



DRILL STEM TEST REPORT

Prepared For: **TDI, Inc.**

1310 Bison Road
Hays, KS 67601

ATTN: Herb Deines

Stackhouse #1

18-12s-18w Ellis,KS

Start Date: 2012.05.31 @ 15:52:24

End Date: 2012.05.31 @ 22:05:39

Job Ticket #: 47803 DST #: 1

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

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TDI, Inc. 18-12s-18w Ellis,KS Stackhouse #1 DST # 1 C-F 2012.05.31



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI, Inc.
1310 Bison Road
Hays, KS 67601
ATTN: Herb Deines

18-12s-18w Ellis, KS
Stackhouse #1
Job Ticket: 47803 **DST#: 1**
Test Start: 2012.05.31 @ 15:52:24

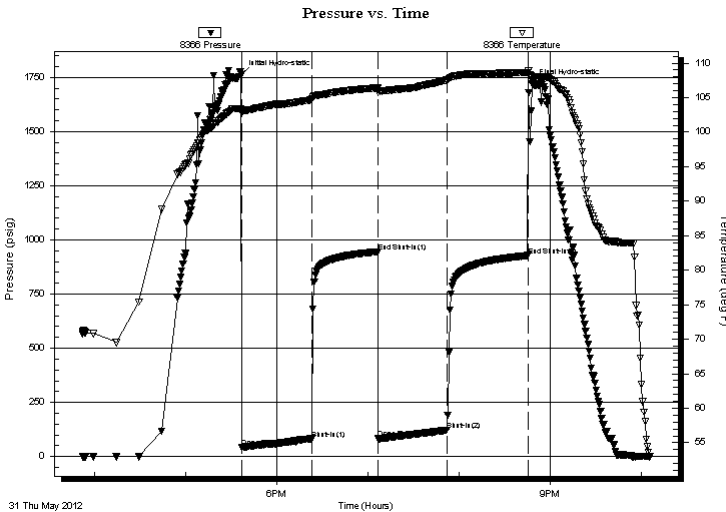
GENERAL INFORMATION:

Formation: **C-F**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 17:37:09
Time Test Ended: 22:05:39
Interval: **3540.00 ft (KB) To 3611.00 ft (KB) (TVD)**
Total Depth: 3611.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Jason McLemore
Unit No: 54
Reference Elevations: 2229.00 ft (KB)
2222.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8366 Inside
Press @ Run Depth: 121.80 psig @ 3608.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.05.31 End Date: 2012.05.31 Last Calib.: 2012.05.31
Start Time: 15:52:26 End Time: 22:05:39 Time On Btm: 2012.05.31 @ 17:36:39
Time Off Btm: 2012.05.31 @ 20:47:39

TEST COMMENT: IFP-Slid 10' Plugging Action, Built to 2 1/2"
ISI-Dead
FFP-Weak Blow, Built to 3 1/4"
FSI-Dead

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1764.03	103.30	Initial Hydro-static
1	41.87	102.85	Open To Flow (1)
47	81.65	104.77	Shut-In(1)
90	945.42	106.39	End Shut-In(1)
90	82.96	105.78	Open To Flow (2)
136	121.80	107.57	Shut-In(2)
189	927.74	108.62	End Shut-In(2)
191	1721.36	108.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
187.00	Drilling Mud	2.62

Gas Rates

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



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TOOL DIAGRAM

TDI, Inc.
1310 Bison Road
Hays, KS 67601
ATTN: Herb Deines

18-12s-18w Ellis,KS
Stackhouse #1
Job Ticket: 47803 **DST#: 1**
Test Start: 2012.05.31 @ 15:52:24

Tool Information

Drill Pipe:	Length: 3549.00 ft	Diameter: 3.80 inches	Volume: 49.78 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 49.78 bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3540.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3520.00	
Shut In Tool	5.00			3525.00	
Hydraulic tool	5.00			3530.00	
Packer	5.00			3535.00	21.00 Bottom Of Top Packer
Packer	5.00			3540.00	
Stubb	1.00			3541.00	
Perforations	3.00			3544.00	
Change Over Sub	1.00			3545.00	
Blank Spacing	62.00			3607.00	
Change Over Sub	1.00			3608.00	
Recorder	0.00	8366	Inside	3608.00	
Recorder	0.00	8289	Outside	3608.00	
Bullnose	3.00			3611.00	71.00 Bottom Packers & Anchor

Total Tool Length: 92.00



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FLUID SUMMARY

TDI, Inc.

18-12s-18w Ellis,KS

1310 Bison Road
Hays, KS 67601

Stackhouse #1

Job Ticket: 47803

DST#: 1

ATTN: Herb Deines

Test Start: 2012.05.31 @ 15:52:24

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: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
187.00	Drilling Mud	2.623

Total Length: 187.00 ft Total Volume: 2.623 bbl

Num Fluid Samples: 0

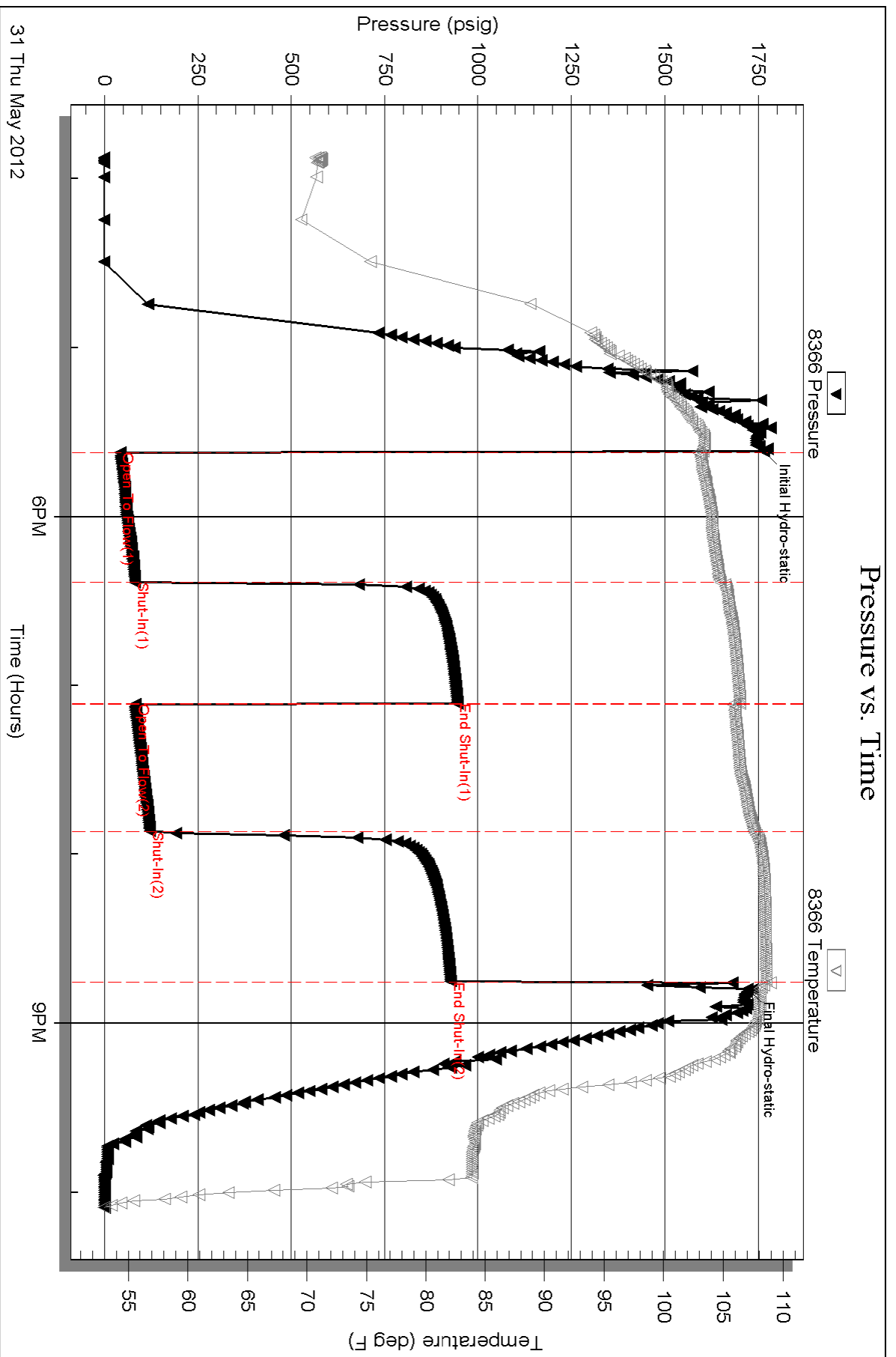
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

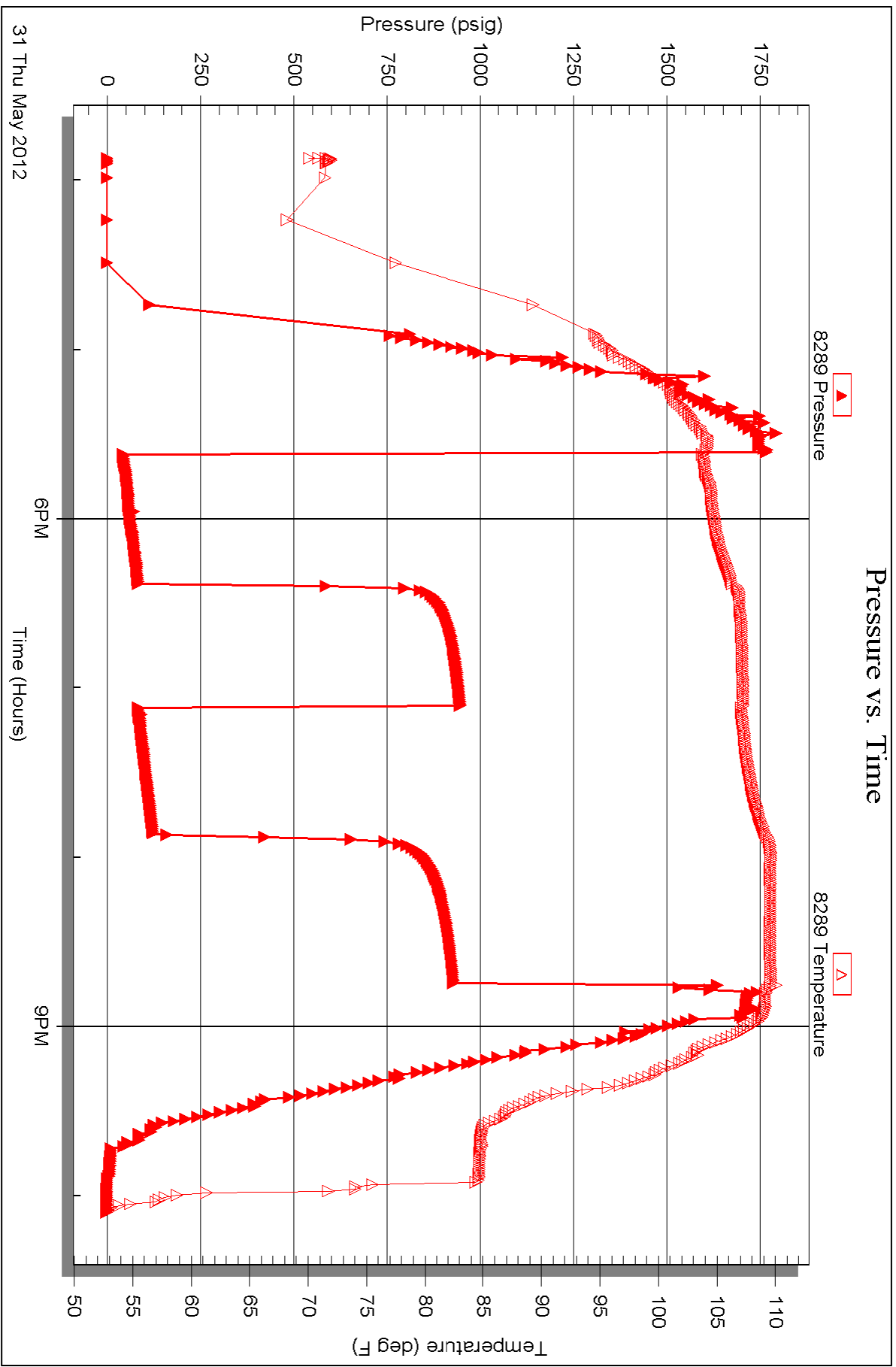


Serial #: 8289

Outside TDI, Inc.

Stackhouse #1

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47803

Well Name & No. Stackhouse #1 Test No. 1 Date 5-31-12
 Company TDI, Inc. Elevation 2229 KB 2222 GL
 Address 1300 Bison Road, Hays, KS. 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 18 Twp. 12s Rge. 18w Co. Ellis State KS

Interval Tested 3540 - 3611 Zone Tested GD-E-F
 Anchor Length 71' Drill Pipe Run 3549 Mud Wt. 9.1
 Top Packer Depth 3535 Drill Collars Run 0 Vis 79
 Bottom Packer Depth 3540 Wt. Pipe Run 0 WL 6.8
 Total Depth 3611 Chlorides 1800 ppm System LCM 1#
 Blow Description IFP - Plugging Action, Slid 10", Built to 2 1/2"
ISI - Dead
IFP - Weak Blow, Built Steady to 3 1/4"
FSI - Dead

Rec	Feet of	%gas	%oil	%water	%mud
<u>187</u>	<u>Drilling Mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 187 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1764 Test 1150 T-On Location 14:08
 (B) First Initial Flow 42 Jars _____ T-Started 15:50
 (C) First Final Flow 82 Safety Joint _____ T-Open 17:37
 (D) Initial Shut-In 945 Circ Sub _____ T-Pulled 20:37
 (E) Second Initial Flow 83 Hourly Standby _____ T-Out 22:04
 (F) Second Final Flow 122 Mileage 22 rt 34.10 Comments _____
 (G) Final Shut-In 928 Sampler _____
 (H) Final Hydrostatic 1721 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 45 Extra Packer _____
 Initial Shut-In 45 Extra Recorder _____
 Final Flow 45 Day Standby _____
 Final Shut-In 45 Accessibility _____
 Sub Total 1184.10 MP/DST Disc't _____

Approved By _____ Our Representative Jason McJannet

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Thank You