



DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison RD
Hays KS 67601

ATTN: Herb Deines

Befort #2

11-15s-19w Ellis,KS

Start Date: 2013.08.05 @ 22:30:00

End Date: 2013.08.06 @ 04:09:00

Job Ticket #: 54752 DST #: 1

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

Printed: 2013.08.08 @ 16:07:04

TDI Inc. 11-15s-19w Ellis,KS Befort #2 DST # 1 KC "D-F" 2013.08.05



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

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

11-15s-19w Ellis,KS
Befort #2
Job Ticket: 54752 **DST#: 1**
Test Start: 2013.08.05 @ 22:30:00

Tool Information

Drill Pipe:	Length: 3310.00 ft	Diameter: 3.80 inches	Volume: 46.43 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer:	2500.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3334.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	76.00 ft				
Tool Length:	97.00 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			3314.00	
Shut In Tool	5.00			3319.00	
Hydraulic tool	5.00			3324.00	
Packer	5.00			3329.00	21.00 Bottom Of Top Packer
Packer	5.00			3334.00	
Stubb	1.00			3335.00	
Recorder	0.00	6753	Inside	3335.00	
Recorder	0.00	8166	Outside	3335.00	
Perforations	5.00			3340.00	
Change Over Sub	1.00			3341.00	
Blank Spacing	64.00			3405.00	
Change Over Sub	1.00			3406.00	
Perforations	1.00			3407.00	
Bullnose	3.00			3410.00	76.00 Bottom Packers & Anchor

Total Tool Length: 97.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **11-15s-19w Ellis,KS**
 1310 Bison RD **Before #2**
 Hays KS 67601 Job Ticket: 54752 **DST#: 1**
 ATTN: Herb Deines Test Start: 2013.08.05 @ 22:30:00

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:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4600.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

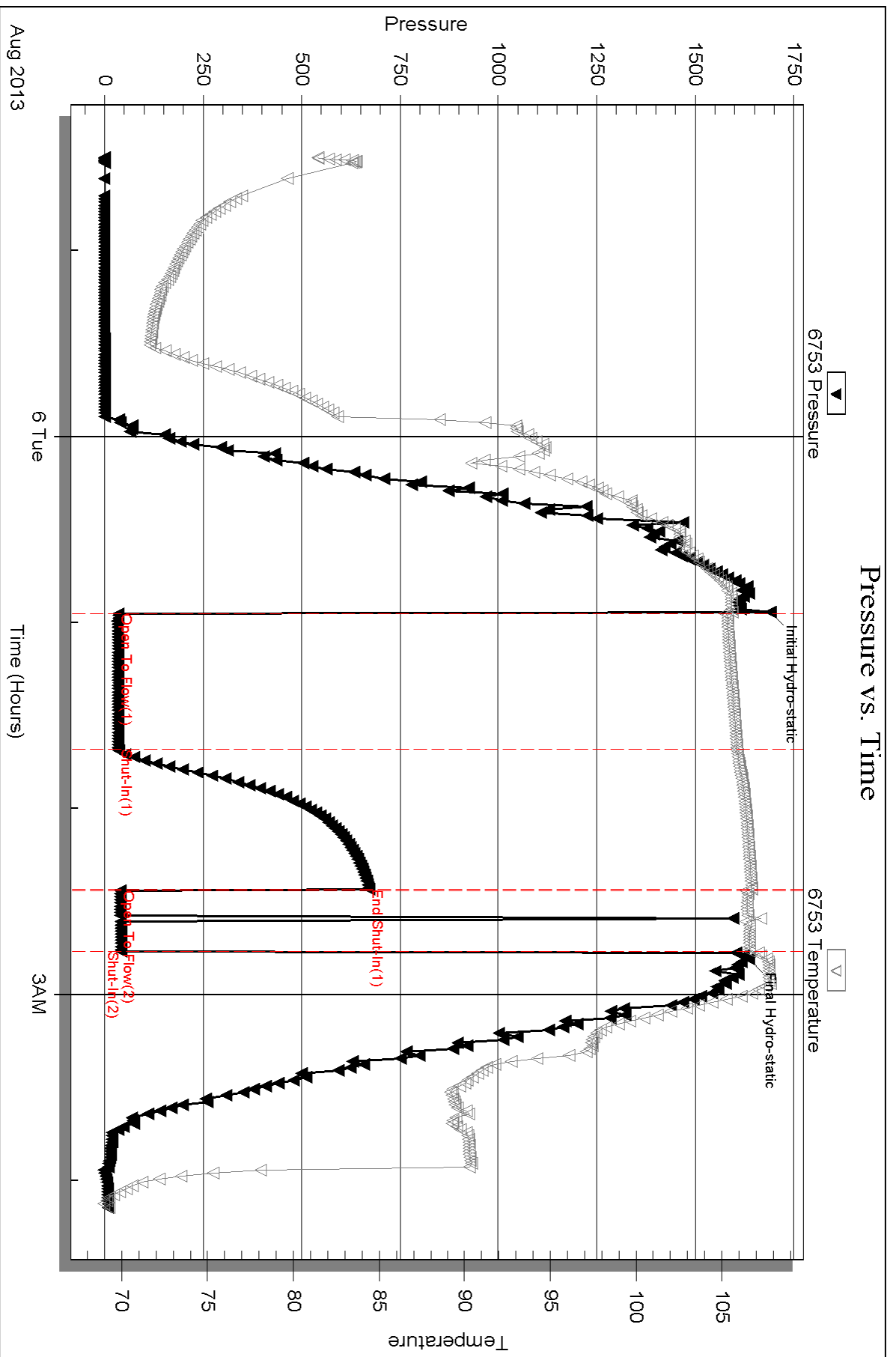
Serial #: 6753

Inside

TDI Inc.

Before #2

DST Test Number: 1

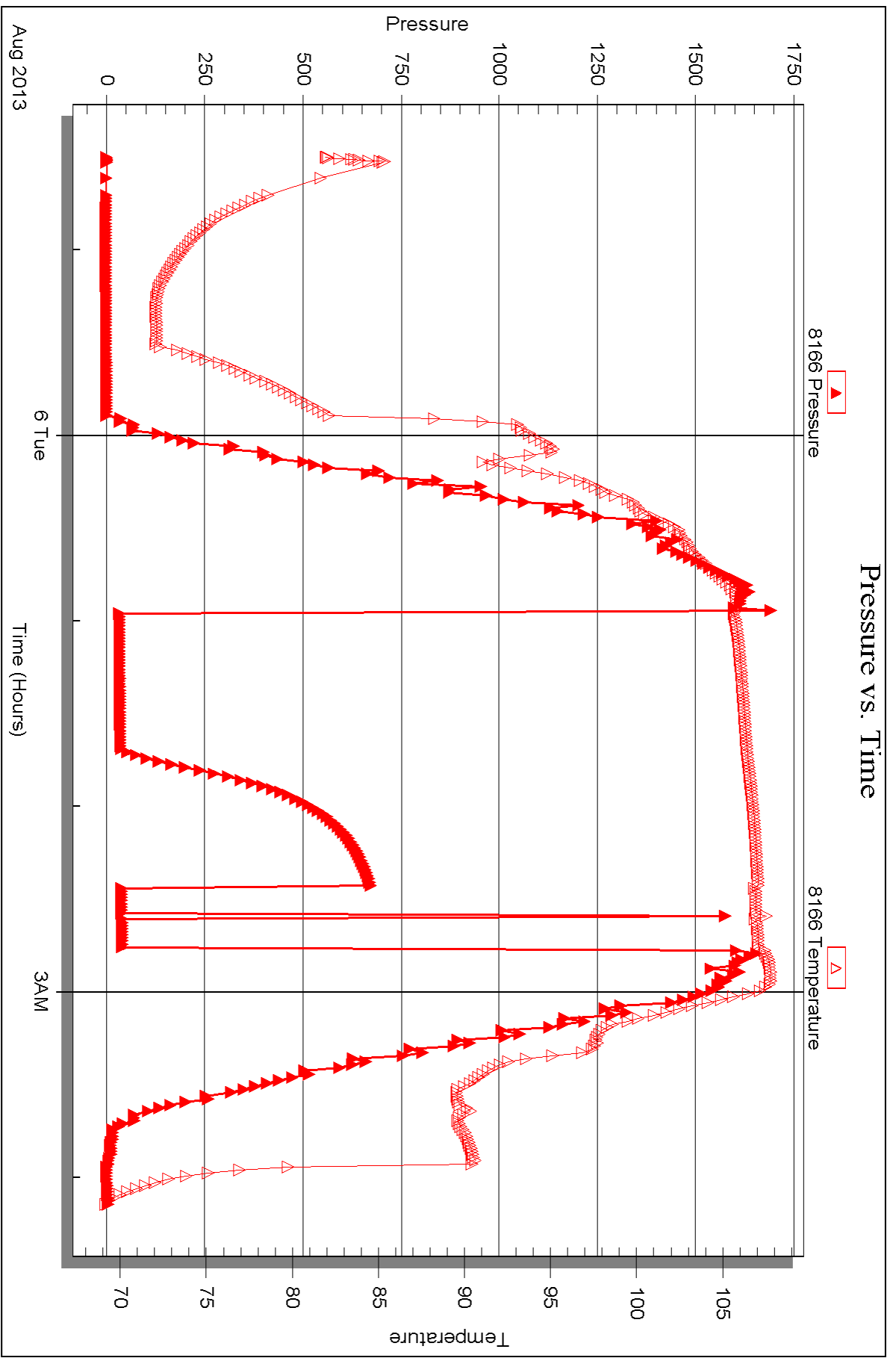


Serial #: 8166

Outside TDI Inc.

Before#2

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison RD
Hays KS 67601

ATTN: Herb Deines

Befort #2

11-15s-19w Ellis,KS

Start Date: 2013.08.06 @ 15:45:00

End Date: 2013.08.06 @ 23:39:00

Job Ticket #: 54753 DST #: 2

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

Printed: 2013.08.08 @ 16:06:06

TDI Inc. 11-15s-19w Ellis,KS Befort #2 DST # 2 KC "i,j" 2013.08.06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

11-15s-19w Ellis,KS
Before #2
 Job Ticket: 54753 **DST#: 2**
 Test Start: 2013.08.06 @ 15:45:00

GENERAL INFORMATION:

Formation: **KC "I,J"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 18:40:00 Tester: Brett Dickinson
 Time Test Ended: 23:39:00 Unit No: 59
 Interval: **3478.00 ft (KB) To 3525.00 ft (KB) (TVD)** Reference Elevations: 2038.00 ft (KB)
 Total Depth: 3525.00 ft (KB) (TVD) 2030.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

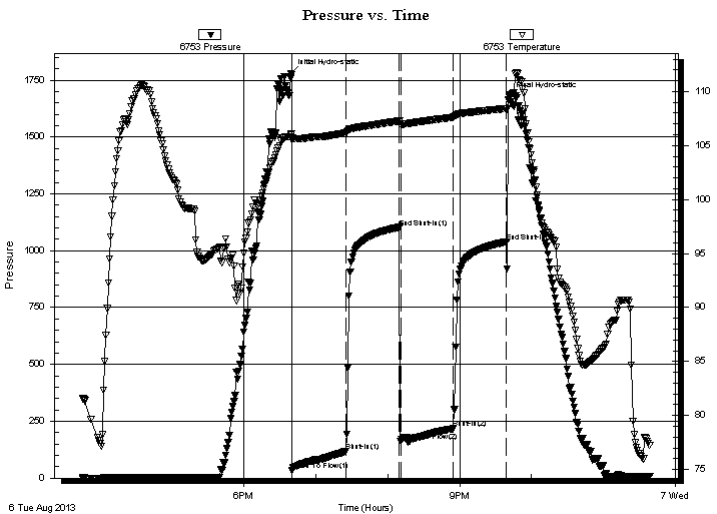
Serial #: 6753

Inside

Press @ Run Depth: 217.10 psig @ 3479.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.06 End Date: 2013.08.06 Last Calib.: 2013.08.06
 Start Time: 15:45:05 End Time: 23:38:59 Time On Btm: 2013.08.06 @ 18:39:00
 Time Off Btm: 2013.08.06 @ 21:41:30

TEST COMMENT: IF-BOB in 19 1/2 min
 ISI-Very weak surface blow
 FF-BOB in 31 min
 FSI-Very weak surface blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1779.73	105.95	Initial Hydro-static
1	34.97	105.52	Open To Flow (1)
46	117.26	106.17	Shut-In(1)
91	1102.22	107.28	End Shut-In(1)
92	161.17	107.00	Open To Flow (2)
136	217.10	107.62	Shut-In(2)
180	1039.06	108.42	End Shut-In(2)
183	1678.29	109.60	Final Hydro-static

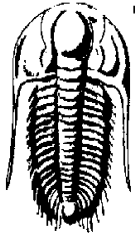
Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
247.00	SMCW 95%W 5%M	3.19
180.00	GSOWCM 10%G 2%O 25%W 63%M	2.52
3.00	Free Oil	0.04

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

11-15s-19w Ellis, KS
Before #2
 Job Ticket: 54753 **DST#: 2**
 Test Start: 2013.08.06 @ 15:45:00

GENERAL INFORMATION:

Formation: **KC "I,J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:40:00
 Time Test Ended: 23:39:00
Interval: 3478.00 ft (KB) To 3525.00 ft (KB) (TVD)
 Total Depth: 3525.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 2038.00 ft (KB)
 2030.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8166

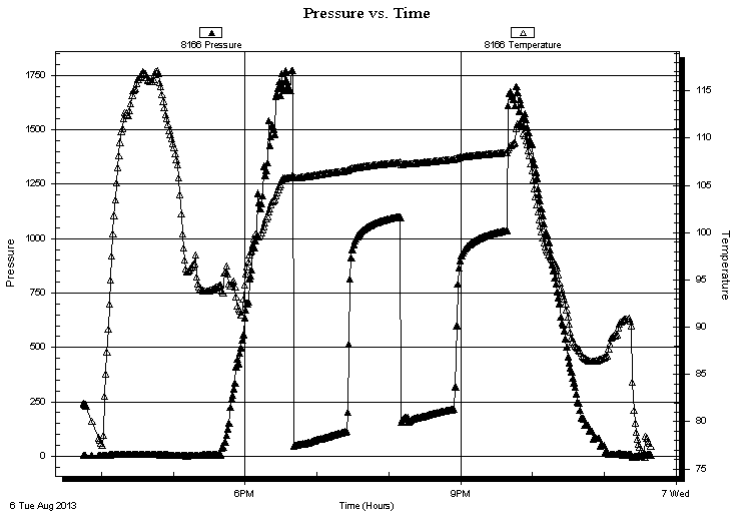
Outside

Press @ Run Depth: psig @ 3479.00 ft (KB)
 Start Date: 2013.08.06 End Date: 2013.08.06
 Start Time: 15:45:05 End Time: 23:38:59

Capacity: 8000.00 psig
 Last Calib.: 2013.08.06
 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF-BOB in 19 1/2 min
 ISI-Very weak surface blow
 FF-BOB in 31 min
 FSI-Very weak surface blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
247.00	SMCW 95%W 5%M	3.19
180.00	GSOWCM 10%G 2%O 25%W 63%M	2.52
3.00	Free Oil	0.04

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

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

11-15s-19w Ellis,KS
Befort #2
Job Ticket: 54753 **DST#: 2**
Test Start: 2013.08.06 @ 15:45:00

Tool Information

Drill Pipe:	Length: 3435.00 ft	Diameter: 3.80 inches	Volume: 48.18 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	39000.00 lb
Depth to Top Packer:	3478.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	47.00 ft				
Tool Length:	68.00 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			3458.00	
Shut In Tool	5.00			3463.00	
Hydraulic tool	5.00			3468.00	
Packer	5.00			3473.00	21.00 Bottom Of Top Packer
Packer	5.00			3478.00	
Stubb	1.00			3479.00	
Recorder	0.00	6753	Inside	3479.00	
Recorder	0.00	8166	Outside	3479.00	
Perforations	9.00			3488.00	
Change Over Sub	1.00			3489.00	
Blank Spacing	31.00			3520.00	
Change Over Sub	1.00			3521.00	
Perforations	1.00			3522.00	
Bullnose	3.00			3525.00	47.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **11-15s-19w Ellis,KS**
 1310 Bison RD **Before #2**
 Hays KS 67601 Job Ticket: 54753 **DST#: 2**
 ATTN: Herb Deines Test Start: 2013.08.06 @ 15:45:00

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:	55000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4600.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
247.00	SMCW 95%W 5%M	3.191
180.00	GOWCM 10%G 2%O 25%W 63%M	2.525
3.00	Free Oil	0.042

Total Length: 430.00 ft Total Volume: 5.758 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 6753

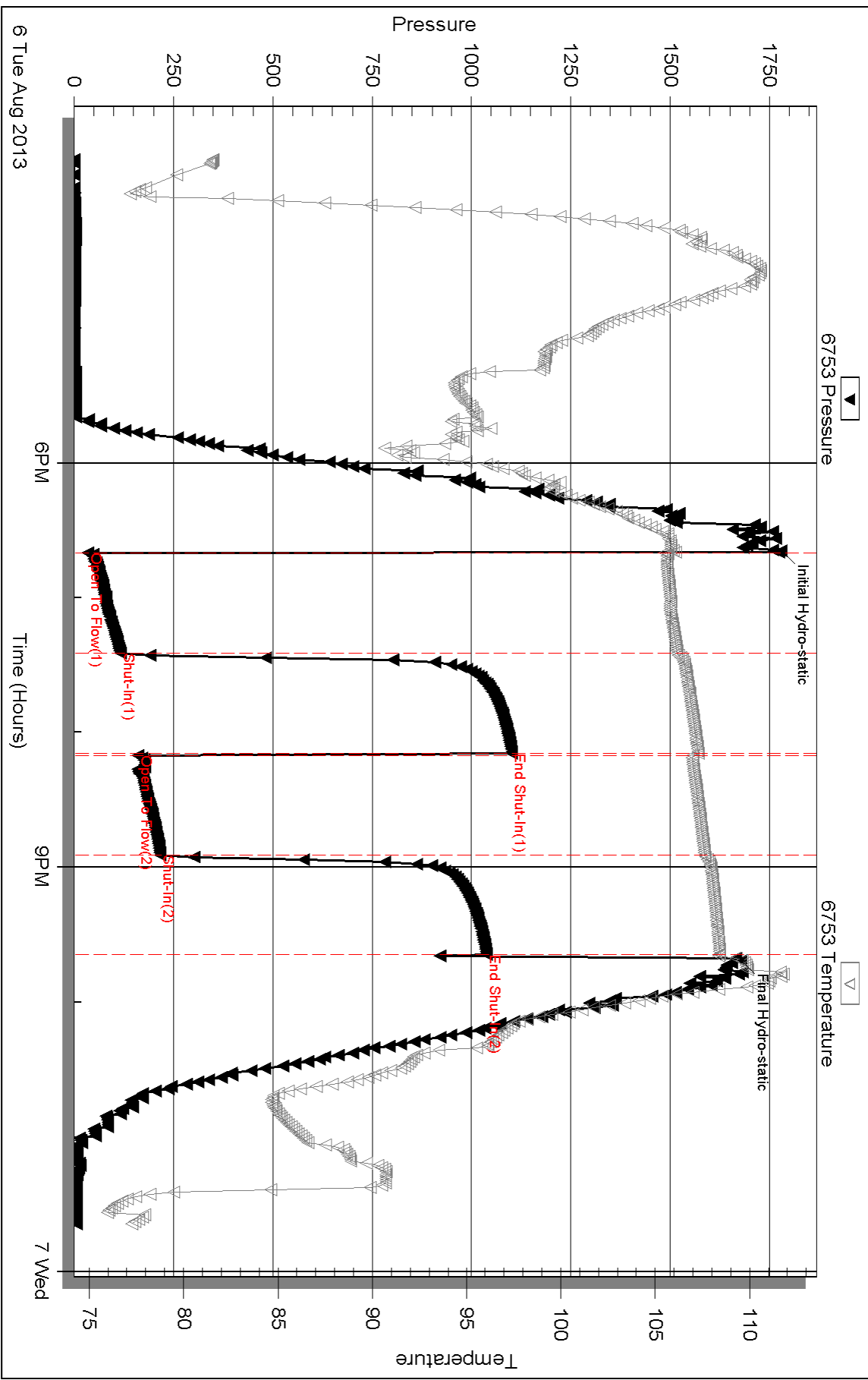
Inside

TDI Inc.

Beform#2

DST Test Number: 2

Pressure vs. Time

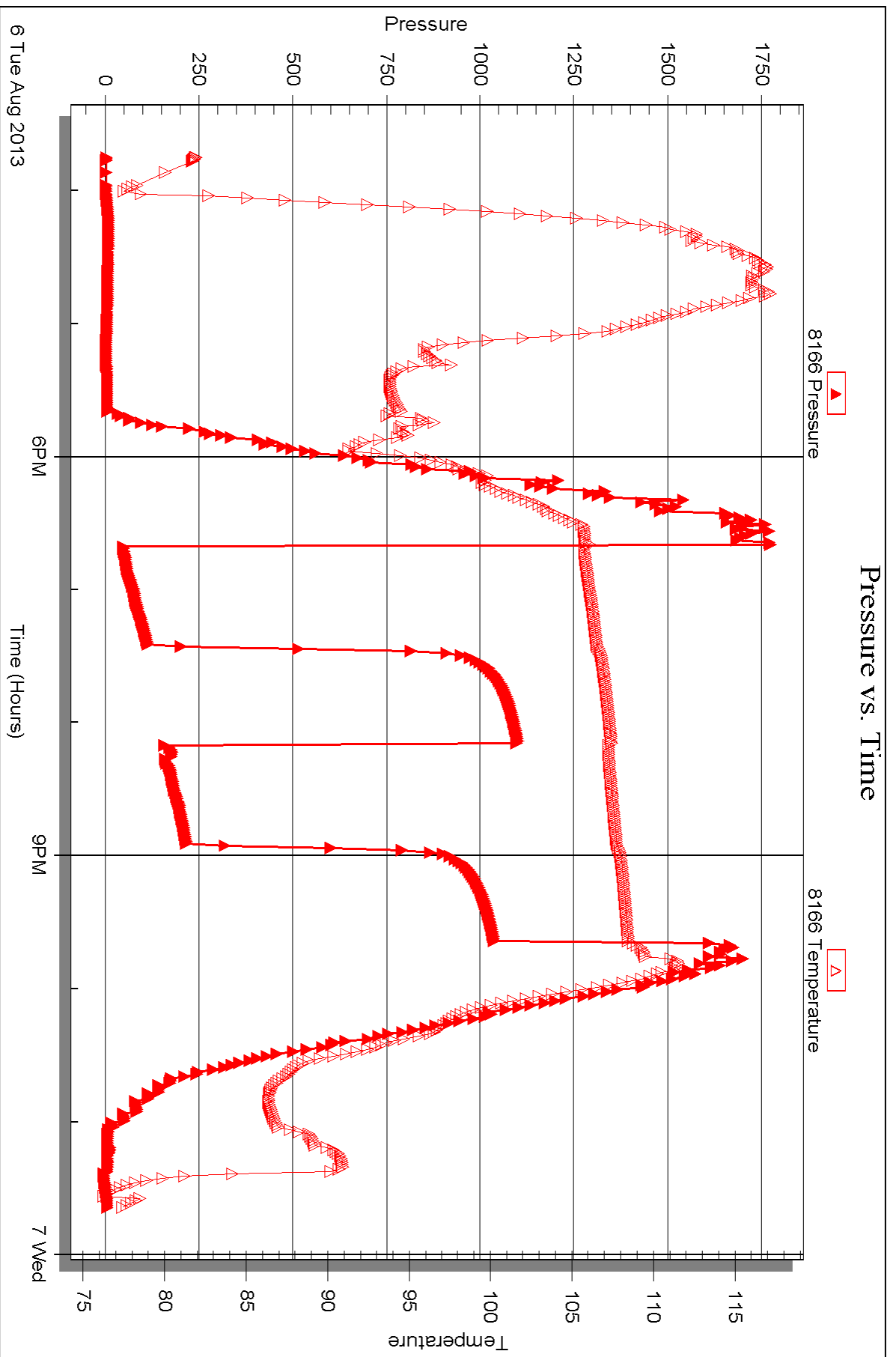


Serial #: 8166

Outside TDI Inc.

Before#2

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison RD
Hays KS 67601

ATTN: Herb Deines

Befort #2

11-15s-19w Ellis,KS

Start Date: 2013.08.07 @ 20:10:00

End Date: 2013.08.08 @ 02:08:30

Job Ticket #: 54754 DST #: 3

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

Printed: 2013.08.08 @ 15:59:40

TDI Inc. 11-15s-19w Ellis,KS Befort #2 DST # 3 Cong. sd. 2013.08.07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

11-15s-19w Ellis,KS
Before #2
Job Ticket: 54754 **DST#: 3**
Test Start: 2013.08.07 @ 20:10:00

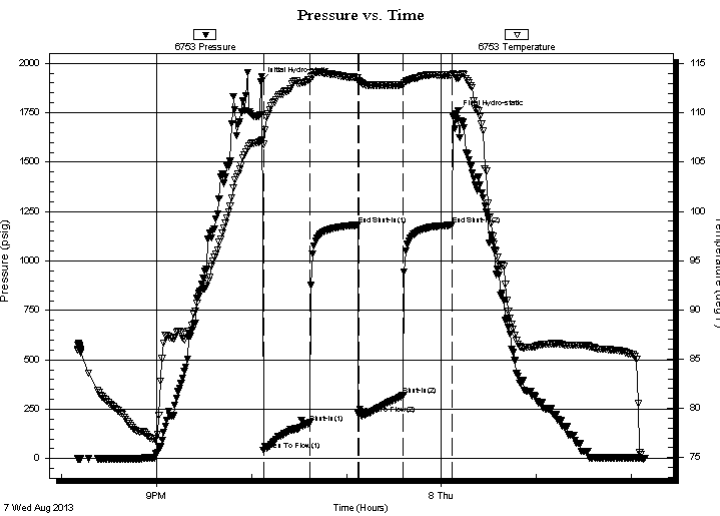
GENERAL INFORMATION:

Formation: **Cong. sd.**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:07:30
Time Test Ended: 02:08:30
Test Type: Conventional Straddle (Reset)
Tester: Brett Dickinson
Unit No: 59
Interval: **3610.00 ft (KB) To 3656.00 ft (KB) (TVD)**
Reference Elevations: 2038.00 ft (KB)
Total Depth: 3730.00 ft (KB) (TVD) 2030.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 6753 Outside

Press @ Run Depth: 320.65 psig @ 3645.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.08.07 End Date: 2013.08.08 Last Calib.: 2013.08.08
Start Time: 20:10:05 End Time: 02:08:29 Time On Btm: 2013.08.07 @ 22:06:00
Time Off Btm: 2013.08.08 @ 00:09:00

TEST COMMENT: IF-BOB in 6 min
ISI-No blow
FF-BOB in 8 min
FSI-Very weak surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1909.73	107.17	Initial Hydro-static
2	44.25	106.81	Open To Flow (1)
31	181.23	113.34	Shut-In(1)
61	1182.08	113.61	End Shut-In(1)
62	225.20	113.23	Open To Flow (2)
90	320.65	112.84	Shut-In(2)
121	1181.85	113.84	End Shut-In(2)
123	1742.77	113.74	Final Hydro-static

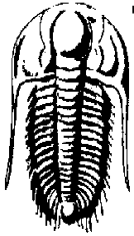
Recovery

Length (ft)	Description	Volume (bbl)
15.00	SGWOCM 5%G 10%W 45%O 40%M	0.07
520.00	GMCO 5%G 25%M 70%O	7.16
180.00	GMCO 10%G 15%M 75%O	2.52

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

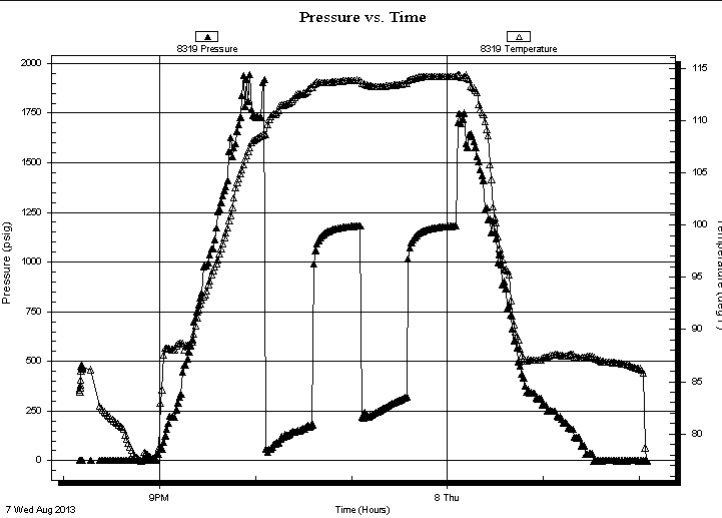
11-15s-19w Ellis, KS
Before #2
Job Ticket: 54754 **DST#: 3**
Test Start: 2013.08.07 @ 20:10:00

GENERAL INFORMATION:

Formation: Cong. sd.		
Deviated: No Whipstock: ft (KB)		Test Type: Conventional Straddle (Reset)
Time Tool Opened: 22:07:30		Tester: Brett Dickinson
Time Test Ended: 02:08:30		Unit No: 59
Interval: 3610.00 ft (KB) To 3656.00 ft (KB) (TVD)		Reference Elevations: 2038.00 ft (KB)
Total Depth: 3730.00 ft (KB) (TVD)		2030.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 8.00 ft

Serial #: 8319	Inside				
Press @ Run Depth: psig @ 3645.00 ft (KB)		Capacity: 8000.00 psig			
Start Date: 2013.08.07	End Date: 2013.08.08	Last Calib.: 2013.08.08			
Start Time: 20:10:05	End Time: 02:04:59	Time On Btm:			
		Time Off Btm:			

TEST COMMENT: IF-BOB in 6 min
IS- No blow
FF-BOB in 8 min
FS- Very weak surface blow

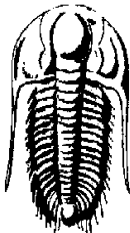


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
15.00	SGWOCM 5%G 10%W 45%O 40%M	0.07
520.00	GMCO 5%G 25%M 70%O	7.16
180.00	GMCO 10%G 15%M 75%O	2.52

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays KS 67601

ATTN: Herb Deines

11-15s-19w Ellis,KS

Before #2
Job Ticket: 54754 **DST#: 3**

Test Start: 2013.08.07 @ 20:10:00

GENERAL INFORMATION:

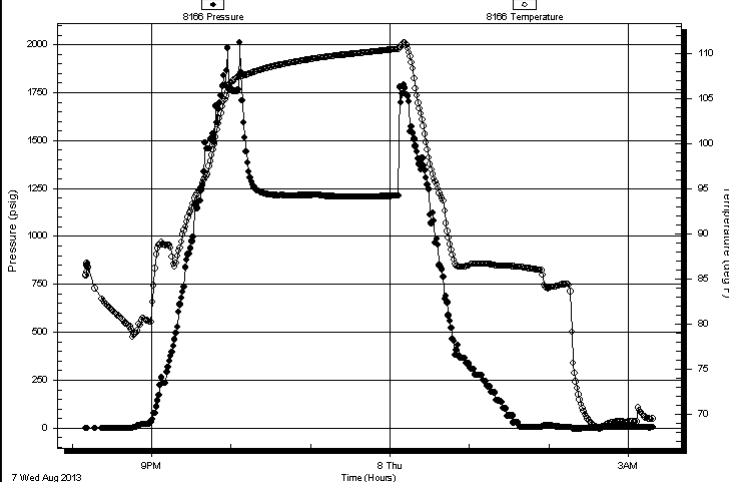
Formation: **Cong. sd.**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Straddle (Reset)
Time Tool Opened: 22:07:30 Tester: Brett Dickinson
Time Test Ended: 02:08:30 Unit No: 59

Interval: 3610.00 ft (KB) To 3656.00 ft (KB) (TVD) Reference Elevations: 2038.00 ft (KB)
Total Depth: 3730.00 ft (KB) (TVD) 2030.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8166 Below (Straddle)
Press @ Run Depth: psig @ 3661.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.08.07 End Date: 2013.08.08 Last Calib.: 2013.08.08
Start Time: 20:10:05 End Time: 03:18:29 Time On Btm:
Time Off Btm:

TEST COMMENT: IF-BOB in 6 min
ISI-No blow
FF-BOB in 8 min
FSI-Very weak surface blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	SGWOCM 5%G 10%W 45%O 40%M	0.07
520.00	GMCO 5%G 25%M 70%O	7.16
180.00	GMCO 10%G 15%M 75%O	2.52

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

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

11-15s-19w Ellis,KS
Befort #2
Job Ticket: 54754 **DST#: 3**
Test Start: 2013.08.07 @ 20:10:00

Tool Information

Drill Pipe:	Length: 3566.00 ft	Diameter: 3.80 inches	Volume: 50.02 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
				String Weight: Initial	40000.00 lb
Drill Pipe Above KB:	6.00 ft			Final	42000.00 lb
Depth to Top Packer:	3610.00 ft				
Depth to Bottom Packer:	3656.00 ft				
Interval between Packers:	46.00 ft				
Tool Length:	143.00 ft				
Number of Packers:	3	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			3591.00	
Shut In Tool	5.00			3596.00	
Hydraulic tool	5.00			3601.00	
Packer	4.00			3605.00	20.00 Bottom Of Top Packer
Packer	5.00			3610.00	
Stubb	1.00			3611.00	
Perforations	1.00			3612.00	
change Over Sub	1.00			3613.00	
Blank Spacing	31.00			3644.00	
change Over Sub	1.00			3645.00	
Recorder	0.00	8319	Inside	3645.00	
Recorder	0.00	6753	Outside	3645.00	
Perforations	7.00			3652.00	
Blank Off Sub	4.00			3656.00	46.00 Tool Interval
Packer	4.00			3660.00	
Stubb	1.00			3661.00	
Recorder	0.00	8166	Below	3661.00	
perforations	4.00			3665.00	
Change Over Sub	1.00			3666.00	
Blank Spacing	63.00			3729.00	
Change Over Sub	1.00			3730.00	
Bullnose	3.00			3733.00	77.00 Bottom Packers & Anchor

Total Tool Length: 143.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **11-15s-19w Ellis,KS**
 1310 Bison RD **Before #2**
 Hays KS 67601 Job Ticket: 54754 **DST#: 3**
 ATTN: Herb Deines Test Start: 2013.08.07 @ 20:10:00

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:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4600.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	SGWOCM 5%G 10%W 45%O 40%M	0.074
520.00	GMCO 5%G 25%M 70%O	7.158
180.00	GMCO 10%G 15%M 75%O	2.525

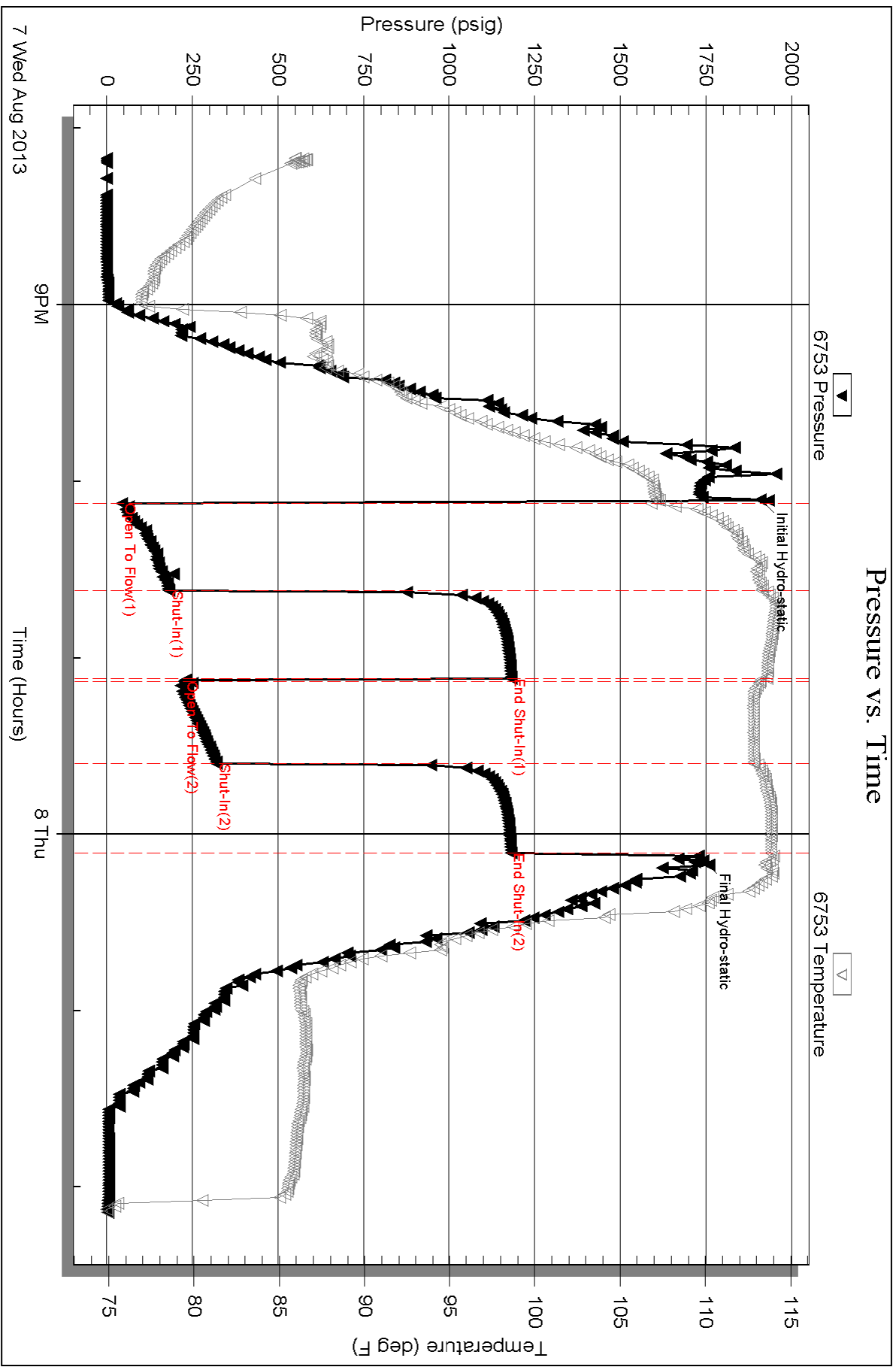
Total Length: 715.00 ft Total Volume: 9.757 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 6753

Outside TDI Inc.

Before#2

DST Test Number: 3



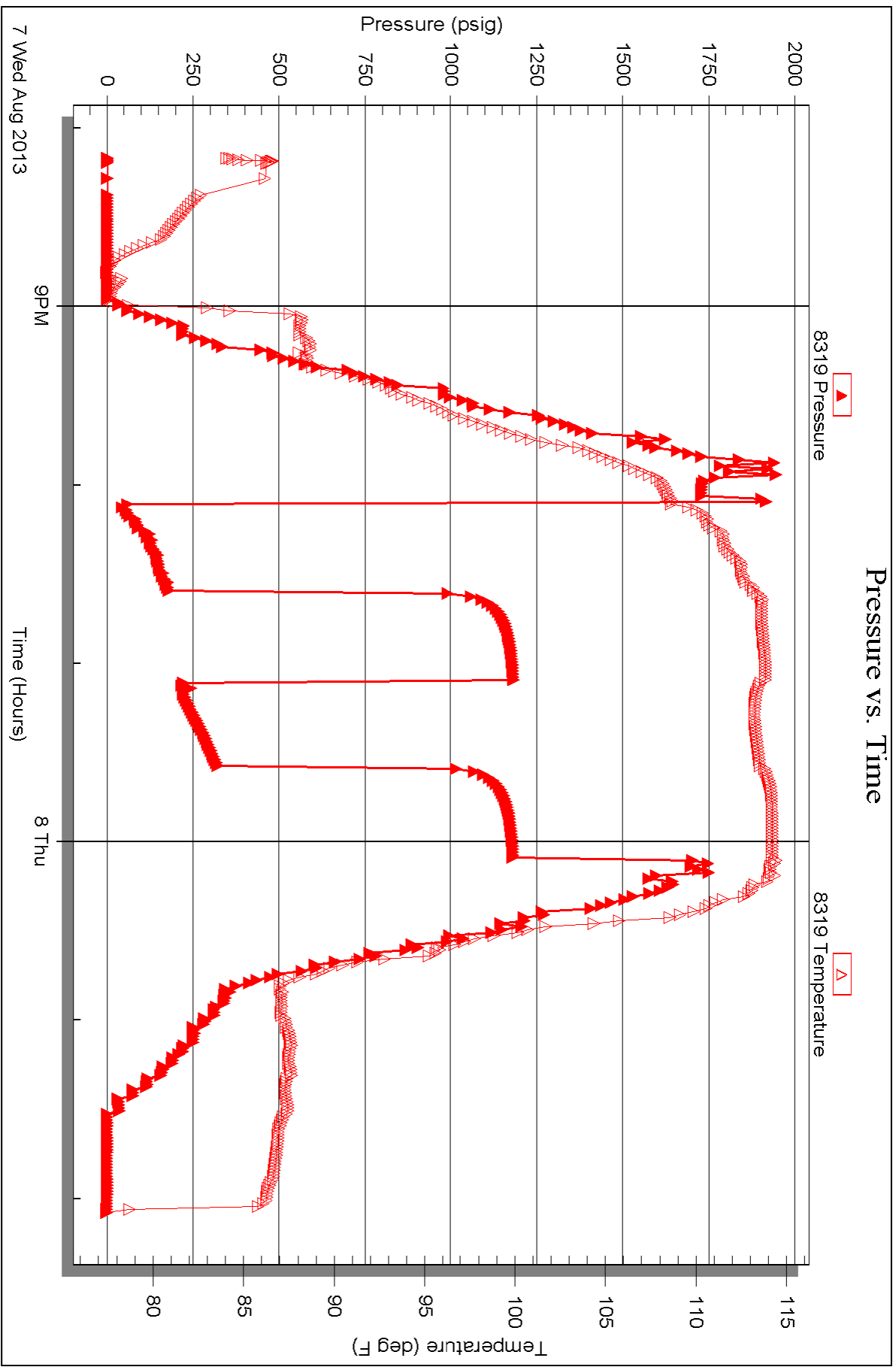
Serial #: 8319

Inside

TDI Inc.

Before#2

DST Test Number: 3

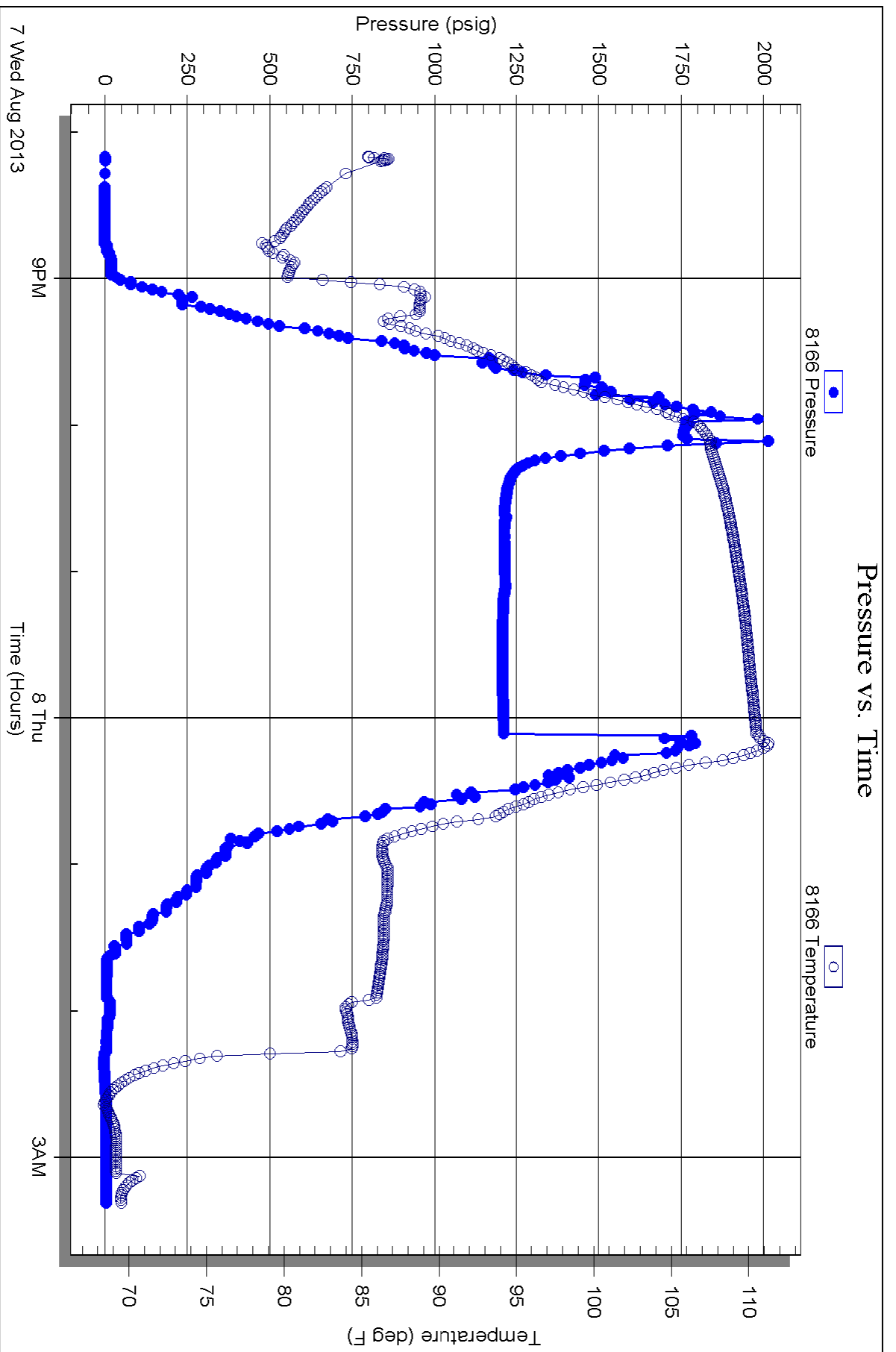


Serial #: 8166

Below (Straddling)

Before#2

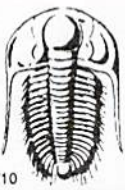
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 54754

Printed: 2013.08.08 @ 15:59:54



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **54752**

Well Name & No. Befent #2 Test No. 1 Date 8/15/13
 Company TDI Inc. Elevation 2038 KB 2030 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb D Rig Southwind #1
 Location: Sec. 11 Twp. 15 Rge. 19 Co. Ellis State KS

Interval Tested 3334-3410 Zone Tested KC "P-F"
 Anchor Length 26 Drill Pipe Run _____ Mud Wt. 9.2
 Top Packer Depth 3329 Drill Collars Run 30 Vis 51
 Bottom Packer Depth 3334 Wt. Pipe Run — WL 8.0
 Total Depth 3410 Chlorides 4,600 ppm System LCM #1
 Blow Description 2F - 1/2 in blow died to 3/4 in
7SA - No blow
FF - No blow flush tool No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud</u>				
_____	_____				
_____	_____				
_____	_____				
_____	_____				

Rec Total 30 BHT 108 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1,690 Test 1150 T-On Location 22:05
 (B) First Initial Flow 35 Jars _____ T-Started 22:30
 (C) First Final Flow 35 Safety Joint _____ T-Open 00:55
 (D) Initial Shut-In 671 Circ Sub _____ T-Pulled 2:45
 (E) Second Initial Flow 40 Hourly Standby _____ T-Out 4:06
 (F) Second Final Flow _____ Mileage 30 RT X 2 93 Comments wanted tools
 (G) Final Shut-In _____ Sampler _____ unloaded early
 (H) Final Hydrostatic 1,636 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1243
 Final Flow 20 Accessibility _____ MP/DST Disc't _____
 Final Shut-In _____ Sub Total 1243

Approved By _____ Our Representative Butch D...

TriLOBite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **54753**

4/10

Well Name & No. Becont #2 Test No. 2 Date 8/6/13
 Company TRT Inc. Elevation 2038 KB 2030 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb D Rig Southwind #1
 Location: Sec. 11 Twp. 15 Rge. 19 Co. Ellis State KS

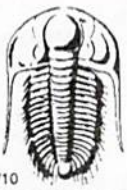
Interval Tested 3478 - 3525 Zone Tested KC "I, O"
 Anchor Length 47 Drill Pipe Run 3435 Mud Wt. 9.2
 Top Packer Depth 3473 Drill Collars Run 30 Vis 5.1
 Bottom Packer Depth 3478 Wt. Pipe Run — WL 8.0
 Total Depth 3525 Chlorides 4,600 ppm System LCM 1
 Blow Description IF - BOB in 19 1/2 min
FSF - very weak surface blow
EF - BOB in 31 min
FSF - very weak surface blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>3</u>	<u>Free Oil</u>				
<u>180</u>	<u>GSOWCM</u>	<u>10</u>	<u>2</u>	<u>25</u>	<u>83</u>
<u>247</u>	<u>SMCW</u>			<u>95</u>	<u>5</u>

Rec Total 430 BHT 108 Gravity — API RW .14 @ 70 °F Chlorides 53,000 ppm
 (A) Initial Hydrostatic 1,780 Test 1150 T-On Location 14:05
 (B) First Initial Flow 35 Jars T-Started 15:45
 (C) First Final Flow 117 Safety Joint T-Open 18:40
 (D) Initial Shut-In 1,102 Circ Sub T-Pulled 21:40
 (E) Second Initial Flow 161 Hourly Standby T-Out 23:38
 (F) Second Final Flow 217 Mileage 30 RT 46.50 Comments _____
 (G) Final Shut-In 1,039 Sampler _____
 (H) Final Hydrostatic 1,678 Straddle _____
 Initial Open 45 Shale Packer _____
 Initial Shut-In 45 Shale Packer _____
 Final Flow 45 Extra Packer _____
 Final Shut-In 45 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1196.50 MP/DST Disc't _____

Approved By _____ Our Representative Beth D...

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54754

Well Name & No. Befant #2 Test No. 3 Date 8/2/13
 Company TPI Inc. Elevation 2038 KB 2030 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb D. Rig Southwind #1
 Location: Sec. 11 Twp. 15 Rge. 19 Co. Ellis State KS

Interval Tested 3610-3656 Zone Tested Cong sd.
 Anchor Length 46 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth 3605, 3610 Drill Collars Run 30 Vis _____
 Bottom Packer Depth 3656 Wt. Pipe Run _____ WL _____
 Total Depth 3730 Chlorides _____ ppm System LCM _____

Blow Description ~~FF~~ IF - BOB in 6min
ISI - No blow
FF - BOB in 8min
ESI - very weak surface blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>SGWOCM</u>	<u>5</u>	<u>45</u>	<u>10</u>	<u>40</u>
<u>520</u>	<u>GMC0</u>	<u>5</u>	<u>70</u>		<u>25</u>
<u>180</u>	<u>GMC0</u>	<u>10</u>	<u>75</u>		<u>15</u>
____	____	____	____	____	____
____	____	____	____	____	____

Rec Total 715 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1,910 Test 1150 T-On Location 19:35
 (B) First Initial Flow 44 Jars T-Started 20:10
 (C) First Final Flow 181 Safety Joint T-Open 22:05
 (D) Initial Shut-In 1,182 Circ Sub T-Pulled 00:05
 (E) Second Initial Flow 225 Hourly Standby T-Out 2:07
 (F) Second Final Flow 321 Mileage 30 RT 46.50
 (G) Final Shut-In 1,182 Sampler
 (H) Final Hydrostatic 1,743 Straddle 600

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 30 Ruined Packer _____
 Final Flow 30 Extra Copies _____
 Final Shut-In 30 Extra Recorder _____
 Sub Total 0
 Total 1796.50
 MP/DST Disc't _____
 Sub Total 1796.50

Approved By _____ Our Representative Burstein

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.