



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

Luea #4

PO Box 1019
Hays Ks 67601

1-14-21, Trego, Ks

ATTN: Marc Dow ning

Job Ticket: 44278

DST#: 4

Test Start: 2011.08.02 @ 20:45:15

GENERAL INFORMATION:

Formation: **Arb.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:33:15

Time Test Ended: 03:46:15

Test Type: Conventional Straddle

Tester: Brett Dickinson

Unit No: 47

Interval: 3890.00 ft (KB) To 3925.00 ft (KB) (TVD)

Reference Elevations: 2260.00 ft (KB)

Total Depth: 3999.00 ft (KB) (TVD)

2252.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6753

Press @RunDepth: 59.28 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.08.02

End Date:

2011.08.03

Last Calib.:

2011.08.03

Start Time: 20:45:20

End Time:

03:46:14

Time On Btm:

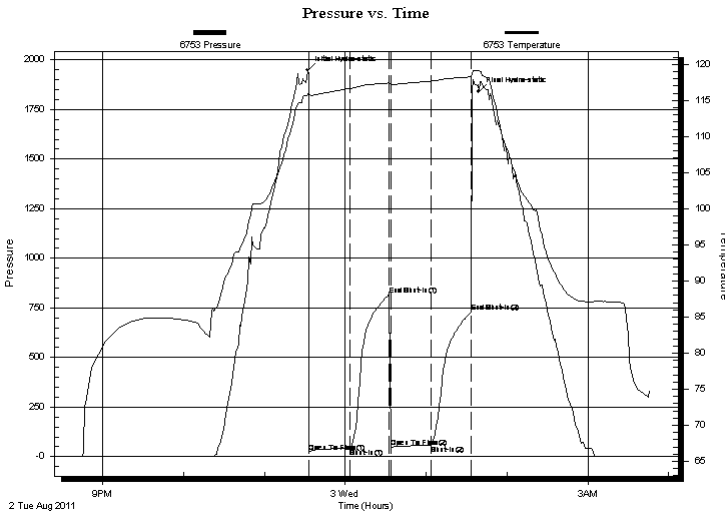
2011.08.02 @ 23:32:15

Time Off Btm:

2011.08.03 @ 01:39:15

TEST COMMENT: IF-3/4in blow died back to weak surface blow
IS-No blow
FF-1/2in blow died in 23min
FS-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1947.06	115.86	Initial Hydro-static
1	24.02	115.57	Open To Flow (1)
32	42.70	116.67	Shut-In(1)
61	817.52	117.43	End Shut-In(1)
62	46.72	117.19	Open To Flow (2)
92	59.28	117.68	Shut-In(2)
121	729.10	118.26	End Shut-In(2)
127	1840.33	119.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	OCM 40%O 60%M	0.22
60.00	MCO 65%O 35%M	0.84

Gas Rates

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



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Reference Elevations: 2260.00 ft (KB)

Total Depth: 3999.00 ft (KB) (TVD)

2252.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8319 Inside

Press @RunDepth: psig @ 3891.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.08.02

End Date:

2011.08.03

Last Calib.:

2011.08.03

Start Time: 20:45:43

End Time:

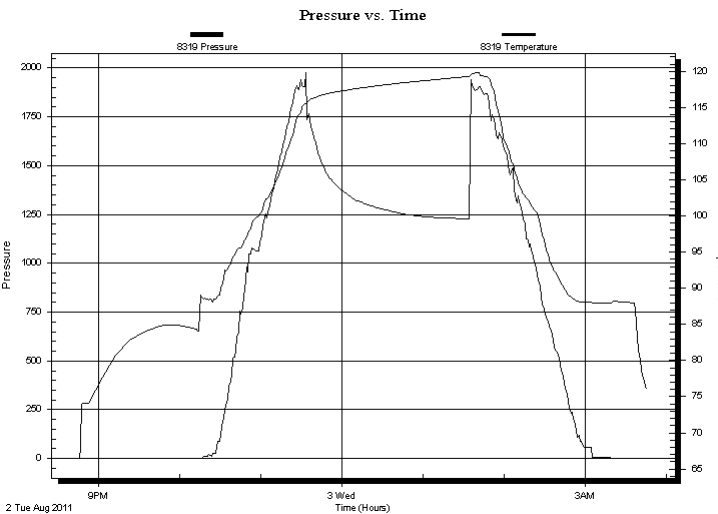
03:45:37

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-3/4in blow died back to weak surface blow
IS- No blow
FF- 1/2in blow died in 23min
FS- No blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	OCM 40%O 60%M	0.22
60.00	MCO 65%O 35%M	0.84

Gas Rates

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



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TESTING, INC.**

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FLUID SUMMARY

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Luea #4

PO Box 1019
Hays Ks 67601

1-14-21, Trego, Ks

Job Ticket: 44278

DST#: 4

ATTN: Marc Dow ning

Test Start: 2011.08.02 @ 20:45:15

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: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
35.00	OCM 40%O 60%M	0.218
60.00	MCO 65%O 35%M	0.842

Total Length: 95.00 ft Total Volume: 1.060 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

