



DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Comp. INC.**

1700 N Waterfront PKWAY
Wichita KS 67206

ATTN: Phil Askey

Schmitt-County #1-11

11-17s-32w Scott KS

Start Date: 2012.11.17 @ 11:52:57

End Date: 2012.11.17 @ 17:30:12

Job Ticket #: 49838 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.23 @ 14:19:20

Mull Drilling Comp. INC.

11-17s-32w Scott KS

Schmitt-County #1-11

DST # 1

Lansing J&K

2012.11.17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Comp. INC.
 1700 N Waterfront PKWAY
 Wichita KS 67206
 ATTN: Phil Askey

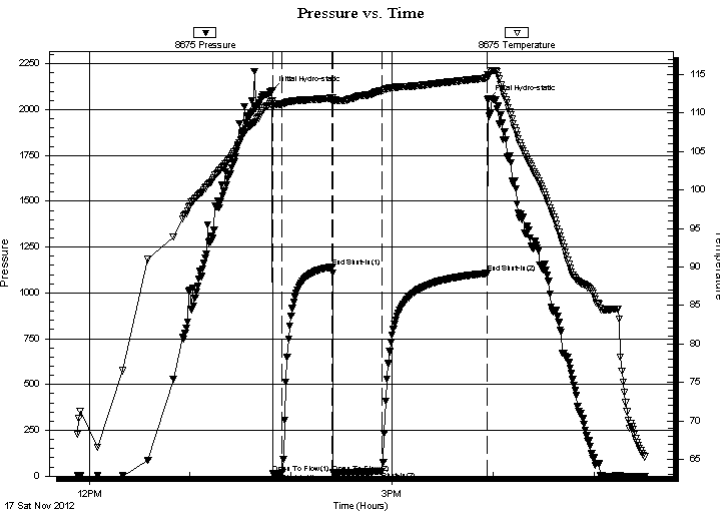
11-17s-32w Scott KS
Schmitt-County #1-11
 Job Ticket: 49838 **DST#: 1**
 Test Start: 2012.11.17 @ 11:52:57

GENERAL INFORMATION:

Formation: **Lansing J&K**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 13:48:57 Tester: Tate Lang
 Time Test Ended: 17:30:12 Unit No: 46
 Interval: **4263.00 ft (KB) To 4295.00 ft (KB) (TVD)** Reference Elevations: 2992.00 ft (KB)
 Total Depth: 4295.00 ft (KB) (TVD) 2987.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8675 Inside
 Press @ Run Depth: 25.74 psig @ 4264.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.17 End Date: 2012.11.17 Last Calib.: 2012.11.17
 Start Time: 11:53:12 End Time: 17:30:12 Time On Btm: 2012.11.17 @ 13:48:42
 Time Off Btm: 2012.11.17 @ 15:56:42

TEST COMMENT: IF-Weak surface blow died in 3 1/2 mins.
 IS-Dead no return.
 FF-Dead no blow.
 FS-Dead no return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2104.57	111.61	Initial Hydro-static
1	14.76	110.74	Open To Flow (1)
6	16.29	111.16	Shut-In(1)
36	1142.11	111.95	End Shut-In(1)
37	17.68	111.34	Open To Flow (2)
66	25.74	112.89	Shut-In(2)
128	1106.60	114.55	End Shut-In(2)
128	2052.46	114.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	100%M w ith oil spots	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 49838

DST#: 1

ATTN: Phil Askey

Test Start: 2012.11.17 @ 11:52:57

Tool Information

Drill Pipe:	Length: 4126.00 ft	Diameter: 3.80 inches	Volume: 57.88 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 58.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4263.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	52.00 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			4244.00	
Shut In Tool	5.00			4249.00	
Hydraulic tool	5.00			4254.00	
Packer	5.00			4259.00	20.00 Bottom Of Top Packer
Packer	4.00			4263.00	
Stubb	1.00			4264.00	
Recorder	0.00	8675	Inside	4264.00	
Recorder	0.00	8650	Outside	4264.00	
Perforations	28.00			4292.00	
Bullnose	3.00			4295.00	32.00 Bottom Packers & Anchor
Total Tool Length:	52.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 49838

DST#: 1

ATTN: Phil Askey

Test Start: 2012.11.17 @ 11:52:57

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	100%M with oil spots	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

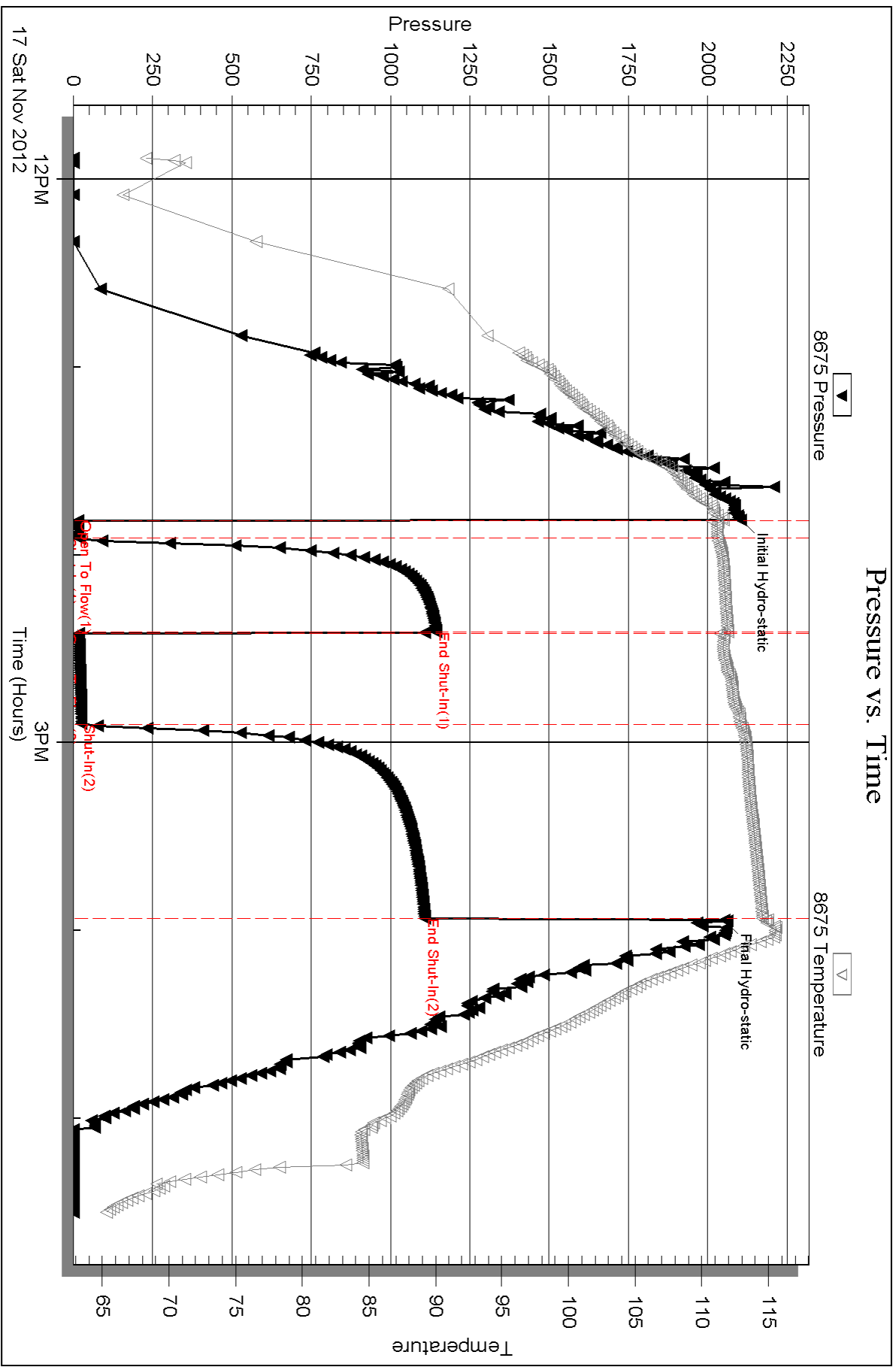
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

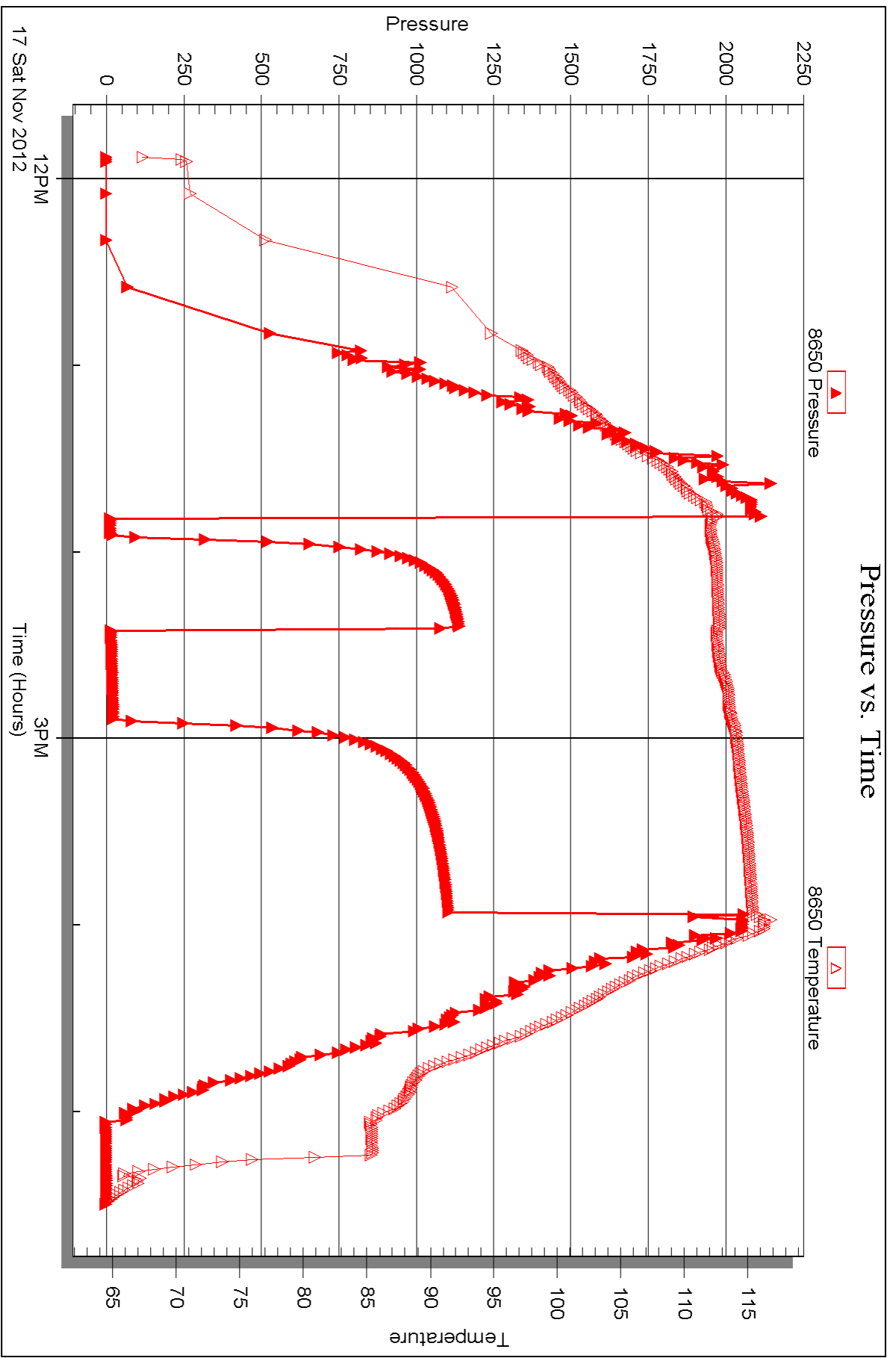


Serial #: 8650

Outside Mull Drilling Comp. INC.

Schmitt-County #1-11

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 49838

Printed: 2012.11.23 @ 14:19:25



DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Comp. INC.**

1700 N Waterfront PKWAY
Wichita KS 67206

ATTN: Phil Askey

Schmitt-County #1-11

11-17s-32w Scott KS

Start Date: 2002.01.01 @ 11:49:44

End Date: 2002.01.01 @ 17:13:14

Job Ticket #: 49839 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.23 @ 14:18:39

Mull Drilling Comp. INC.

11-17s-32w Scott KS

Schmitt-County #1-11

DST # 2

Marmaton-Pawnee

2002.01.01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

ATTN: Phil Askey

Job Ticket: 49839

DST#: 2

Test Start: 2002.01.01 @ 11:49:44

GENERAL INFORMATION:

Formation: **Marmaton-Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:34:14

Time Test Ended: 17:13:14

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 46

Interval: 4362.00 ft (KB) To 4490.00 ft (KB) (TVD)

Reference Elevations: 2992.00 ft (KB)

Total Depth: 4490.00 ft (KB) (TVD)

2987.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8675 Inside

Press @ Run Depth: 68.38 psig @ 4364.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2002.01.01 End Date: 2002.01.01

Last Calib.: 2012.11.18

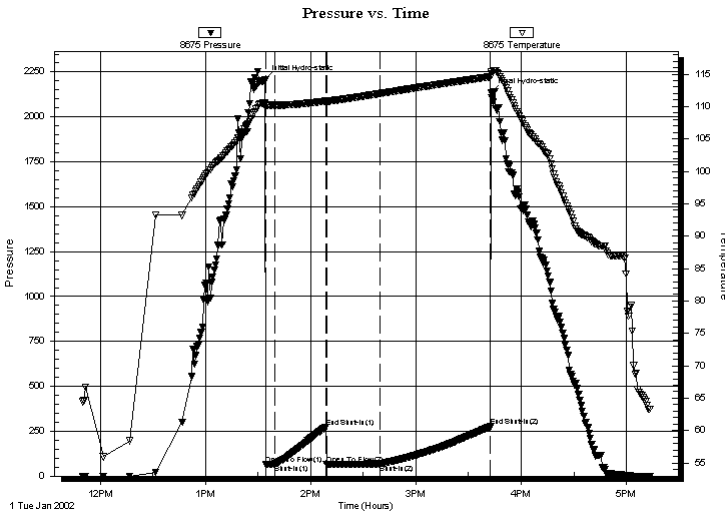
Start Time: 11:49:59 End Time: 17:13:14

Time On Btm: 2002.01.01 @ 13:33:59

Time Off Btm: 2002.01.01 @ 15:42:59

TEST COMMENT: IF-Weak surface blow .
ISI-Dead no return.
FF-Dead no blow .
FSI-Dead no return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2205.55	110.54	Initial Hydro-static
1	64.61	109.81	Open To Flow (1)
6	65.46	110.22	Shut-In(1)
35	273.88	110.85	End Shut-In(1)
35	66.64	110.71	Open To Flow (2)
66	68.38	112.01	Shut-In(2)
129	275.57	114.60	End Shut-In(2)
219	2137.03	115.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	100%M with oil spots	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 49839

DST#: 2

ATTN: Phil Askey

Test Start: 2002.01.01 @ 11:49:44

Tool Information

Drill Pipe:	Length: 4250.00 ft	Diameter: 3.80 inches	Volume: 59.62 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 60.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4362.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	128.00 ft			
Tool Length:	148.00 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			4343.00	
Shut In Tool	5.00			4348.00	
Hydraulic tool	5.00			4353.00	
Packer	5.00			4358.00	20.00 Bottom Of Top Packer
Packer	4.00			4362.00	
Stubb	1.00			4363.00	
Perforations	1.00			4364.00	
Recorder	0.00	8675	Inside	4364.00	
Recorder	0.00	8650	Outside	4364.00	
Change Over Sub	1.00			4365.00	
Drill Pipe	30.00			4395.00	
Blank Spacing	63.00			4458.00	
Change Over Sub	1.00			4459.00	
Perforations	28.00			4487.00	
Bullnose	3.00			4490.00	128.00 Bottom Packers & Anchor

Total Tool Length: 148.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 49839

DST#: 2

ATTN: Phil Askey

Test Start: 2002.01.01 @ 11:49:44

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	100%M with oil spots	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

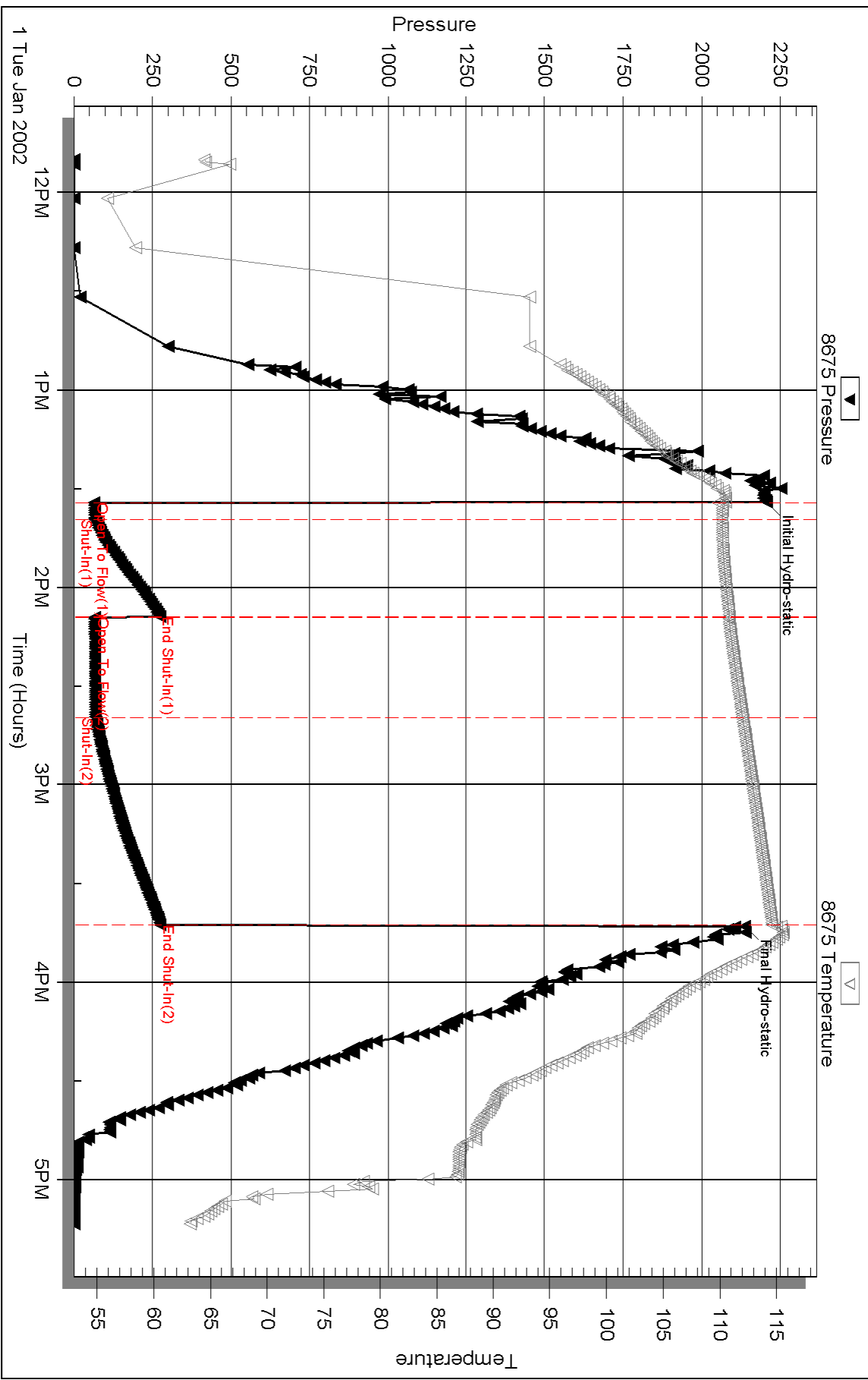
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

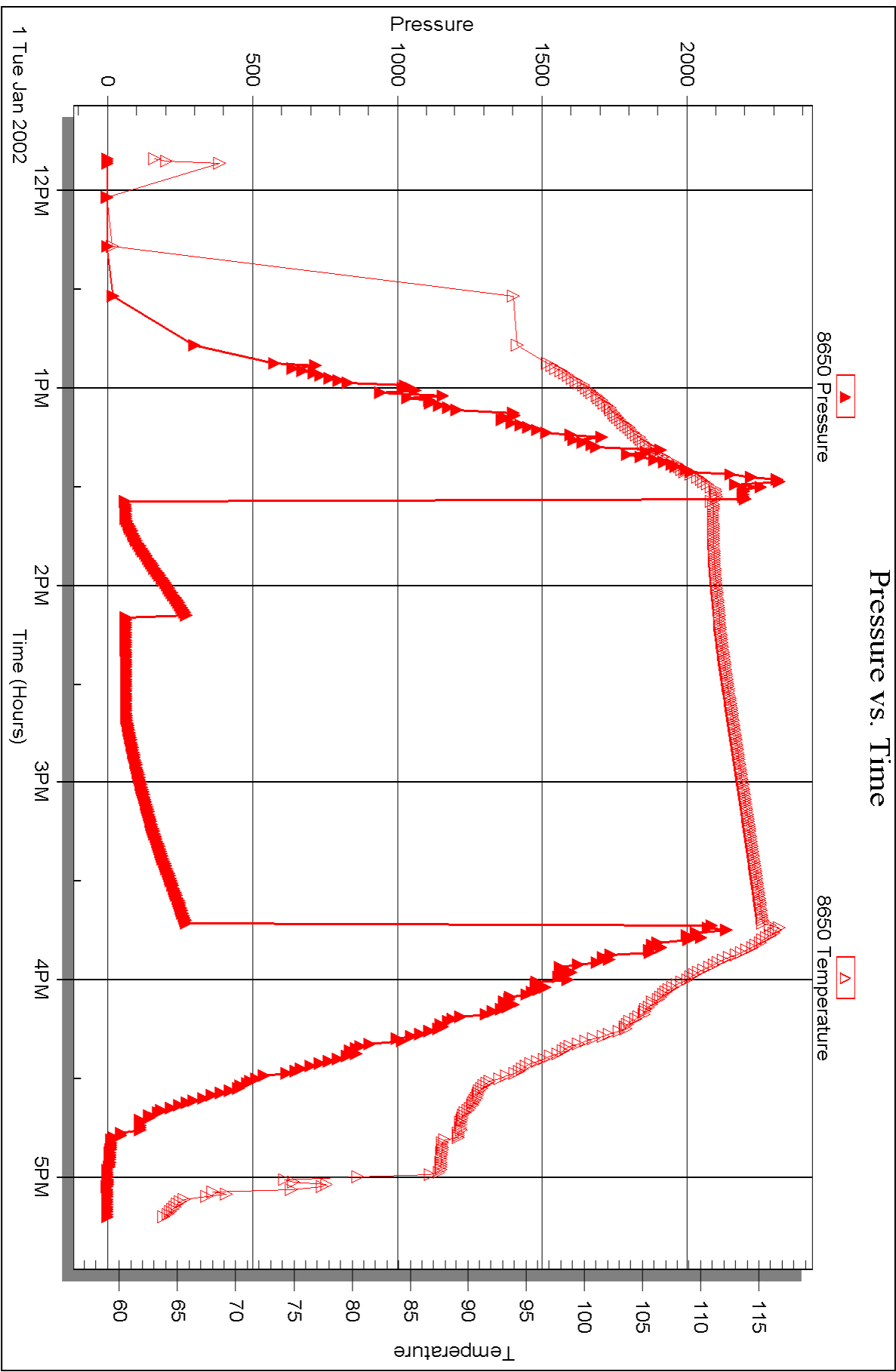


Serial #: 8650

Outside Mall Drilling Comp. INC.

Schmitt-County #1-11

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Comp. INC.**

1700 N Waterfront PKWAY
Wichita KS 67206

ATTN: Phil Askey

Schmitt-County #1-11

11-17s-32w Scott KS

Start Date: 2012.11.19 @ 03:03:06

End Date: 2012.11.19 @ 08:32:51

Job Ticket #: 48940 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.23 @ 14:17:56

Mull Drilling Comp. INC.

11-17s-32w Scott KS

Schmitt-County #1-11

DST # 3

Ft. Scott-Cherokee

2012.11.19



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Comp. INC.
 1700 N Waterfront PKWAY
 Wichita KS 67206
 ATTN: Phil Askey

11-17s-32w Scott KS
Schmitt-County #1-11
 Job Ticket: 48940 **DST#: 3**
 Test Start: 2012.11.19 @ 03:03:06

GENERAL INFORMATION:

Formation: **Ft. Scott-Cherokee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:55:21
 Time Test Ended: 08:32:51
 Interval: **4513.00 ft (KB) To 4565.00 ft (KB) (TVD)**
 Total Depth: 4565.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Tate Lang
 Unit No: 46
 Reference Elevations: 2992.00 ft (KB)
 2987.00 ft (CF)
 KB to GR/CF: 5.00 ft

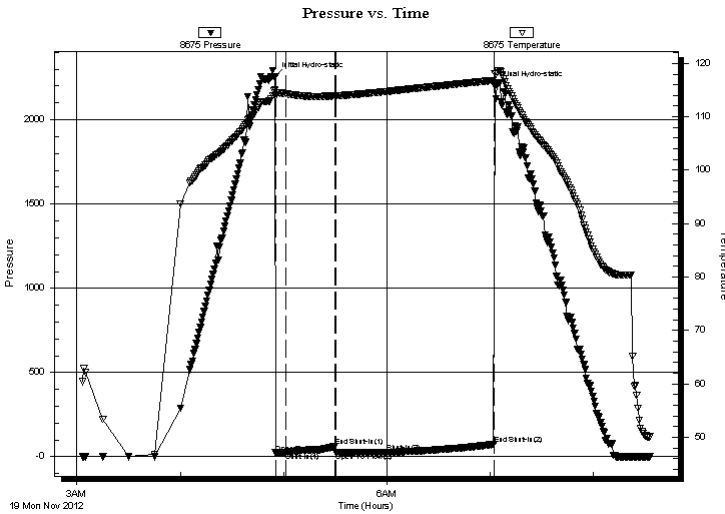
Serial #: 8675

Inside

Press @ Run Depth: 26.13 psig @ 4515.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.19 End Date: 2012.11.19 Last Calib.: 2012.11.19
 Start Time: 03:03:21 End Time: 08:32:51 Time On Btm: 2012.11.19 @ 04:55:06
 Time Off Btm: 2012.11.19 @ 07:02:36

TEST COMMENT: IF-Weak surface blow .
 IS-Dead no return.
 FF-Dead no blow
 FS-Dead no return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2257.43	115.00	Initial Hydro-static
1	23.40	113.84	Open To Flow (1)
7	25.84	114.28	Shut-In(1)
35	63.67	113.93	End Shut-In(1)
36	25.25	113.93	Open To Flow (2)
66	26.13	114.76	Shut-In(2)
127	74.13	116.82	End Shut-In(2)
128	2200.87	118.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	100%M w ith oil spots	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 48940

DST#: 3

ATTN: Phil Askey

Test Start: 2012.11.19 @ 03:03:06

Tool Information

Drill Pipe:	Length: 4375.00 ft	Diameter: 3.80 inches	Volume: 61.37 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	64000.00 lb
			<u>Total Volume: 61.98 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4513.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	52.00 ft				
Tool Length:	72.00 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			4494.00	
Shut In Tool	5.00			4499.00	
Hydraulic tool	5.00			4504.00	
Packer	5.00			4509.00	20.00 Bottom Of Top Packer
Packer	4.00			4513.00	
Stubb	1.00			4514.00	
Perforations	1.00			4515.00	
Recorder	0.00	8675	Inside	4515.00	
Recorder	0.00	8650	Outside	4515.00	
Perforations	15.00			4530.00	
Change Over Sub	1.00			4531.00	
Drill Pipe	30.00			4561.00	
Change Over Sub	1.00			4562.00	
Bullnose	3.00			4565.00	52.00 Bottom Packers & Anchor

Total Tool Length: 72.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 48940

DST#: 3

ATTN: Phil Askey

Test Start: 2012.11.19 @ 03:03:06

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:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	100%M with oil spots	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:

Serial #: 8675

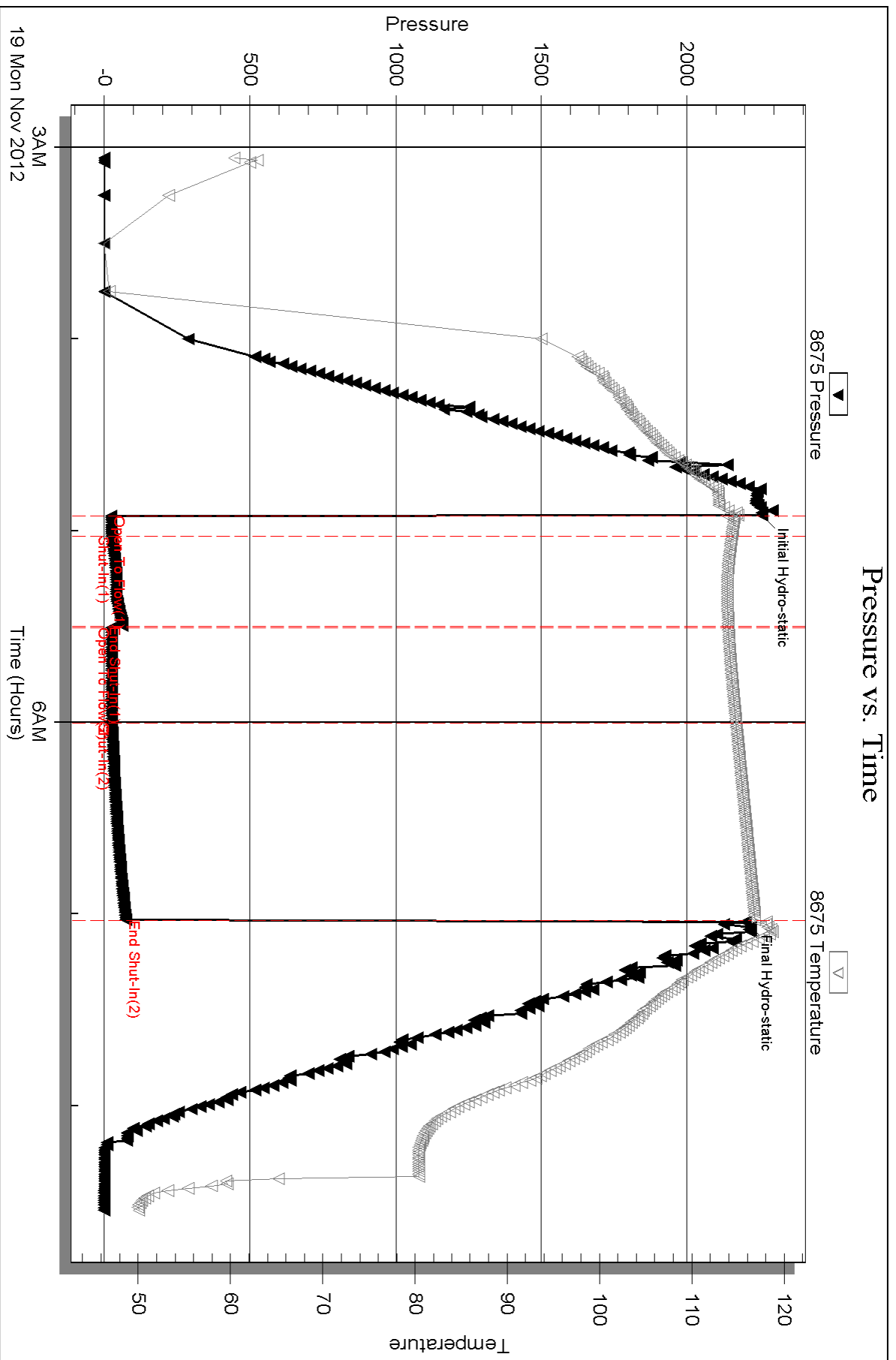
Inside

Mull Drilling Comp. INC.

Schmitt-County #1-11

DST Test Number: 3

Pressure vs. Time

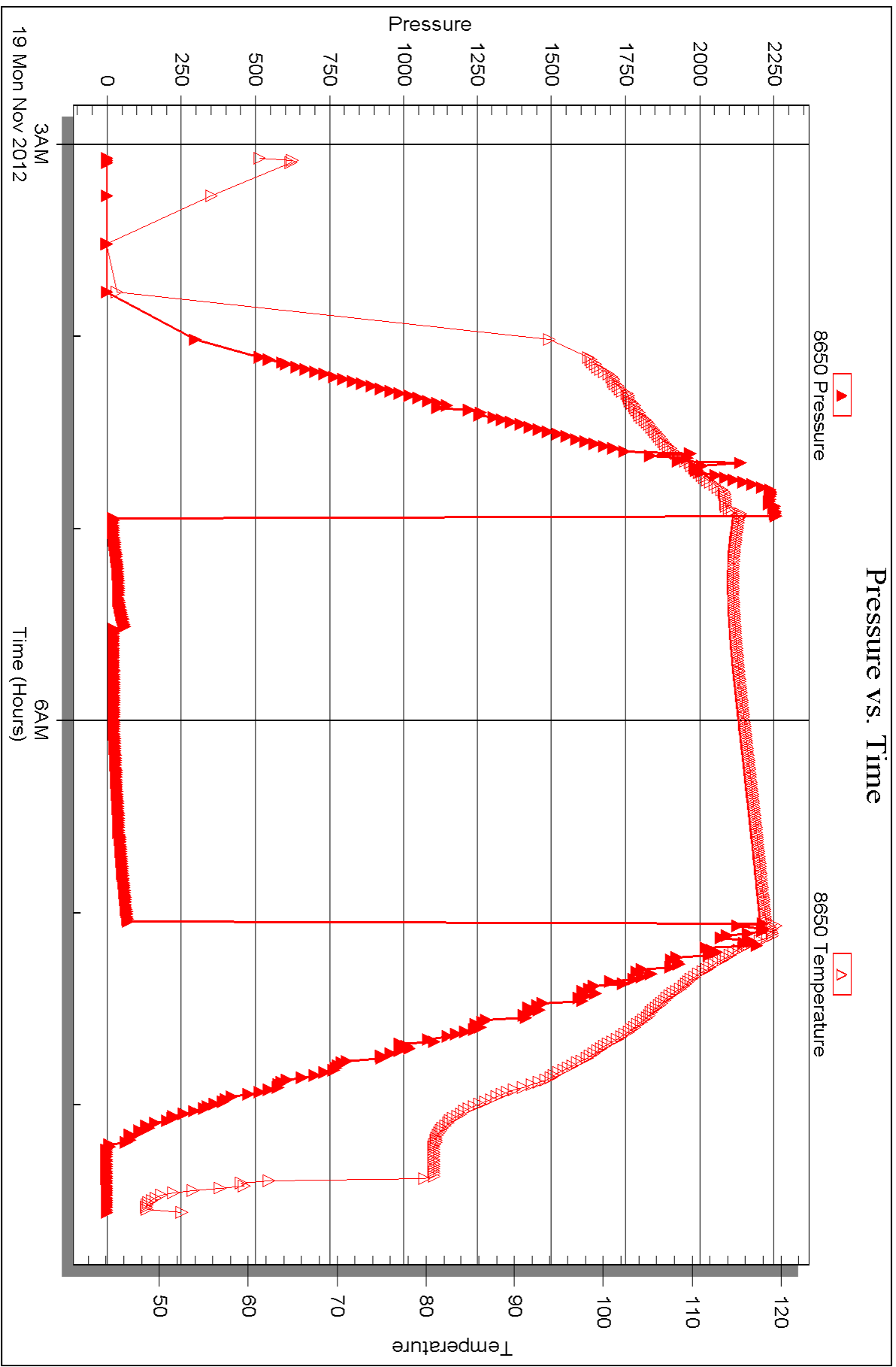


Serial #: 8650

Outside Mall Drilling Comp. INC.

Schmitt-County #1-11

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 48940

Printed: 2012.11.23 @ 14:18:00



DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Comp. INC.**

1700 N Waterfront PKWAY
Wichita KS 67206

ATTN: Phil Askey

Schmitt-County #1-11

11-17s-32w Scott KS

Start Date: 2012.11.19 @ 18:04:22

End Date: 2012.11.19 @ 23:28:45

Job Ticket #: 49841 DST #: 4

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

Printed: 2012.11.23 @ 14:17:05

Mull Drilling Comp. INC.

11-17s-32w Scott KS

Schmitt-County #1-11

DST # 4

Johnson

2012.11.19



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mull Drilling Comp. INC.
 1700 N Waterfront PKWAY
 Wichita KS 67206
 ATTN: Phil Askey

11-17s-32w Scott KS
Schmitt-County #1-11
 Job Ticket: 49841 **DST#: 4**
 Test Start: 2012.11.19 @ 18:04:22

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:54:00
 Time Test Ended: 23:28:45
Interval: 4546.00 ft (KB) To 4640.00 ft (KB) (TVD)
 Total Depth: 4640.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Tate Lang
 Unit No: 46
 Reference Elevations: 2992.00 ft (KB)
 2987.00 ft (CF)
 KB to GR/CF: 5.00 ft

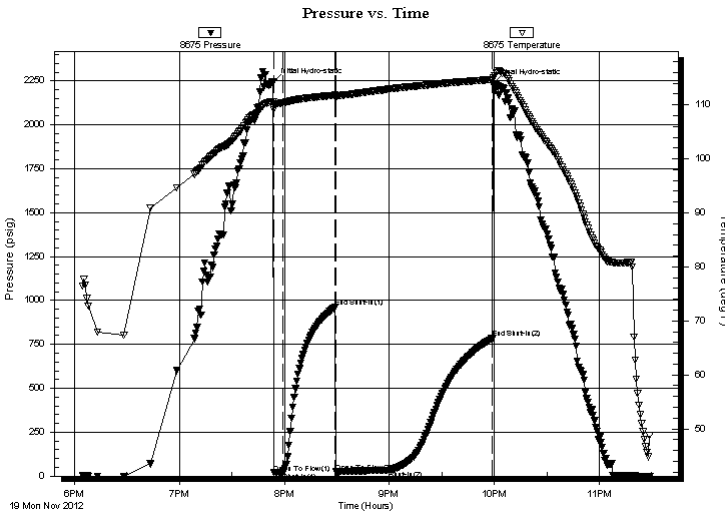
Serial #: 8675

Inside

Press @ Run Depth: 33.66 psig @ 4547.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.19 End Date: 2012.11.19 Last Calib.: 2012.11.19
 Start Time: 18:04:37 End Time: 23:28:45 Time On Btm: 2012.11.19 @ 19:53:45
 Time Off Btm: 2012.11.19 @ 21:59:15

TEST COMMENT: IF-Weak surface blow .
 IS-Dead no return.
 FF-Dead no blow .
 FS-Dead no return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2243.27	110.63	Initial Hydro-static
1	18.64	109.13	Open To Flow (1)
6	21.91	110.40	Shut-In(1)
36	960.54	111.80	End Shut-In(1)
36	24.20	111.27	Open To Flow (2)
67	33.66	112.92	Shut-In(2)
125	783.33	114.70	End Shut-In(2)
126	2231.76	115.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%M with skim of oil on top of tool	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 49841

DST#: 4

ATTN: Phil Askey

Test Start: 2012.11.19 @ 18:04:22

Tool Information

Drill Pipe:	Length: 4407.00 ft	Diameter: 3.80 inches	Volume: 61.82 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 62.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4546.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.00 ft			
Tool Length:	114.00 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			4527.00	
Shut In Tool	5.00			4532.00	
Hydraulic tool	5.00			4537.00	
Packer	5.00			4542.00	20.00 Bottom Of Top Packer
Packer	4.00			4546.00	
Stubb	1.00			4547.00	
Recorder	0.00	8675	Inside	4547.00	
Recorder	0.00	8650	Outside	4547.00	
Perforations	26.00			4573.00	
Change Over Sub	1.00			4574.00	
drill Pipe	62.00			4636.00	
change Over Sub	1.00			4637.00	
Bullnose	3.00			4640.00	94.00 Bottom Packers & Anchor

Total Tool Length: 114.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Comp. INC.

11-17s-32w Scott KS

1700 N Waterfront PKWAY
Wichita KS 67206

Schmitt-County #1-11

Job Ticket: 49841

DST#: 4

ATTN: Phil Askey

Test Start: 2012.11.19 @ 18:04:22

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:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100%M w ith skim of oil on top of tool	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

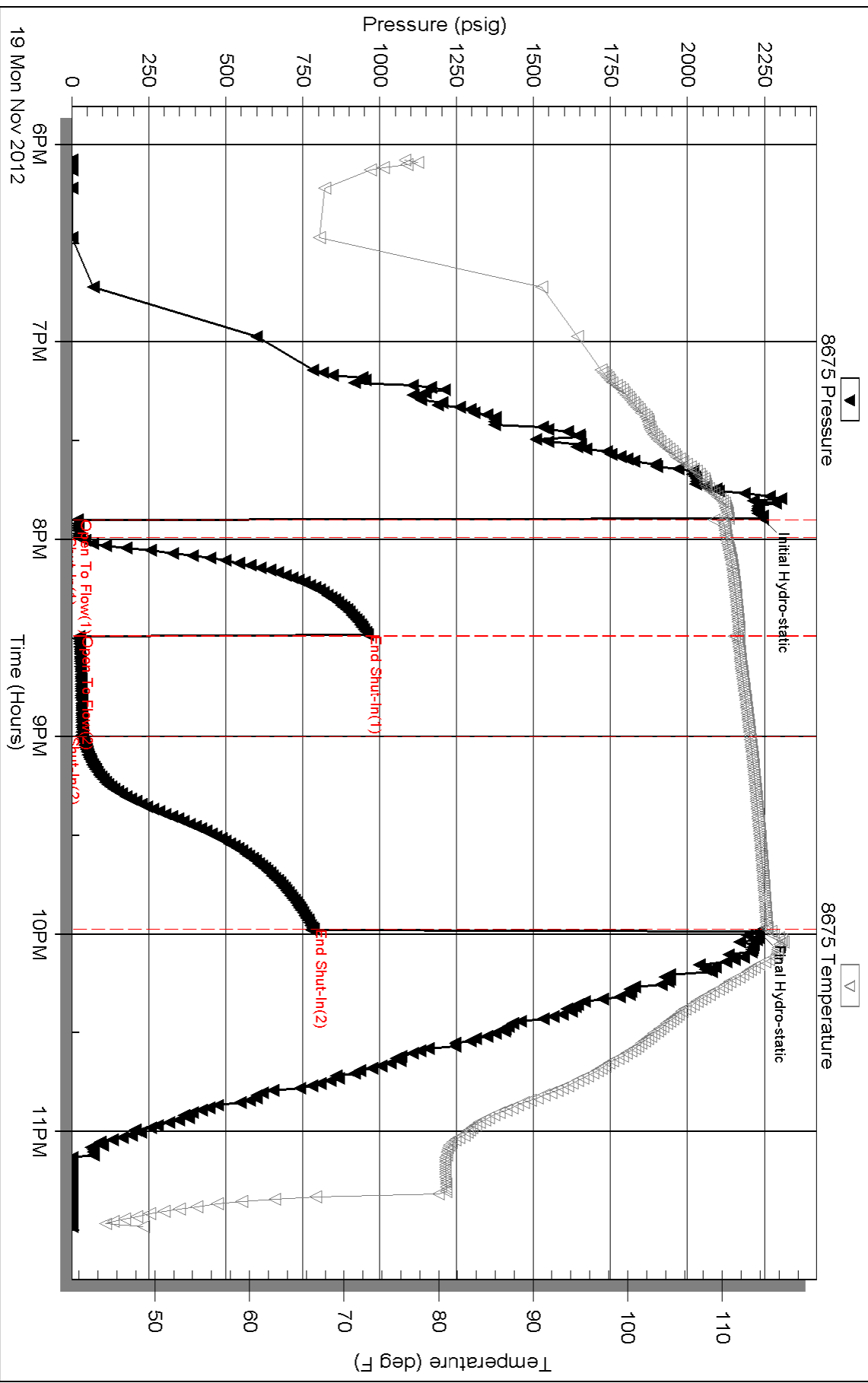
Inside

Mull Drilling Comp. INC.

Schmitt-County #1-11

DST Test Number: 4

Pressure vs. Time

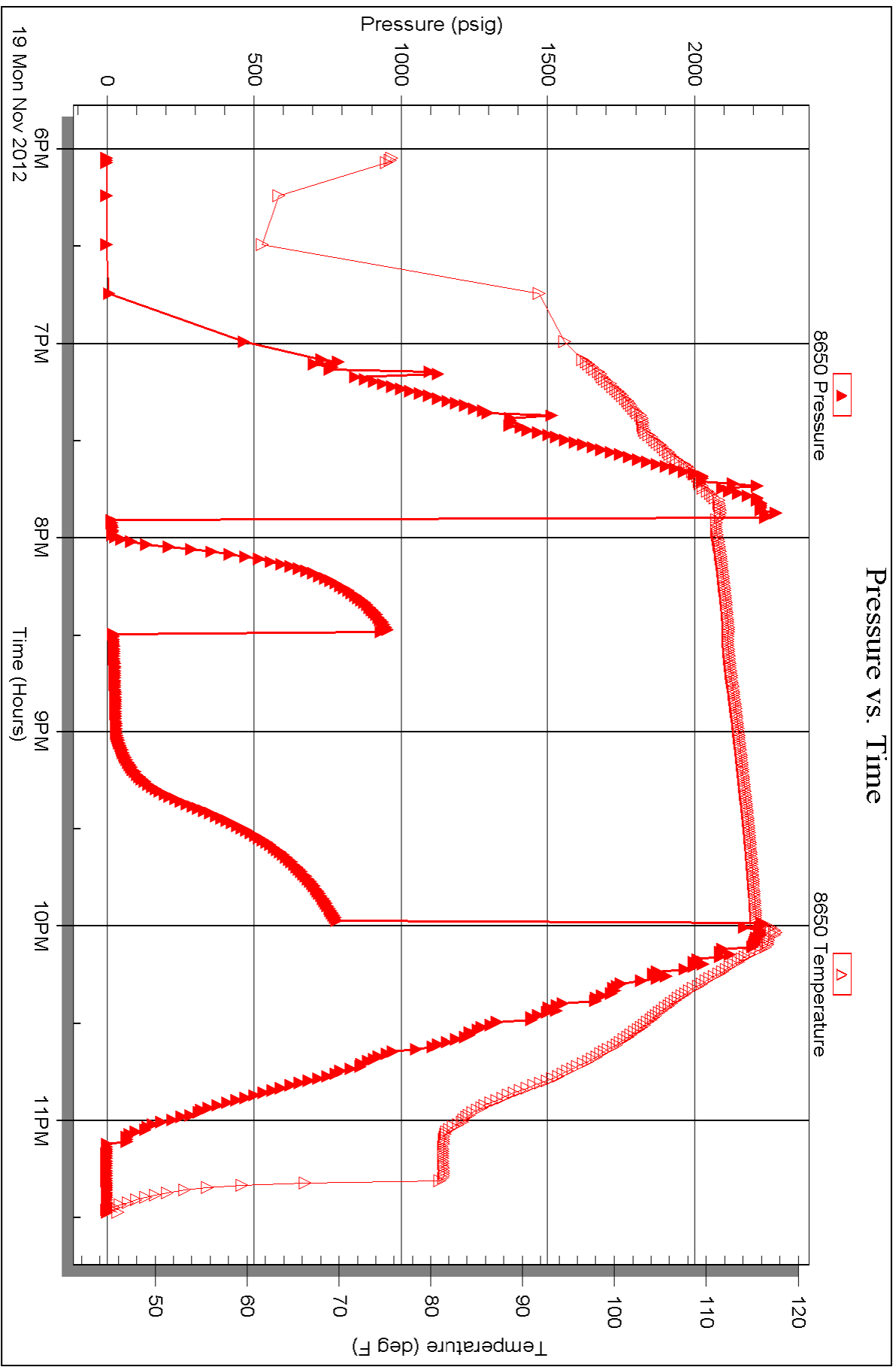


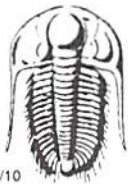
Serial #: 8650

Outside Mull Drilling Comp. INC.

Schmitt-County #1-11

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **49838**

Well Name & No. Schmitt-County Unit # 1-11 Test No. 1 Date 11-17-12
 Company Mull Drilling Comp. INC Elevation 2992 KB 2987 GL
 Address 1700 Waterfront PKWay Wichita KS 67206
 Co. Rep / Geo. Phil Askey Rig WW Rig # 10
 Location: Sec. 11 Twp. 17S Rge. 32W Co. Scott State KS

Interval Tested 4263-4295 Zone Tested Lasing 5+K
 Anchor Length 32 Drill Pipe Run 4126 Mud Wt. 8.9
 Top Packer Depth 4259 Drill Collars Run 124 Vis 51
 Bottom Packer Depth 4263 Wt. Pipe Run 0 WL 6.4
 Total Depth 4295 Chlorides 200 ppm System LCM 1#

Blow Description FF - Weak surface blow died in 3 1/2 mins.
ISI - Dead No return blow.
FF - Dead No blow.
FSL - Dead No return blow.

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>1</u>	Feet of <u>Mud with oil spots</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

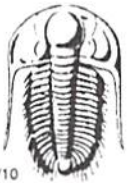
Rec Total 1 BHT 115 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2105 Test 1250 T-On Location 10:05
 (B) First Initial Flow 15 Jars T-Started 11:52
 (C) First Final Flow 16 Safety Joint T-Open 13:49
 (D) Initial Shut-In 1142 Circ Sub N/C T-Pulled 15:54
 (E) Second Initial Flow 18 Hourly Standby T-Out 17:30
 (F) Second Final Flow 26 Mileage 26 R/T 40.30 Comments
 (G) Final Shut-In 1107 Sampler
 (H) Final Hydrostatic 2052 Straddle Ruined Shale Packer

Initial Open 5 Shale Packer Ruined Packer
 Initial Shut-In 30 Extra Packer Extra Copies
 Final Flow 30 Extra Recorder Sub Total 0
 Final Shut-In 60 Day Standby Total 1290.30
 Accessibility MP/DST Disc't
 Sub Total 1290.30

Approved By Phil Askey Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 49839

Well Name & No. Schmitt - County Unit #1H Test No. 2 Date 11-18-12
 Company Mull Drilling Corp. INC. Elevation 2992 KB 2987 GL
 Address _____
 Co. Rep / Geo. Ahill Askey Rig W&W Rig #10
 Location: Sec. 11 Twp. 17S Rge. 32W Co. Scott State KS

Interval Tested 4362 4490 Zone Tested Marmaton - Pawnee
 Anchor Length 128 Drill Pipe Run 4250 Mud Wt. 9.3
 Top Packer Depth 4358 Drill Collars Run 124 Vis 52
 Bottom Packer Depth 4362 Wt. Pipe Run 0 WL 7.4
 Total Depth 4490 Chlorides 3400 ppm System LCM 1#

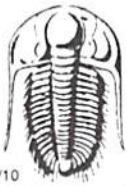
Blow Description IF- Weak surface blow
ISI- Dead no return,
FF- Dead no blow,
FSI Dead no return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>1</u>	Feet of <u>Mud With Oil spots</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1 BHT _____ Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 2206 Test 1250 T-On Location 11:30
 (B) First Initial Flow 65 Jars _____ T-Started 11:47
 (C) First Final Flow 65 Safety Joint _____ T-Open 13:35
 (D) Initial Shut-In 274 Circ Sub NIC T-Pulled 15:40
 (E) Second Initial Flow 67 Hourly Standby _____ T-Out 17:12
 (F) Second Final Flow 68 Mileage 26 R/T 40.30 Comments _____
 (G) Final Shut-In 276 Sampler _____
 (H) Final Hydrostatic 2137 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 5 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1290.30
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1290.30

Approved By Phil Askey Our Representative [Signature]
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **49840**

Well Name & No. Schmitt - County Unit #4-11 Test No. 3 Date 11-19-12
 Company Mull Drilling Comp INC. Elevation 2992 KB 2987 GL
 Address _____
 Co. Rep / Geo. Phill Astley Rig WW Rig #10
 Location: Sec. 11 Twp. 17S Rge. 32E Co. Scott State KS

Interval Tested 4513 4565 Zone Tested F1. SCOTT - Cherokee
 Anchor Length _____ Drill Pipe Run 4374 Mud Wt. 9.3
 Top Packer Depth 4509 Drill Collars Run 124 Vis 52
 Bottom Packer Depth 4513 Wt. Pipe Run 0 WL 7.4
 Total Depth 4565 Chlorides 3400 ppm System LCM 1#

Blow Description IF - Weak surface blow.
ISI - Need no slow return.
FF - Dead No blow.
FSTI - Dead No Return

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>1</u>	Feet of <u>Mud with Oil spots</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

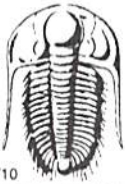
Rec Total 1 BHT 118 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2257 Test 1250 T-On Location 2:15
 (B) First Initial Flow 23 Jars _____ T-Started 3:03
 (C) First Final Flow 26 Safety Joint _____ T-Open 4:56
 (D) Initial Shut-In 64 Circ Sub N/C T-Pulled 7:01
 (E) Second Initial Flow 25 Hourly Standby _____ T-Out 8:35
 (F) Second Final Flow 26 Mileage 26 R/T 40.30 Comments _____
 (G) Final Shut-In 74 Sampler _____
 (H) Final Hydrostatic 2201 Straddle _____ Ruined Shale Packer _____

Initial Open 5 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 30 Extra Packer _____ Extra Copies _____
 Final Flow 30 Extra Recorder _____ Sub Total 0
 Final Shut-In 60 Day Standby _____ Total 1290.30
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1290.30

Approved By Phill Astley Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 49841

Well Name & No. Schmitt County Unit #1-11 Test No. 4 Date 11-19-12
 Company Mull Drilling Comp, INC Elevation 2992 KB 2787 GL
 Address _____
 Co. Rep / Geo. Phil Askey Rig WW Rig #10
 Location: Sec. 11 Twp. 17S Rge. 32W Co. Scott State KS

Interval Tested 4546 4690 Zone Tested Johnson
 Anchor Length _____ Drill Pipe Run 4407 Mud Wt. 9.3
 Top Packer Depth _____ Drill Collars Run 124 Vis 47
 Bottom Packer Depth _____ Wt. Pipe Run 0 WL 8.0
 Total Depth 4690 Chlorides 3500 ppm System LCM 1#

Blow Description IF - Weak surface blow
ISE - Dead no return
FF - Dead no blow
FSI - Dead no return

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>5</u>	Feet of <u>Mud Skin of Oil on top of tool</u>	%gas	%oil	%water	<u>100</u> %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 116 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2243</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>17:45</u>
(B) First Initial Flow <u>19</u>	<input type="checkbox"/> Jars _____	T-Started <u>18:04</u>
(C) First Final Flow <u>22</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>19:56</u>
(D) Initial Shut-In <u>961</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>22:01</u>
(E) Second Initial Flow <u>24</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>23:30</u>
(F) Second Final Flow <u>34</u>	<input checked="" type="checkbox"/> Mileage <u>26 BR/T</u> 40.30	Comments <u>Load Tools</u>
(G) Final Shut-In <u>783</u>	<input type="checkbox"/> Sampler _____	<u>11-20-12</u>
(H) Final Hydrostatic <u>2232</u>	<input type="checkbox"/> Straddle _____	<u>@ 12:00 AM</u>

Initial Open 5
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 60

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1290.30
 MP/DST Disc't _____
 Sub Total 1290.30

Approved By Phil Askey Our Representative [Signature]

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