

CONFIDENTIAL

Mull Drilling Co. Inc.

Steckel Farms A #1-12

12-22s-14w Stafford

DST # 1

Lansing B - F

2002.06.30



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co. Inc.**

ORIGINAL

PO Box 2758
Wichita KS 67201-2758

CONFIDENTIAL KCC

ATTN: Roger L. Martin

JUL 25 2002

12-22s-14w Stafford

RELEASED CONFIDENTIAL
Steckel Farms A #1-12

Start Date: 2002.06.30 @ 09:01:16

End Date: 2002.06.30 @ 17:47:31

Job Ticket #: 10000

FROM CONFIDENTIAL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

RELEASED

Mull Drilling Co. Inc.

Steckel Farms A #1-12

PO Box 2758
Wichita KS 67201-2758

12-22s-14w Stafford

ATTN: Roger L. Martin

Job Ticket: 15689

DST#: 1

Test Start: 2002.06.30 @ 09:01:16

FROM CONFIDENTIAL

GENERAL INFORMATION:

Formation: **Lansing B - F**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 10:46:16
 Time Test Ended: 17:47:31

KCC

JUL 25 2002

Test Type: **Conventional Bottom Hole**
 Tester: **Gary Pevoteaux**
 Unit No: **23**

Interval: **3434.00 ft (KB) To 3503.00 ft (KB) (TVD)**
 Total Depth: **3503.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Poor**

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Reference Elevations: **1934.00 ft (KB)**
1925.00 ft (CF)
 KB to GR/CF: **9.00 ft**

Serial #: 2342

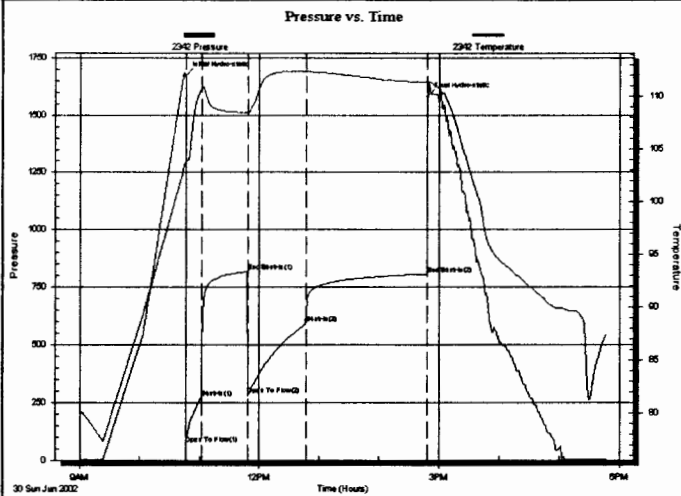
Inside

Press@RunDepth: **590.26 psig @ 3435.00 ft (KB)**
 Start Date: **2002.06.30** End Date: **2002.06.30**
 Start Time: **09:01:17** End Time: **17:47:31**

Capacity: **7000.00 psig**
 Last Calib.: **2002.06.30**
 Time On Btm: **2002.06.30 @ 10:45:46**
 Time Off Btm: **2002.06.30 @ 14:48:16**

TEST COMMENT: IF: Strong blow . B.O.B. in 2 min.50 sec.
 IS: Weak blow . 1/4" for approx. 20 min.
 FF: Strong blow . B.O.B. in 3.25 min.
 FS: Weak blow . 1/4" for approx. 15 min.

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PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1672.67	103.76	Initial Hydro-static
1	68.31	103.84	Open To Flow (1)
16	272.42	110.65	Shut-in(1)
63	817.36	108.49	End Shut-in(1)
63	283.33	108.49	Open To Flow (2)
121	590.26	112.35	Shut-in(2)
242	807.03	111.34	End Shut-in(2)
243	1581.28	111.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
730.00	Salt water w with a few oil specs.	8.05
0.00	Rw .056 ohms @ 95 deg. F.	0.00
255.00	GCMW w ith oil scum >1%o 5%g 15%v	3.58v
150.00	SG&OCMW 5%g 5%o 20%m 70%w	2.10
0.00	90 ft. of gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15689 DST#: 1
Test Start: 2002.06.30 @ 09:01:16

Tool Information

Drill Pipe:	Length: 3182.00 ft	Diameter: 3.80 inches	Volume: 44.64 bbl	Tool Weight: 2100.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 45.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3434.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	69.00 ft			
Tool Length:	89.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3415.00	
S.I. Tool	5.00			3420.00	
HMV	5.00			3425.00	
Packer	4.00			3429.00	20.00 Bottom Of Top Packer
Packer	5.00			3434.00	
Stubb	1.00			3435.00	
Recorder	0.00	2342	Inside	3435.00	
Perforations	6.00			3441.00	
C.O. Sub	1.00			3442.00	
Blank Spacing	31.00			3473.00	
C.O. Sub	1.00			3474.00	
Perforations	24.00			3498.00	
Recorder	0.00	13222	Outside	3498.00	
Bullnose	5.00			3503.00	69.00 Bottom Packers & Anchor

Total Tool Length: 89.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758

ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15689 **DST#: 1**
Test Start: 2002.06.30 @ 09:01:16

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:	109000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.15 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
730.00	Salt water with a few oil specs.	8.054
0.00	Rw .056 ohms @ 95 deg. F.	0.000
255.00	GCMW with oil scum >1%o 5%g 15%m 80%a	3.577
150.00	SG&OCMW 5%g 5%o 20%m 70%w	2.104
0.00	90 ft. of gas in pipe	0.000

Total Length: 1135.00 ft Total Volume: 13.735 bbl
 Num Fluid Samples: 1 Num Gas Bombs: 0 Serial #: none
 Laboratory Name: Laboratory Location:
 Recovery Comments:

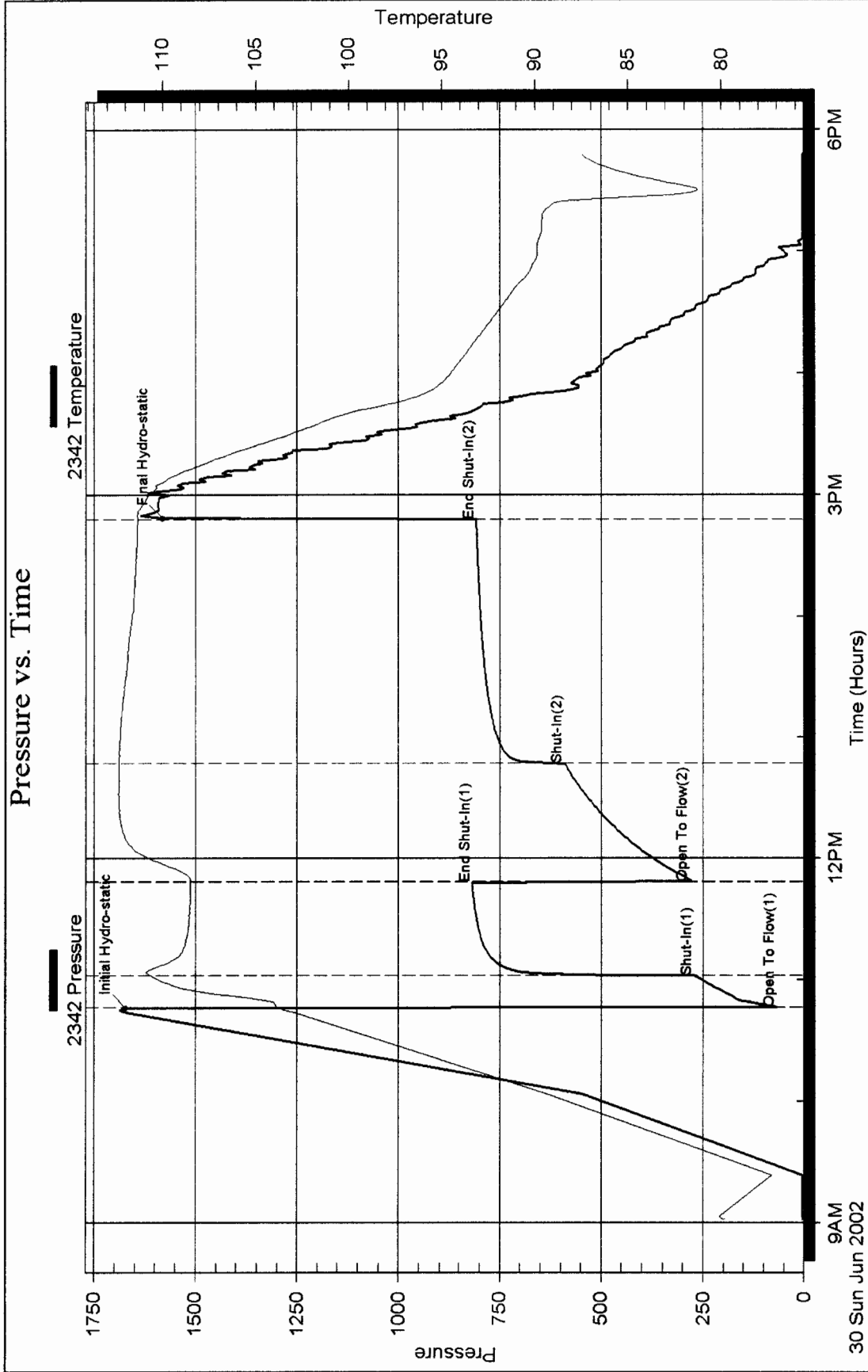
Serial #: 2342

Inside

Mull Drilling Co. Inc.

12-22s-14w Stafford

DST Test Number: 1



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Trilobite Testing, Inc

Ref. No: 15689

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DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co. Inc.**

PO Box 2758
Wichita KS 67201-2758

ATTN: Roger L. Martin

12-22s-14w Stafford

Steckel Farms A #1-12

Start Date: 2002.07.01 @ 08:07:56

End Date: 2002.07.01 @ 15:59:56

Job Ticket #: 15690 DST #: 2

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758

ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15690 DST#: 2
Test Start: 2002.07.01 @ 08:07:56

GENERAL INFORMATION:

Formation: **Lansing H - I**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:50:11
Time Test Ended: 15:59:56

Interval: **3530.00 ft (KB) To 3595.00 ft (KB) (TVD)**
Total Depth: 3595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole
Tester: Gary Pevoteaux
Unit No: 23

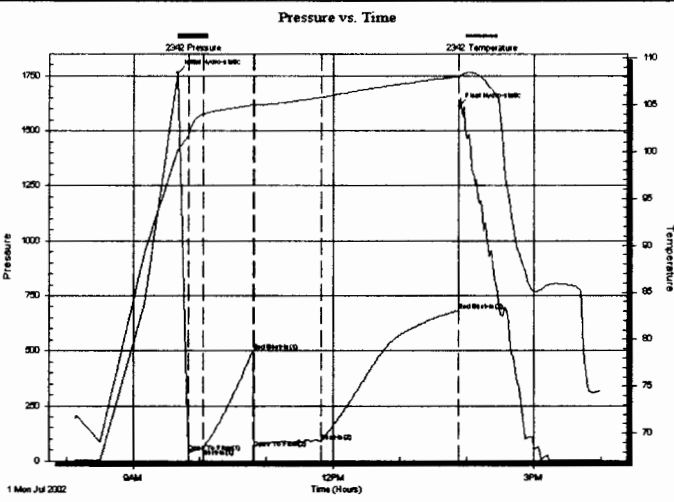
Reference Elevations: 1934.00 ft (KB)
1925.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 2342

Inside

Press@RunDepth: 88.20 psig @ 3531.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2002.07.01 End Date: 2002.07.01 Last Calib.: 2002.07.01
Start Time: 08:07:57 End Time: 15:59:56 Time On Btm: 2002.07.01 @ 09:39:56
Time Off Btm: 2002.07.01 @ 13:52:41

TEST COMMENT: F:Strong blow . B.O.B. in 6.5 min.
I:Weak blow . 1/4" or less for 20 - 30 min.
FF:Strong blow . B.O.B. in 20 sec.
FS:No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1763.73	100.16	Initial Hydro-static
11	37.93	101.71	Open To Flow (1)
24	56.22	103.99	Shut-In(1)
69	497.18	104.99	End Shut-In(1)
70	58.32	105.00	Open To Flow (2)
130	88.20	105.79	Shut-In(2)
253	682.41	107.97	End Shut-In(2)
253	1611.15	107.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GMCO 20%g 20%m 60%o	0.59
60.00	GOCM 55%g 20%o 25%m	0.30
20.00	GCM with oil specs 25%g 75%m	0.10
0.00	800 ft of 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.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15690 **DST#: 2**
Test Start: 2002.07.01 @ 08:07:56

Tool Information

Drill Pipe:	Length: 3275.00 ft	Diameter: 3.80 inches	Volume: 45.94 bbl	Tool Weight: 2100.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 47.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3530.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3511.00	
S.I. Tool	5.00			3516.00	
HMV	5.00			3521.00	
Packer	4.00			3525.00	20.00 Bottom Of Top Packer
Packer	5.00			3530.00	
Stubb	1.00			3531.00	
Recorder	0.00	2342	Inside	3531.00	
Perforations	6.00			3537.00	
C.O. Sub	1.00			3538.00	
Blank Spacing	31.00			3569.00	
C.O. Sub	1.00			3570.00	
Perforations	20.00			3590.00	
Recorder	0.00	13222	Outside	3590.00	
Bullnose	5.00			3595.00	65.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15690 DST#: 2
Test Start: 2002.07.01 @ 08:07:56

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:	7000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.15 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 7000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GMCO 20%g 20%m 60%o	0.590
60.00	GOCM 55%g 20%o 25%m	0.295
20.00	GCM with oil specs 25%g 75%m	0.098
0.00	800 ft of gas in pipe	0.000

Total Length: 200.00 ft Total Volume: 0.983 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 2342

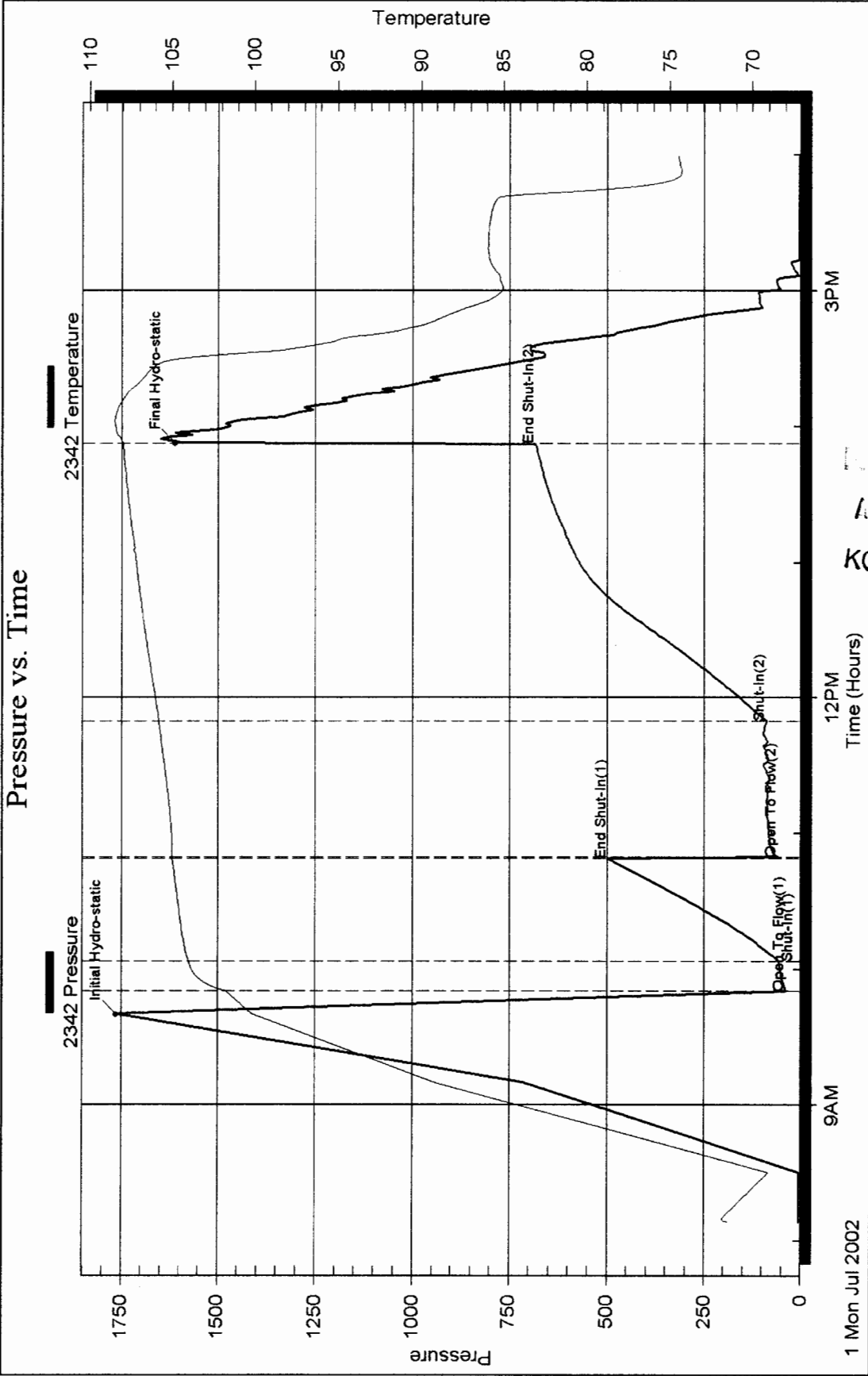
Inside

Mull Drilling Co. Inc.

12-22s-14w Stafford

DST Test Number: 2

Pressure vs. Time

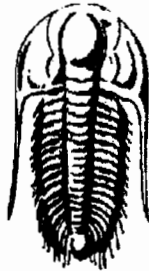


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Trilobite Testing, Inc

Ref. No: 15690

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co. Inc.**

PO Box 2758
Wichita KS 67201-2758

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ATTN: Roger L. Martin

12-22s-14w Stafford

Steckel Farms A #1-12

Start Date: 2002.07.02 @ 02:15:06

End Date: 2002.07.02 @ 08:56:51

Job Ticket #: 15691 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Mull Drilling Co. Inc.

Steckel Farms A #1-12

12-22s-14w Stafford

DST # 3

Lansing K - L

2002.07.02



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15691 **DST#: 3**
Test Start: 2002.07.02 @ 02:15:06

GENERAL INFORMATION:

Formation: **Lansing K - L**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**
Time Tool Opened: **04:47:21** Tester: **Gary Pevoteaux**
Time Test Ended: **08:56:51** Unit No: **23**

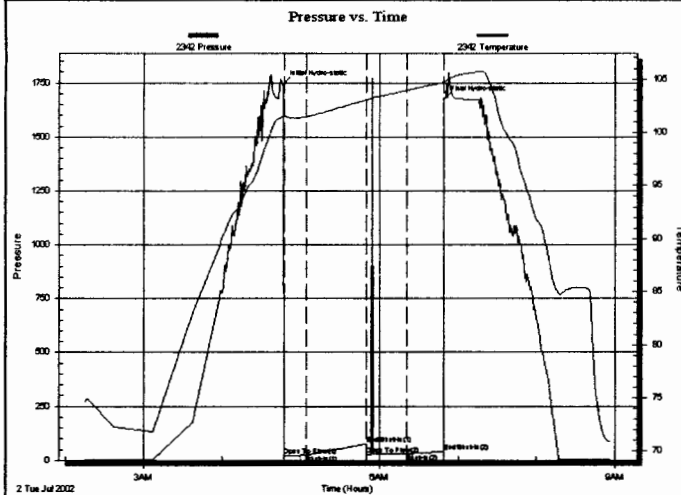
Interval: **3595.00 ft (KB) To 3650.00 ft (KB) (TVD)** Reference Elevations: **1934.00 ft (KB)**
Total Depth: **3650.00 ft (KB) (TVD)** **1925.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Poor** KB to GR/CF: **9.00 ft**

Serial #: 2342

Inside

Press@RunDepth: **29.95 psig @ 3596.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2002.07.02** End Date: **2002.07.02** Last Calib.: **2002.07.02**
Start Time: **02:15:07** End Time: **08:56:51** Time On Btm: **2002.07.02 @ 04:46:51**
Time Off Btm: **2002.07.02 @ 06:49:06**

TEST COMMENT: IF:Weak blow . (surface) Dead in 12 min.
IS:No blow .
FF:No blow . Flushed tool 4 - 5 min. in to FFP.
FS:No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.00	101.51	Initial Hydro-static
1	21.81	101.51	Open To Flow (1)
18	23.74	101.47	Shut-In(1)
63	75.86	103.06	End Shut-In(1)
64	25.42	103.06	Open To Flow (2)
94	29.95	103.94	Shut-In(2)
122	39.69	104.67	End Shut-In(2)
123	1674.18	104.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Drig.mud	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co. Inc.

Steckel Farms A #1-12

PO Box 2758
Wichita KS 67201-2758

12-22s-14w Stafford

Job Ticket: 15691

DST#: 3

ATTN: Roger L.Martin

Test Start: 2002.07.02 @ 02:15:06

Tool Information

Drill Pipe:	Length: 3338.00 ft	Diameter: 3.80 inches	Volume: 46.82 bbl	Tool Weight: 2100.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 48.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3595.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	75.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description Length (ft) Serial No. Position Depth (ft) Accum. Lengths

C.O. Sub	1.00			3576.00	
S.I. Tool	5.00			3581.00	
HMV	5.00			3586.00	
Packer	4.00			3590.00	20.00 Bottom Of Top Packer
Packer	5.00			3595.00	
Stubb	1.00			3596.00	
Recorder	0.00	2342	Inside	3596.00	
Perforations	6.00			3602.00	
C.O. Sub	1.00			3603.00	
Blank Spacing	31.00			3634.00	
C.O. Sub	1.00			3635.00	
Perforations	10.00			3645.00	
Recorder	0.00	13222	Outside	3645.00	
Bullnose	5.00			3650.00	55.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15691 **DST#: 3**
Test Start: 2002.07.02 @ 02:15:06

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:	7000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.17 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 7000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Drig.mud	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 2342

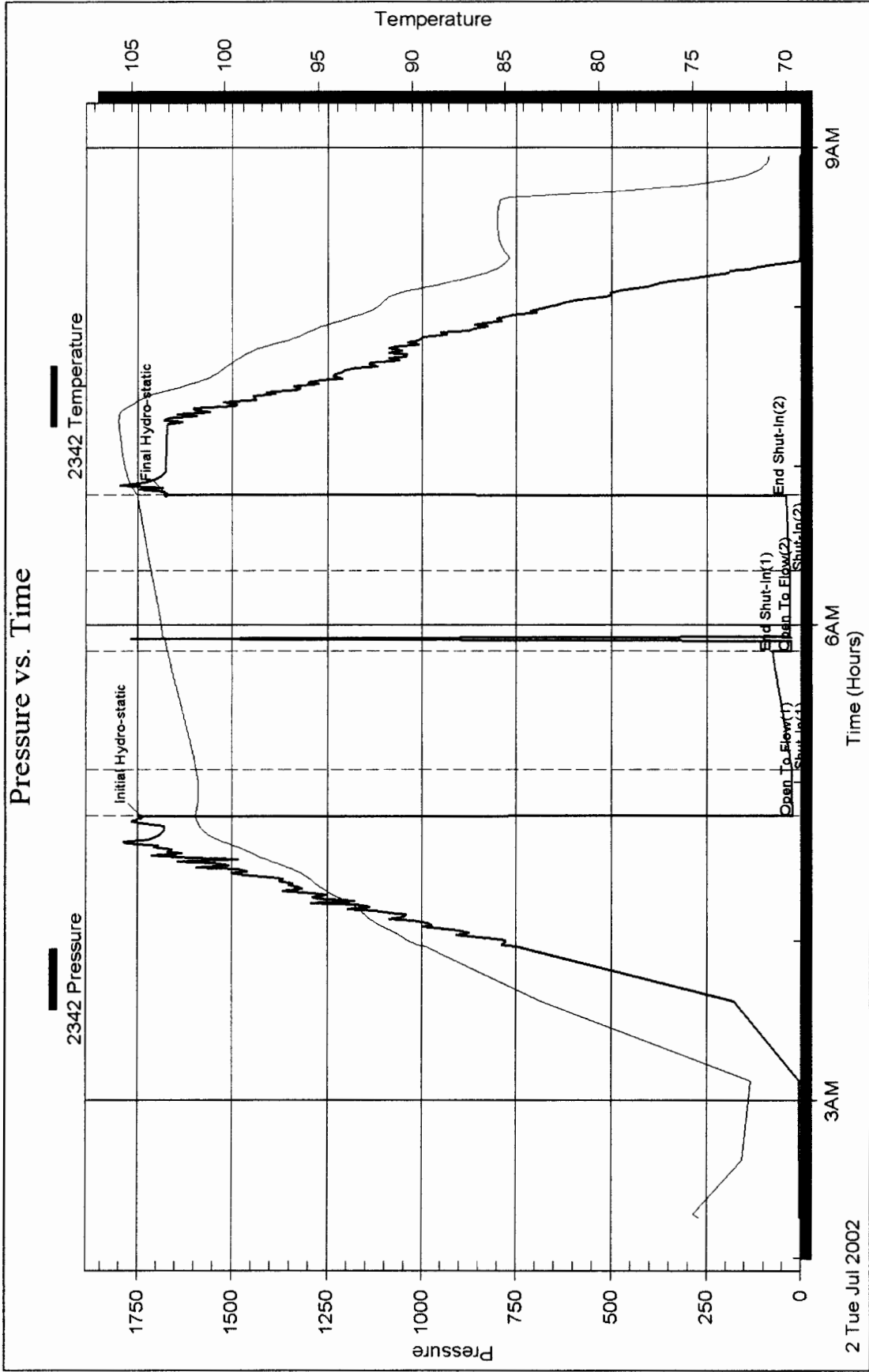
Inside

Mull Drilling Co. Inc.

12-22s-14w Stafford

DST Test Number: 3

Pressure vs. Time

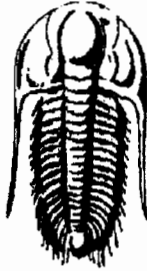


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Trilobite Testing, Inc

Ref. No: 15691

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co. Inc.**

PO Box 2758
Wichita KS 67201-2758

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ATTN: Roger L.Martin

12-22s-14w Stafford

Steckel Farms A #1-12

Start Date: 2002.07.02 @ 18:35:02

End Date: 2002.07.03 @ 00:55:17

Job Ticket #: 15692 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Mull Drilling Co. Inc.

Steckel Farms A #1-12

12-22s-14w Stafford

DST # 4

Viola

2002.07.02



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15692 **DST#: 4**
Test Start: 2002.07.02 @ 18:35:02

GENERAL INFORMATION:

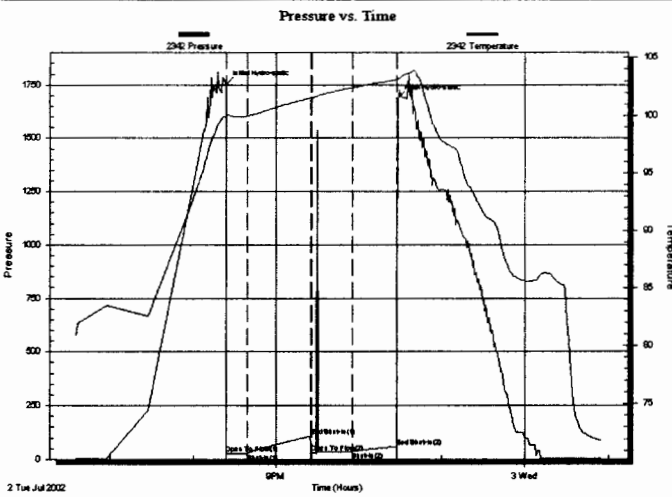
Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:24:02
Time Test Ended: 00:55:17
Test Type: Conventional Bottom Hole
Tester: Gary Pevoteaux
Unit No: 23
Interval: **3626.00 ft (KB) To 3737.00 ft (KB) (TVD)**
Reference Elevations: 1934.00 ft (KB)
Total Depth: 3737.00 ft (KB) (TVD) 1925.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 9.00 ft

Serial #: 2342

Inside

Press@RunDepth: 35.91 psig @ 3627.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2002.07.02 End Date: 2002.07.03 Last Calib.: 2002.07.03
Start Time: 18:35:03 End Time: 00:55:17 Time On Btm: 2002.07.02 @ 20:23:47
Time Off Btm: 2002.07.02 @ 22:28:17

TEST COMMENT: F:Weak blow . 1/4" decreasing.
IS:No blow .
FF:No blow . Flushed tool 4 min. in to FFP.
FS:No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1753.16	100.01	Initial Hydro-static
1	24.92	100.01	Open To Flow (1)
16	27.69	99.95	Shut-In(1)
62	108.76	101.53	End Shut-In(1)
63	29.11	101.56	Open To Flow (2)
92	35.91	102.40	Shut-In(2)
124	58.99	103.10	End Shut-In(2)
125	1685.77	103.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	Drig.mud	0.12

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15692 **DST#: 4**
Test Start: 2002.07.02 @ 18:35:02

Tool Information

Drill Pipe:	Length: 3370.00 ft	Diameter: 3.80 inches	Volume: 47.27 bbl	Tool Weight: 2100.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 48.45 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3626.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	111.00 ft			
Tool Length:	131.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description Length (ft) Serial No. Position Depth (ft) Accum. Lengths

C.O. Sub	1.00			3607.00	
S.I. Tool	5.00			3612.00	
HMV	5.00			3617.00	
Packer	4.00			3621.00	20.00 Bottom Of Top Packer
Packer	5.00			3626.00	
Stubb	1.00			3627.00	
Recorder	0.00	2342	Inside	3627.00	
Perforations	5.00			3632.00	
C.O. Sub	1.00			3633.00	
Blank Spacing	93.00			3726.00	
C.O. Sub	1.00			3727.00	
Perforations	5.00			3732.00	
Recorder	0.00	13222	Outside	3732.00	
Bullnose	5.00			3737.00	111.00 Bottom Packers & Anchor

Total Tool Length: 131.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15692 **DST#: 4**
Test Start: 2002.07.02 @ 18:35:02

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:	8000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.78 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 8000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	Drig.mud	0.123

Total Length: 25.00 ft Total Volume: 0.123 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 2342

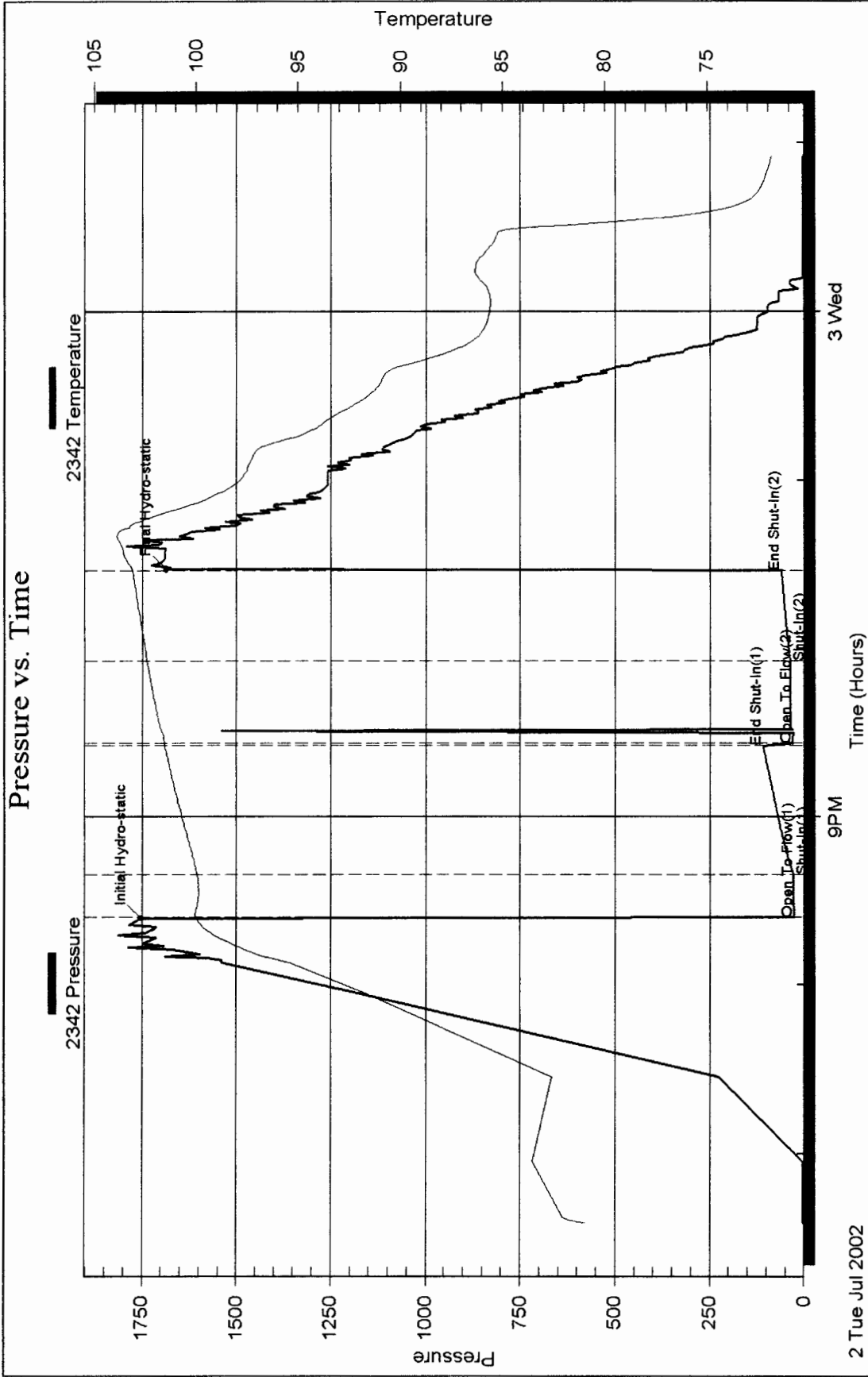
Inside


Mull Drilling Co. Inc.

12-22s-14w Stafford

DST Test Number: 4

Pressure vs. Time




 AUG 01 6 2002
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co. Inc.**

PO Box 2758
Wichita KS 67201-2758

ATTN: Roger L.Martin

12-22s-14w Stafford

Steckel Farms A #1-12

Start Date: 2002.07.03 @ 10:48:22

End Date: 2002.07.03 @ 20:20:22

Job Ticket #: 15693 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Mull Drilling Co. Inc.

Steckel Farms A #1-12

AUG 01 2002
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12-22s-14w Stafford

DST # 5

Arbuckle

2002.07.03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15693 **DST#: 5**
Test Start: 2002.07.03 @ 10:48:22

GENERAL INFORMATION:

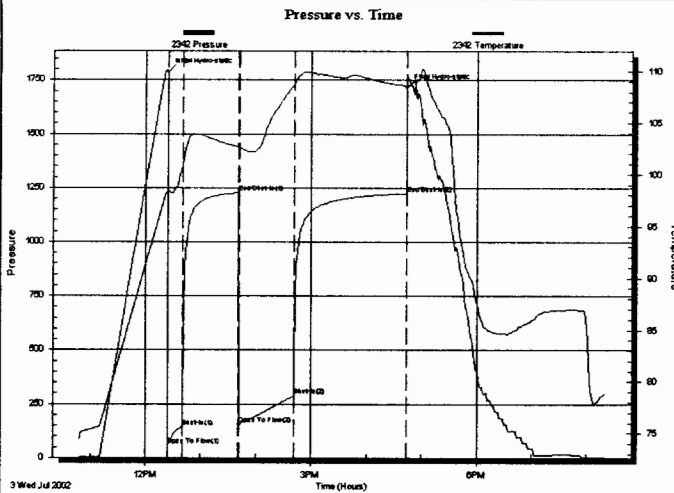
Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:24:37
Time Test Ended: 20:20:22
Interval: **3694.00 ft (KB) To 3754.00 ft (KB) (TVD)**
Total Depth: 3754.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole
Tester: Gary Pevoteaux
Unit No: 23
Reference Elevations: 1934.00 ft (KB)
1925.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 2342

Inside

Press@RunDepth: 286.35 psig @ 3695.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2002.07.03 End Date: 2002.07.03 Last Calib.: 2002.07.03
Start Time: 10:48:23 End Time: 20:20:22 Time On Btm: 2002.07.03 @ 12:23:37
Time Off Btm: 2002.07.03 @ 16:43:37

TEST COMMENT: F:Strong blow . B.O.B. in 10 min.
IS:Weak blow . (1/2")
FF:Strong blow . B.O.B. in 11 min.
FS:Weak blow . (1/4 - 1/2")



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1789.00	98.32	Initial Hydro-static
1	58.99	98.40	Open To Flow (1)
17	143.00	100.97	Shut-In(1)
78	1226.93	102.65	End Shut-In(1)
79	154.59	102.64	Open To Flow (2)
138	286.35	108.69	Shut-In(2)
260	1224.02	108.58	End Shut-In(2)
260	1717.15	108.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GHOCM 16%g 35%o 49%m	0.59
190.00	CGO 15%g 85%o	1.57
30.00	GMCO 20%g 25%m 55%o	0.42
330.00	CGO 15%g 85%o	4.63

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758
ATTN: Roger L. Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15693 DST#: 5
Test Start: 2002.07.03 @ 10:48:22

Tool Information

Drill Pipe:	Length: 3462.00 ft	Diameter: 3.80 inches	Volume: 48.56 bbl	Tool Weight: 2100.00 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 86000.00 lb
			<u>Total Volume: 49.74 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3694.00 ft			Final 59500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

100 0.16 2002
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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3675.00	
S.I. Tool	5.00			3680.00	
HMV	5.00			3685.00	
Packer	4.00			3689.00	20.00 Bottom Of Top Packer
Packer	5.00			3694.00	
Stubb	1.00			3695.00	
Recorder	0.00	2342	Inside	3695.00	
Perforations	5.00			3700.00	
C.O. Sub	1.00			3701.00	
Blank Spacing	31.00			3732.00	
C.O. Sub	1.00			3733.00	
Perforations	16.00			3749.00	
Recorder	0.00	13222	Outside	3749.00	
Bullnose	5.00			3754.00	60.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co. Inc.
PO Box 2758
Wichita KS 67201-2758

ATTN: Roger L.Martin

Steckel Farms A #1-12
12-22s-14w Stafford
Job Ticket: 15693 **DST#: 5**
Test Start: 2002.07.03 @ 10:48:22

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: 11000 ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.18 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 11000.00 ppm		
Filter Cake: 0.20 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GHOCM 16%g 35%o 49%m	0.590
190.00	CGO 15%g 85%o	1.572
30.00	GMCO 20%g 25%m 55%o	0.421
330.00	CGO 15%g 85%o	4.629

Total Length: 670.00 ft Total Volume: 7.212 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data: Trace of gas, and 2900 ML. of gassy oil. 18%g 82%o
PSI 160

Serial #: 2342

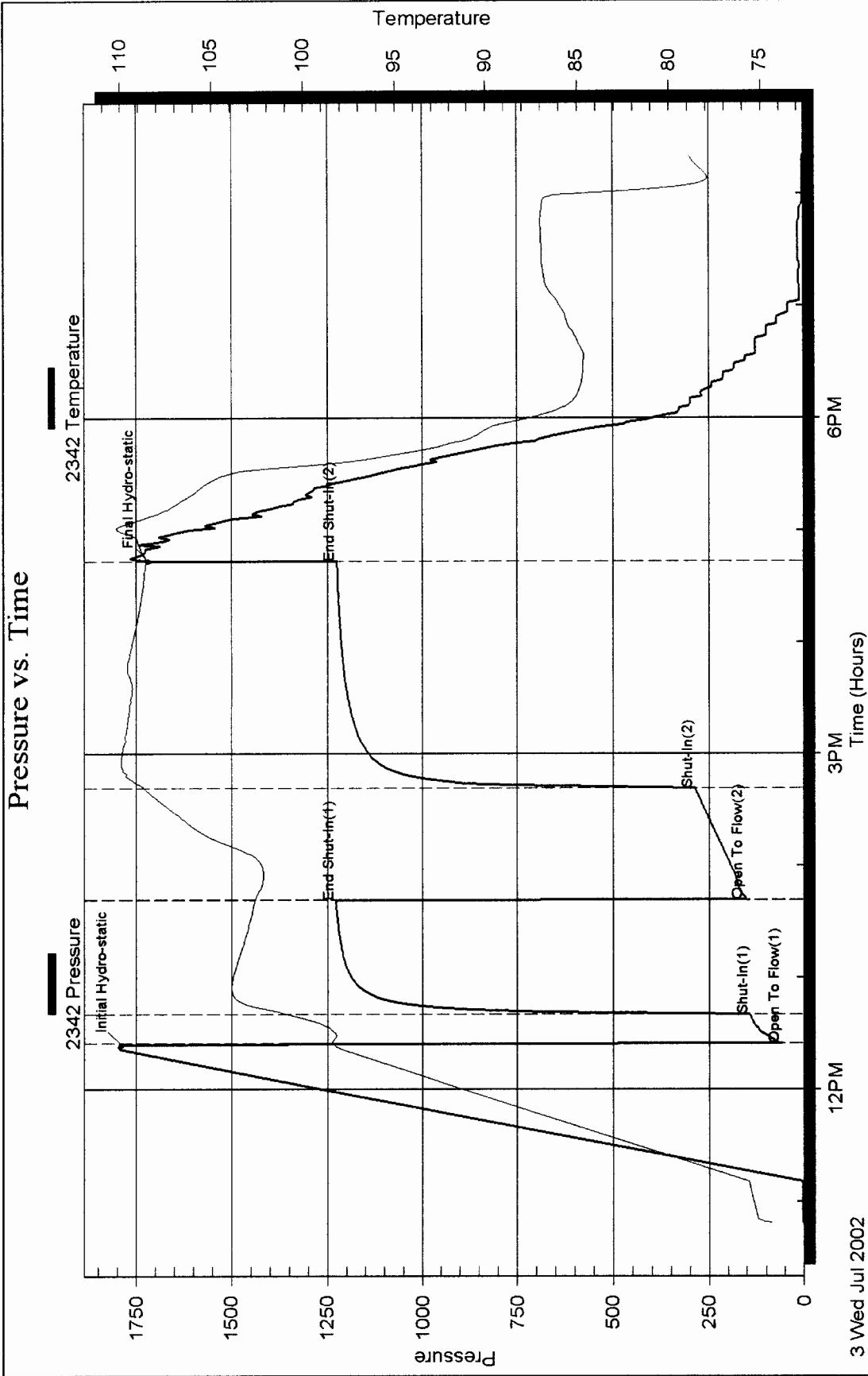
Inside

Mull Drilling Co. Inc.

12-22s-14w Stafford

DST Test Number: 5

Pressure vs. Time



3 Wed Jul 2002

133 010 200
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Trilobite Testing, Inc

Ref. No: 15693

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