



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Norstar Petroleum Inc.  
88 Inverness CIR E  
Unit F104  
Englewood Co 80112  
ATTN: Bob Elder

**34-9S-35W Thomas KS**

**Solo-hoff #1-34**

Job Ticket: 56891 **DST#: 1**  
Test Start: 2014.05.13 @ 21:06:00

## GENERAL INFORMATION:

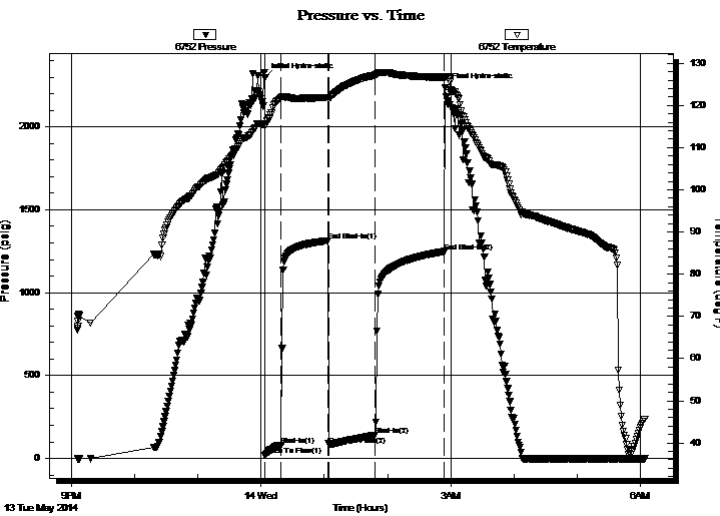
Formation: **LKC " K "**  
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)  
Time Tool Opened: 00:04:00 Tester: Ryan Nichols  
Time Test Ended: 06:04:00 Unit No: 58  
**Interval: 4456.00 ft (KB) To 4494.00 ft (KB) (TVD)** Reference Elevations: 3344.00 ft (KB)  
Total Depth: 4494.00 ft (KB) (TVD) 3339.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

## Serial #: 6752

Inside

Press@RunDepth: 139.85 psig @ 4457.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.05.13 End Date: 2014.05.14 Last Calib.: 2014.05.14  
Start Time: 21:06:01 End Time: 06:04:00 Time On Btm: 2014.05.14 @ 00:03:50  
Time Off Btm: 2014.05.14 @ 02:55:00

TEST COMMENT: 15 IF - 1/4" blow built to 6"  
45 ISI - No return  
45 FF - Surface blow built to BoB @ 22 mins  
60 FSI - Surface blow started @ 4 mins built to 1"



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2296.16	115.75	Initial Hydro-static
1	18.15	115.23	Open To Flow (1)
16	80.79	121.86	Shut-In(1)
60	1313.31	121.88	End Shut-In(1)
61	82.09	121.61	Open To Flow (2)
105	139.85	127.22	Shut-In(2)
171	1248.55	126.69	End Shut-In(2)
172	2235.55	126.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	MCW - 25%M - 75%W	0.30
60.00	MCW - 30%M - 70%W	0.30
60.00	OWCM - 2%o - 28%W - 70%M	0.81
60.00	OWCM - 10%o - 40%W - 50%M	0.84
40.00	GO - 15%G - 85%o	0.56
0.00	150' GIP	0.00

## Gas Rates

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



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## FLUID SUMMARY

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### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 56.00 sec/qt  
Water Loss: 8.79 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 4500.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MCW - 25%M - 75%W	0.295
60.00	MCW - 30%M - 70%W	0.295
60.00	OWCM - 2%o - 28%W - 70%M	0.805
60.00	OWCM - 10%o - 40%W - 50%M	0.842
40.00	GO - 15%G - 85%o	0.561
0.00	150' GIP	0.000

Total Length: 280.00 ft Total Volume: 2.798 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: OIL API = 34 @ 60 DEG F  
couldn't get chlorides dirty water

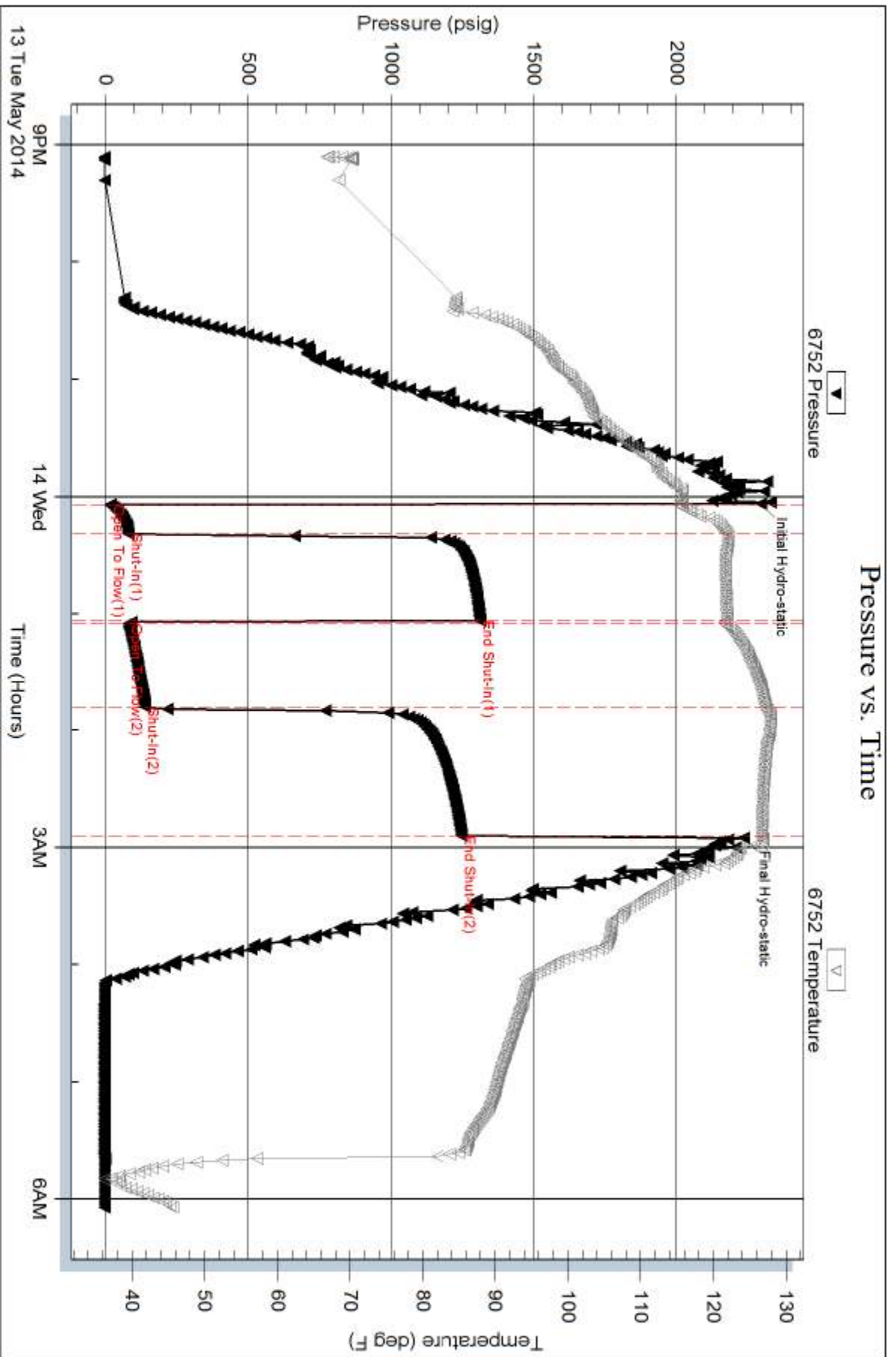
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Inside

Norstar Petroleum Inc.

Solo-hoff #1-34

DST Test Number: 1



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Ref. No: 56891

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