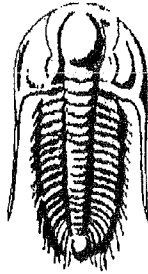


15-163-23808

28-10s-18w

IND



**TRILOBITE**  
**TESTING, INC.**

**CONFIDENTIAL**

JUL 28 2009

**DRILL STEM TEST REPORT KCO**

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.20 @ 11:14:55

End Date: 2009.06.20 @ 17:31:25

Job Ticket #: 36146                      DST #: 1

KANSAS CORPORATION COMMISSION

JUL 24 2009

**RECEIVED**

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Company, Inc.

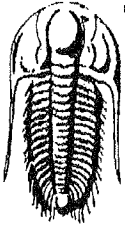
Collins #1-28

28 10s 18w Rooks KS

DST # 1

Oread

2009.06.20



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 36146      **DST#: 1**

Test Start: 2009.06.20 @ 11:14:55

## GENERAL INFORMATION:

Formation: **Oread**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 12:59:25  
Time Test Ended: 17:31:25

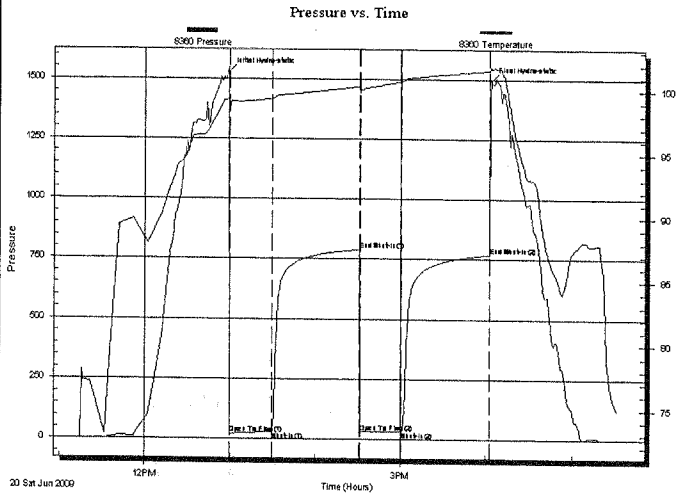
Test Type: Conventional Bottom Hole  
Tester: Jason McLemore  
Unit No: 32

Interval: **3183.00 ft (KB) To 3223.00 ft (KB) (TVD)**  
Total Depth: 3223.00 ft (KB) (TVD)  
Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2065.00 ft (KB)  
2060.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8360**      **Inside**      **35.51 psig @ 3190.00 ft (KB)**  
Press@RunDepth:                      @                      3190.00 ft (KB)  
Start Date: 2009.06.20      End Date: 2009.06.20      Capacity: 7000.00 psig  
Start Time: 11:14:57      End Time: 17:31:25      Last Calib.: 2009.06.20  
Time On Btm: 2009.06.20 @ 12:58:55  
Time Off Btm: 2009.06.20 @ 16:03:55

**TEST COMMENT:** IFP-Weak Blow ,Built to 1-1/2"  
ISI-Dead  
FFP-Dead  
FSI-Dead



## PRESSURE SUMMARY

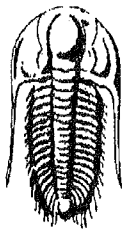
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1524.37	99.53	Initial Hydro-static
1	22.61	98.68	Open To Flow (1)
30	29.06	99.36	Shut-In(1)
92	788.24	100.32	End Shut-In(1)
93	31.95	100.08	Open To Flow (2)
122	35.51	100.75	Shut-In(2)
184	769.42	101.59	End Shut-In(2)
185	1495.04	101.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud W/Oil Specks-1%O-99%M	0.22

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36146      **DST#: 1**  
Test Start: 2009.06.20 @ 11:14:55

**Tool Information**

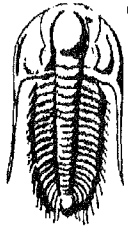
Drill Pipe:	Length: 3136.00 ft	Diameter: 3.80 inches	Volume: 43.99 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 44.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3183.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	63.00 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			3161.00	
Shut In Tool	5.00			3166.00	
Hydraulic tool	5.00			3171.00	
Safety Joint	2.00			3173.00	
Packer	5.00			3178.00	23.00      Bottom Of Top Packer
Packer	5.00			3183.00	
Stubb	1.00			3184.00	
Perforations	6.00			3190.00	
Recorder	0.00	8360	Inside	3190.00	
Recorder	0.00	6755	Inside	3190.00	
Perforations	30.00			3220.00	
Bullnose	3.00			3223.00	40.00      Bottom Packers & Anchor

**Total Tool Length: 63.00**

KANSAS CORPORATION COMMISSION  
**JUL 24 2009**  
**RECEIVED**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36146      **DST#: 1**  
Test Start: 2009.06.20 @ 11:14:55

## 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: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.75 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

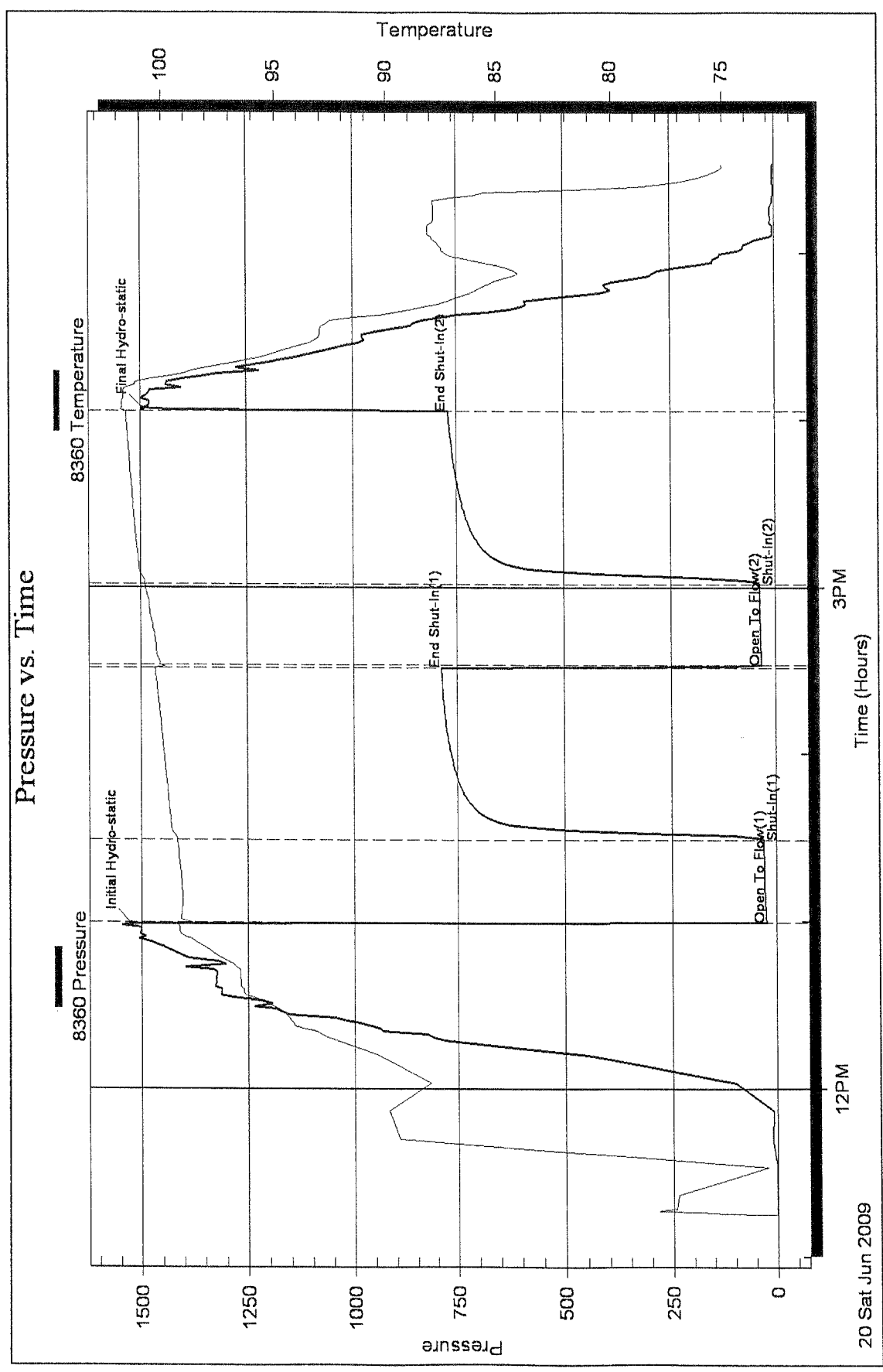
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	Mud W/Oil Specks-1%O-99%M	0.218

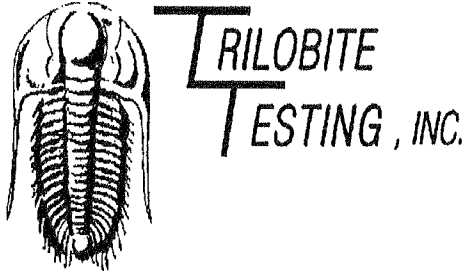
Total Length: 35.00 ft      Total Volume: 0.218 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time



KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.21 @ 02:15:15

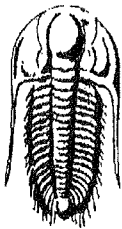
End Date: 2009.06.21 @ 09:31:45

Job Ticket #: 36147                      DST #: 2

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 36147      DST#: 2

Test Start: 2009.06.21 @ 02:15:15

## GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock:                      ft (KB)

Time Tool Opened: 03:50:15

Time Test Ended: 09:31:45

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3257.00 ft (KB) To 3292.00 ft (KB) (TVD)**

Total Depth: 3292.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2065.00 ft (KB)

2060.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8360**      Inside

Press@RunDepth: 120.94 psig @ 3259.00 ft (KB)

Start Date: 2009.06.21

End Date:

2009.06.21

Capacity: 7000.00 psig

Last Calib.: 2009.06.21

Start Time: 02:15:17

End Time:

09:31:45

Time On Btm: 2009.06.21 @ 03:49:45

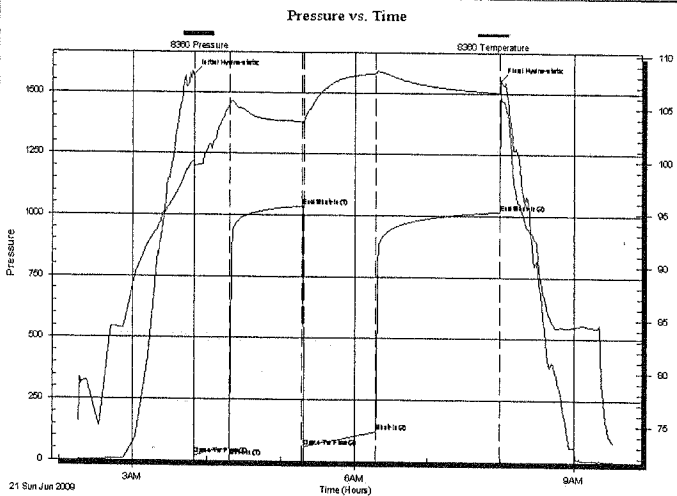
Time Off Btm: 2009.06.21 @ 07:59:45

TEST COMMENT: IFP-Fair Blow ,Built to 7-1/2"

ISI-Dead

FFP-Fair Blow ,Built to 8"

FSI-Dead



## PRESSURE SUMMARY

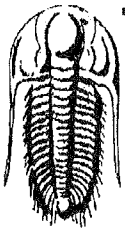
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1571.75	100.01	Initial Hydro-static
1	20.86	99.53	Open To Flow (1)
29	49.25	105.20	Shut-In(1)
88	1036.46	103.71	End Shut-In(1)
89	58.64	103.53	Open To Flow (2)
148	120.94	108.30	Shut-In(2)
250	1016.58	106.48	End Shut-In(2)
250	1549.51	106.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
220.00	Muddy Water-80%W-20%M	2.81
4.00	Free Oil	0.06

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36147      **DST#: 2**  
Test Start: 2009.06.21 @ 02:15:15

**Tool Information**

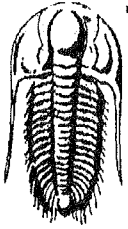
Drill Pipe:	Length: 3234.00 ft	Diameter: 3.80 inches	Volume: 45.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 45.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3257.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	56.00 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			3237.00	
Shut In Tool	5.00			3242.00	
Hydraulic tool	5.00			3247.00	
Packer	5.00			3252.00	21.00      Bottom Of Top Packer
Packer	5.00			3257.00	
Stubb	1.00			3258.00	
Perforations	1.00			3259.00	
Recorder	0.00	8360	Inside	3259.00	
Recorder	0.00	6755	Inside	3259.00	
Perforations	30.00			3289.00	
Bullnose	3.00			3292.00	35.00      Bottom Packers & Anchor

**Total Tool Length: 56.00**

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water

**28 10s 18w Rooks KS**

Suite 300

Job Ticket: 36147

**DST#: 2**

Wichita, Ks. 67202

ATTN: Rocky Milford

Test Start: 2009.06.21 @ 02:15:15

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

25 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

84000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.04 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
220.00	Muddy Water-80%W-20%M	2.813
4.00	Free Oil	0.056

Total Length: 224.00 ft      Total Volume: 2.869 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

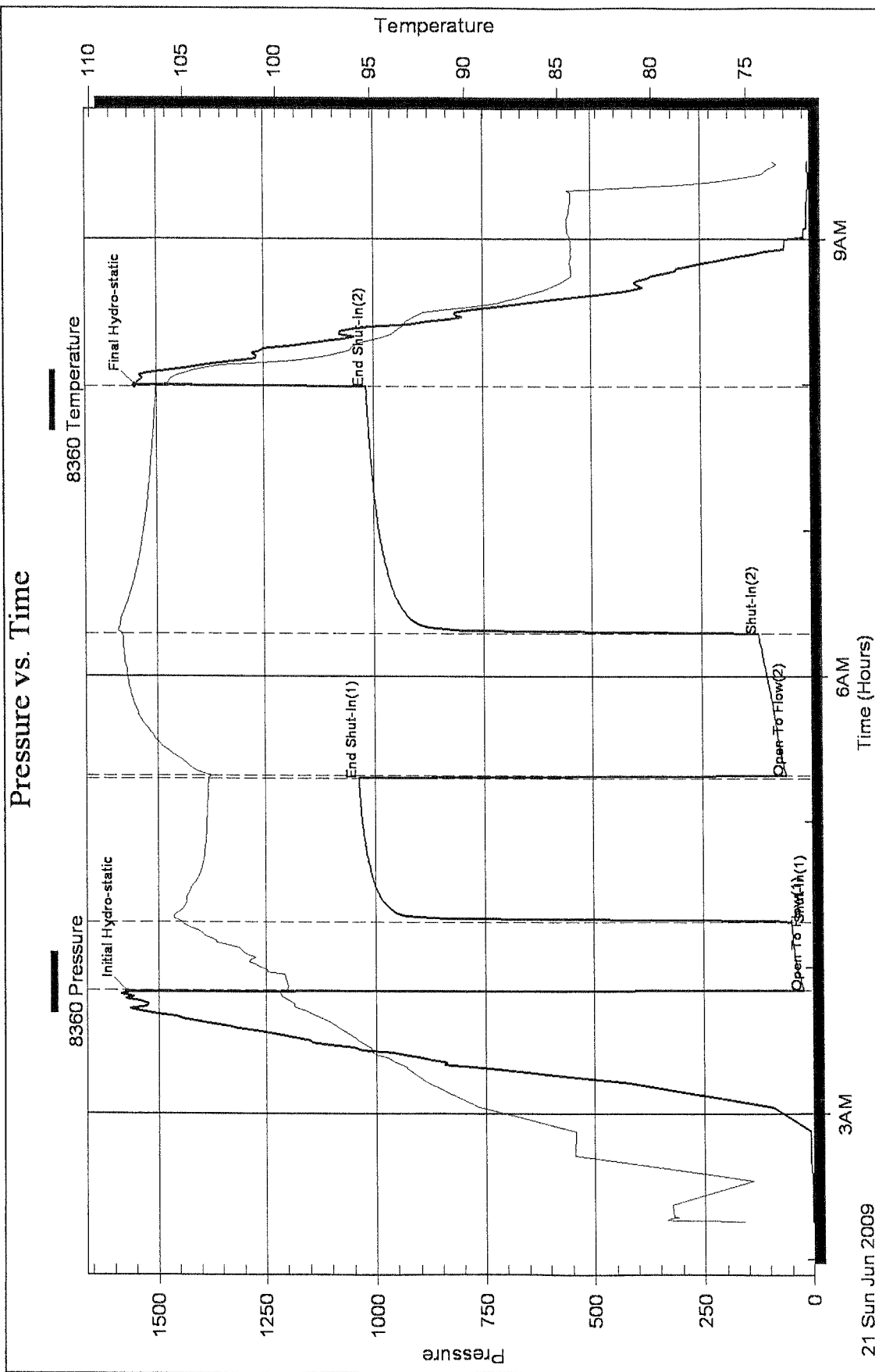
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .095 @ 76F = 84000ppm chlorides

### Pressure vs. Time



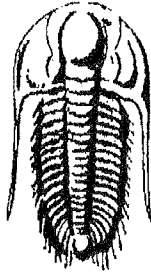
21 Sun Jun 2009

KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED

Ref. No: 36147

Trilobite Testing, Inc



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.21 @ 21:45:06

End Date: 2009.06.22 @ 06:25:36

Job Ticket #: 36149                      DST #: 3

KANSAS CORPORATION COMMISSION

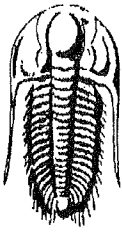
**JUL 24 2009**

**RECEIVED**

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.  
 250 N Water  
 Suite 300  
 Wichita, Ks. 67202  
 ATTN: Rocky Milford

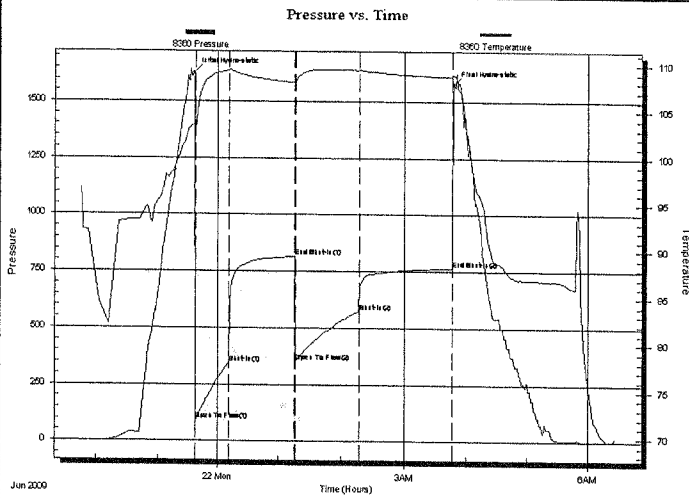
**Collins #1-28**  
**28 10s 18w Rooks KS**  
 Job Ticket: 36149      **DST#: 3**  
 Test Start: 2009.06.21 @ 21:45:06

## GENERAL INFORMATION:

Formation: "A-F"  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 23:37:36  
 Time Test Ended: 06:25:36  
 Interval: 3288.00 ft (KB) To 3392.00 ft (KB) (TVD)  
 Total Depth: 3392.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches      Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 32  
 Reference Elevations: 2065.00 ft (KB)  
    2060.00 ft (CF)  
    KB to GR/CF: 5.00 ft

**Serial #: 8360      Inside**  
 Press@RunDepth: 572.74 psig @ 3295.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2009.06.21      End Date: 2009.06.22      Last Calib.: 2009.06.22  
 Start Time: 21:45:08      End Time: 06:25:36      Time On Btm: 2009.06.21 @ 23:37:06  
                   Time Off Btm: 2009.06.22 @ 03:48:06

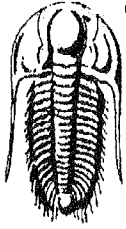
**TEST COMMENT:** IFF-Strong Blow ,BOB in 3-1/2 Min  
 IS-Dead  
 FFP-Good Blow ,BOB in 6 Min.  
 FSI-Surface Blow back for 20 Min



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1625.91	103.67	Initial Hydro-static
1	88.93	102.96	Open To Flow (1)
34	343.74	109.36	Shut-In(1)
99	814.77	108.12	End Shut-In(1)
99	352.36	107.89	Open To Flow (2)
160	572.74	109.42	Shut-In(2)
249	765.25	108.74	End Shut-In(2)
251	1576.80	108.83	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
480.00	MW-95%W-5%M	6.46
180.00	GVSOVMW-10%G-5%O-65%W-20%M	2.52
360.00	GOVMW-20%G-15%O-40%W-25%M	5.05
35.00	GOCMW-10%G-20%O-40%W-30%M	0.49
15.00	WCO-70%O-30%W	0.21

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36149      **DST#: 3**  
Test Start: 2009.06.21 @ 21:45:06

**Tool Information**

Drill Pipe:	Length: 3263.00 ft	Diameter: 3.80 inches	Volume: 45.77 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	48000.00 lb
			<u>Total Volume: 45.92 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3288.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	104.00 ft				
Tool Length:	125.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

**Tool Description**

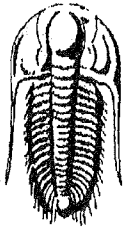
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3268.00	
Shut In Tool	5.00			3273.00	
Hydraulic tool	5.00			3278.00	
Packer	5.00			3283.00	21.00      Bottom Of Top Packer
Packer	5.00			3288.00	
Stubb	1.00			3289.00	
Perforations	6.00			3295.00	
Recorder	0.00	8360	Inside	3295.00	
Change Over Sub	1.00			3296.00	
Recorder	0.00	6755	Inside	3296.00	
Blank Spacing	62.00			3358.00	
Change Over Sub	1.00			3359.00	
Perforations	30.00			3389.00	
Bullnose	3.00			3392.00	104.00      Bottom Packers & Anchor

**Total Tool Length: 125.00**

KANSAS CORPORATION COMMISSION

JUL 24 2009

RECEIVED



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36149      **DST#: 3**  
Test Start: 2009.06.21 @ 21:45:06

## 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:	84000 ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.75 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
480.00	MW-95%W-5%M	6.460
180.00	GV/SOCMW-10%G-5%O-65%W-20%M	2.525
360.00	GOVMW-20%G-15%O-40%W-25%M	5.050
35.00	GOCMW-10%G-20%O-40%W-30%M	0.491
15.00	WCO-70%O-30%W	0.210

Total Length: 1070.00 ft      Total Volume: 14.736 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: RW .105@68F = 84000ppm chlorides

Serial #: 8360

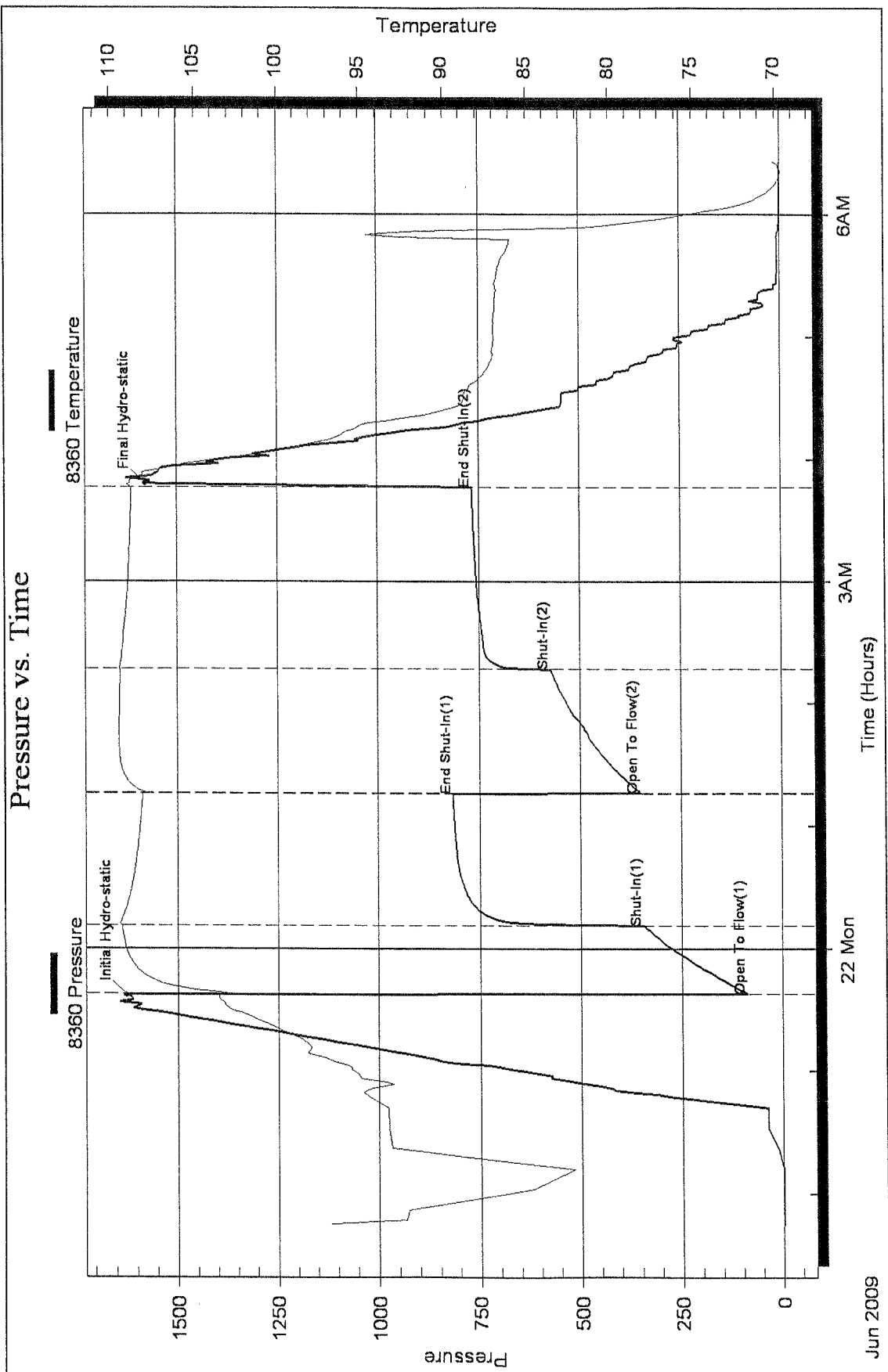
Inside

Murfin Drilling Company, Inc.

28 10s 18w Rooks KS

DST Test Number: 3

### Pressure vs. Time

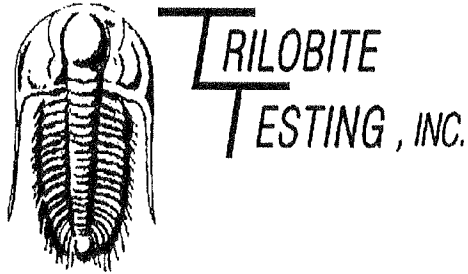


KANSAS CORPORATION COMMISSION

**JUL 24 2009**  
**RECEIVED**

Ref. No: 36149

Trilobite Testing, Inc



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

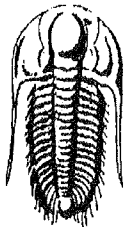
Start Date: 2009.06.22 @ 07:16:09

End Date: 2009.06.22 @ 14:50:39

Job Ticket #: 36150                      DST #: 4

KANSAS CORPORATION COMMISSION  
JUL 24 2009  
RECEIVED

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**Collins #1-28**

**28 10s 18w Rooks KS**

Job Ticket: 36150      **DST#: 4**

Test Start: 2009.06.22 @ 07:16:09

## GENERAL INFORMATION:

Formation: "E-F"

Deviated: No      Whipstock:      ft (KB)

Time Tool Opened: 08:47:39

Time Test Ended: 14:50:39

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

**Interval: 3362.00 ft (KB) To 3392.00 ft (KB) (TVD)**

Total Depth: 3392.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches      Hole Condition: Good

Reference Elevations: 2065.00 ft (KB)

2060.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8360**

**Inside**

Press@RunDepth: 504.47 psig @ 3369.00 ft (KB)

Start Date: 2009.06.22      End Date: 2009.06.22

Start Time: 07:16:11      End Time: 14:50:39

Capacity: 7000.00 psig

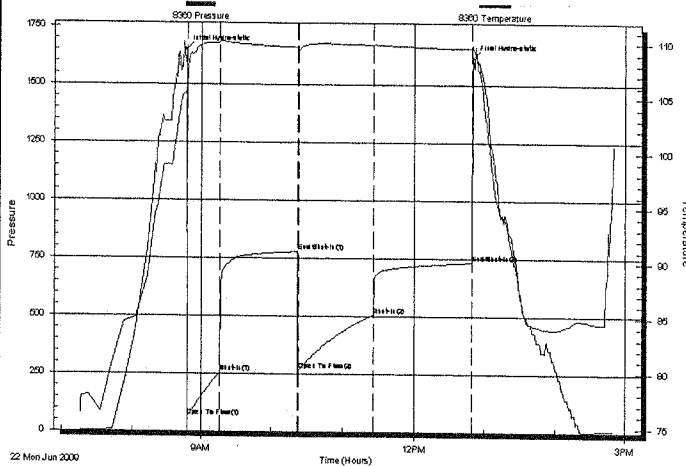
Last Calib.: 2009.06.22

Time On Btm: 2009.06.22 @ 08:46:39

Time Off Btm: 2009.06.22 @ 12:50:09

**TEST COMMENT:** IFF-Slid Tool 6' on Open, Bled Off Blow, Built to BOB in 4-1/2 Min.  
ISI-Dead  
FFP-Strong Blow, BOB in 5 Min.  
FSI-Blow back Built to 5/8"

Pressure vs. Time



## PRESSURE SUMMARY

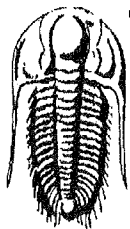
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.25	105.61	Initial Hydro-static
1	60.02	105.48	Open To Flow (1)
29	253.94	110.08	Shut-In (1)
96	777.06	109.64	End Shut-In (1)
96	265.41	109.40	Open To Flow (2)
159	504.47	109.88	Shut-In (2)
243	731.44	109.55	End Shut-In (2)
244	1613.45	109.64	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
425.00	Muddy Water-95%W-5%M	5.69
300.00	VSOCMW-3%O-90%W-7%M	4.21
240.00	GassyOCMW-20%G-16%O-54%W-10%M	3.37
25.00	Free Oil	0.35
0.00	1380' Gas In Pipe	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36150      **DST#: 4**  
Test Start: 2009.06.22 @ 07:16:09

**Tool Information**

Drill Pipe:	Length: 3323.00 ft	Diameter: 3.80 inches	Volume: 46.61 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 46.76 bbl		Tool Chased 6.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3362.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

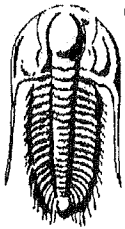
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3340.00	
Shut In Tool	5.00			3345.00	
Hydraulic tool	5.00			3350.00	
Safety Joint	2.00			3352.00	
Packer	5.00			3357.00	23.00      Bottom Of Top Packer
Packer	5.00			3362.00	
Stubb	1.00			3363.00	
Perforations	6.00			3369.00	
Recorder	0.00	8360	Inside	3369.00	
Recorder	0.00	6755	Inside	3369.00	
Perforations	20.00			3389.00	
Bullnose	3.00			3392.00	30.00      Bottom Packers & Anchor

**Total Tool Length: 53.00**

KANSAS CORPORATION COMM

JUL 24 2009

**RECEIVED**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 36150      **DST#: 4**  
Test Start: 2009.06.22 @ 07:16:09

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 32 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 91000 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.95 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3100.00 ppm		
Filter Cake: inches		

## Recovery Information

Recovery Table

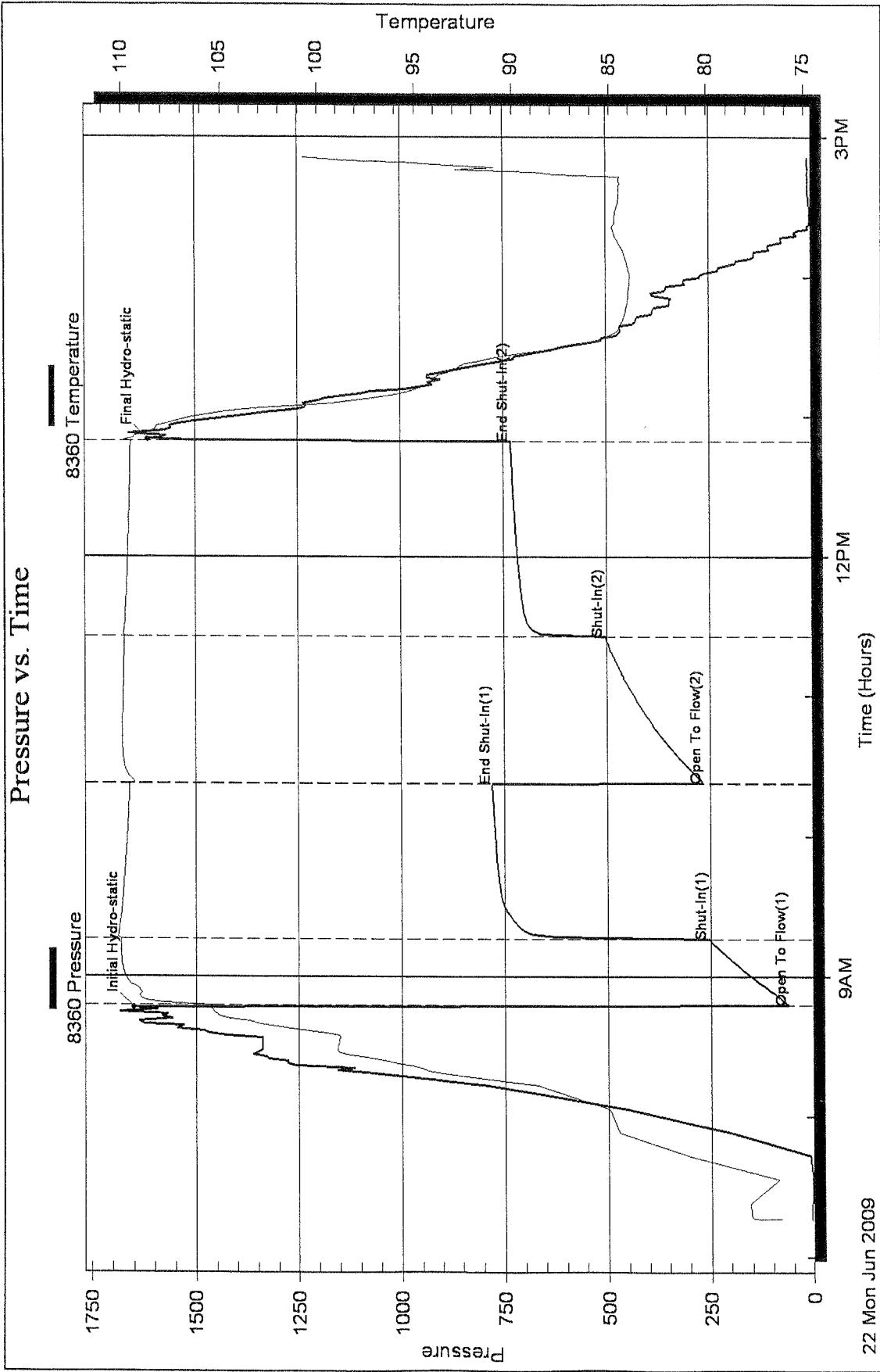
Length ft	Description	Volume bbl
425.00	Muddy Water-95%W-5%M	5.688
300.00	VSOCMW-3%O-90%W-7%M	4.208
240.00	GassyOCMW-20%G-16%O-54%W-10%M	3.367
25.00	Free Oil	0.351
0.00	1380' Gas In Pipe	0.000

Total Length: 990.00 ft      Total Volume: 13.614 bbl

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

Laboratory Name:      Laboratory Location:

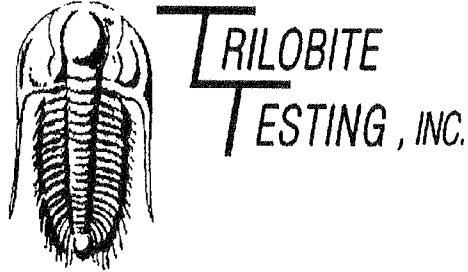
Recovery Comments: RW .061 @ 104F = 91000 ppm chlorides



KANSAS CORPORATION COMMISSION

JUL 24 2009

RECEIVED



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.23 @ 00:21:53

End Date: 2009.06.23 @ 06:25:23

Job Ticket #: 17185                      DST #: 5

KANSAS CORPORATION COMMISSION

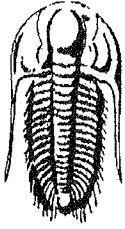
JUL 24 2009

RECEIVED

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

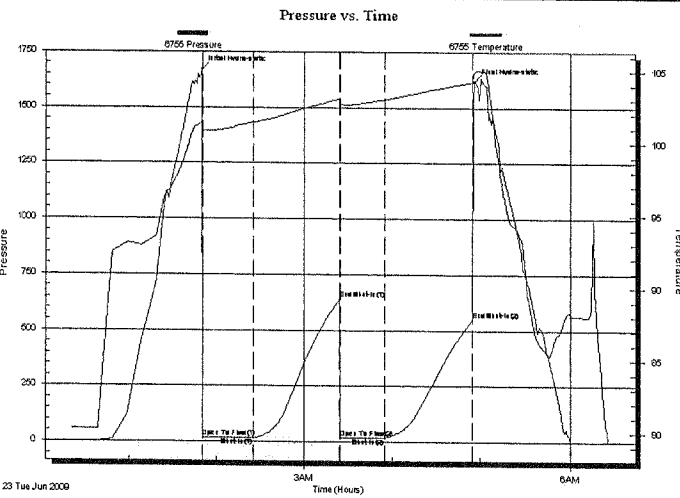
Job Ticket: 17185      **DST#: 5**  
Test Start: 2009.06.23 @ 00:21:53

## GENERAL INFORMATION:

Formation: "H-I"  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 01:50:23  
Time Test Ended: 06:25:23  
Interval: 3417.00 ft (KB) To 3464.00 ft (KB) (TVD)  
Total Depth: 3464.00 ft (KB) (TVD)  
Hole Diameter: 7.80 inches      Hole Condition: Good  
Test Type: Conventional Bottom Hole  
Tester: Jason McLemore  
Unit No: 32  
Reference Elevations: 2065.00 ft (KB)  
2060.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 6755      Inside**  
Press@RunDepth: 18.29 psig @ 3425.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2009.06.23      End Date: 2009.06.23      Last Calib.: 2009.06.23  
Start Time: 00:21:53      End Time: 06:25:21      Time On Btm: 2009.06.23 @ 01:49:51  
Time Off Btm: 2009.06.23 @ 04:55:51

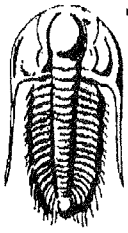
**TEST COMMENT:** IFP-Weak Blow, Died in 10 Mn.  
ISI-Dead  
FFP-Dead  
FSI-Dead



PRESSURE SUMMARY			
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1667.31	101.47	Initial Hydro-static
1	19.31	100.87	Open To Flow (1)
36	18.25	101.44	Shut-In(1)
95	639.58	103.07	End Shut-In(1)
95	18.39	102.64	Open To Flow (2)
125	18.29	103.01	Shut-In(2)
185	550.17	104.24	End Shut-In(2)
186	1616.62	104.86	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
1.00	Drilling Mud	0.00

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 17185      **DST#: 5**  
Test Start: 2009.06.23 @ 00:21:53

**Tool Information**

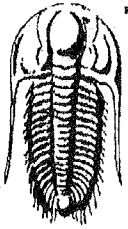
Drill Pipe:	Length: 3386.00 ft	Diameter: 3.80 inches	Volume: 47.50 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 47.65 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3417.00 ft			Final 42000.00 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
Change Over Sub	1.00			3397.00	
Shut In Tool	5.00			3402.00	
Hydraulic tool	5.00			3407.00	
Packer	5.00			3412.00	21.00 Bottom Of Top Packer
Packer	5.00			3417.00	
Stubb	1.00			3418.00	
Perforations	6.00			3424.00	
Recorder	0.00	8360	Inside	3424.00	
Change Over Sub	1.00			3425.00	
Recorder	0.00	6755	Inside	3425.00	
Blank Spacing	32.00			3457.00	
Change Over Sub	1.00			3458.00	
Perforations	3.00			3461.00	
Bullnose	3.00			3464.00	47.00 Bottom Packers & Anchor

**Total Tool Length: 68.00**

KANSAS CORPORATION COMMISSION  
**JUL 24 2009**  
**RECEIVED**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water

**28 10s 18w Rooks KS**

Suite 300

Job Ticket: 17185

**DST#: 5**

Wichita, Ks. 67202

Test Start: 2009.06.23 @ 00:21:53

ATTN: Rocky Milford

## 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: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.74 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Drilling Mud	0.005

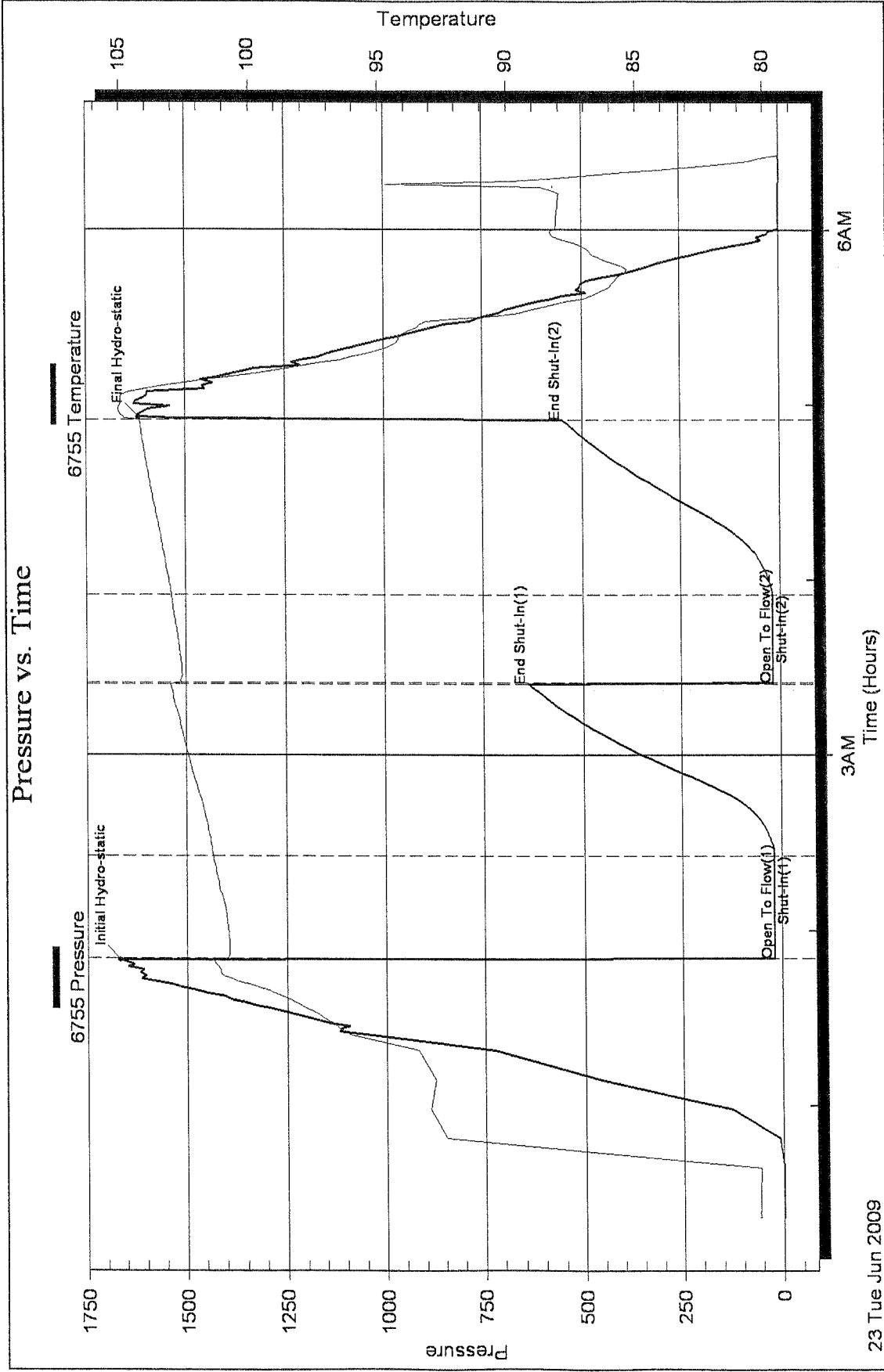
Total Length: 1.00 ft      Total Volume: 0.005 bbl

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

Laboratory Name:      Laboratory Location:

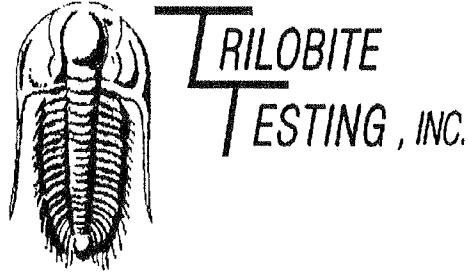
Recovery Comments:

### Pressure vs. Time



KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.23 @ 14:28:59

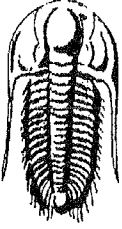
End Date: 2009.06.23 @ 20:19:59

Job Ticket #: 17186                      DST #: 6

KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 17186      **DST#: 6**

Test Start: 2009.06.23 @ 14:28:59

## GENERAL INFORMATION:

Formation: "J-K"

Deviated: No      Whipstock:      ft (KB)

Time Tool Opened: 15:46:59

Time Test Ended: 20:19:59

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: 3463.00 ft (KB) To 3508.00 ft (KB) (TVD)

Total Depth: 3508.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches      Hole Condition: Good

Reference Elevations: 2065.00 ft (KB)

2060.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8360**

Inside

Press@RunDepth: 26.00 psig @ 3470.00 ft (KB)

Start Date: 2009.06.23

End Date:

2009.06.23

Capacity: 7000.00 psig

Last Calib.: 2009.06.23

Start Time: 14:29:01

End Time:

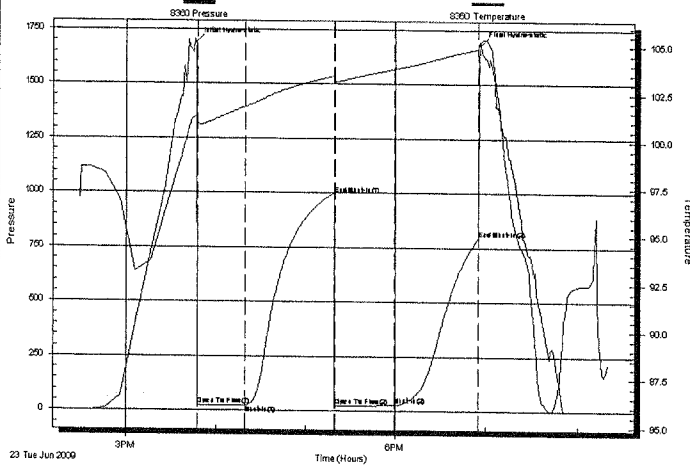
20:19:59

Time On Btm: 2009.06.23 @ 15:46:29

Time Off Btm: 2009.06.23 @ 18:56:29

**TEST COMMENT:** IFP-Surge on Open, Then Dead  
ISL-Dead  
FFP-Dead, Bucket on Slight Vacuum, (Warm Pipe)  
FSI-Dead

Pressure vs. Time



## PRESSURE SUMMARY

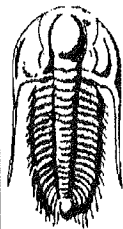
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1691.72	101.38	Initial Hydro-static
1	22.23	100.87	Open To Flow (1)
33	23.89	101.81	Shut-In(1)
93	993.52	103.43	End Shut-In(1)
93	25.06	103.12	Open To Flow (2)
133	26.00	103.81	Shut-In(2)
189	795.07	104.88	End Shut-In(2)
190	1684.32	105.26	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	VSOCM-2%O-98%M	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 17186      **DST#: 6**  
Test Start: 2009.06.23 @ 14:28:59

**Tool Information**

Drill Pipe:	Length: 3419.00 ft	Diameter: 3.80 inches	Volume: 47.96 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 48.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3463.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

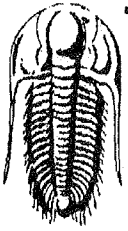
Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3443.00	
Shut In Tool	5.00			3448.00	
Hydraulic tool	5.00			3453.00	
Packer	5.00			3458.00	21.00 Bottom Of Top Packer
Packer	5.00			3463.00	
Stubb	1.00			3464.00	
Perforations	6.00			3470.00	
Recorder	0.00	8360	Inside	3470.00	
Change Over Sub	1.00			3471.00	
Recorder	0.00	6755	Inside	3471.00	
Blank Spacing	30.00			3501.00	
Change Over Sub	1.00			3502.00	
Perforations	3.00			3505.00	
Bullnose	3.00			3508.00	45.00 Bottom Packers & Anchor

**Total Tool Length: 66.00**

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 17186      **DST#: 6**  
Test Start: 2009.06.23 @ 14:28:59

## 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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

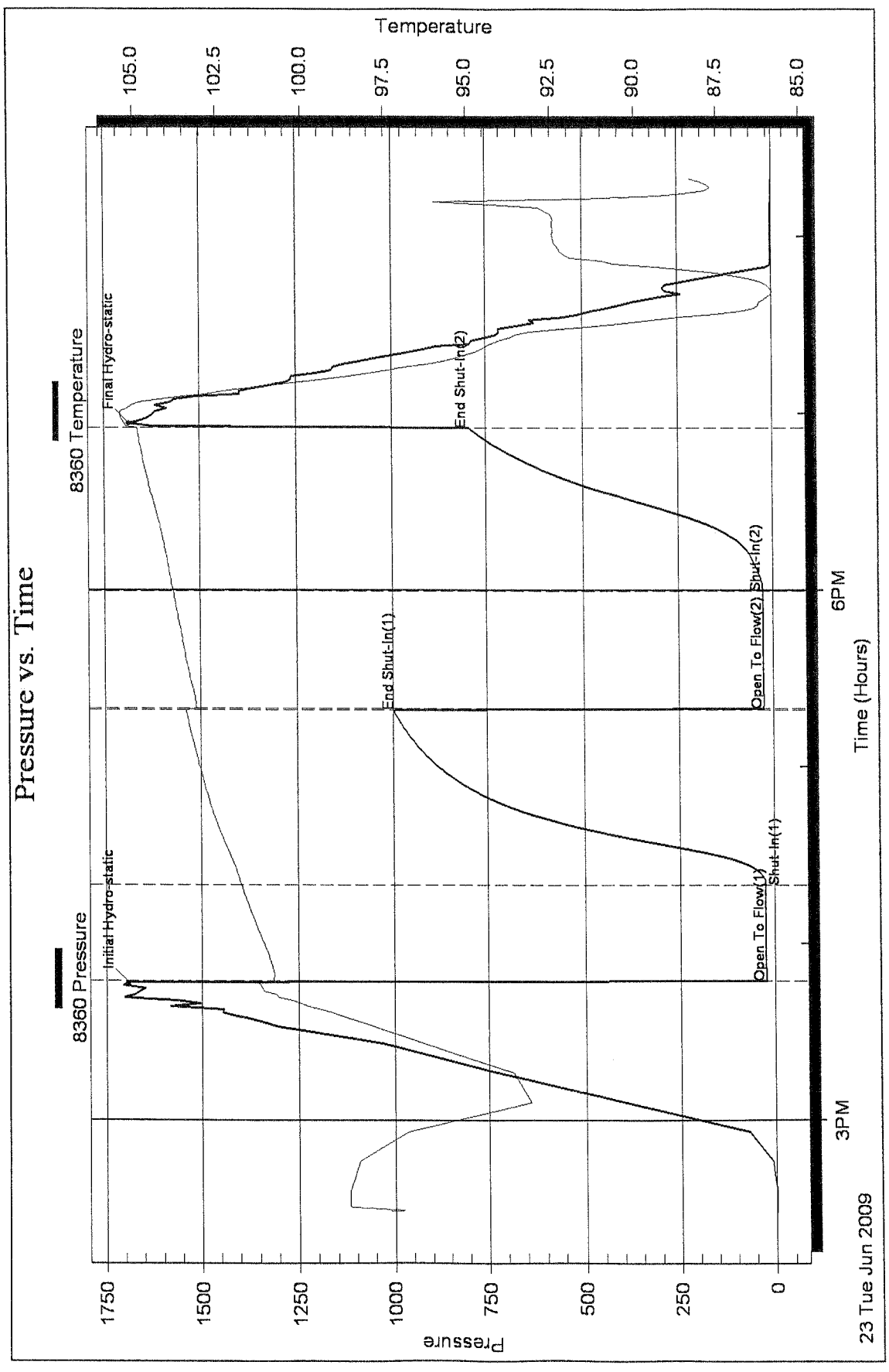
Length ft	Description	Volume bbl
3.00	VSOCM-2%O-98%M	0.015

Total Length: 3.00 ft      Total Volume: 0.015 bbl

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

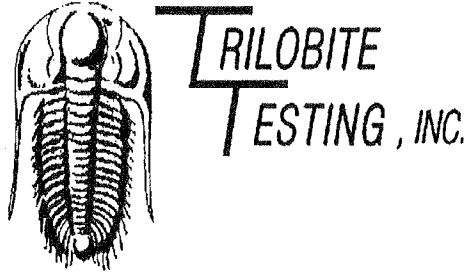
Laboratory Name:      Laboratory Location:

Recovery Comments:



KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.24 @ 01:53:08

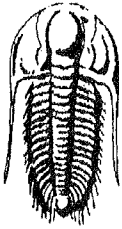
End Date: 2009.06.24 @ 08:05:38

Job Ticket #: 17187                      DST #: 7

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 17187      **DST#: 7**

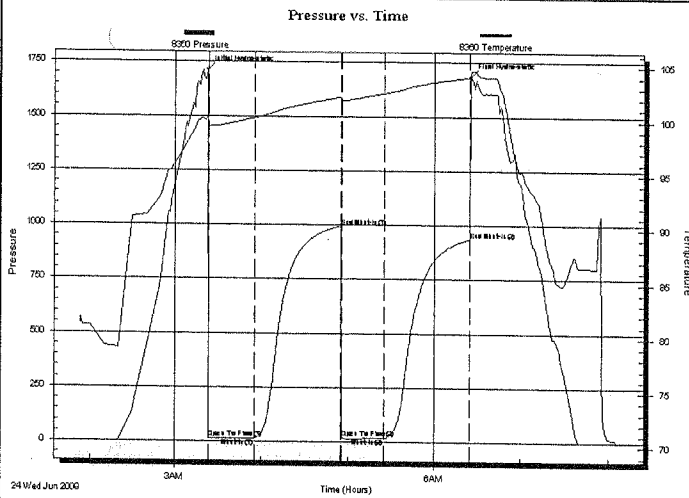
Test Start: 2009.06.24 @ 01:53:08

## GENERAL INFORMATION:

Formation: "L"  
 Deviated: No      Whipstock:      ft (KB)  
 Test Type: Conventional Bottom Hole  
 Time Tool Opened: 03:23:38      Tester: Jason McLemore  
 Time Test Ended: 08:05:38      Unit No: 32  
 Interval: 3504.00 ft (KB) To 3524.00 ft (KB) (TVD)      Reference Elevations: 2065.00 ft (KB)  
 Total Depth: 3524.00 ft (KB) (TVD)      2060.00 ft (CF)  
 Hole Diameter: 7.80 inches      Hole Condition: Good      KB to GR/CF: 5.00 ft

**Serial #: 8360      Inside**  
 Press@RunDepth: 17.03 psig @ 3506.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2009.06.24      End Date: 2009.06.24      Last Calib.: 2009.06.24  
 Start Time: 01:53:10      End Time: 08:05:38      Time On Btm: 2009.06.24 @ 03:23:08  
 Time Off Btm: 2009.06.24 @ 06:24:38

**TEST COMMENT:** IFP-Surge On Open, Dead After Surge  
 ISI-Dead  
 FFP-Dead  
 FSI-Dead



## PRESSURE SUMMARY

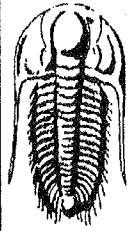
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1712.21	100.29	Initial Hydro-static
1	15.99	99.45	Open To Flow (1)
33	15.28	100.28	Shut-In(1)
92	993.98	102.23	End Shut-In(1)
92	17.23	101.71	Open To Flow (2)
122	17.03	102.57	Shut-In(2)
181	935.42	104.07	End Shut-In(2)
182	1684.60	104.33	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	Free Oil	0.01
1.00	Mud	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 17187

**DST#: 7**

Test Start: 2009.06.24 @ 01:53:08

**Tool Information**

Drill Pipe:	Length: 3480.00 ft	Diameter: 3.80 inches	Volume: 48.82 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
			<b>Total Volume: 48.97 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3504.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	41.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

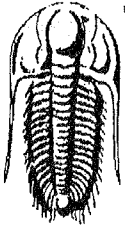
Tool Comments:

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3484.00	
Shut In Tool	5.00			3489.00	
Hydraulic tool	5.00			3494.00	
Packer	5.00			3499.00	21.00 Bottom Of Top Packer
Packer	5.00			3504.00	
Stubb	1.00			3505.00	
Perforations	1.00			3506.00	
Recorder	0.00	8360	Inside	3506.00	
Recorder	0.00	6755	Inside	3506.00	
Perforations	15.00			3521.00	
Bullnose	3.00			3524.00	20.00 Bottom Packers & Anchor

**Total Tool Length: 41.00**

KANSAS CORPORATION COMMISSION  
JUL 24 2009  
RECEIVED



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 17187      **DST#: 7**  
Test Start: 2009.06.24 @ 01:53:08

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	30 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Free Oil	0.010
1.00	Mud	0.005

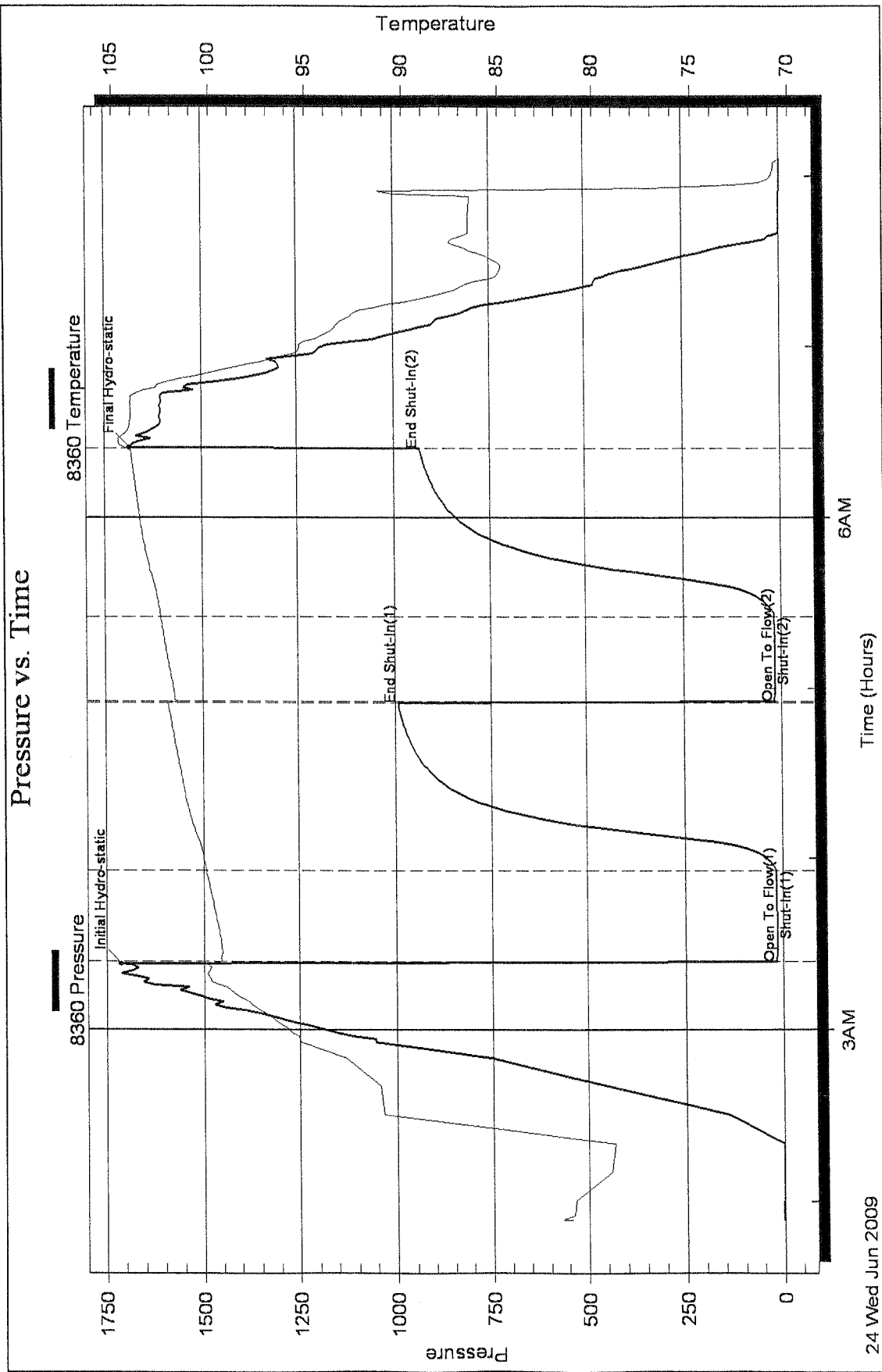
Total Length: 3.00 ft      Total Volume: 0.015 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time

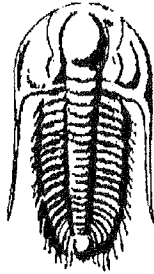


KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED

Ref. No: 17187

Triobite Testing, Inc



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.24 @ 20:46:43

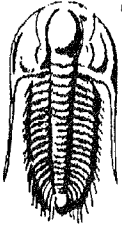
End Date: 2009.06.25 @ 00:01:13

Job Ticket #: 17188                      DST #: 8

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 17188      **DST#: 8**

Test Start: 2009.06.24 @ 20:46:43

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No      Whipstock:      ft (KB)

Time Tool Opened:

Time Test Ended: 00:01:13

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3615.00 ft (KB) To 3662.00 ft (KB) (TVD)**

Total Depth: 3662.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches      Hole Condition: Good

Reference Elevations: 2065.00 ft (KB)

2060.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8360      Inside**

Press@RunDepth:      psig @      3622.00 ft (KB)

Start Date: 2009.06.24

End Date:

2009.06.25

Capacity: 7000.00 psig

Last Calib.: 2009.06.25

Start Time: 20:46:45

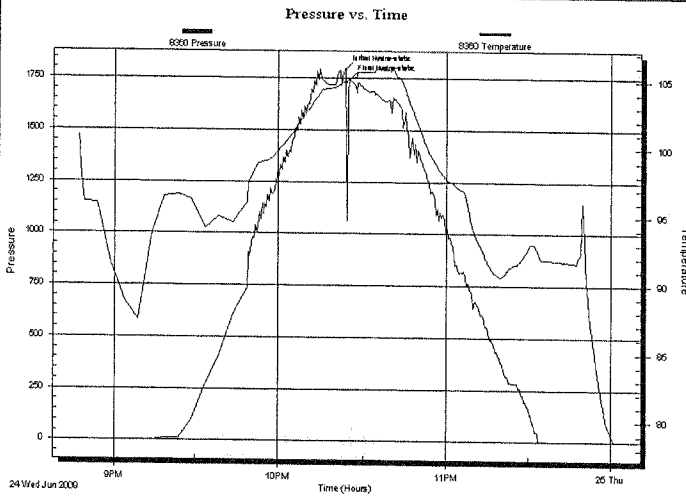
End Time:

00:01:13

Time On Btm: 2009.06.24 @ 22:23:43

Time Off Btm: 2009.06.24 @ 22:25:13

TEST COMMENT: IFP-Packer Failure, Full Tool



## PRESSURE SUMMARY

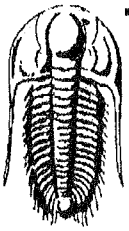
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1790.97	104.97	Initial Hydro-static
2	1745.04	105.16	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
100.00	Drilling Mud	1.13

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 17188      **DST#: 8**  
Test Start: 2009.06.24 @ 20:46:43

**Tool Information**

Drill Pipe:	Length: 3576.00 ft	Diameter: 3.80 inches	Volume: 50.16 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: 30000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 43000.00 lb
			<u>Total Volume: 50.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3615.00 ft			Final 43000.00 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		

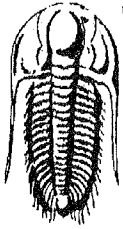
Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3595.00	
Shut In Tool	5.00			3600.00	
Hydraulic tool	5.00			3605.00	
Packer	5.00			3610.00	21.00      Bottom Of Top Packer
Packer	5.00			3615.00	
Stubb	1.00			3616.00	
Perforations	6.00			3622.00	
Recorder	0.00	8360	Inside	3622.00	
Change Over Sub	1.00			3623.00	
Recorder	0.00	6755	Inside	3623.00	
Blank Spacing	31.00			3654.00	
Change Over Sub	1.00			3655.00	
Perforations	4.00			3659.00	
Bullnose	3.00			3662.00	47.00      Bottom Packers & Anchor

**Total Tool Length: 68.00**

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water

**28 10s 18w Rooks KS**

Suite 300

Job Ticket: 17188

**DST#: 8**

Wichita, Ks. 67202

Test Start: 2009.06.24 @ 20:46:43

ATTN: Rocky Milford

## 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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3300.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
100.00	Drilling Mud	1.129

Total Length: 100.00 ft      Total Volume: 1.129 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

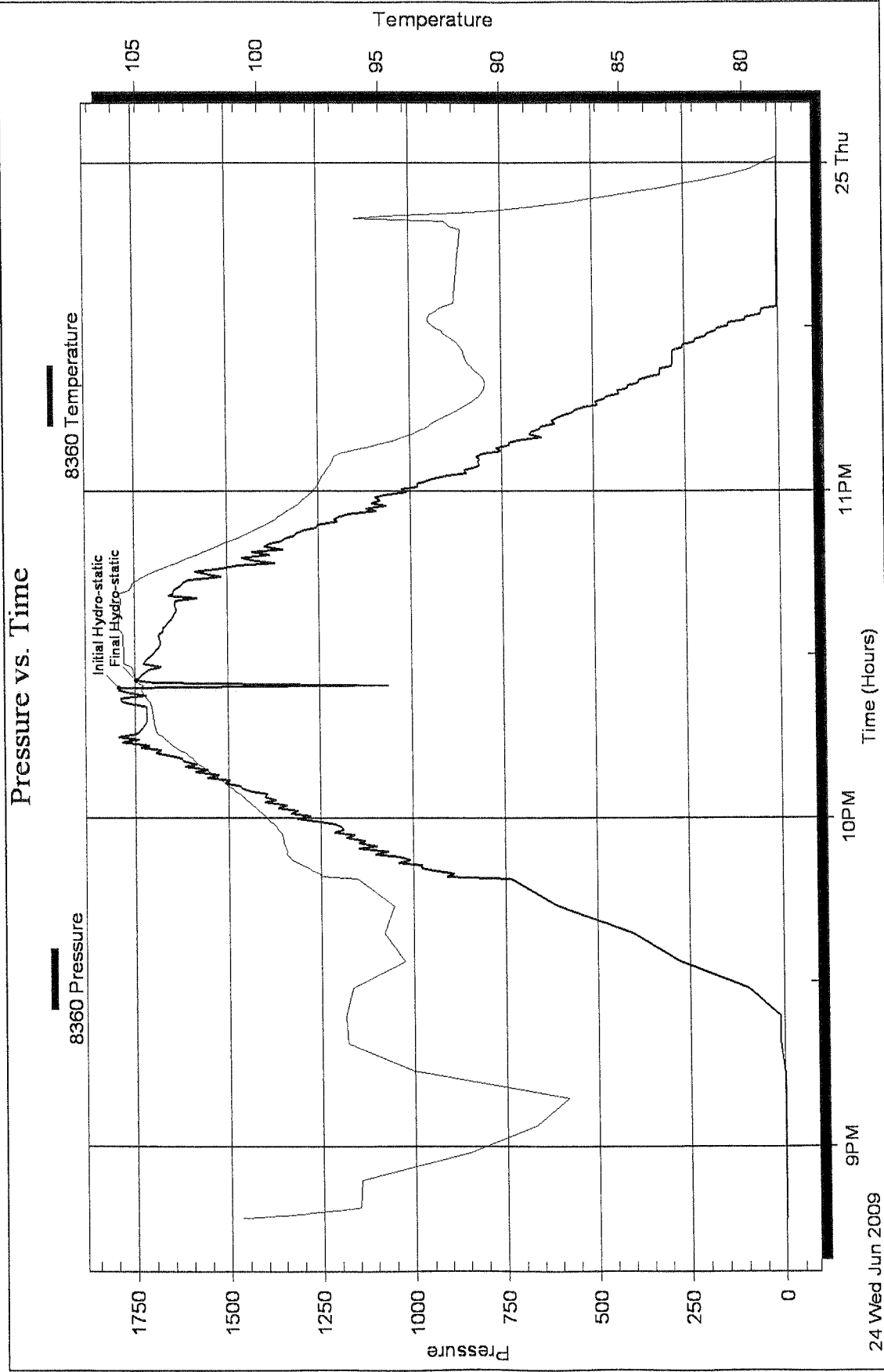
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

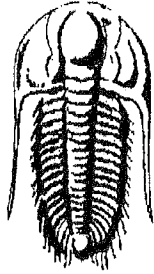
### Pressure vs. Time



KANSAS CORPORATION COMMISSION

JUL 24 2009

RECEIVED



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N Water  
Suite 300  
Wichita, Ks. 67202

ATTN: Rocky Milford

**28 10s 18w Rooks KS**

**Collins #1-28**

Start Date: 2009.06.25 @ 00:15:22

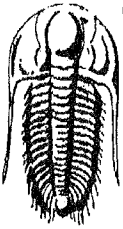
End Date: 2009.06.25 @ 07:07:22

Job Ticket #: 17189                      DST #: 9

KANSAS CORPORATION COMMISSION

**JUL 24 2009  
RECEIVED**

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 17189      **DST#: 9**

Test Start: 2009.06.25 @ 00:15:22

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:46:52

Time Test Ended: 07:07:22

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3657.00 ft (KB) To 3662.00 ft (KB) (TVD)**

Total Depth: 3662.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2065.00 ft (KB)

2060.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8360 Inside**

Press@RunDepth: 83.88 psig @ 3659.00 ft (KB)

Start Date: 2009.06.25

End Date:

2009.06.25

Capacity: 7000.00 psig

Last Calib.: 2009.06.25

Start Time: 00:15:24

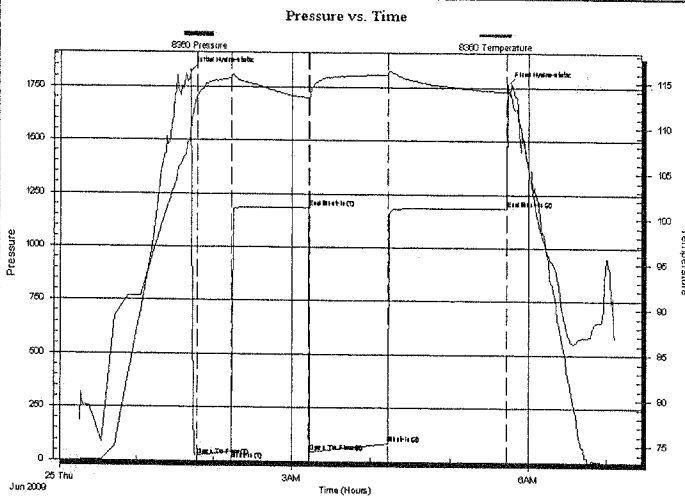
End Time:

07:07:22

Time On Btm: 2009.06.25 @ 01:41:52

Time Off Btm: 2009.06.25 @ 05:43:52

TEST COMMENT: IFP-Fair Blow ,Built to 5"  
ISI-Dead  
FFP-Fair Blow ,Built to 4"  
FSI-Dead



## PRESSURE SUMMARY

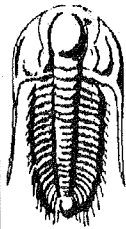
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1821.68	109.11	Initial Hydro-static
5	23.31	113.39	Open To Flow (1)
32	43.16	115.51	Shut-In(1)
91	1186.19	113.31	End Shut-In(1)
92	44.10	113.02	Open To Flow (2)
151	83.88	115.91	Shut-In(2)
242	1185.79	114.04	End Shut-In(2)
242	1760.70	114.17	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
151.00	Muddy Water	1.84

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**

Job Ticket: 17189      **DST#: 9**

Test Start: 2009.06.25 @ 00:15:22

**Tool Information**

Drill Pipe:	Length: 3635.00 ft	Diameter: 3.80 inches	Volume: 50.99 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 51.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3657.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	5.00 ft			
Tool Length:	28.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

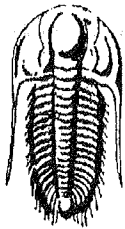
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3635.00	
Shut In Tool	5.00			3640.00	
Hydraulic tool	5.00			3645.00	
Safety Joint	2.00			3647.00	
Packer	5.00			3652.00	23.00      Bottom Of Top Packer
Packer	5.00			3657.00	
Stubb	1.00			3658.00	
Perforations	1.00			3659.00	
Recorder	0.00	8360	Inside	3659.00	
Recorder	0.00	6755	Inside	3659.00	
Bullnose	3.00			3662.00	5.00      Bottom Packers & Anchor

**Total Tool Length: 28.00**

KANSAS CORPORATION COMMISSION

**JUL 24 2009**

**RECEIVED**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Company, Inc.

**Collins #1-28**

250 N Water  
Suite 300  
Wichita, Ks. 67202  
ATTN: Rocky Milford

**28 10s 18w Rooks KS**  
Job Ticket: 17189      **DST#: 9**  
Test Start: 2009.06.25 @ 00:15:22

## 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: 24000 ppm	
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
151.00	Muddy Water	1.845

Total Length: 151.00 ft      Total Volume: 1.845 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: RW .265 @ 70F = 24000 ppm chlorides



DST Test Number: 9

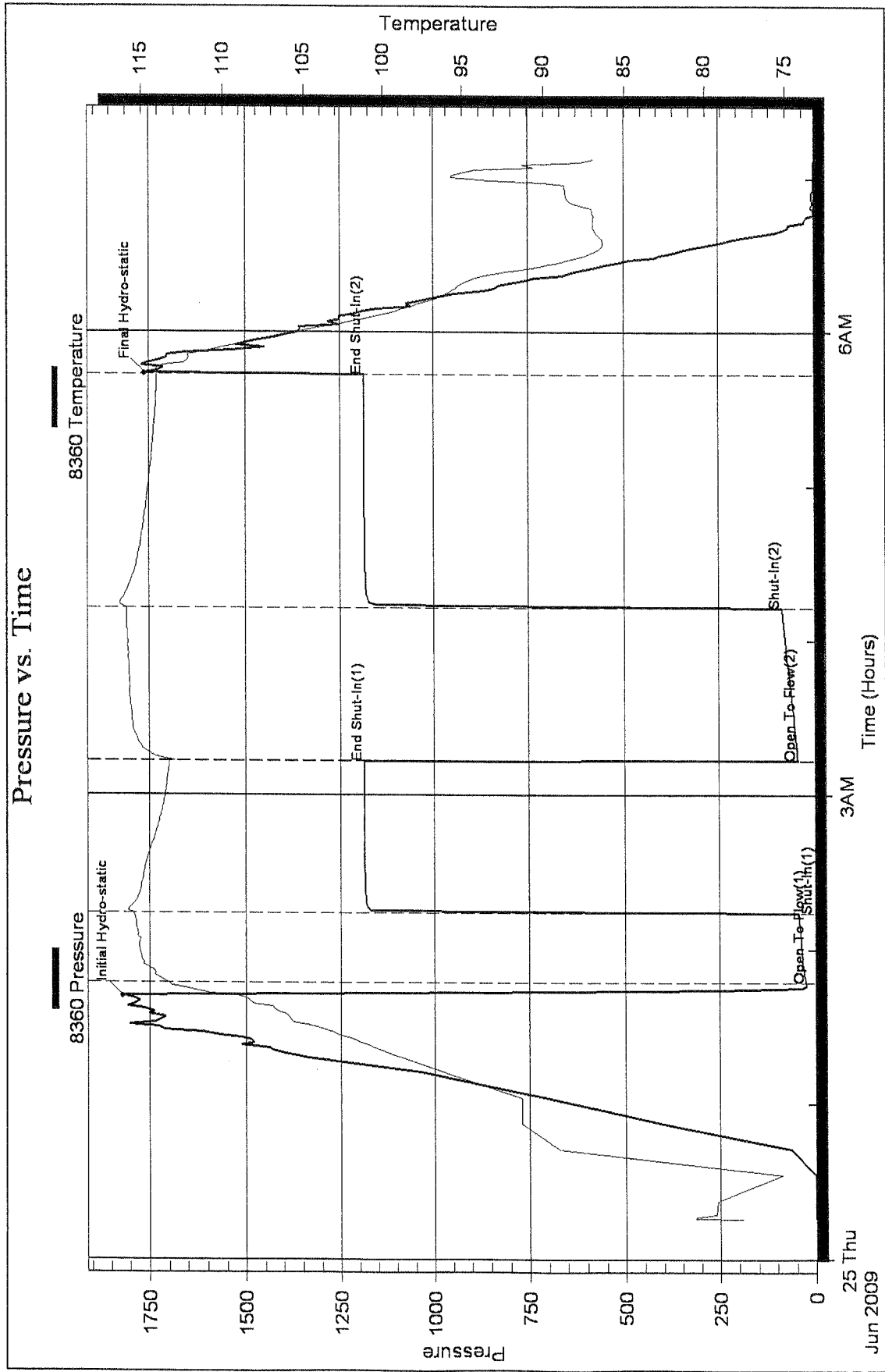
28 10s 18w Rooks KS

Murfin Drilling Company, Inc.

Inside

Serial #: 8360

### Pressure vs. Time



KANSAS CORPORATION COMMISSION

JUL 24 2009  
RECEIVED

Ref. No: 17189

Trilobite Testing, Inc

Printed: 2009.06.29 @ 08:12:29 Page 5