



**TRILOBITE  
TESTING, INC.**

### DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc**

250 N Water Ste 300  
Wichita KS 67202

ATTN: Paul Gunzelman

**30 8S 32W Thomas KS**

**Saddler 1-30**

Start Date: 2007.04.01 @ 11:50:34

End Date: 2007.04.01 @ 18:39:13

Job Ticket #: 27659                      DST #: 1

15-193-20719  
NE SW NE NW  
920 FNL 1920 FWL

RECEIVED  
KANSAS CORPORATION COMMISSION

**AUG 20 2007**

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Murfin Drilling Company Inc

Saddler 1-30

30 8S 32W Thomas KS

DST # 1

Lansing B

2007.04.01



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 27659

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2007.04.01 @ 11:50:34

## GENERAL INFORMATION:

Formation: **Lansing B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:29:14

Time Test Ended: 18:39:13

Test Type: Conventional Bottom Hole

Tester: Brandon Domsch

Unit No: 23

Interval: **4134.00 ft (KB) To 4162.00 ft (KB) (TVD)**

Reference Elevations: 3135.00 ft (KB)

Total Depth: 4162.00 ft (KB) (TVD)

3125.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: **6755**

Inside

Press@RunDepth: 18.84 psig @ 4135.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.04.01

End Date:

2007.04.01

Last Calib.: 2007.04.01

Start Time: 11:50:34

End Time:

18:39:13

Time On Btm: 2007.04.01 @ 14:28:59

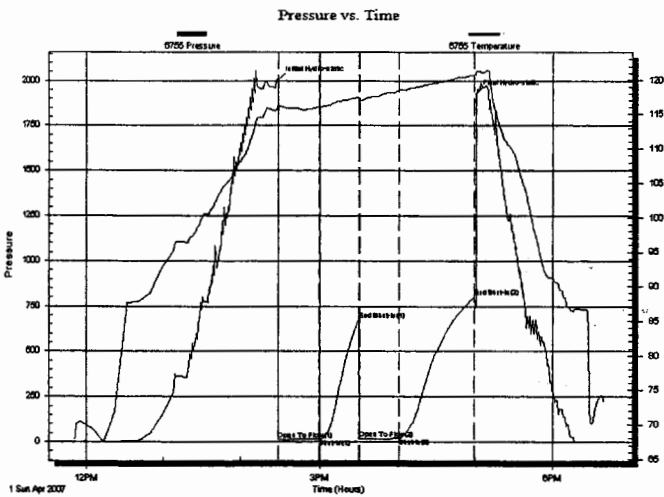
Time Off Btm: 2007.04.01 @ 17:00:58

TEST COMMENT: IF Weak surface blow died in 27 mins.

IS No return.

FF No blow

FS No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2001.94	116.44	Initial Hydro-static
1	12.63	115.74	Open To Flow (1)
31	15.88	116.07	Shut-In (1)
61	674.67	117.50	End Shut-In (1)
62	16.06	117.06	Open To Flow (2)
92	18.84	118.57	Shut-In (2)
151	802.91	120.73	End Shut-In (2)
152	1927.85	121.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bb)
5.00	O spotted Mud 100%M	0.02

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

ATTN: Paul Gunzelman

Job Ticket: 27659

**DST#: 1**

Test Start: 2007.04.01 @ 11:50:34

**Tool Information**

Drill Pipe:	Length: 3614.00 ft	Diameter: 3.80 inches	Volume: 50.69 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 527.00 ft	Diameter: 2.25 inches	Volume: 2.59 bbl	Weight to Pull Loose: 110000.0 lb
		<u>Total Volume: 53.28 bbl</u>		Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 85000.00 lb
Depth to Top Packer:	4134.00 ft			Final 85000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	51.00 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			4112.00	
Shut In Tool	5.00			4117.00	
Hydraulic tool	5.00			4122.00	
Safety Joint	3.00			4125.00	
Packer	5.00			4130.00	23.00 Bottom Of Top Packer
Packer	4.00			4134.00	
Stubb	1.00			4135.00	
Recorder	0.00	6755	inside	4135.00	
Perforations	22.00			4157.00	
Recorder	0.00	2606	inside	4157.00	
Bullnose	5.00			4162.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 51.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 27659

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2007.04.01 @ 11:50:34

### 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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	O spotted Mud 100%M	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6755

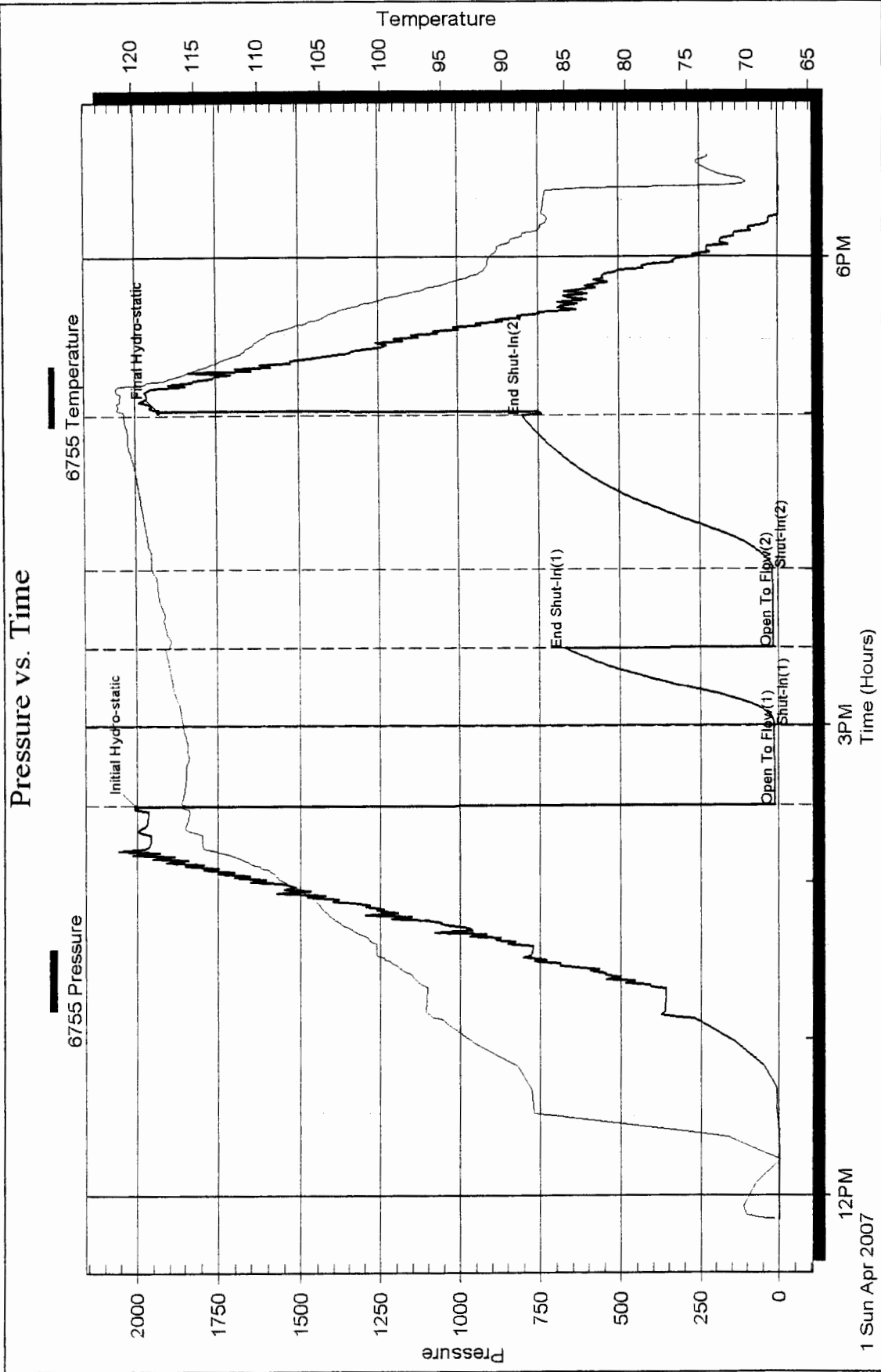
Inside

Murfin Drilling Company Inc

30 8S 32W Thomas KS

DST Test Number: 1

### Pressure vs. Time

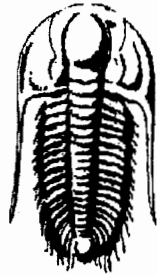


1 Sun Apr 2007

12PM

3PM

6PM



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc**

250 N Water Ste 300  
Wichita KS 67202

ATTN: Paul Gunzelman

**30 8S 32W Thomas KS**

**Saddler 1-30**

Start Date: 2007.04.03 @ 06:38:16

End Date: 2007.04.03 @ 13:47:25

Job Ticket #: 27660                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Murfin Drilling Company Inc

Saddler 1-30

30 8S 32W Thomas KS

DST # 2

Cher "Johnson"

2007.04.03



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company Inc

250 N Water Ste 300  
Wichita KS 67202

ATTN: Paul Gunzelman

**Saddler 1-30**

**30 8S 32W Thomas KS**

Job Ticket: 27660

**DST#: 2**

Test Start: 2007.04.03 @ 06:38:16

## GENERAL INFORMATION:

Formation: **Cher "Johnson"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:41:11

Time Test Ended: 13:47:25

Test Type: Conventional Bottom Hole

Tester: Brandon Domsch

Unit No: 23

Interval: **4628.00 ft (KB) To 4652.00 ft (KB) (TVD)**

Total Depth: 4652.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3135.00 ft (KB)

3125.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 6755** Inside

Press@RunDepth: 22.42 psig @ 4629.00 ft (KB)

Start Date: 2007.04.03

End Date:

2007.04.03

Start Time: 06:38:16

End Time:

13:47:25

Capacity: 7000.00 psig

Last Calib.: 2007.04.03

Time On Btm: 2007.04.03 @ 08:40:56

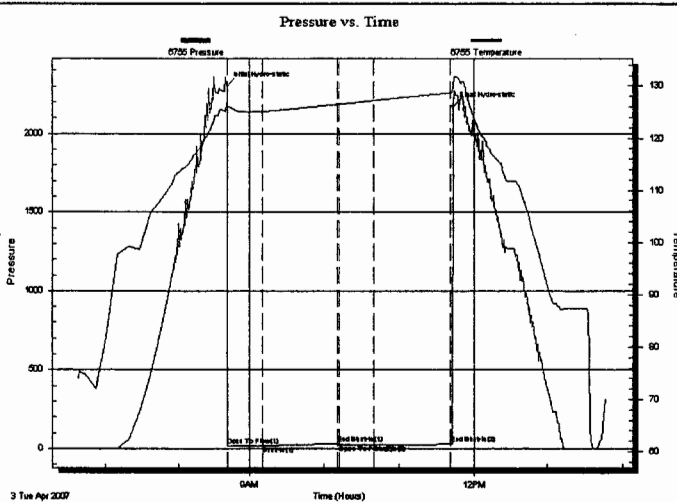
Time Off Btm: 2007.04.03 @ 11:43:10

TEST COMMENT: IF 1/2 inch blow built to 3/4 inch died in 29 mins.

IS No return

FF No blow

FS No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2301.68	126.92	Initial Hydro-static
1	17.33	126.19	Open To Flow (1)
29	19.57	125.09	Shut-In (1)
91	31.08	126.52	End Shut-In (1)
92	21.82	126.52	Open To Flow (2)
120	22.42	127.27	Shut-In (2)
180	28.67	128.69	End Shut-In (2)
183	2172.87	130.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	O spotted Mud 100%M	0.05

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 27660

**DST#: 2**

ATTN: Paul Gunzelman

Test Start: 2007.04.03 @ 06:38:16

### Tool Information

Drill Pipe:	Length: 4090.00 ft	Diameter: 3.80 inches	Volume: 57.37 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 527.00 ft	Diameter: 2.25 inches	Volume: 2.59 bbl	Weight to Pull Loose: 120000.0 lb
			<u>Total Volume: 59.96 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 88000.00 lb
Depth to Top Packer:	4628.00 ft			Final 88000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 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			4606.00	
Shut In Tool	5.00			4611.00	
Hydraulic tool	5.00			4616.00	
Safety Joint	3.00			4619.00	
Packer	5.00			4624.00	23.00 Bottom Of Top Packer
Packer	4.00			4628.00	
Stubb	1.00			4629.00	
Recorder	0.00	6755	Inside	4629.00	
Perforations	18.00			4647.00	
Recorder	0.00	2607	Inside	4647.00	
Bullnose	5.00			4652.00	24.00 Bottom Packers & Anchor

**Total Tool Length: 47.00**



**TRILOBITE  
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## DRILL STEM TEST REPORT

**FLUID-SUMMARY**

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 27660

**DST#: 2**

ATTN: Paul Gunzelman

Test Start: 2007.04.03 @ 06:38:16

### 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: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	O spotted Mud 100%M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

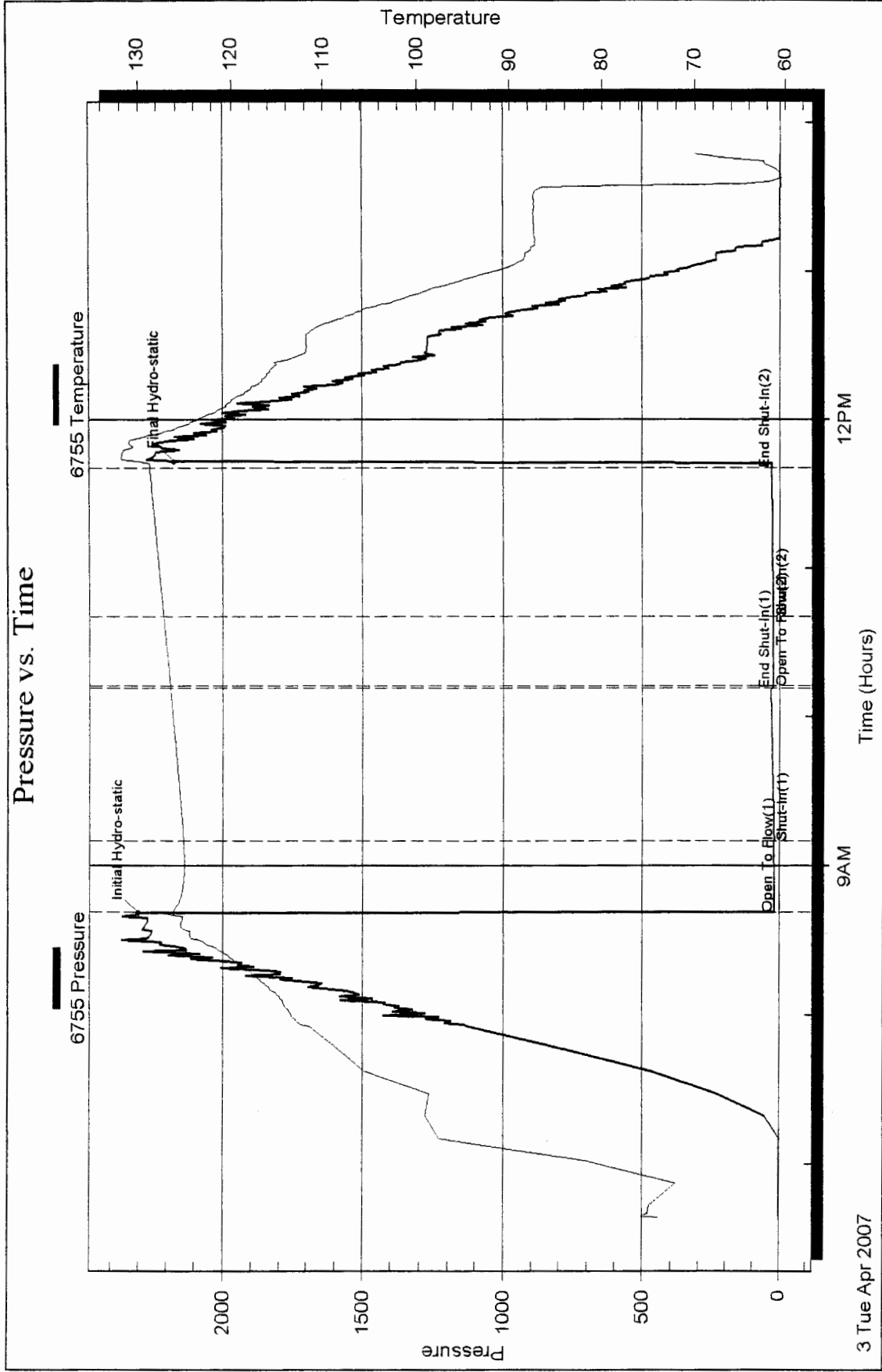
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

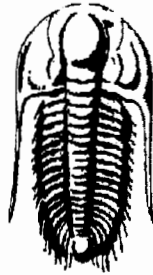


3 Tue Apr 2007

12PM

9AM

Time (Hours)



**TRILOBITE  
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## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc**

250 N Water Ste 300  
Wichita KS 67202

ATTN: Paul Gunzelman

**30 8S 32W Thomas KS**

**Saddler 1-30**

Start Date: 2007.04.04 @ 11:17:18

End Date: 2007.04.04 @ 21:14:13

Job Ticket #: 26630                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Murfin Drilling Company Inc

Saddler 1-30

30 8S 32W Thomas KS

DST # 3

Altamout

2007.04.04



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 26630

**DST#: 3**

ATTN: Paul Gunzelman

Test Start: 2007.04.04 @ 11:17:18

## GENERAL INFORMATION:

Formation: **Altamout**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:25:43

Time Test Ended: 21:14:13

Test Type: Conventional Straddle

Tester: Brandon Turley

Unit No: 35

Interval: **4418.00 ft (KB) To 4440.00 ft (KB) (TVD)**

Reference Elevations: 3135.00 ft (KB)

Total Depth: 4760.00 ft (KB) (TVD)

3125.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

**Serial #: 6772 Inside**

Press@RunDepth: 546.14 psig @ 4419.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.04.04

End Date:

2007.04.04

Last Calib.: 2007.04.04

Start Time: 11:17:18

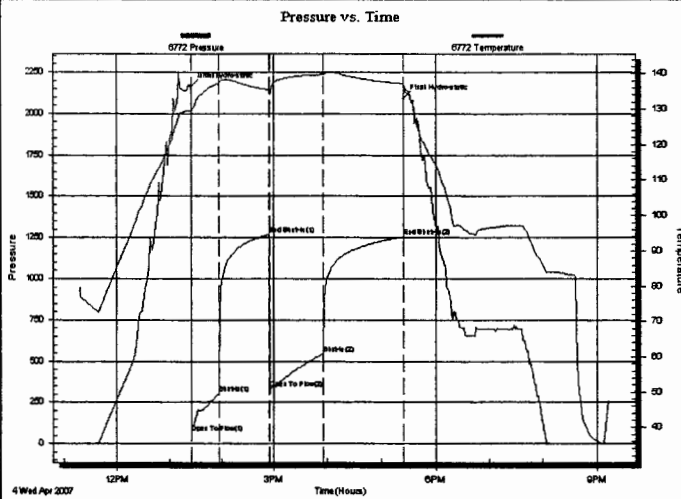
End Time:

21:14:13

Time On Btm: 2007.04.04 @ 13:25:28

Time Off Btm: 2007.04.04 @ 17:25:42

**TEST COMMENT:** IF 1/4 blow BOB in 2 min.  
IS 1/4 blow BOB in 10 min.  
FF 1/4 blow BOB in 4 min. Gas to surface in 50 min.  
FS 1/4 blow BOB in 10 min.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2164.08	129.58	Initial Hydro-static
1	63.56	128.90	Open To Flow (1)
32	303.45	137.29	Shut-In(1)
90	1268.87	135.49	End Shut-In(1)
91	336.27	134.07	Open To Flow (2)
151	546.14	139.74	Shut-In(2)
240	1254.43	137.18	End Shut-In(2)
241	2089.42	137.56	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
94.00	MCGO 20%G 40%O 40%M	0.46
433.00	MCGO 10%G 70%O 20%M	2.13
987.00	GO 20%G 80%O	13.85

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 26630

**DST#: 3**

ATTN: Paul Gunzelman

Test Start: 2007.04.04 @ 11:17:18

### Tool Information

Drill Pipe:	Length: 3873.00 ft	Diameter: 3.80 inches	Volume: 54.33 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: 30000.00 lb
Drill Collar:	Length: 527.00 ft	Diameter: 2.25 inches	Volume: 2.59 bbl	Weight to Pull Loose: 120000.0 lb
			<b>Total Volume: 56.92 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 94000.00 lb
Depth to Top Packer:	4418.00 ft			Final 98000.00 lb
Depth to Bottom Packer:	4437.00 ft			
Interval between Packers:	19.00 ft			
Tool Length:	373.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4392.00	
Shut In Tool	5.00			4397.00	
Hydraulic tool	5.00			4402.00	
Jars	5.00			4407.00	
Safety Joint	2.00			4409.00	
Packer	5.00			4414.00	27.00 Bottom Of Top Packer
Packer	4.00			4418.00	
Stubb	1.00			4419.00	
Recorder	0.00	6772	Inside	4419.00	
Perforations	17.00			4436.00	
Recorder	0.00	7437	Outside	4436.00	
Blank Off Sub	1.00			4437.00	19.00 Tool Interval
Packer	3.00			4440.00	
Stubb	1.00			4441.00	
Change Over Sub	1.00			4442.00	
Drill Pipe	316.00			4758.00	
Change Over Sub	1.00			4759.00	
Recorder	0.00	10248	Below	4759.00	
Bullnose	5.00			4764.00	327.00 Bottom Packers & Anchor

**Total Tool Length: 373.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Murfin Drilling Company Inc

**Saddler 1-30**

250 N Water Ste 300  
Wichita KS 67202

**30 8S 32W Thomas KS**

Job Ticket: 26630

**DST#: 3**

ATTN: Paul Gunzelman

Test Start: 2007.04.04 @ 11:17:18

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API: 38 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 0 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.99 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 1000.00 ppm		
Filter Cake: 1.00 inches		

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
94.00	MCGO 20%G 40%O 40%M	0.462
433.00	MCGO 10%G 70%O 20%M	2.129
987.00	GO 20%G 80%O	13.845

Total Length: 1514.00ft      Total Volume: 16.436 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

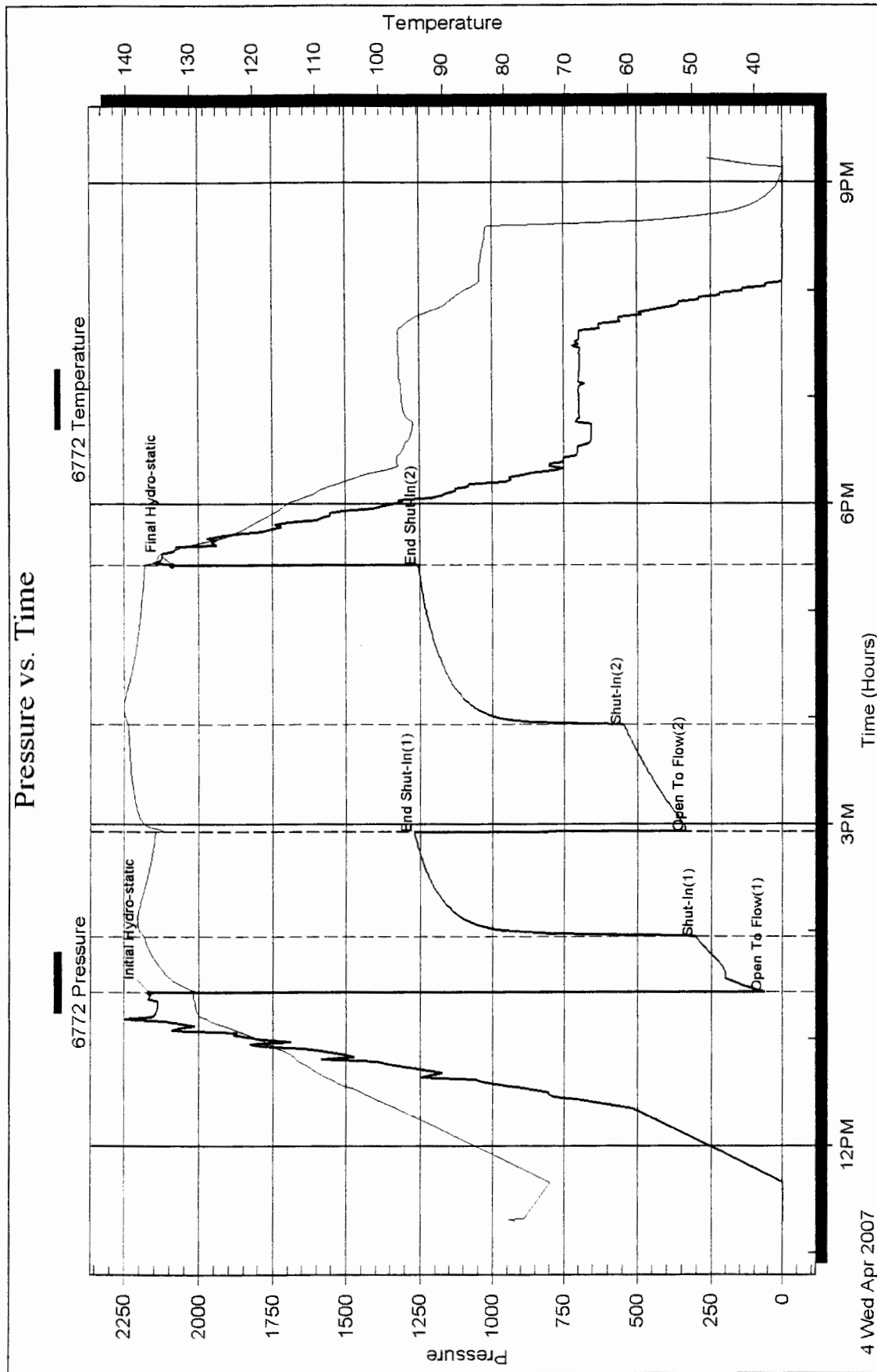
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time



4 Wed Apr 2007