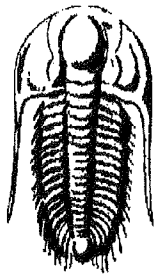


15-101-22118

21-18s-27w

RED



**TRILOBITE  
TESTING, INC.**

### DRILL STEM TEST REPORT

Prepared For: **Raymond Oil CO. Inc.**

P.O. Box 48788  
Wichita Ks. 67202

ATTN: Kim Shoemaker

**21 18 27 Lane KS**

**Michaud Trust #1**

Start Date: 2008.10.11 @ 03:01:53

End Date: 2008.10.11 @ 10:38:53

Job Ticket #: 33428                      DST #: 1

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

Raymond Oil CO. Inc.

Michaud Trust #1

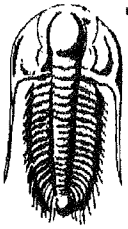
21 18 27 Lane KS

DST # 1

Chero. Sand

2008.10.11

CONFIDENTIAL  
3/12/09



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

Job Ticket: 33428

DST#: 1

ATTN: Kim Shoemaker

Test Start: 2008.10.11 @ 03:01:53

## GENERAL INFORMATION:

Formation: **Chero. Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:20:38

Time Test Ended: 10:38:53

Test Type: Inflate Bottom Hole

Tester: Chuck Kreutzer

Unit No: 30

Interval: **4557.00 ft (KB) To 4585.00 ft (KB) (TVD)**

Total Depth: 4585.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2699.00 ft (KB)

2694.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8166**

**Inside**

Press@RunDepth: 16.88 psig @ 4561.00 ft (KB)

Start Date: 2008.10.11

End Date:

2008.10.11

Start Time: 03:01:58

End Time:

10:38:52

Capacity: 7000.00 psig

Last Calib.: 2008.10.11

Time On Btm: 2008.10.11 @ 05:18:23

Time Off Btm: 2008.10.11 @ 08:56:52

TEST COMMENT: IF: Weak blow, surface.

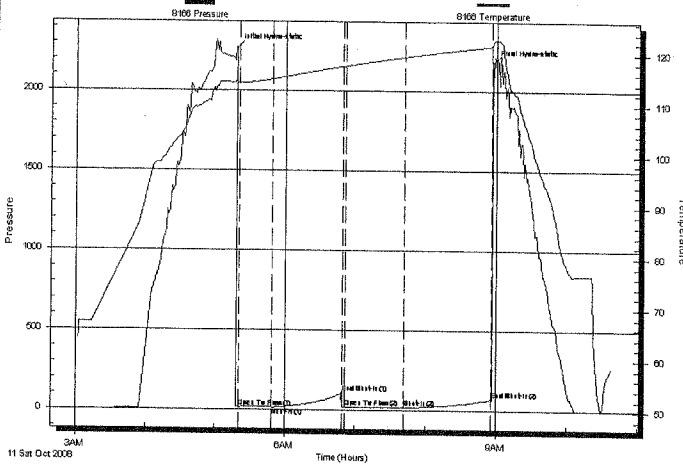
IS: No blow.

FF: No blow.

FSI: No blow.

*Handwritten note: 211827*

Pressure vs. Time



## PRESSURE SUMMARY

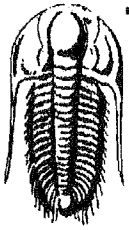
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2263.21	115.03	Initial Hydro-static
3	14.99	114.27	Open To Flow (1)
31	15.62	115.02	Shut-In(1)
91	107.38	117.57	End Shut-In(1)
93	16.16	117.62	Open To Flow(2)
144	16.88	119.42	Shut-In(2)
218	70.67	121.58	End Shut-In(2)
219	2177.28	122.25	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.07

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

ATTN: Kim Shoemaker

Job Ticket: 33428

**DST#: 1**

Test Start: 2008.10.11 @ 03:01:53

### Tool Information

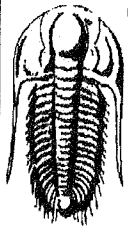
Drill Pipe:	Length: 4532.00 ft	Diameter: 3.80 inches	Volume: 63.57 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<b>Total Volume: 63.57 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4557.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	56.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4534.00	
Hydraulic tool	5.00			4539.00	
Jars	5.00			4544.00	
Safety Joint	3.00			4547.00	
Packer	5.00			4552.00	28.00 Bottom Of Top Packer
Packer	5.00			4557.00	
Stubb	1.00			4558.00	
Perforations	2.00			4560.00	
Change Over Sub	1.00			4561.00	
Recorder	0.00	8166	Inside	4561.00	
Recorder	0.00	8356	Inside	4561.00	
Change Over Sub	1.00			4562.00	
Perforations	20.00			4582.00	
Bullnose	3.00			4585.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 56.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

Job Ticket: 33428

**DST#: 1**

ATTN: Kim Shoemaker

Test Start: 2008.10.11 @ 03:01:53

**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: 9.51 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 0.20 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.070

Total Length:

5.00 ft

Total Volume:

0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

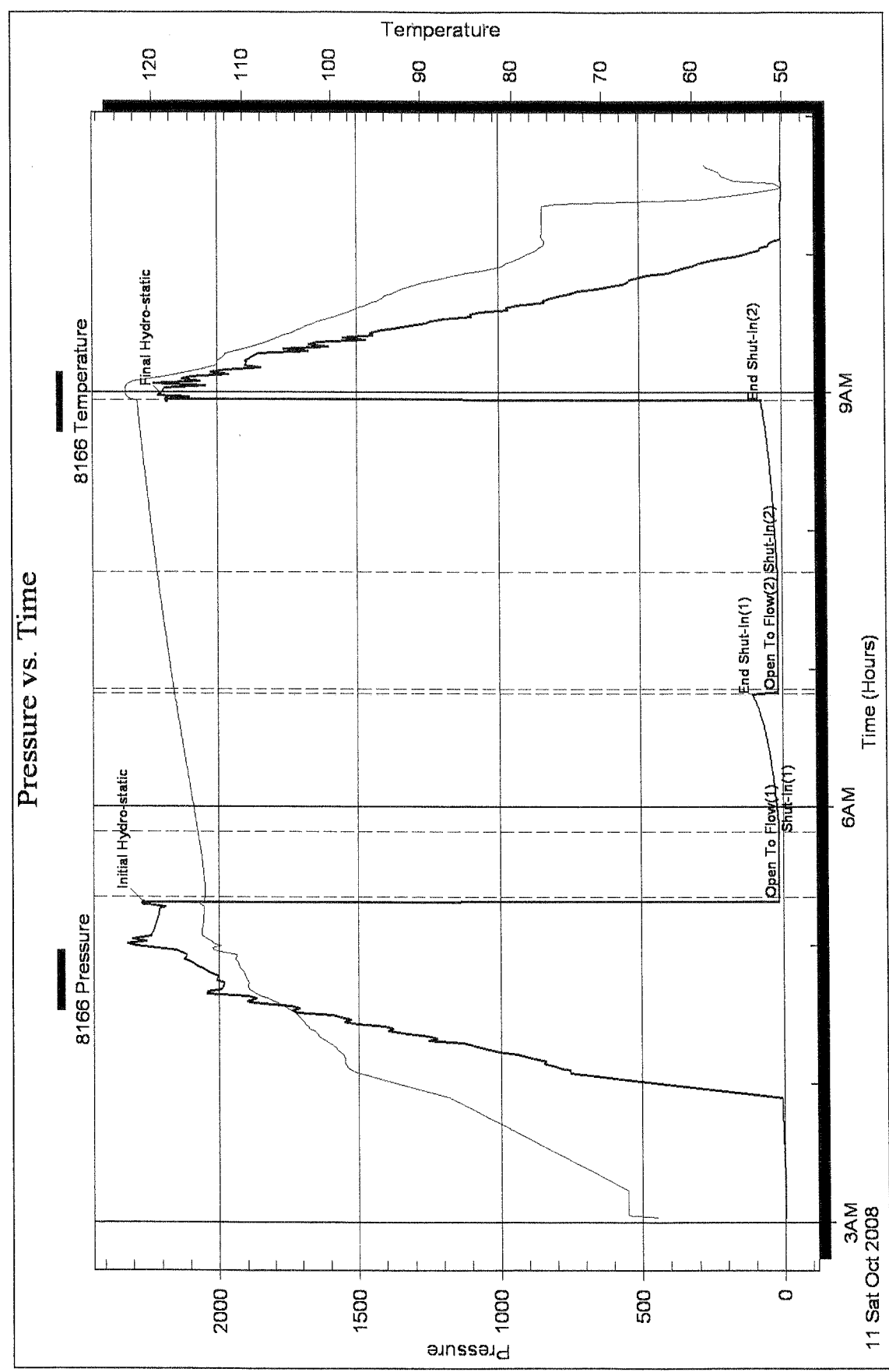
Serial #:

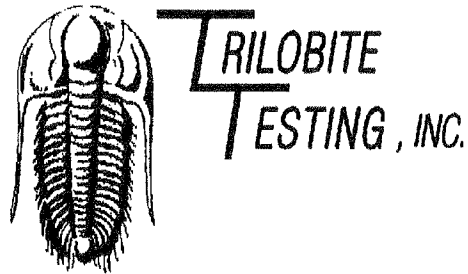
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Raymond Oil CO. Inc.**

P.O. Box 48788  
Wichita Ks. 67202

ATTN: Kim Shoemaker

**21 18 27 Lane KS**

**Michaud Trust #1**

Start Date: 2008.10.11 @ 18:26:01

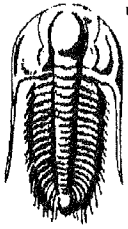
End Date: 2008.10.12 @ 00:14:01

Job Ticket #: 33429                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

Job Ticket: 33429

**DST#: 2**

ATTN: Kim Shoemaker

Test Start: 2008.10.11 @ 18:26:01

## GENERAL INFORMATION:

Formation: **Chero. sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:14:01

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer

Unit No: 30

Interval: **4558.00 ft (KB) To 4600.00 ft (KB) (TVD)**

Total Depth: 4600.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2699.00 ft (KB)

2694.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8166** Inside

Press@RunDepth: psig @ 4562.00 ft (KB)

Start Date: 2008.10.11

End Date:

2008.10.12

Start Time: 18:26:06

End Time:

00:14:00

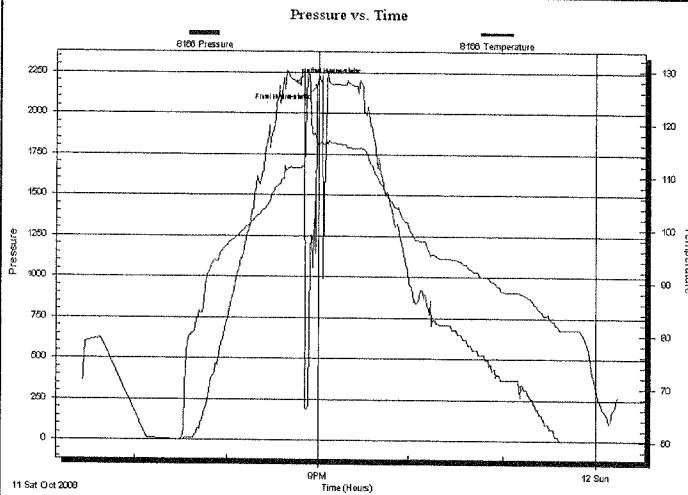
Capacity: 7000.00 psig

Last Calib.: 2008.10.12

Time On Btm: 2008.10.11 @ 20:46:16

Time Off Btm: 2008.10.11 @ 20:59:01

TEST COMMENT: mis-run



## PRESSURE SUMMARY

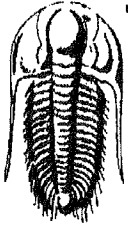
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2191.02	111.54	Initial Hydro-static
13	2168.23	116.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Raymond Oil CO. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

Job Ticket: 33429

**DST#: 2**

ATTN: Kim Shoemaker

Test Start: 2008.10.11 @ 18:26:01

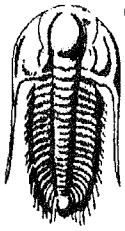
### Tool Information

Drill Pipe:	Length: 4533.00 ft	Diameter: 3.80 inches	Volume: 63.59 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<b>Total Volume: 63.59 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4558.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	72.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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

Shut In Tool	5.00			4535.00	
Hydraulic tool	5.00			4540.00	
Jars	5.00			4545.00	
Safety Joint	3.00			4548.00	
Packer	5.00			4553.00	28.00 Bottom Of Top Packer
Packer	5.00			4558.00	
Stubb	1.00			4559.00	
Perforations	2.00			4561.00	
Change Over Sub	1.00			4562.00	
Recorder	0.00	8166	Inside	4562.00	
Recorder	0.00	8356	Inside	4562.00	
Blank Spacing	32.00			4594.00	
Perforations	5.00			4599.00	
Bullnose	3.00			4602.00	44.00 Bottom Packers & Anchor

**Total Tool Length: 72.00**



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

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

Job Ticket: 33429

**DST#: 2**

ATTN: Kim Shoemaker

Test Start: 2008.10.11 @ 18:26:01

## 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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.96 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length:

ft

Total Volume:

bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8166

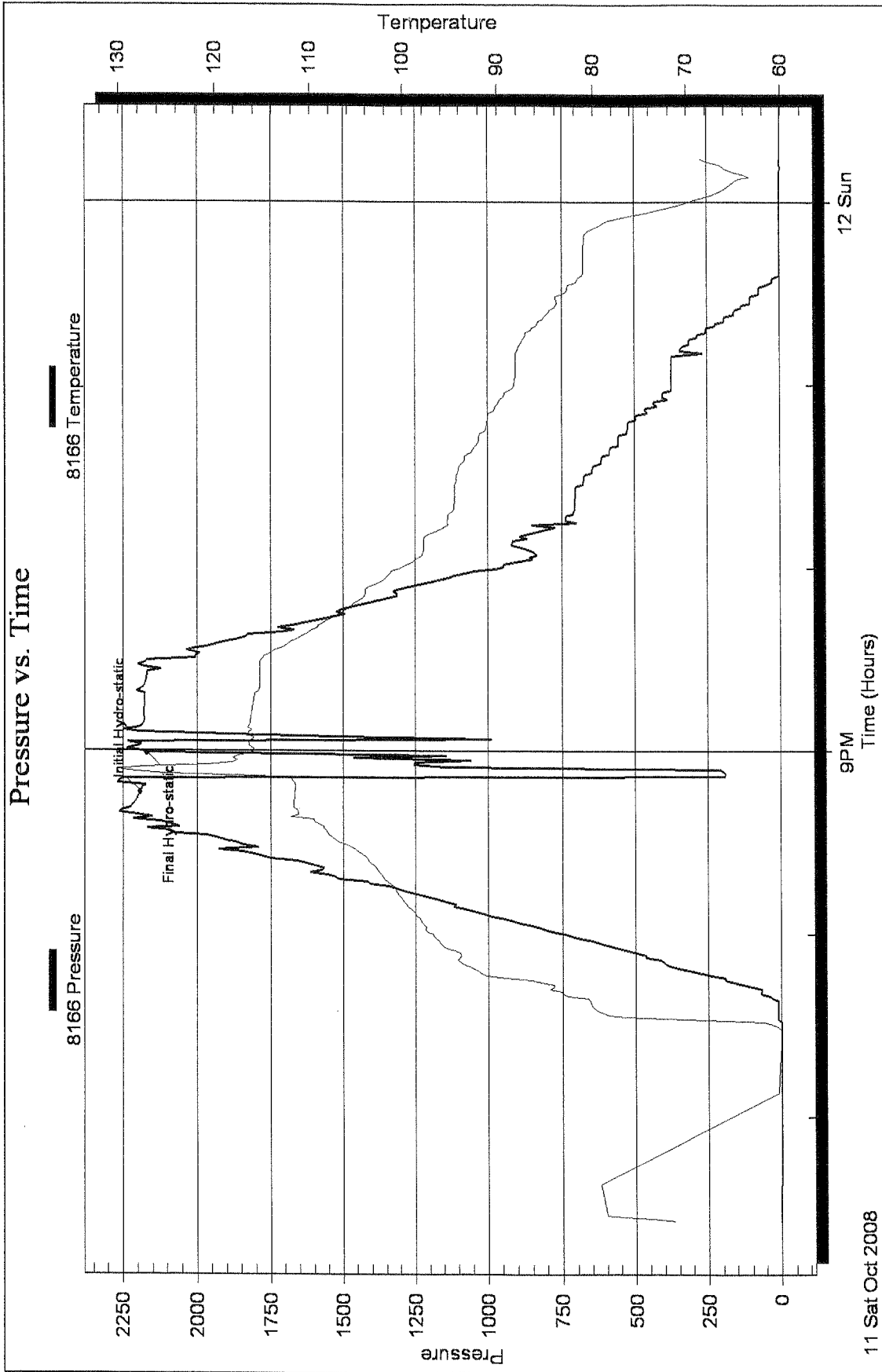
Inside

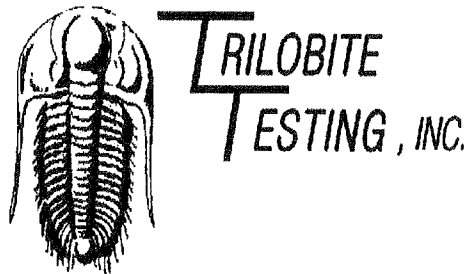
Raymond Oil CO. Inc.

21 18 27 Lane KS

DST Test Number: 2

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Raymond Oil CO. Inc.**

P.O. Box 48788  
Wichita Ks. 67202

ATTN: Kim Shoemaker

**21 18 27 Lane KS**

**Michaud Trust #1**

Start Date: 2008.10.12 @ 00:22:47

End Date: 2008.10.12 @ 00:00:00

Job Ticket #: 33430                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Raymond Oil CO. Inc.

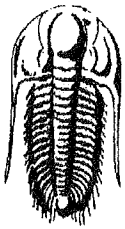
Michaud Trust #1

21 18 27 Lane KS

DST # 3

chero. sand

2008.10.12



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Raymond Oil Co. Inc.

P.O. Box 48788  
Wichita Ks. 67202

ATTN: Kim Shoemaker

**Michaud Trust #1**

**21 18 27 Lane KS**

Job Ticket: 33430

**DST#: 3**

Test Start: 2008.10.12 @ 00:22:47

## GENERAL INFORMATION:

Formation: **chero. sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:15:02

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole

Tester: Chuck Kreuzer

Unit No: 30

Interval: **4534.00 ft (KB) To 4600.00 ft (KB) (TVD)**

Total Depth: 4585.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2699.00 ft (KB)

2694.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8166**

**Inside**

Press@RunDepth: 909.87 psig @ 4538.00 ft (KB)

Start Date: 2008.10.12

End Date:

2008.10.12

Capacity: 7000.00 psig

Last Calib.: 2008.10.12

Start Time: 00:22:52

End Time:

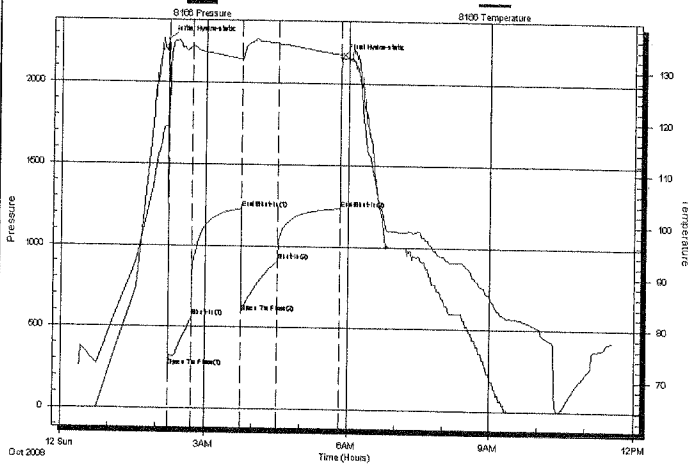
11:34:32

Time On Btm: 2008.10.12 @ 02:14:47

Time Off Btm: 2008.10.12 @ 05:49:31

**TEST COMMENT:** IF: Fair blow BOB in 3mins  
IS: surface blow  
FF: Fair blow BOB in 3 mins  
FSI: no blow

Pressure vs. Time



## PRESSURE SUMMARY

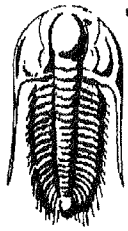
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2260.78	118.93	Initial Hydro-static
1	253.48	118.39	Open To Flow (1)
30	560.20	134.37	Shut-In(1)
91	1225.40	132.01	End Shut-In(1)
91	592.27	131.65	Open To Flow(2)
136	909.87	135.21	Shut-In(2)
215	1233.40	133.06	End Shut-In(2)
215	2157.14	133.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	go 20%g 80%o	0.42
868.00	ogw m 20%o 16%g 20%w 44%m	12.18
1148.00	ogmw 20%g 20%o 15%m 45%w	16.10
496.00	gw 20%g 80%w	6.96

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

Job Ticket: 33430

**DST#: 3**

ATTN: Kim Shoemaker

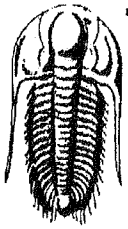
Test Start: 2008.10.12 @ 00:22:47

## Tool Information

Drill Pipe:	Length: 4533.00 ft	Diameter: 3.80 inches	Volume: 63.59 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<b>Total Volume: 63.59 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4534.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	94.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4511.00	
Hydraulic tool	5.00			4516.00	
Jars	5.00			4521.00	
Safety Joint	3.00			4524.00	
Packer	5.00			4529.00	28.00 Bottom Of Top Packer
Packer	5.00			4534.00	
Stubb	1.00			4535.00	
Perforations	2.00			4537.00	
Change Over Sub	1.00			4538.00	
Recorder	0.00	8166	Inside	4538.00	
Recorder	0.00	8356	Inside	4538.00	
Blank Spacing	32.00			4570.00	
Perforations	27.00			4597.00	
Bullnose	3.00			4600.00	66.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>94.00</b>				



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

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Raymond Oil Co. Inc.

**Michaud Trust #1**

P.O. Box 48788  
Wichita Ks. 67202

**21 18 27 Lane KS**

ATTN: Kim Shoemaker

Job Ticket: 33430

**DST#: 3**

Test Start: 2008.10.12 @ 00:22:47

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 9.48 in<sup>3</sup>

Resistivity: 1.00 ohm.m

Salinity: 3200.00 ppm

Filter Cake: 0.20 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
30.00	go 20%g 80%o	0.421
868.00	ogw m 20%o 16%g 20%w 44%m	12.176
1148.00	ogmw 20%g 20%o 15%m 45%w	16.103
496.00	gw 20%g 80%w	6.958

Total Length: 2542.00 ft

Total Volume: 35.658 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

