-13C

13 17s 31w Scott KS

DST # 6

Cherokee & Johnson

2006.04.02



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration
PO 783188
Wichita KS 67278-3188
ATTN: Mike Engelbrecht

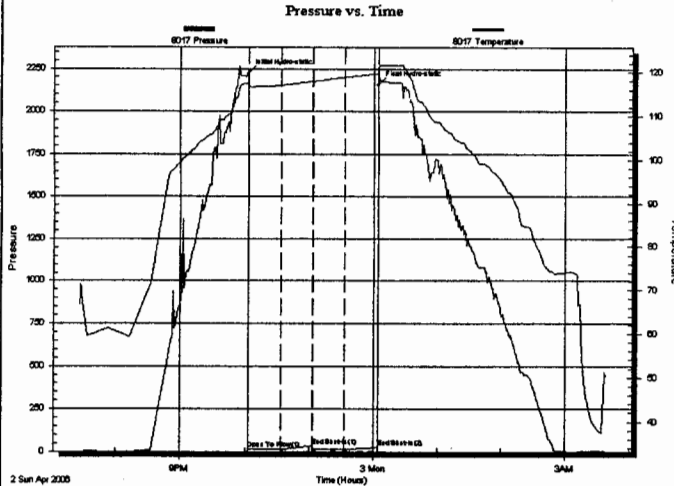
McClellan #1-13C
13 17s 31w Scott KS
Job Ticket: 23241 **DST#: 6**
Test Start: 2006.04.02 @ 19:26:01

GENERAL INFORMATION:

Formation: **Cherokee & Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:03:00
Time Test Ended: 03:38:00
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 18
Interval: **4468.00 ft (KB) To 4530.00 ft (KB) (TVD)**
Reference Elevations: 2913.00 ft (KB)
Total Depth: 4530.00 ft (KB) (TVD) 2903.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8017 Inside
Press@RunDepth: 15.66 psig @ 4469.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.04.02 End Date: 2006.04.03 Last Calib.: 2006.04.03
Start Time: 19:26:01 End Time: 03:38:00 Time On Btm: 2006.04.02 @ 22:02:45
Time Off Btm: 2006.04.03 @ 00:04:15

TEST COMMENT: IF Weak blow died @ 9 min. over 30 min
IS No return over 30 min
FF Flushed tool after 1 min (tw o attempts) no blow over 30 min
FS No return over 30 min



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2222.58 | 117.33 | Initial Hydro-static |
| 1 | 14.82 | 116.41 | Open To Flow (1) |
| 31 | 15.21 | 117.02 | Shut-In(1) |
| 61 | 33.84 | 117.92 | End Shut-In(1) |
| 61 | 14.94 | 117.93 | Open To Flow (2) |
| 91 | 15.66 | 118.85 | Shut-In(2) |
| 122 | 27.37 | 119.74 | End Shut-In(2) |
| 122 | 2155.43 | 120.64 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 4.00 | M 100%M | 0.06 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23241 **DST#: 6**

ATTN: Mike Engelbrecht

Test Start: 2006.04.02 @ 19:26:01

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4470.00 ft | Diameter: 3.80 inches | Volume: 62.70 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: 2.25 inches | Volume: 0.00 bbl | Weight to Pull Loose: 90000.00 lb |
| | | | <u>Total Volume: 62.70 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 21.00 ft | | | String Weight: Initial 60000.00 lb |
| Depth to Top Packer: | 4468.00 ft | | | Final 60000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 62.00 ft | | | |
| Tool Length: | 81.00 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 | | | 4454.00 | |
| Hydraulic tool | 5.00 | | | 4459.00 | |
| Packer | 5.00 | | | 4464.00 | 19.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4468.00 | |
| Stubb | 1.00 | | | 4469.00 | |
| Recorder | 0.00 | 8017 | Inside | 4469.00 | |
| Perforations | 25.00 | | | 4494.00 | |
| Change Over Sub | 1.00 | | | 4495.00 | |
| Drill Pipe | 29.00 | | | 4524.00 | |
| Change Over Sub | 1.00 | | | 4525.00 | |
| Recorder | 0.00 | 13276 | Inside | 4525.00 | |
| Bullnose | 5.00 | | | 4530.00 | 62.00 Bottom Packers & Anchor |

Total Tool Length: 81.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

McClellan #1-13C

PO 783188
Wichita KS 67278-3188

13 17s 31w Scott KS

Job Ticket: 23241

DST#: 6

ATTN: Mike Engelbrecht

Test Start: 2006.04.02 @ 19:26:01

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: 49.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 7.18 in ³ | Gas Cushion Type: | | |
| Resistivity: 0.00 ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 2400.00 ppm | | | |
| Filter Cake: 1.00 inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 4.00 | M 100%M | 0.056 |

Total Length: 4.00 ft Total Volume: 0.056 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Scum of oil

Serial #: 8017

Inside

Ritchie Exploration

13 17s 31w Scott KS

DST Test Number: 6

