

**DRILL STEM TEST REPORT**

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

P.O. Box 48788  
Wichita KS 67202

ATTN: Kim Shoemaker

**28 18 27 Lane KS**

**#1 Habiger Lvg. Trust**

Start Date: 2010.03.17 @ 20:45:05

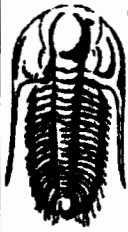
End Date: 2010.03.18 @ 05:59:00

Job Ticket #: 37093                      DST #: 1

**KCC**  
**APR 23 2010**  
**CONFIDENTIAL**

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

RECEIVED  
KANSAS CORPORATION COMMISSION  
APR 27 2010  
CONSERVATION DIVISION  
WICHITA, KS



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Raymond Oil Company Inc.

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**#1 Habiger Lvg. Trust**

**28 18 27 Lane KS**

Job Ticket: 37093

**DST#: 1**

Test Start: 2010.03.17 @ 20:45:05

### GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 23:11:30

Time Test Ended: 05:59:00

Test Type: **Conventional Bottom Hole**

Tester: **Mike Roberts**

Unit No: **35**

Interval: **4498.00 ft (KB) To 4549.00 ft (KB) (TVD)**

Total Depth: **4549.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

Reference Elevations: **2659.00 ft (KB)**

**2654.00 ft (CF)**

KB to GR/CF: **5.00 ft**

**Serial #: 6772** **Outside**

Press@RunDepth: **511.59 psig @ 4499.00 ft (KB)**

Start Date: **2010.03.17**

End Date: **2010.03.18**

Capacity: **8000.00 psig**

Last Calib.: **2010.03.18**

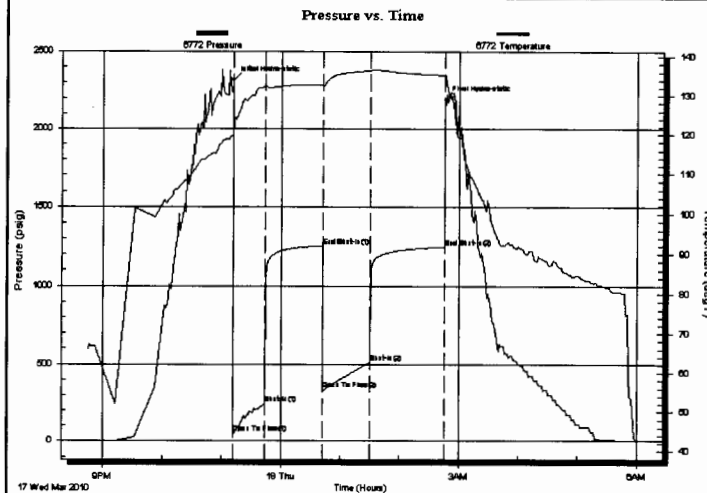
Start Time: **20:45:05**

End Time: **05:59:00**

Time On Btm: **2010.03.17 @ 23:11:15**

Time Off Btm: **2010.03.18 @ 02:45:44**

**TEST COMMENT:** IF:BOB 6 min  
IS:no return  
FF:BOB 9 min  
FS:no return



### PRESSURE SUMMARY

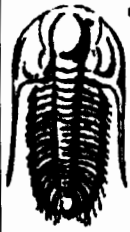
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2315.53	119.85	Initial Hydro-static
1	51.12	119.37	Open To Flow (1)
33	244.34	132.34	Shut-In(1)
91	1254.03	132.82	End Shut-In(1)
92	337.44	132.39	Open To Flow (2)
139	511.59	136.43	Shut-In(2)
214	1246.71	135.21	End Shut-In(2)
215	2190.65	135.48	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
90.00	100% o	1.26
30.00	ocm 50 % o 50% m	0.42
310.00	ocm 10% o 90 % m	4.35
372.00	mogo 10% m 40% g 50% o	5.22
186.00	gco 10 % g 90% o	2.61

### Gas Rates

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



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**TOOL DIAGRAM**

Raymond Oil Company Inc.

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Wichita KS 67202

**28 18 27 Lane KS**

Job Ticket: 37093

**DST#: 1**

ATTN: Kim Shoemaker

Test Start: 2010.03.17 @ 20:45:05

**Tool Information**

Drill Pipe:	Length: 4480.00 ft	Diameter: 3.80 inches	Volume: 62.84 bbl	Tool Weight: 1500.00 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
		<u>Total Volume:</u>	<u>62.84 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4498.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4471.00	
Shut In Tool	5.00			4476.00	
Hydraulic tool	5.00			4481.00	
Jars	5.00			4486.00	
Safety Joint	3.00			4489.00	
Packer	5.00			4494.00	28.00 Bottom Of Top Packer
Packer	4.00			4498.00	
Stubb	1.00			4499.00	
Recorder	0.00	8373	Inside	4499.00	
Recorder	0.00	6772	Outside	4499.00	
Change Over Sub	1.00			4500.00	
Drill Pipe	32.00			4532.00	
Change Over Sub	1.00			4533.00	
Perforations	11.00			4544.00	
Bullnose	5.00			4549.00	51.00 Bottom Packers & Anchor

**Total Tool Length: 79.00**



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**FLUID SUMMARY**

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**28 18 27 Lane KS**

Job Ticket: 37093

**DST#: 1**

ATTN: Kim Shoemaker

Test Start: 2010.03.17 @ 20:45:05

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.17 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6200.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
90.00	100% o	1.262
30.00	ocm 50 % o 50%m	0.421
310.00	ocm 10%o 90 %m	4.348
372.00	mcgo 10%m 40%g 50%o	5.218
186.00	gco 10 %g 90%o	2.609

Total Length: 988.00 ft      Total Volume: 13.858 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API 30 @30\* corrected to 33@60\*

Serial #: 6772

Outside Raymond Oil Company Inc.

28 18 27 Lane KS

DST Test Number: 1

### Pressure vs. Time

