

TRILOBITE TESTING, INC.

KCC
MAR 0 3 2005
CONFIDENTIAL

# DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc.**

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**2--9s--22w**

**Billips # 1**

Start Date: 2005.01.29 @ 20:55:31
End Date: 2005.01.30 @ 03:37:01
Job Ticket #: 21208 DST #: 1

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



John O Farmer Inc. Billips # 1 2--9s--22w DST # 1 L.Kc.-E & F 2005.01.29

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2--9s--22w**

Job Ticket: 21208 **DST#: 1**

Test Start: 2005.01.29 @ 20:55:31

## GENERAL INFORMATION:

Formation: **L.Kc.-E & F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:27:31
Time Test Ended: 03:37:01

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 31

**Interval: 3498.00 ft (KB) To 3530.00 ft (KB) (TVD)**
Total Depth: 3530.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

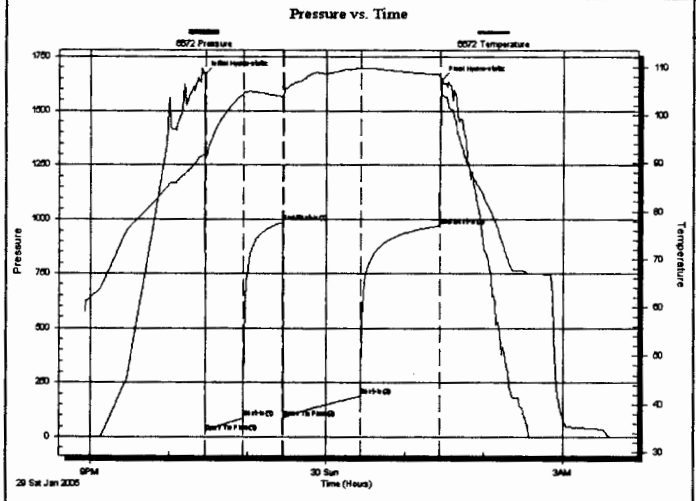
Reference Elevations: 2200.00 ft (KB)
2192.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 6672** **Inside**

Press@RunDepth: 188.25 psig @ 3502.00 ft (KB)
Start Date: 2005.01.29 End Date: 2005.01.30
Start Time: 20:55:32 End Time: 03:37:01

Capacity: 7000.00 psig
Last Calib.: 2005.01.30
Time On Btm: 2005.01.29 @ 22:27:01
Time Off Btm: 2005.01.30 @ 01:28:01

TEST COMMENT: IF-Strong B.O.B.20 min. ISI-Dead
FF-Strong B.O.B.25 min, FSI-Dead




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1667.66 | 91.83 | Initial Hydro-static |
| 1 | 21.68 | 91.63 | Open To Flow (1) |
| 30 | 86.69 | 104.34 | Shut-In(1) |
| 60 | 986.01 | 103.77 | End Shut-In(1) |
| 60 | 89.74 | 103.42 | Open To Flow (2) |
| 119 | 188.25 | 109.68 | Shut-In(2) |
| 179 | 970.99 | 108.43 | End Shut-In(2) |
| 181 | 1643.31 | 104.21 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 376.00 | Muddy S.W.30%M-70%W | 4.99 |
| | | |
| | | |
| | | |
| | | |
| | | |

## Gas Rates

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

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2-9s-22w**

Job Ticket: 21208 **DST#: 1**

Test Start: 2005.01.29 @ 20:55:31

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3455.00 ft | Diameter: | 3.80 inches | Volume: | 48.46 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 2.70 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 31.00 ft | Diameter: | 2.25 inches | Volume: | 0.15 bbl | |
| | | | | | Total Volume: | 48.61 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 8.00 ft |
| Depth to Top Packer: | 3498.00 ft |
| Depth to Bottom Packer: | ft |
| Interval betw een Packers: | 32.00 ft |
| Tool Length: | 52.00 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | |
|---|---|
| Tool Weight: | 2200.00 lb |
| Weight set on Packer: | 25000.00 lb |
| Weight to Pull Loose: | 60000.00 lb |
| Tool Chased | 0.00 ft |
| String Weight: Initial | 50000.00 lb |
| Final | 53000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 3479.00 | | |
| Shut In Tool | 5.00 | | | 3484.00 | | |
| Hydraulic tool | 5.00 | | | 3489.00 | | |
| Packer | 4.00 | | | 3493.00 | 20.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 3498.00 | | |
| Stubb | 1.00 | | | 3499.00 | | |
| Perforations | 3.00 | | | 3502.00 | | |
| Recorder | 0.00 | 6672 | Inside | 3502.00 | | |
| Perforations | 25.00 | | | 3527.00 | | |
| Recorder | 0.00 | 13308 | Outside | 3527.00 | | |
| Bullnose | 3.00 | | | 3530.00 | 32.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **52.00** | | | | | |

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2--9s--22w**

Job Ticket: 21208 **DST#: 1**

Test Start: 2005.01.29 @ 20:55:31

## 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: | 80000 ppm |
| Viscosity: | 53.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.98 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | ppm | | | | |
| Filter Cake: | inches | | | | |

## Recovery Information

Recovery Table

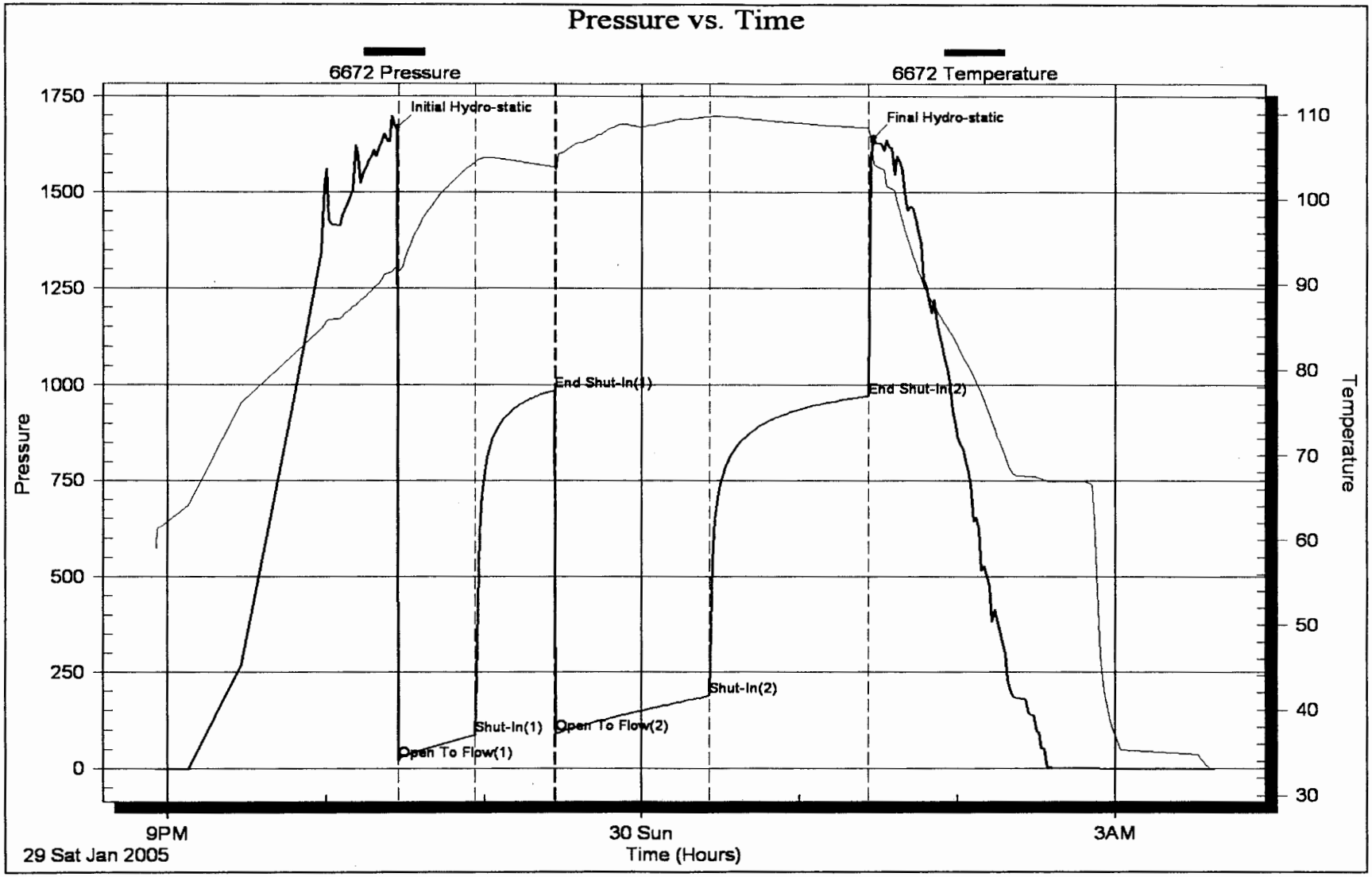
| Length ft | Description | Volume bbl |
|---|---|---|
| 376.00 | Muddy S.W.30%M-70%W | 4.992 |

Total Length: 376.00 ft Total Volume: 4.992 bbl

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

Billips #1

Serial #: 6672 Inside John O Farmer Inc. 2--9s--22w DST Test Number: 1





TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc.**

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**2--9s--22w**

**Billips # 1**

Start Date: 2005.01.30 @ 13:33:04
End Date: 2005.01.30 @ 18:46:04
Job Ticket #: 21209 DST #: 2

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

# DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2–9s–22w**

Job Ticket: 21209 **DST#: 2**

Test Start: 2005.01.30 @ 13:33:04

## GENERAL INFORMATION:

Formation: **L.Kc.-H-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:00:04
Time Test Ended: 18:46:04

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 31

**Interval: 3544.00 ft (KB) To 3645.00 ft (KB) (TVD)**
Total Depth: 3645.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

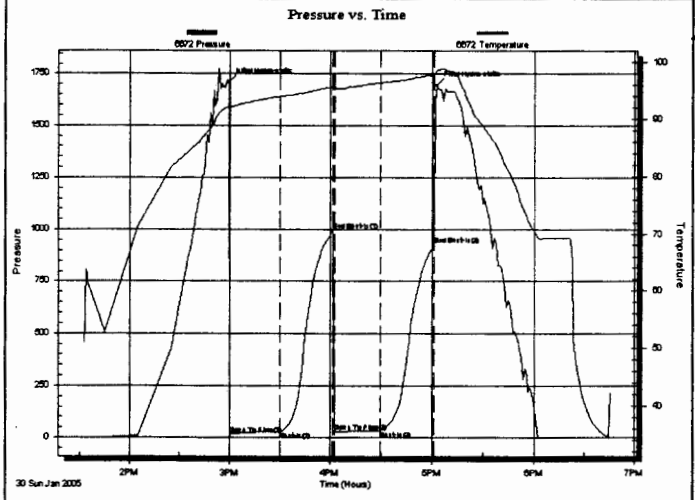
Reference Elevations: 2200.00 ft (KB)
2192.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 6672** **Inside**

Press@RunDepth: 32.82 psig @ 3549.00 ft (KB)
Start Date: 2005.01.30 End Date: 2005.01.30
Start Time: 13:33:05 End Time: 18:46:04

Capacity: 7000.00 psig
Last Calib.: 2005.01.30
Time On Btm: 2005.01.30 @ 14:59:34
Time Off Btm: 2005.01.30 @ 17:02:34

TEST COMMENT: IF-Weak surface blow. ISI-Dead
FF-Weak surface blow. FSI-Dead




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1711.19 | 92.10 | Initial Hydro-static |
| 1 | 15.19 | 91.96 | Open To Flow (1) |
| 31 | 27.74 | 93.89 | Shut-In(1) |
| 62 | 995.99 | 95.56 | End Shut-In(1) |
| 63 | 28.18 | 95.42 | Open To Flow (2) |
| 90 | 32.82 | 96.33 | Shut-In(2) |
| 122 | 925.13 | 97.78 | End Shut-In(2) |
| 123 | 1695.92 | 98.45 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 50.00 | MCO-35%M-65%oil | 0.42 |
| | | |
| | | |
| | | |
| | | |
| | | |

## Gas Rates

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

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2–9s–22w**

Job Ticket: 21209 **DST#: 2**

Test Start: 2005.01.30 @ 13:33:04

## Tool Information

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3517.00 ft | Diameter: | 3.80 | inches | Volume: | 49.33 bbl | Tool Weight: | 2200.00 lb |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 2.70 | inches | Volume: | 0.00 bbl | Weight set on Packer: | 25000.00 lb |
| Drill Collar: | Length: | 31.00 ft | Diameter: | 2.25 | inches | Volume: | 0.15 bbl | Weight to Pull Loose: | 60000.00 lb |
| | | | | | | Total Volume: | 49.48 bbl | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | | 24.00 ft | | | | | | String Weight: Initial | 51000.00 lb |
| Depth to Top Packer: | | 3544.00 ft | | | | | | Final | 51000.00 lb |
| Depth to Bottom Packer: | | ft | | | | | | | |
| Interval between Packers: | | 101.00 ft | | | | | | | |
| Tool Length: | | 121.00 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 | | | 3525.00 | | |
| Shut In Tool | 5.00 | | | 3530.00 | | |
| Hydraulic tool | 5.00 | | | 3535.00 | | |
| Packer | 4.00 | | | 3539.00 | 20.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 3544.00 | | |
| Stubb | 1.00 | | | 3545.00 | | |
| Perforations | 3.00 | | | 3548.00 | | |
| Change Over Sub | 1.00 | | | 3549.00 | | |
| Recorder | 0.00 | 6672 | Inside | 3549.00 | | |
| Blank Spacing | 62.00 | | | 3611.00 | | |
| Change Over Sub | 1.00 | | | 3612.00 | | |
| Recorder | 0.00 | 11084 | Outside | 3612.00 | | |
| Perforations | 30.00 | | | 3642.00 | | |
| Bullnose | 3.00 | | | 3645.00 | 101.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **121.00** | | | | | |

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2-9s-22w**

Job Ticket: 21209 **DST#: 2**

Test Start: 2005.01.30 @ 13:33:04

## 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: | 53.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.98 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | ppm | | | | |
| Filter Cake: | inches | | | | |

## Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 50.00 | MCO-35%M-65%oil | 0.419 |

Total Length: 50.00 ft Total Volume: 0.419 bbl

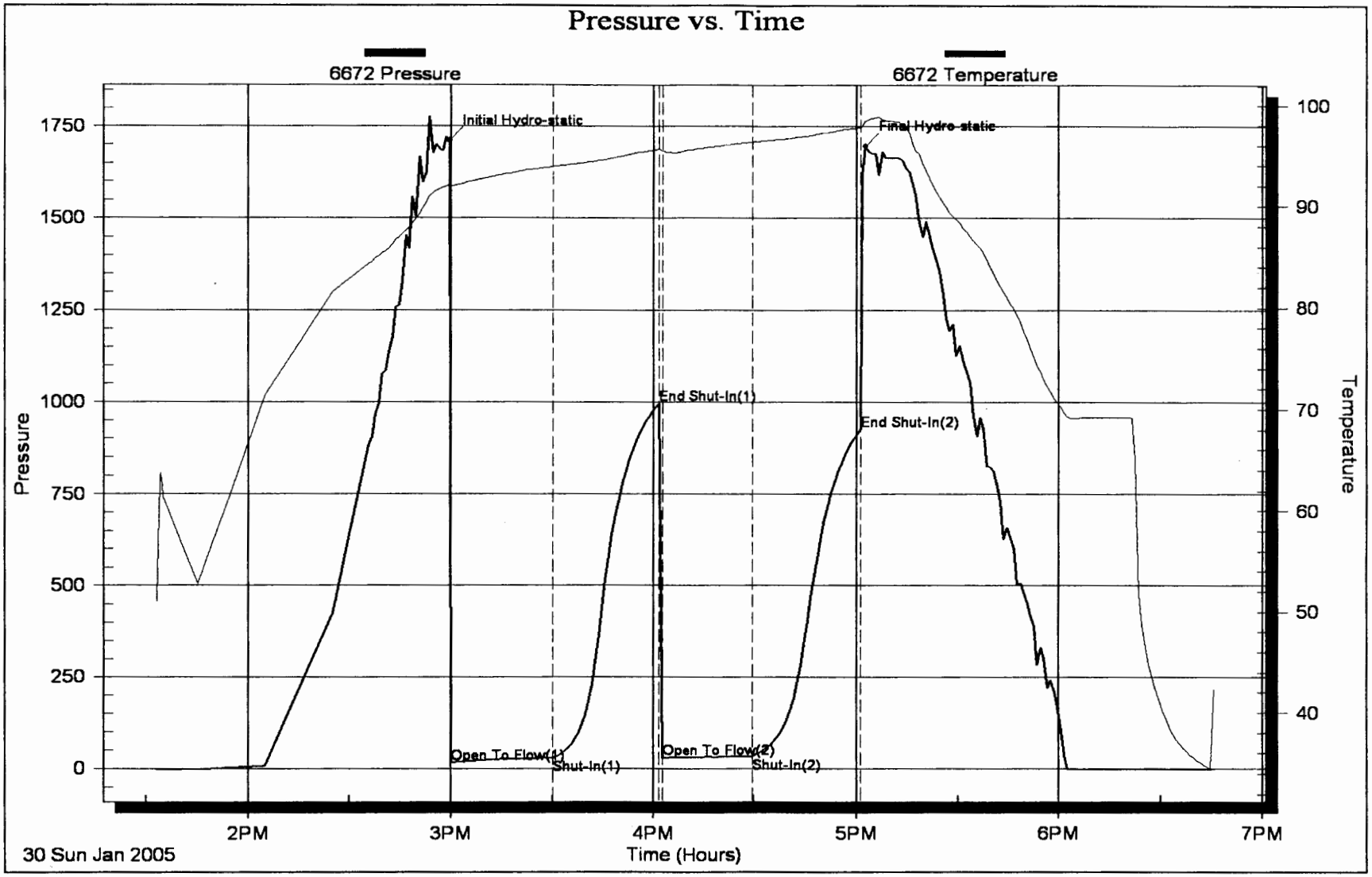
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Billips #1

Serial #: 6672 Inside John O Farmer Inc. 2--9s--22w DST Test Number: 2





TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **John O Farmer Inc.**

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**2--9s--22w**

**Billips # 1**

Start Date: 2005.01.31 @ 13:00:20
End Date: 2005.01.31 @ 19:41:50
Job Ticket #: 21210 DST #: 3

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

# DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2--9s--22w**

Job Ticket: 21210 **DST#: 3**

Test Start: 2005.01.31 @ 13:00:20

## GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:15:50
Time Test Ended: 19:41:50

Test Type: Conventional Straddle
Tester: John Schmidt
Unit No: 31

**Interval: 3736.00 ft (KB) To 3786.00 ft (KB) (TVD)**
Total Depth: 353835.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

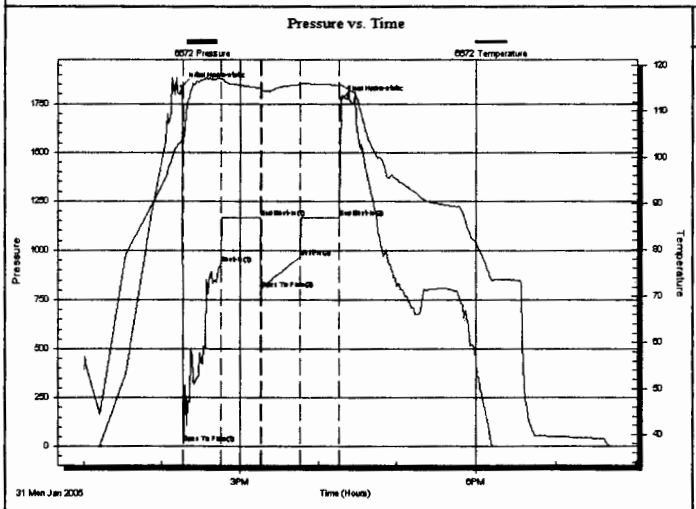
Reference Elevations: 2200.00 ft (KB)
2192.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 6672** **Inside**

Press@RunDepth: 965.42 psig @ 3741.00 ft (KB)
Start Date: 2005.01.31 End Date: 2005.01.31
Start Time: 13:00:21 End Time: 19:41:50

Capacity: 7000.00 psig
Last Calib.: 2005.01.31
Time On Btm: 2005.01.31 @ 14:15:20
Time Off Btm: 2005.01.31 @ 16:16:50

TEST COMMENT: IF-Strong B.O.B.2 min. ISI-Dead
FF-Strong B.O.B.2 min. FSI-Dead




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1838.93 | 103.86 | Initial Hydro-static |
| 1 | 13.90 | 104.08 | Open To Flow (1) |
| 30 | 932.95 | 116.99 | Shut-In(1) |
| 60 | 1165.26 | 114.92 | End Shut-In(1) |
| 61 | 805.13 | 114.45 | Open To Flow (2) |
| 91 | 965.42 | 115.80 | Shut-In(2) |
| 121 | 1165.78 | 115.58 | End Shut-In(2) |
| 122 | 1774.46 | 115.65 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 2115.00 | Muddy salt w ater | 29.39 |
| | | |
| | | |
| | | |
| | | |
| | | |

## Gas Rates

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

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2–9s–22w**

Job Ticket: 21210 **DST#: 3**

Test Start: 2005.01.31 @ 13:00:20

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3705.00 ft | Diameter: | 3.80 inches | Volume: | 51.97 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 2.70 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 31.00 ft | Diameter: | 2.25 inches | Volume: | 0.15 bbl | |
| | | | | | Total Volume: | 52.12 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 20.00 ft |
| Depth to Top Packer: | 3736.00 ft |
| Depth to Bottom Packer: | 3787.00 ft |
| Interval betw een Packers: | 51.00 ft |
| Tool Length: | 120.00 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | | |
|---|---|---|
| Tool Weight: | | 2500.00 lb |
| Weight set on Packer: | | 25000.00 lb |
| Weight to Pull Loose: | | 70000.00 lb |
| Tool Chased | | 0.00 ft |
| String Weight: | Initial | 52000.00 lb |
| | Final | 64000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 3717.00 | | |
| Shut In Tool | 5.00 | | | 3722.00 | | |
| Hydraulic tool | 5.00 | | | 3727.00 | | |
| Packer | 4.00 | | | 3731.00 | 20.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 3736.00 | | |
| Stubb | 1.00 | | | 3737.00 | | |
| Perforations | 3.00 | | | 3740.00 | | |
| Change Over Sub | 1.00 | | | 3741.00 | | |
| Recorder | 0.00 | 6672 | Inside | 3741.00 | | |
| Blank Spacing | 31.00 | | | 3772.00 | | |
| Change Over Sub | 1.00 | | | 3773.00 | | |
| Perforations | 13.00 | | | 3786.00 | | |
| Recorder | 0.00 | 13308 | Outside | 3786.00 | | |
| Blank Off Sub | 1.00 | | | 3787.00 | 51.00 | Tool Interval |
| Packer | 0.00 | | | 3787.00 | | |
| Stubb | 1.00 | | | 3788.00 | | |
| Perforations | 10.00 | | | 3798.00 | | |
| Change Over Sub | 1.00 | | | 3799.00 | | |
| Recorder | 0.00 | 11084 | Below | 3799.00 | | |
| Blank Spacing | 31.00 | | | 3830.00 | | |
| Change Over Sub | 1.00 | | | 3831.00 | | |
| Perforations | 2.00 | | | 3833.00 | | |
| Bullnose | 3.00 | | | 3836.00 | 49.00 | Bottom Packers & Anchor |
| **Total Tool Length:** | **120.00** | | | | | |

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

John O Farmer Inc.

P.O.Box 352
Russell,Ks.67665

ATTN: John O Farmer

**Billips # 1**

**2–9s–22w**

Job Ticket: 21210 **DST#: 3**

Test Start: 2005.01.31 @ 13:00:20

## 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: | 27000 ppm |
| Viscosity: | 53.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.98 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | ppm | | | | |
| Filter Cake: | inches | | | | |

## Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 2115.00 | Muddy salt water | 29.385 |

Total Length: 2115.00 ft Total Volume: 29.385 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Billips #1

Serial #: 6672 Inside John O Farmer Inc. 2--9s--22w DST Test Number: 3

