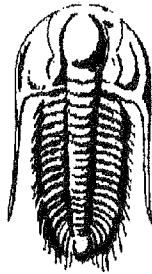


15-135-24744

14-18s-23w

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

PO Box 2758
Wichita KS 67201

ATTN: Phil Askey

14 18S 23W Ness KS

Coombs #1-14

Start Date: 2008.02.07 @ 08:44:40

End Date: 2008.02.07 @ 15:20:40

Job Ticket #: 31407 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Mull Drilling Co Inc

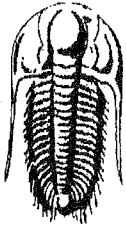
Coombs #1-14

14 18S 23W Ness KS

DST # 1

Fl Scott

2008.02.07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mull Drilling Co Inc

PO Box 2758
Wichita KS 67201

ATTN: Phil Askey

Coombs #1-14

14 18S 23W Ness KS

Job Ticket: 31407

DST#: 1

Test Start: 2008.02.07 @ 08:44:40

GENERAL INFORMATION:

Formation: **Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:30:10

Time Test Ended: 15:20:40

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **4220.00 ft (KB) To 4245.00 ft (KB) (TVD)**

Total Depth: 4245.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2255.00 ft (KB)

2250.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6719

Inside

Press@RunDepth: 30.00 psig @ 4227.00 ft (KB)

Start Date: 2008.02.07

End Date:

2008.02.07

Start Time: 08:44:42

End Time:

15:20:40

Capacity: 7000.00 psig

Last Calib.: 2008.02.07

Time On Btm: 2008.02.07 @ 10:29:40

Time Off Btm: 2008.02.07 @ 13:28:10

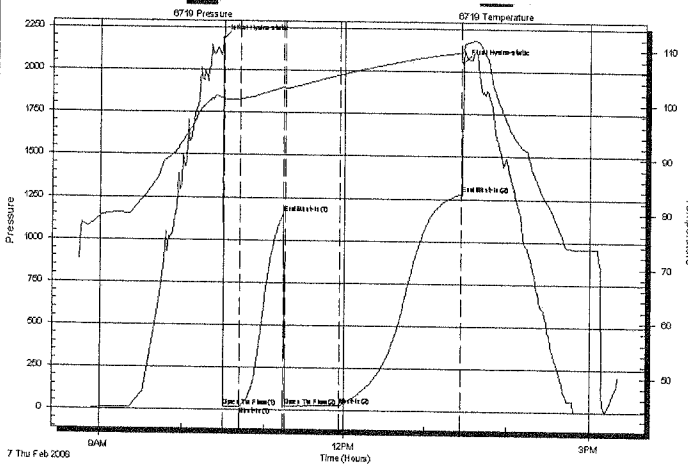
TEST COMMENT: IFP Weak Blow Built to 1 "

ISI Dead

FFP Fair Blow Built to 5-1/2 "

FSI Dead

Pressure vs. Time



PRESSURE SUMMARY

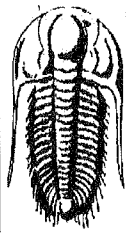
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2183.62	101.11	Initial Hydro-static
1	17.25	100.78	Open To Flow (1)
13	20.81	100.83	Shut-In(1)
45	1157.68	102.99	End Shut-In(1)
46	24.99	102.80	Open To Flow (2)
87	30.00	105.38	Shut-In(2)
177	1280.24	109.66	End Shut-In(2)
179	2050.21	109.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOCM 10%O 90%M	0.22
0.00	30 ' Gas In Pipe	0.00

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc

Coombs #1-14

PO Box 2758
Wichita KS 67201

14 18S 23W Ness KS

Job Ticket: 31407

DST#: 1

ATTN: Phil Askey

Test Start: 2008.02.07 @ 08:44:40

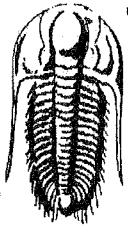
Tool Information

Drill Pipe:	Length: 4100.00 ft	Diameter: 3.80 inches	Volume: 57.51 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 58.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4220.00 ft			Final 52000.00 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			4200.00	
Shut In Tool	5.00			4205.00	
Hydraulic tool	5.00			4210.00	
Packer	5.00			4215.00	21.00 Bottom Of Top Packer
Packer	5.00			4220.00	
Stubb	1.00			4221.00	
Perforations	5.00			4226.00	
Recorder	0.00	8360	Outside	4226.00	
Change Over Sub	1.00			4227.00	
Recorder	0.00	6719	Inside	4227.00	
Blank Spacing	31.00			4258.00	
Change Over Sub	1.00			4259.00	
Perforations	3.00			4262.00	
Bullnose	3.00			4265.00	45.00 Bottom Packers & Anchor

Total Tool Length: 66.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc

Coombs #1-14

PO Box 2758
Wichita KS 67201

14 18S 23W Ness KS

Job Ticket: 31407

DST#: 1

ATTN: Phil Askey

Test Start: 2008.02.07 @ 08:44:40

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.39 in³

Resistivity: ohm.m

Salinity: 3100.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	SOCM 10%O 90%M	0.221
0.00	30' Gas In Pipe	0.000

Total Length: 45.00 ft Total Volume: 0.221 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

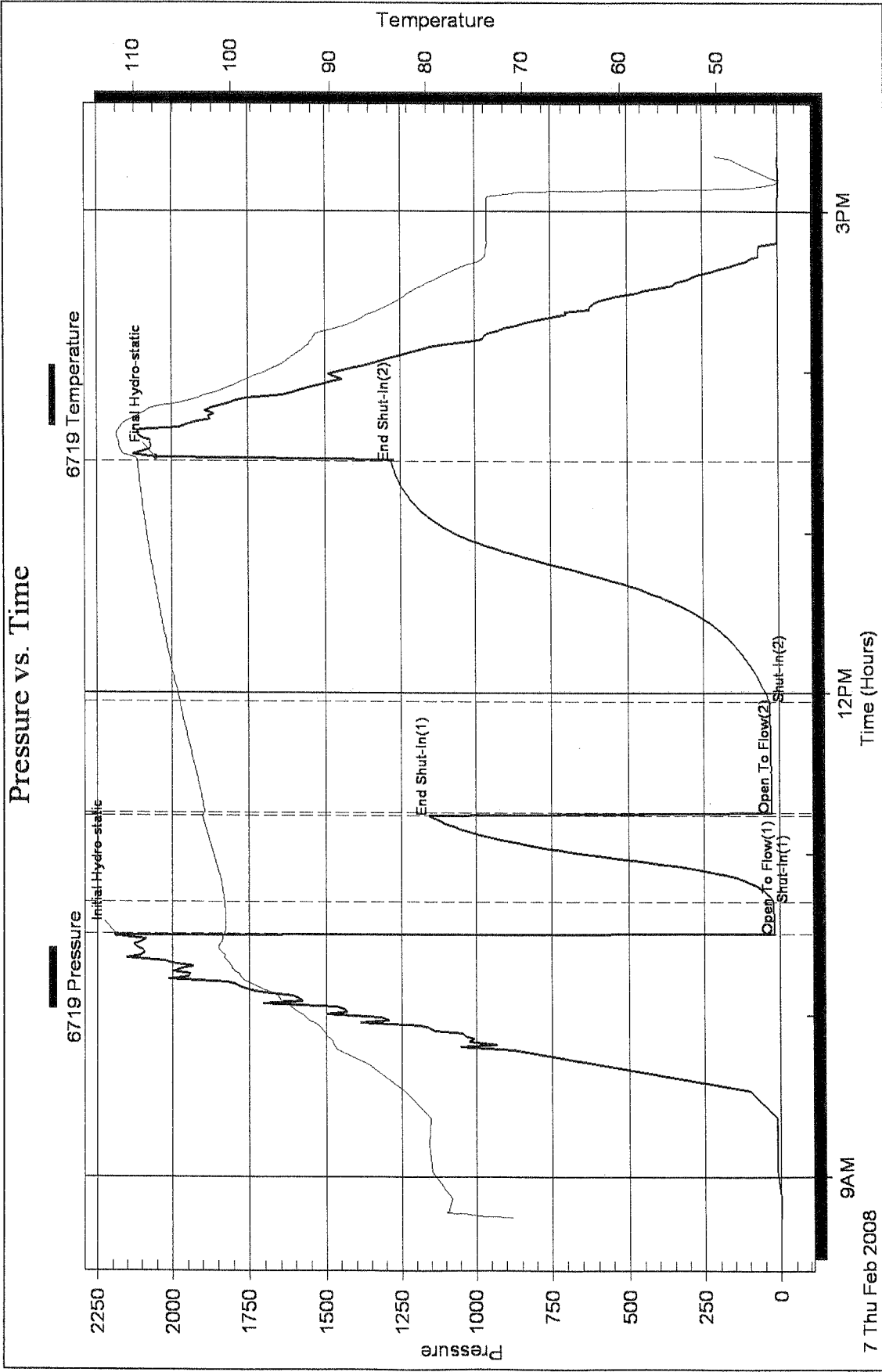
Inside

Mull Drilling Co Inc

14 18S23W Ness KS

DST Test Number: 1

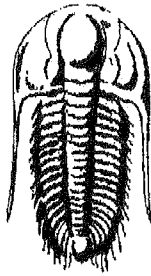
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 31407

Printed: 2008.02.12 @ 09:46:32 Page 5



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

PO Box 2758
Wichita KS 67201

ATTN: Phil Askey

14 18S 23W Ness KS

Coombs #1-14

Start Date: 2008.02.08 @ 04:17:12

End Date: 2008.02.08 @ 09:30:12

Job Ticket #: 31408 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Mull Drilling Co Inc

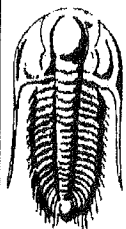
Coombs #1-14

14 18S 23W Ness KS

DST # 2

Mississippi

2008.02.08



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mull Drilling Co Inc

Coombs #1-14

PO Box 2758
Wichita KS 67201

14 18S 23W Ness KS

Job Ticket: 31408 **DST#: 2**

ATTN: Phil Askey

Test Start: 2008.02.08 @ 04:17:12

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:44:12
 Time Test Ended: 09:30:12

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

Interval: **4286.00 ft (KB) To 4350.00 ft (KB) (TVD)**
 Total Depth: 4350.00 ft (KB) (TVD)
 Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2255.00 ft (KB)
 2250.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6719

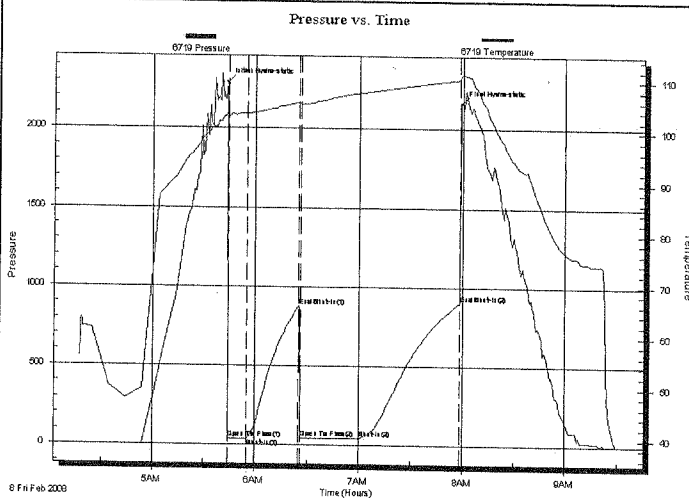
Inside

Press@RunDepth: 44.66 psig @ 4293.00 ft (KB)
 Start Date: 2008.02.08 End Date: 2008.02.08
 Start Time: 04:17:14 End Time: 09:30:12

Capacity: 7000.00 psig
 Last Calib.: 2008.02.08
 Time On Btm: 2008.02.08 @ 05:43:42
 Time Off Btm: 2008.02.08 @ 07:59:12

TEST COMMENT: IFP Weak Blow Built to 1-1/2 "

ISI Dead
 FFP Dead
 FSI Dead



PRESSURE SUMMARY

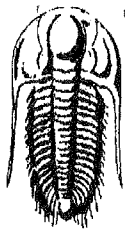
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2290.58	103.90	Initial Hydro-static
1	36.92	103.22	Open To Flow (1)
12	40.08	103.59	Shut-In(1)
42	876.22	105.74	End Shut-In(1)
43	41.98	105.56	Open To Flow (2)
77	44.66	107.73	Shut-In(2)
135	904.22	110.42	End Shut-In(2)
136	2157.69	111.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (tubl)
5.00	SOCM 10%O 90%M	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc

Coombs #1-14

PO Box 2758
Wichita KS 67201

14 18S 23W Ness KS

Job Ticket: 31408

DST#: 2

ATTN: Phil Askey

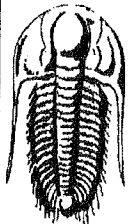
Test Start: 2008.02.08 @ 04:17:12

Tool Information

Drill Pipe:	Length: 4163.00 ft	Diameter: 3.80 inches	Volume: 58.40 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 59.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4286.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	85.00 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			4266.00	
Shut In Tool	5.00			4271.00	
Hydraulic tool	5.00			4276.00	
Packer	5.00			4281.00	21.00 Bottom Of Top Packer
Packer	5.00			4286.00	
Stubb	1.00			4287.00	
Perforations	5.00			4292.00	
Recorder	0.00	8360	Outside	4292.00	
Change Over Sub	1.00			4293.00	
Recorder	0.00	6719	Inside	4293.00	
Blank Spacing	31.00			4324.00	
Change Over Sub	1.00			4325.00	
Perforations	22.00			4347.00	
Bullnose	3.00			4350.00	64.00 Bottom Packers & Anchor

Total Tool Length: 85.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc

Coombs #1-14

PO Box 2758
Wichita KS 67201

14 18S 23W Ness KS

ATTN: Phil Askey

Job Ticket: 31408

DST#: 2

Test Start: 2008.02.08 @ 04:17:12

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 11.99 in³

Resistivity: ohm.m

Salinity: 2800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 10%O 90%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:

Pressure vs. Time

