



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

30-14-16, Ellis, KS

1515 Wynkoop, Ste 700
Denver CO 80202

Brungardt #1-30

Job Ticket: 50266

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2013.01.27 @ 16:00:00

GENERAL INFORMATION:

Formation: **Arb**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:46:00
 Time Test Ended: 22:33:00
 Interval: **3458.00 ft (KB) To 3468.00 ft (KB) (TVD)**
 Total Depth: 3561.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 1948.00 ft (KB)
 1940.00 ft (CF)
 KB to GR/CF: 8.00 ft

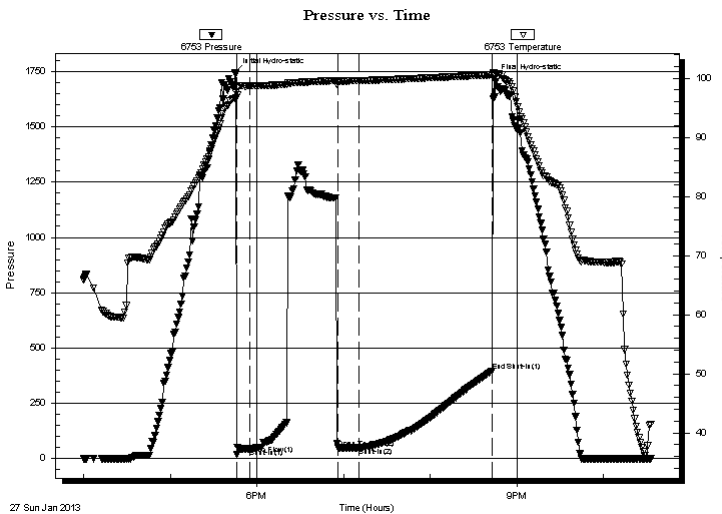
Serial #: 6753

Outside

Press @ Run Depth: 44.94 psig @ 3464.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.01.27 End Date: 2013.01.27 Last Calib.: 2013.01.27
 Start Time: 16:00:05 End Time: 22:32:59 Time On Btm: 2013.01.27 @ 17:45:00
 Time Off Btm: 2013.01.27 @ 20:44:00

TEST COMMENT: 10min IF-3.75in blow
 60min ISI-No blow
 15min FF-Very weak surface blow died in 10min
 90min FSI-No blow

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1745.61 | 96.59 | Initial Hydro-static |
| 1 | 18.04 | 96.68 | Open To Flow (1) |
| 10 | 44.94 | 98.75 | Shut-In(1) |
| 71 | 48.57 | 99.47 | Open To Flow (2) |
| 86 | 49.39 | 99.58 | Shut-In(2) |
| 178 | 396.50 | 100.57 | End Shut-In(1) |
| 179 | 1717.95 | 100.87 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 65.00 | Mud | 0.64 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 65.00 | Mud | 0.638 |

Total Length: 65.00 ft Total Volume: 0.638 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data 25psi 4000ml mud

