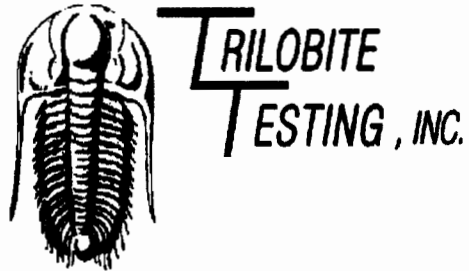


15-051-25816



DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays, KS 67601

ATTN: Tom Denning

25 13 16 Ellis, Ks

LLF # 1

Start Date: 2008.10.13 @ 10:11:59

End Date: 2008.10.13 @ 15:01:59

Job Ticket #: 33654 DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

NOV 03 2008

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Tom Denning

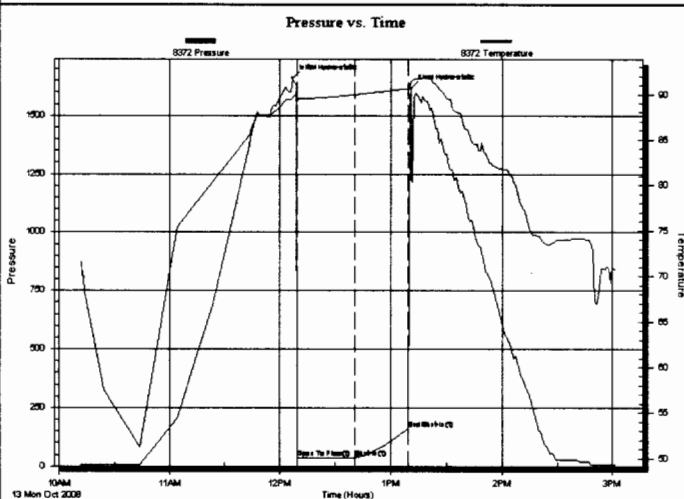
LLF # 1
25 13 16 Ellis, Ks
Job Ticket: 33654 **DST#: 1**
Test Start: 2008.10.13 @ 10:11:59

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:09:29
Time Test Ended: 15:01:59
Interval: **3316.00 ft (KB) To 3368.00 ft (KB) (TVD)**
Total Depth: 3368.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 38
Reference Elevations: 1930.00 ft (KB)
1925.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8372 **Inside**
Press@RunDepth: 35.70 psig @ 3319.00 ft (KB)
Start Date: 2008.10.13 End Date: 2008.10.13
Start Time: 10:12:00 End Time: 15:01:59
Capacity: 7000.00 psig
Last Calib.: 2008.10.13
Time On Btm: 2008.10.13 @ 12:06:59
Time Off Btm: 2008.10.13 @ 13:10:29

TEST COMMENT: IF-Weak 1/2" decreasing to weak surface blow



PRESSURE SUMMARY

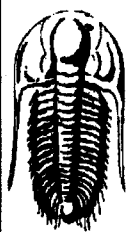
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1660.40	89.59	Initial Hydro-static
3	34.82	89.16	Open To Flow (1)
34	35.70	89.95	Shut-In(1)
62	159.13	90.63	End Shut-In(1)
64	1617.26	91.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	DM	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc

LLF # 1

1310 Bison Rd
Hays, KS 67601

25 13 16 Ellis, Ks

Job Ticket: 33654

DST#: 1

ATTN: Tom Denning

Test Start: 2008.10.13 @ 10:11:59

Tool Information

Drill Pipe:	Length: 3308.00 ft	Diameter: 3.80 inches	Volume: 46.40 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			Total Volume: 46.40 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3316.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	73.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3296.00	
Shut In Tool	5.00			3301.00	
Hydraulic tool	5.00			3306.00	
Packer	5.00			3311.00	21.00 Bottom Of Top Packer
Packer	5.00			3316.00	
Stubb	1.00			3317.00	
Perforations	1.00			3318.00	
Change Over Sub	1.00			3319.00	
Recorder	0.00	8372	Inside	3319.00	
Recorder	0.00	8368	Outside	3319.00	
Drill Pipe	31.00			3350.00	
Change Over Sub	1.00			3351.00	
Perforations	14.00			3365.00	
Bullnose	3.00			3368.00	52.00 Bottom Packers & Anchor

Total Tool Length: 73.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

LLF # 1

1310 Bison Rd
Hays, KS 67601

25 13 16 Ellis, Ks

Job Ticket: 33654

DST#: 1

ATTN: Tom Denning

Test Start: 2008.10.13 @ 10:11:59

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: 42.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	DM	0.140

Total Length: 10.00 ft

Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8372

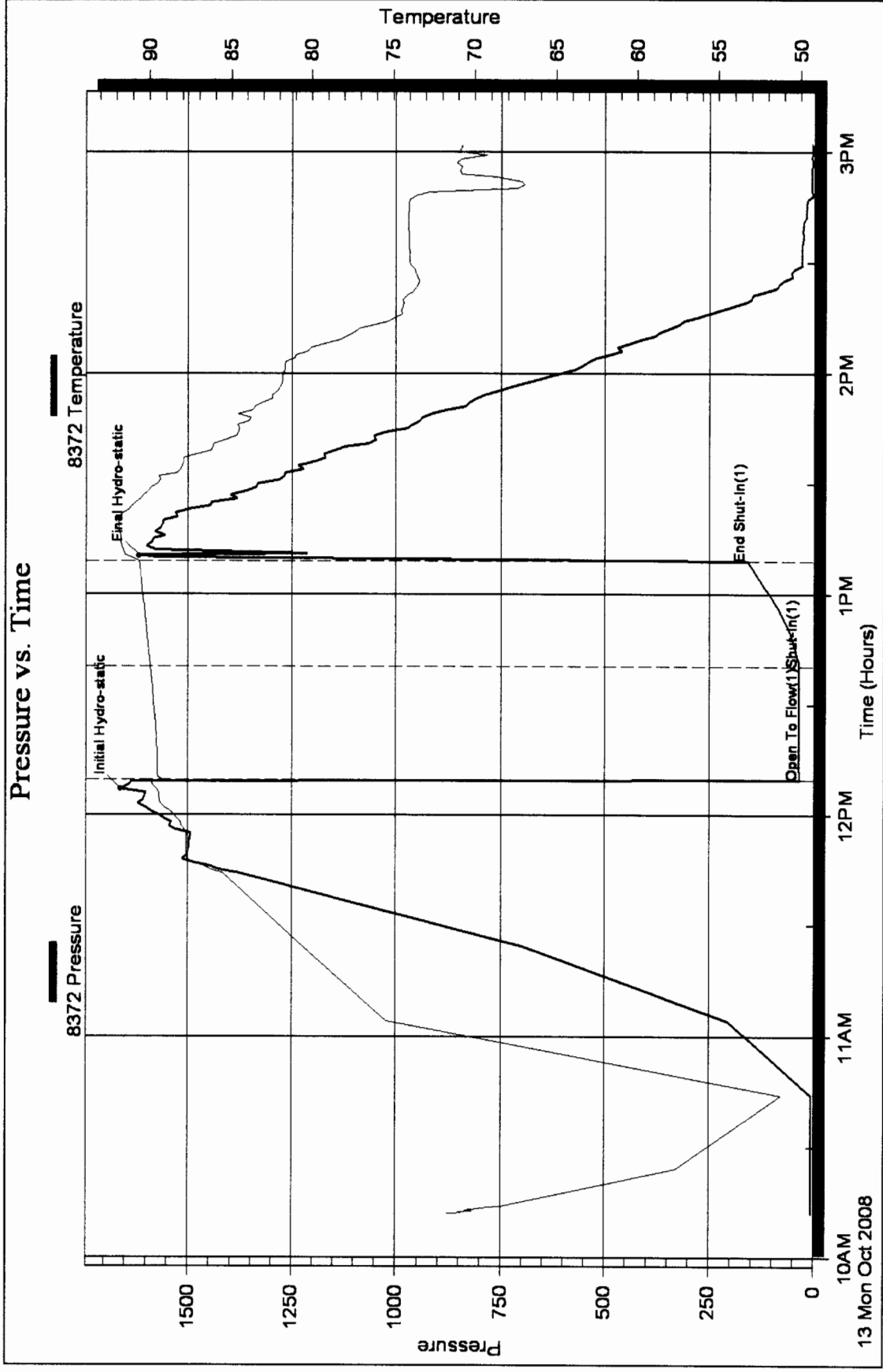
Inside

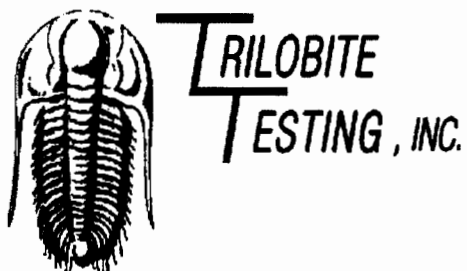
TDI Inc

25 13 16 Ellis, Ks

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays, KS 67601

ATTN: Tom Denning

25 13 16 Ellis, Ks

LLF # 1

Start Date: 2008.10.13 @ 20:54:43

End Date: 2008.10.14 @ 01:06:43

Job Ticket #: 33655 DST #: 2

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KANSAS CORPORATION COMMISSION

NOV 03 2008

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Tom Denning

LLF # 1
25 13 16 Ellis, Ks
Job Ticket: 33655 **DST#: 2**
Test Start: 2008.10.13 @ 20:54:43

GENERAL INFORMATION:

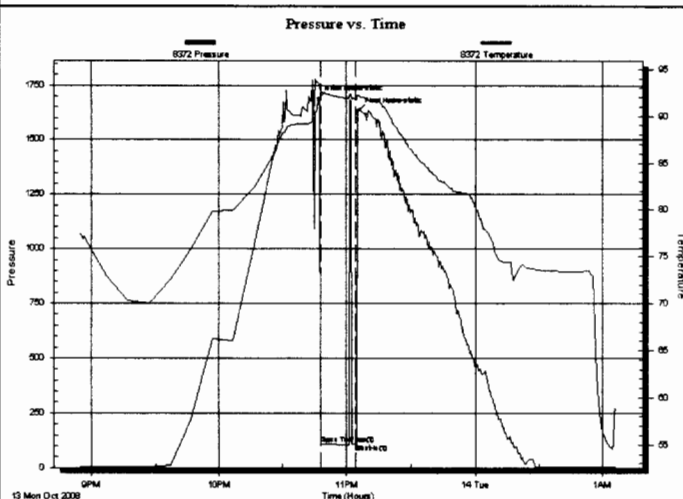
Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:48:13
Time Test Ended: 01:06:43
Interval: **3375.00 ft (KB) To 3401.00 ft (KB) (TVD)**
Total Depth: 3401.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 38
Reference Elevations: 1930.00 ft (KB)
1925.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8372

Inside

Press@RunDepth: psig @ 3376.00 ft (KB)
Start Date: 2008.10.13 End Date: 2008.10.14
Start Time: 20:54:44 End Time: 01:06:43
Capacity: 7000.00 psig
Last Calib.: 2008.10.14
Time On Btm: 2008.10.13 @ 22:46:43
Time Off Btm: 2008.10.13 @ 23:05:13

TEST COMMENT: Packer failure - Reset packers - IF-Weak blow - flushed tool



PRESSURE SUMMARY

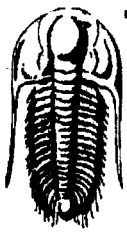
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1687.99	93.57	Initial Hydro-static
2	107.33	92.53	Open To Flow (1)
18	107.94	91.81	Shut-In(1)
19	1630.85	92.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
185.00	Mud w/ oil spots in tool	2.60

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc

LLF # 1

1310 Bison Rd
Hays, KS 67601

25 13 16 Ellis, Ks

Job Ticket: 33655

DST#: 2

ATTN: Tom Denning

Test Start: 2008.10.13 @ 20:54:43

Tool Information

Drill Pipe:	Length:	3370.00 ft	Diameter:	3.80 inches	Volume:	47.27 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	60000.00 lb
					Total Volume:	47.27 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft							
Depth to Top Packer:	3375.00 ft							
Depth to Bottom Packer:	ft							
Interval between Packers:	26.00 ft							
Tool Length:	47.00 ft							
Number of Packers:	2	Diameter:	6.75 inches					
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3355.00	
Shut In Tool	5.00			3360.00	
Hydraulic tool	5.00			3365.00	
Packer	5.00			3370.00	21.00 Bottom Of Top Packer
Packer	5.00			3375.00	
Stubb	1.00			3376.00	
Recorder	0.00	8372	Inside	3376.00	
Recorder	0.00	8368	Outside	3376.00	
Perforations	22.00			3398.00	
Bullnose	3.00			3401.00	26.00 Bottom Packers & Anchor
Total Tool Length:	47.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

LLF # 1

1310 Bison Rd
Hays, KS 67601

25 13 16 Ellis, Ks

Job Ticket: 33655

DST#: 2

ATTN: Tom Denning

Test Start: 2008.10.13 @ 20:54:43

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: 40.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
185.00	Mud w / oil spots in tool	2.595

Total Length: 185.00 ft

Total Volume: 2.595 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

