



DRILL STEM TEST REPORT

Prepared For: **Bengalia Land and Cattle Co.**

PO Box 521008
Tulsa, Oklahoma 74152

ATTN: Calvin Hallam, Jr

XPO #1-19

19 25s 30w Gray,KS

Start Date: 2013.03.07 @ 06:36:30

End Date: 2013.03.07 @ 16:30:15

Job Ticket #: 51445 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.22 @ 10:48:45



**TRILOBITE
TESTING, INC.**

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XPO #1-19

Job Ticket: 51445

DST#: 1

ATTN: Calvin Hallam, Jr

Test Start: 2013.03.07 @ 06:36:30

GENERAL INFORMATION:

Formation: **St. Louis**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:47:30

Time Test Ended: 16:30:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 53

Interval: 4851.00 ft (KB) To 4895.00 ft (KB) (TVD)

Reference Elevations: 2744.00 ft (KB)

Total Depth: 4895.00 ft (KB) (TVD)

2734.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8522 Outside

Press @ Run Depth: 39.84 psig @ 4852.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.07

End Date:

2013.03.07

Last Calib.:

2013.03.07

Start Time: 06:36:35

End Time:

16:30:15

Time On Btm:

2013.03.07 @ 08:47:15

Time Off Btm:

2013.03.07 @ 14:20:00

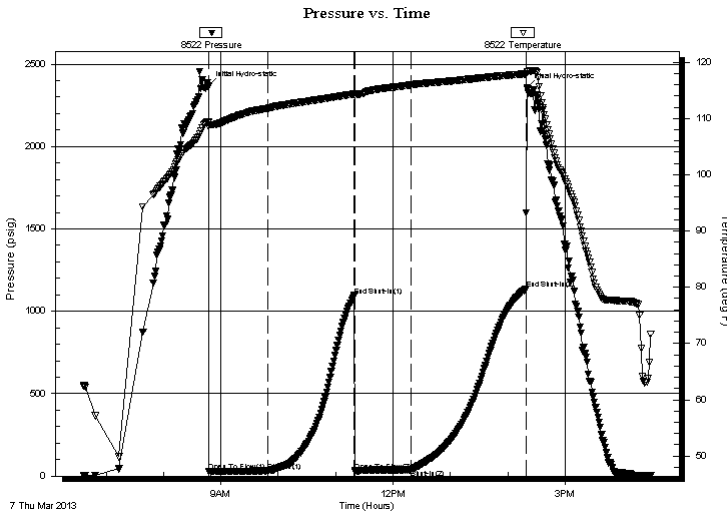
TEST COMMENT: IF: 3" blow.

ISI: Surface return. died @ 45 min.

FF: BOB @ 20 min.

FSI: No return.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2367.38 | 109.36 | Initial Hydro-static |
| 1 | 26.92 | 108.51 | Open To Flow (1) |
| 62 | 32.07 | 111.80 | Shut-In(1) |
| 153 | 1095.38 | 114.35 | End Shut-In(1) |
| 153 | 31.81 | 114.12 | Open To Flow (2) |
| 212 | 39.84 | 115.97 | Shut-In(2) |
| 332 | 1136.26 | 117.91 | End Shut-In(2) |
| 333 | 2358.26 | 118.28 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 50.00 | ocm 10o 90m | 0.50 |
| 0.00 | 390' GIP | 0.00 |
| | | |
| | | |
| | | |

Gas Rates

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



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Job Ticket: 51445

DST#: 1

ATTN: Calvin Hallam, Jr

Test Start: 2013.03.07 @ 06:36:30

GENERAL INFORMATION:

Formation: **St. Louis**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:47:30

Time Test Ended: 16:30:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 53

Interval: **4851.00 ft (KB) To 4895.00 ft (KB) (TVD)**

Reference Elevations: 2744.00 ft (KB)

Total Depth: 4895.00 ft (KB) (TVD)

2734.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8677 Inside

Press @ Run Depth: psig @ 4852.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.07

End Date:

2013.03.07

Last Calib.:

2013.03.07

Start Time: 06:36:35

End Time:

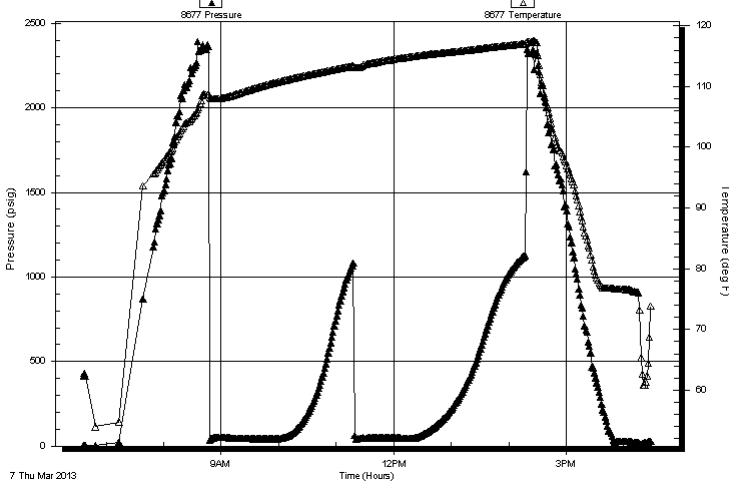
16:28:30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 3" blow.
IS: Surface return. died @ 45 min.
FF: BOB @ 20 min.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|------------|
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Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 50.00 | ocm 10o 90m | 0.50 |
| 0.00 | 390' GIP | 0.00 |
| | | |
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Gas Rates

| Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|-----------------|------------------|
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**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Bengalia Land and Cattle Co.

19 25s 30w Gray,KS

PO Box 521008
Tulsa, Oklahoma 74152

XPO #1-19

Job Ticket: 51445

DST#: 1

ATTN: Calvin Hallam, Jr

Test Start: 2013.03.07 @ 06:36:30

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 4852.00 ft | Diameter: 3.20 inches | Volume: 48.26 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: 85000.00 lb |
| | | | <u>Total Volume: 48.26 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 28.00 ft | | | String Weight: Initial 69000.00 lb |
| Depth to Top Packer: | 4851.00 ft | | | Final 70000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 44.00 ft | | | |
| Tool Length: | 71.00 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 4825.00 | |
| Shut In Tool | 5.00 | | | 4830.00 | |
| Hydraulic tool | 5.00 | | | 4835.00 | |
| Jars | 5.00 | | | 4840.00 | |
| Safety Joint | 2.00 | | | 4842.00 | |
| Packer | 5.00 | | | 4847.00 | 27.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 4851.00 | |
| Stubb | 1.00 | | | 4852.00 | |
| Recorder | 0.00 | 8677 | Inside | 4852.00 | |
| Recorder | 0.00 | 8522 | Outside | 4852.00 | |
| Perforations | 6.00 | | | 4858.00 | |
| Change Over Sub | 1.00 | | | 4859.00 | |
| Drill Pipe | 32.00 | | | 4891.00 | |
| Change Over Sub | 1.00 | | | 4892.00 | |
| Bullnose | 3.00 | | | 4895.00 | 44.00 Bottom Packers & Anchor |

Total Tool Length: 71.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Bengalia Land and Cattle Co.

19 25s 30w Gray,KS

PO Box 521008
Tulsa, Oklahoma 74152

XPO #1-19

Job Ticket: 51445

DST#: 1

ATTN: Calvin Hallam, Jr

Test Start: 2013.03.07 @ 06:36:30

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|-------------|----------------|
| 50.00 | ocm 10o 90m | 0.497 |
| 0.00 | 390' GIP | 0.000 |

Total Length: 50.00 ft Total Volume: 0.497 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

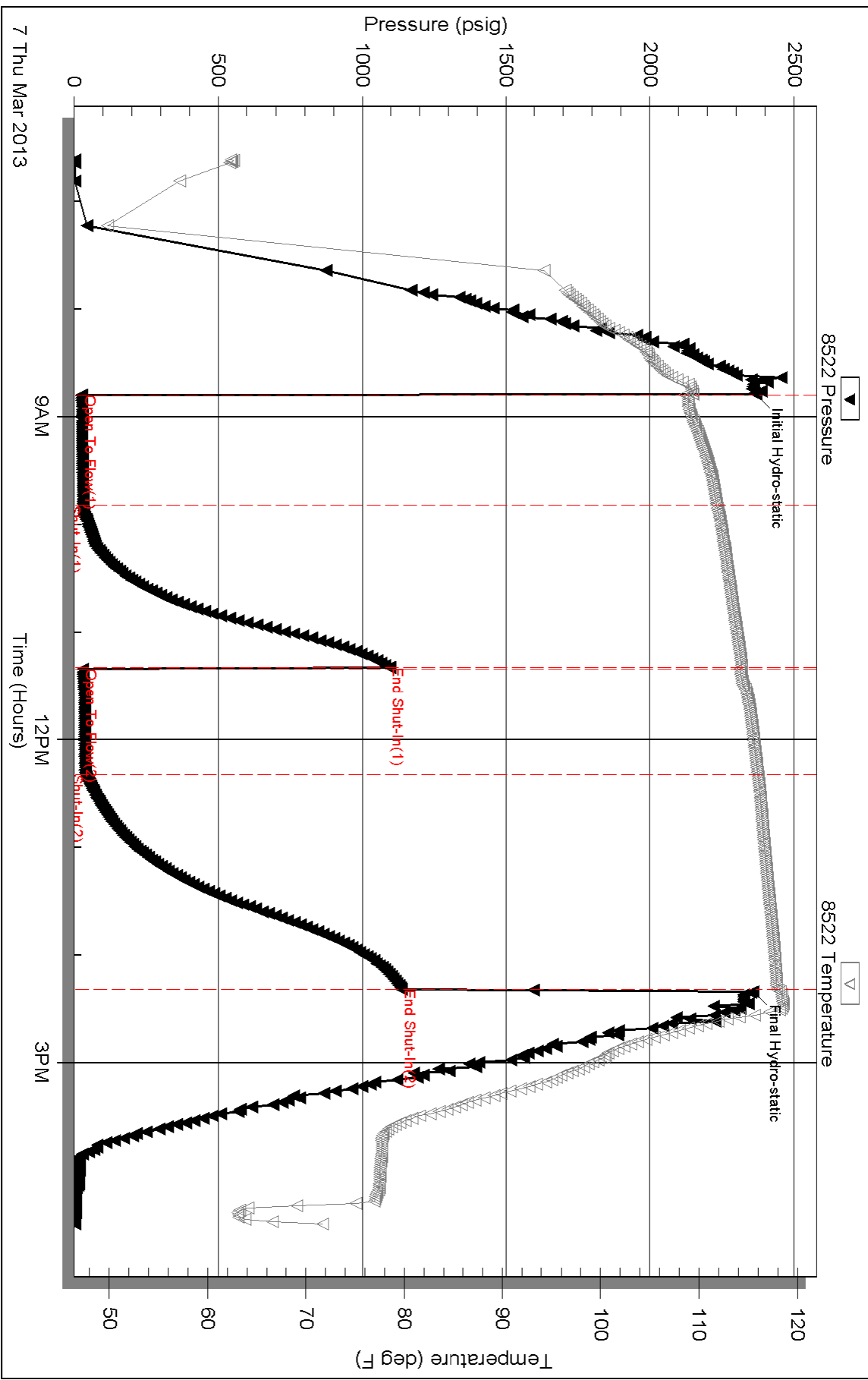
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



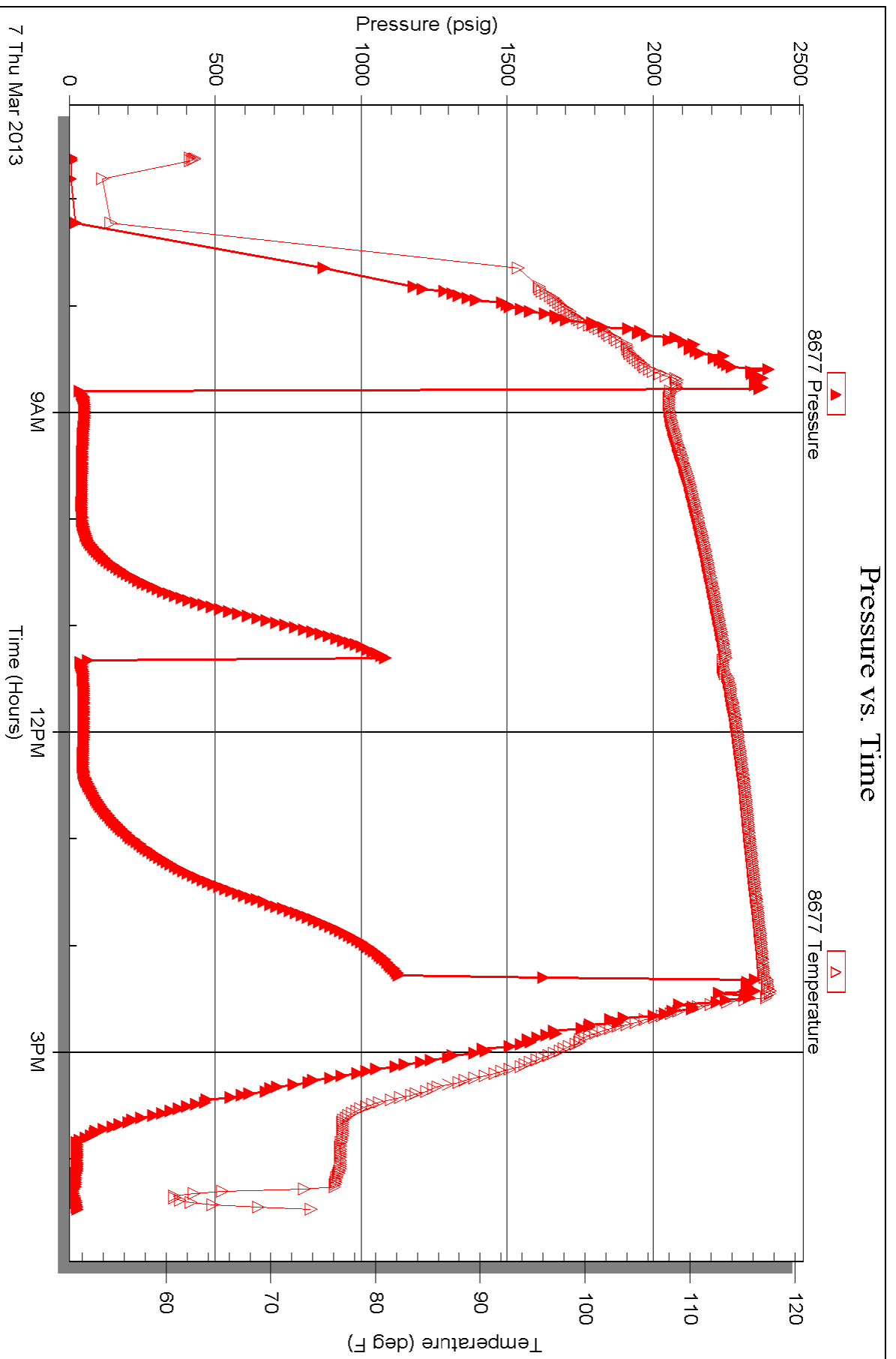
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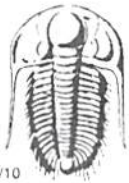
Inside

Bengalia Land and Cattle Co.

XPO #1-19

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51445

Well Name & No. XPO #1-19 Test No. 1 Date 3/07/13
 Company Bengalia Land and Cattle Co Elevation 2744 KB 2734 GL
 Address PO Box 521008 Tulsa, OK 74152
 Co. Rep / Geo. Calvin Hallam, Jr Rig VAL #1
 Location: Sec. 19 Twp. 25S Rge. 30 W Co. Gray State Ks

Interval Tested 4851 - 4895 Zone Tested St. Louis
 Anchor Length 44' Drill Pipe Run 4852 Mud Wt. 9.1
 Top Packer Depth 4846 Drill Collars Run 0 Vis 48
 Bottom Packer Depth 4851 Wt. Pipe Run 0 WL 8.4
 Total Depth 4895 Chlorides 1300 ppm System LCM 4[#]
 Blow Description IF: 3" blow.
ISF: Surface return, died @ 45 min.
FF: BOB @ 20 min.
FSF: No return.

| Rec | Feet of | %gas | %oil | %water | %mud |
|-----------|-----------------|-----------|------|-----------|------|
| <u>50</u> | <u>OCM</u> | <u>10</u> | | <u>90</u> | |
| | <u>390' GIP</u> | | | | |
| | | | | | |
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Rec Total 50 BHT 118 Gravity — API RW — @ — °F Chlorides — ppm

| | | |
|-------------------------------------|--|--|
| (A) Initial Hydrostatic <u>2367</u> | <input checked="" type="checkbox"/> Test 1250 | T-On Location <u>0530</u> |
| (B) First Initial Flow <u>27</u> | <input checked="" type="checkbox"/> Jars 250 | T-Started <u>0636</u> |
| (C) First Final Flow <u>32</u> | <input checked="" type="checkbox"/> Safety Joint 75 | T-Open <u>0849</u> |
| (D) Initial Shut-In <u>1095</u> | <input checked="" type="checkbox"/> Circ Sub <u>N/C</u> | T-Pulled <u>1419</u> |
| (E) Second Initial Flow <u>32</u> | <input checked="" type="checkbox"/> Hourly Standby <u>X1</u> 100 | T-Out <u>1630</u> |
| (F) Second Final Flow <u>40</u> | <input checked="" type="checkbox"/> Mileage <u>104 RT</u> 161.20 | Comments _____ |
| (G) Final Shut-In <u>1136</u> | <input type="checkbox"/> Sampler _____ | <input type="checkbox"/> Ruined Shale Packer _____ |
| (H) Final Hydrostatic <u>2358</u> | <input type="checkbox"/> Straddle _____ | <input type="checkbox"/> Ruined Packer _____ |
| Initial Open <u>60</u> | <input type="checkbox"/> Shale Packer _____ | <input type="checkbox"/> Extra Copies _____ |
| Initial Shut-In <u>90</u> | <input type="checkbox"/> Extra Packer _____ | Sub Total <u>0</u> |
| Final Flow <u>60</u> | <input type="checkbox"/> Extra Recorder _____ | Total <u>1836.20</u> |
| Final Shut-In <u>120</u> | <input type="checkbox"/> Day Standby _____ | MP/DST Disc't _____ |
| | <input type="checkbox"/> Accessibility _____ | |
| | Sub Total <u>1836.20</u> | |

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.