



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.
8100 E. 22nd st. N.
#700 Box 783188 Wichita Ks. 67278
ATTN: Ted Jochems

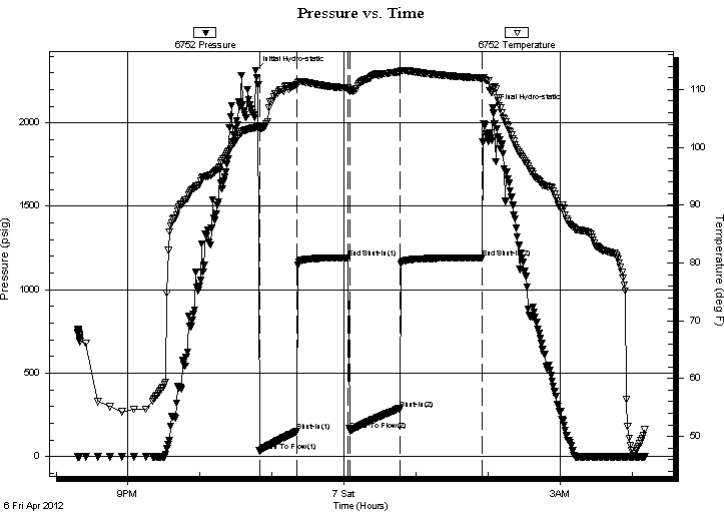
24 17s 35w Wichita Ks
Noonan #1
Job Ticket: 45599 **DST#: 3**
Test Start: 2012.04.06 @ 20:18:00

GENERAL INFORMATION:

Formation: **LKC-H,I,J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:49:30
Time Test Ended: 04:10:30
Interval: **4259.00 ft (KB) To 4355.00 ft (KB) (TVD)**
Total Depth: 4355.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Kreuzer Jr.
Unit No: 61
Reference Elevations: 3184.00 ft (KB)
3174.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6752 Inside
Press @ Run Depth: 285.13 psig @ 4263.60 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.04.06 End Date: 2012.04.07 Last Calib.: 2012.04.07
Start Time: 20:18:05 End Time: 04:10:29 Time On Btm: 2012.04.06 @ 22:46:30
Time Off Btm: 2012.04.07 @ 02:04:00

TEST COMMENT: IF: Fair blow , Built to B.O.B in 14 mins.
IS: Bled off for 2 mins. No blow back over 30 mins.
FF: Fair blow , Built to B.O.B in 16 mins.
FS: Bled off for 2 mins. No blow back over 60 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2315.03	103.44	Initial Hydro-static
3	33.68	103.32	Open To Flow (1)
34	150.90	110.77	Shut-In(1)
77	1192.71	110.26	End Shut-In(1)
79	154.45	110.01	Open To Flow (2)
120	285.13	113.06	Shut-In(2)
189	1192.67	111.97	End Shut-In(2)
198	2088.39	109.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
372.00	w cm-20%w 80%m	5.22
372.00	w cm-10%w 90%m	5.22
310.00	mud-100%m	4.35

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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24 17s 35w Wichita Ks

8100 E. 22nd st. N.
#700 Box 783188 Wichita Ks. 67278

Noonan #1

Job Ticket: 45599

DST#: 3

ATTN: Ted Jochems

Test Start: 2012.04.06 @ 20:18:00

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:

10000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.59 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
372.00	w cm-20%w 80%m	5.218
372.00	w cm-10%w 90%m	5.218
310.00	mud-100%m	4.348

Total Length: 1054.00 ft Total Volume: 14.784 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

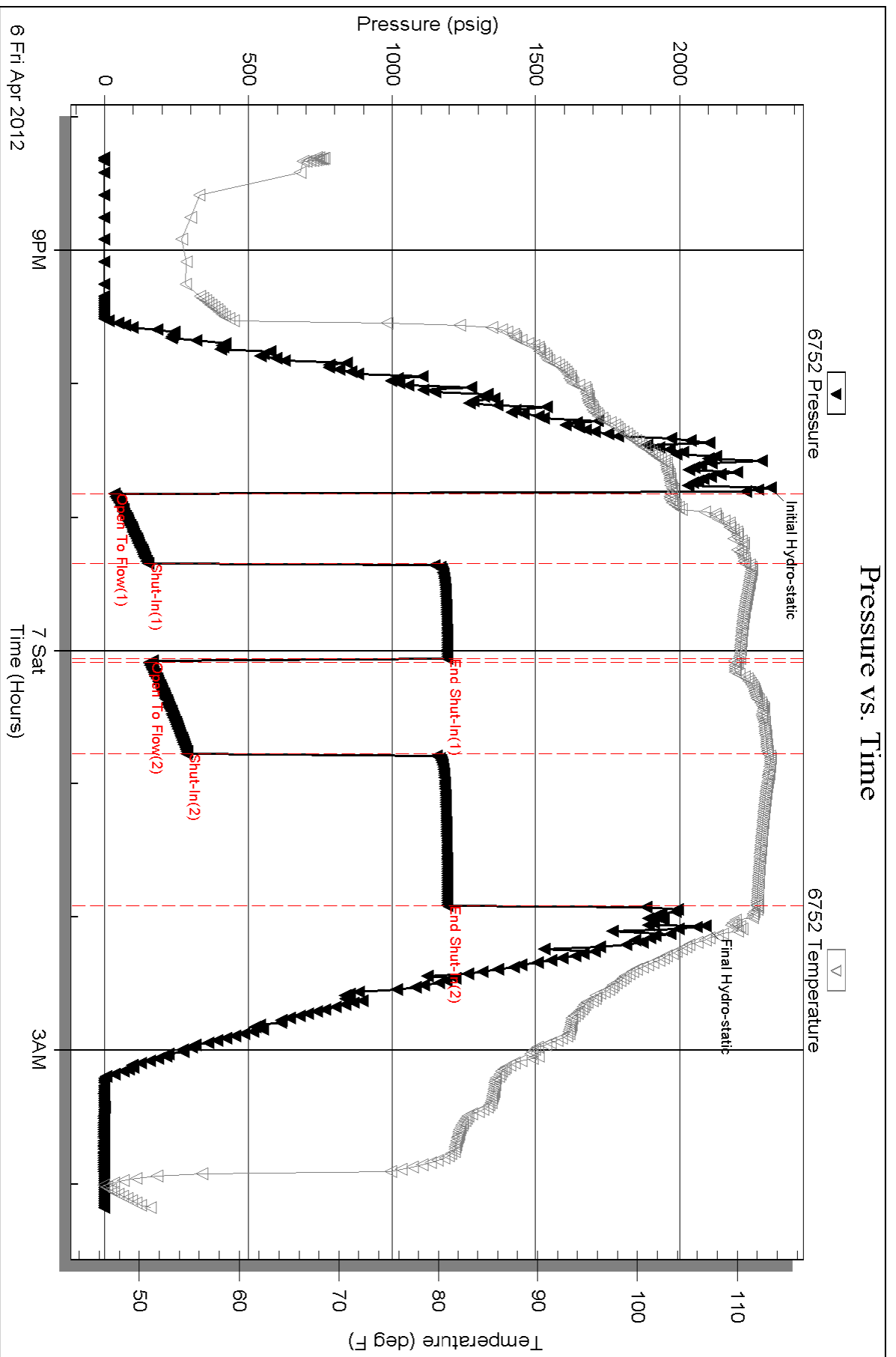
Serial #: 6752

Inside

Ritchie Exploration Inc.

Noonan #1

DST Test Number: 3



Serial #: 6741

Outside

Ritchie Exploration Inc.

Noonan #1

DST Test Number: 3

