



## DRILL STEM TEST REPORT

Prepared For: **Primal Energy O&G, LLC.**

21021 Springbrook Plaza Dr.  
Ste. 106  
Spring, TX 77379

ATTN: Justin Carter / Char

### **Manke Trust #1**

### **3-19s.-9w. Rice Co.**

Start Date: 2012.10.18 @ 12:24:50

End Date: 2012.10.18 @ 18:01:35

Job Ticket #: 49583                      DST #: 2

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

Printed: 2012.10.18 @ 20:05:32



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Primal Energy O&G, LLC.  
 21021 Springbrook Plaza Dr.  
 Ste. 106  
 Spring, TX 77379  
 ATTN: Justin Carter / Char

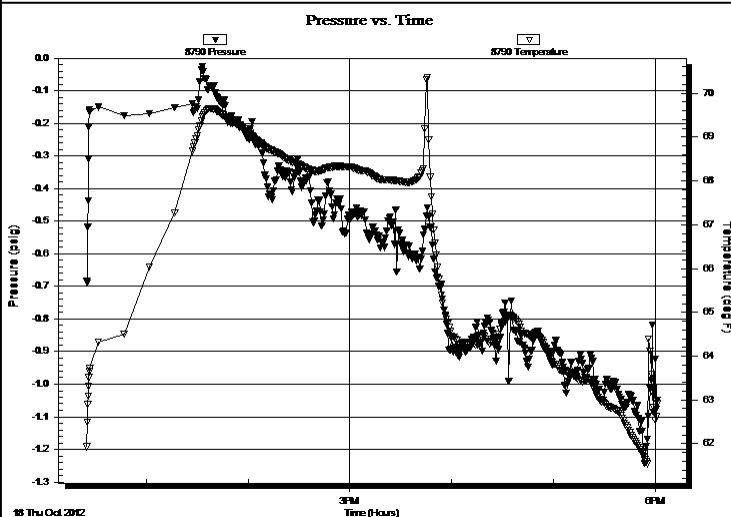
**3-19s-9w. Rice Co.**  
**Manke Trust #1**  
 Job Ticket: 49583 **DST#: 2**  
 Test Start: 2012.10.18 @ 12:24:50

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: 0.00 ft (KB) Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 00:00:00 Tester: Ryan Reynolds  
 Time Test Ended: 18:01:35 Unit No: 48  
**Interval: 3291.00 ft (KB) To 3334.00 ft (KB) (TVD)** Reference Elevations: 1718.00 ft (KB)  
 Total Depth: 3334.00 ft (KB) (TVD) 1708.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 10.00 ft

**Serial #: 8790 Inside**  
 Press @ Run Depth: psig @ 3292.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.10.18 End Date: 2012.10.18 Last Calib.: 2012.10.18  
 Start Time: 12:24:55 End Time: 18:01:34 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: Strong blow . BOB 1min. No GTS.  
 IS: No blow  
 FF: Strong blow . BoB 1min. No GTS.  
 FS: NO shut-in due to lack of recorders in anchor



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
1000.00	Clean Wtr.	12.46
940.00	SLI OMCW 3%oil, 10%mud, 87%w tr	13.19
650.00	SLI OCWM 4%oil, 35%w ater, 61%mud	9.12

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Primal Energy O&G, LLC.

**3-19s-9w. Rice Co.**

21021 Springbrook Plaza Dr.  
Ste. 106  
Spring, TX 77379  
ATTN: Justin Carter / Char

**Manke Trust #1**

Job Ticket: 49583

**DST#: 2**

Test Start: 2012.10.18 @ 12:24:50

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 18:01:35

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Reynolds

Unit No: 48

**Interval: 3291.00 ft (KB) To 3334.00 ft (KB) (TVD)**

Total Depth: 3334.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1718.00 ft (KB)

1708.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 8792 Outside**

Press @ RunDepth: psig @ 3292.00 ft (KB)

Start Date: 2012.10.18

End Date: 2012.10.18

Capacity: 8000.00 psig

Last Calib.: 2012.10.18

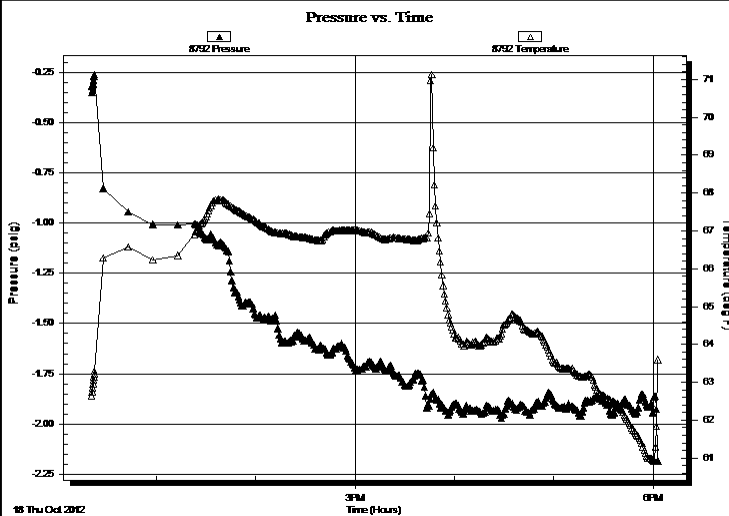
Start Time: 12:20:59

End Time: 18:03:08

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong blow . BOB 1min. No GTS.  
IS: No blow  
FF: Strong blow . BoB 1min. No GTS.  
FS: NO shut-in due to lack of recorders in anchor



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
1000.00	Clean Wtr.	12.46
940.00	SLI OMCW 3%oil, 10%mud, 87%w tr	13.19
650.00	SLI OCWM 4%oil, 35%w ater, 61%mud	9.12

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Primal Energy O&G, LLC.

**3-19s.-9w. Rice Co.**

21021 Springbrook Plaza Dr.  
Ste. 106  
Spring, TX 77379  
ATTN: Justin Carter / Char

**Manke Trust #1**

Job Ticket: 49583

**DST#: 2**

Test Start: 2012.10.18 @ 12:24:50

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 7.19 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 5600.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: 19500 ppm

deg API

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1000.00	Clean Wtr.	12.461
940.00	SLI OMCW 3%oil, 10%mud, 87%w tr	13.186
650.00	SLI OCWM 4%oil, 35%w ater, 61%mud	9.118

Total Length: 2590.00 ft      Total Volume: 34.765 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

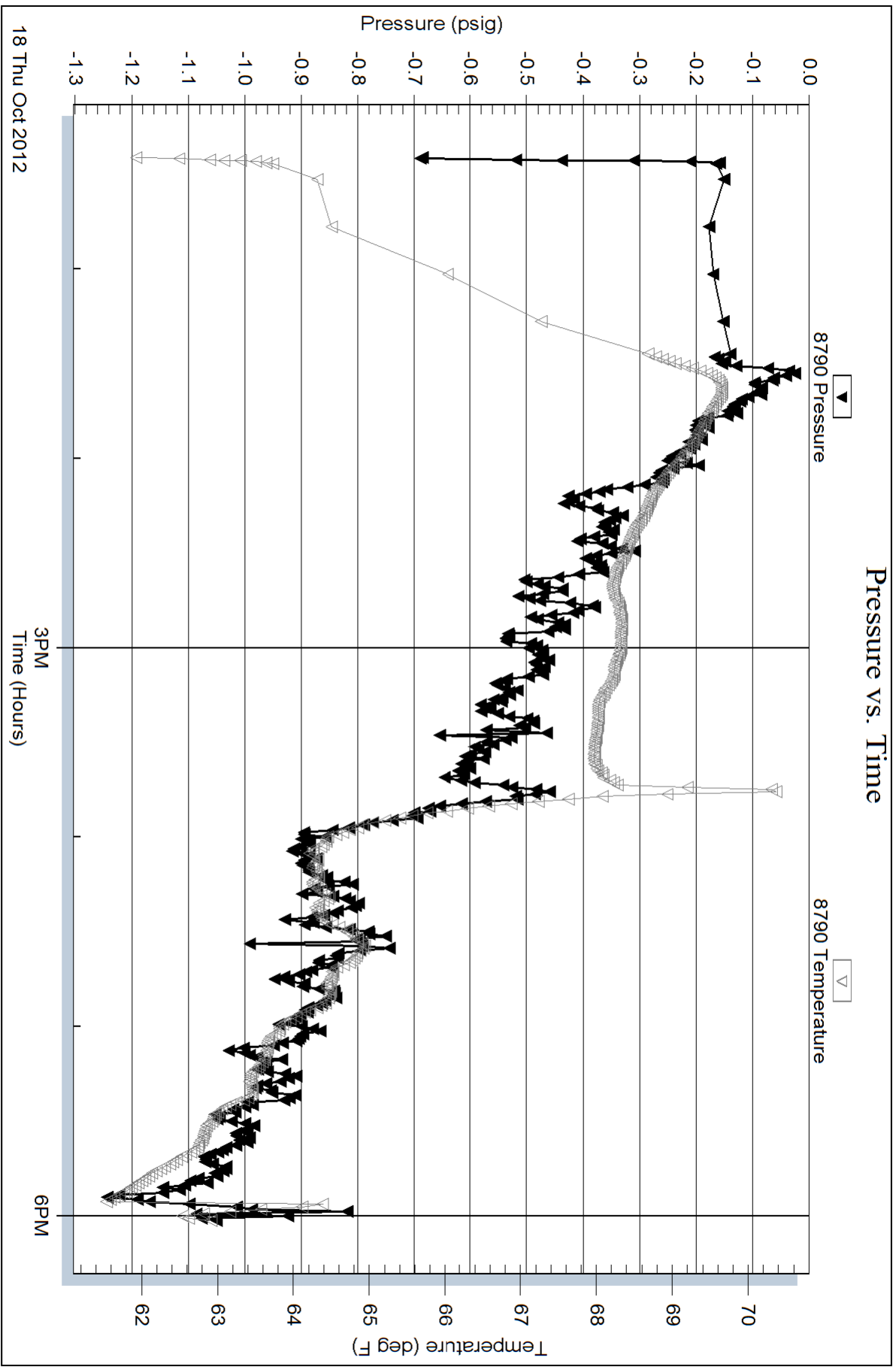
Serial #: 8790

Inside

Pinal Energy O&G, LLC.

Manke Trust #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 49583

Printed: 2012.10.18 @ 20:05:33

Serial #: 8792

Outside Pinal Energy O&G, LLC.

Manke Trust #1

DST Test Number: 2

