

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

## DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co Inc**

605 S 6th Po Box 124  
Kiowa KS 67070-1912

ATTN: Ron Molz

**21-33s-11w Barber KS**

**Lake #1**

Start Date: 2011.04.27 @ 08:53:53

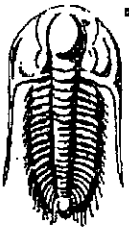
End Date: 2011.04.27 @ 15:26:32

Job Ticket #: 41649      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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TESTING, INC.**

# DRILL STEM TEST REPORT

Chieftain Oil Co Inc  
605 S 6th Po Box 124  
Kiowa KS 67070-1912  
ATTN: Ron Molz

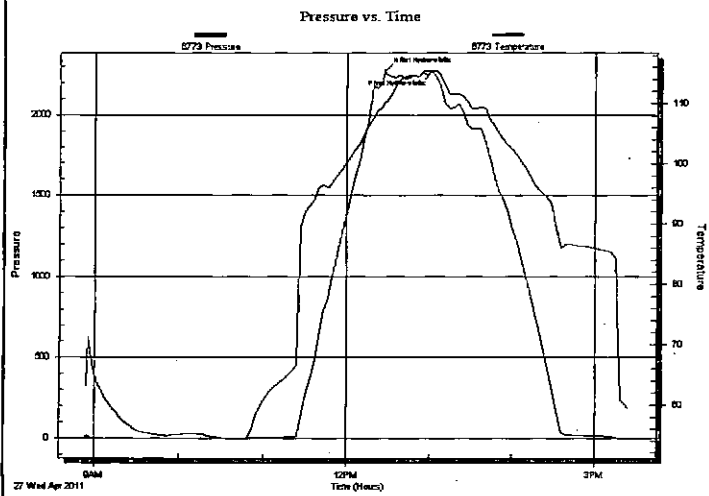
Lake #1  
21-33s-11w Barber KS  
Job Ticket: 41649      DST#: 1  
Test Start: 2011.04.27 @ 08:53:53

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: **No Whipstock:**                      ft (KB)  
 Time Tool Opened: 00:00:00  
 Time Test Ended: 15:26:32  
 Interval: **4742.00 ft (KB) To 4760.00 ft (KB) (TVD)**  
 Total Depth: **4760.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Chris Staats**  
 Unit No: **34**  
 Reference Elevations: **1386.00 ft (KB)**  
**1376.00 ft (CF)**  
 KB to GR/CF: **10.00 ft**

Serial #: **6773**      Outside  
 Press@RunDepth:                      psig @      4743.00 ft (KB)  
 Start Date:                      2011.04.27      End Date:                      2011.04.27  
 Start Time:                      08:53:53      End Time:                      15:26:32  
 Capacity:                      8000.00 psig  
 Last Calib.:                      2011.04.27  
 Time On Btm:                      2011.04.27 @ 12:28:03  
 Time Off Btm:                      2011.04.27 @ 13:01:33

TEST COMMENT: Miss run LOST CIRCULATION



## PRESSURE SUMMARY

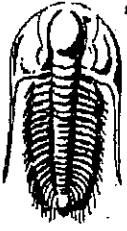
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2271.57	110.11	Initial Hydro-static
34	2267.82	115.42	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)

## Gas Rates

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



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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Chieftain Oil Co Inc  
605 S 6th Po Box 124  
Kiowa KS 67070-1912

**Lake #1**  
**21-33s-11w Barber KS**  
Job Ticket: 41649      DST#: 1  
Test Start: 2011.04.27 @ 08:53:53

ATTN: Ron Moz

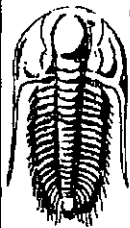
**Tool Information**

Drill Pipe:	Length: 4610.00 ft	Diameter: 3.80 inches	Volume: 64.67 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 65.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	4742.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.25 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4719.00	
Shut In Tool	5.00			4724.00	
Hydraulic tool	5.00			4729.00	
Safety Joint	3.00			4732.00	
Packer	5.00			4737.00	24.00      Bottom Of Top Packer
Packer	5.00			4742.00	
Stubb	1.00			4743.00	
Recorder	0.00	6773	Outside	4743.00	
Recorder	0.00	8166	Outside	4743.00	
Perforations	14.00			4757.00	
Bullnose	3.00			4760.00	18.00      Bottom Packers & Anchor

**Total Tool Length: 42.00**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Chieftain Oil Co Inc  
605 S 6th Po Box 124  
Kiowa KS 67070-1912

**Lake #1**  
**21-33s-11w Barber KS**  
Job Ticket: 41649      DST#: 1  
Test Start: 2011.04.27 @ 08:53:53

ATTN: Ron Moiz

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 50.00 sec/qt  
Water Loss: 7.18 in<sup>3</sup>  
Resistivity: 0.00 ohm.m  
Salinity: 4800.00 ppm  
Filter Cake: 0.02 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

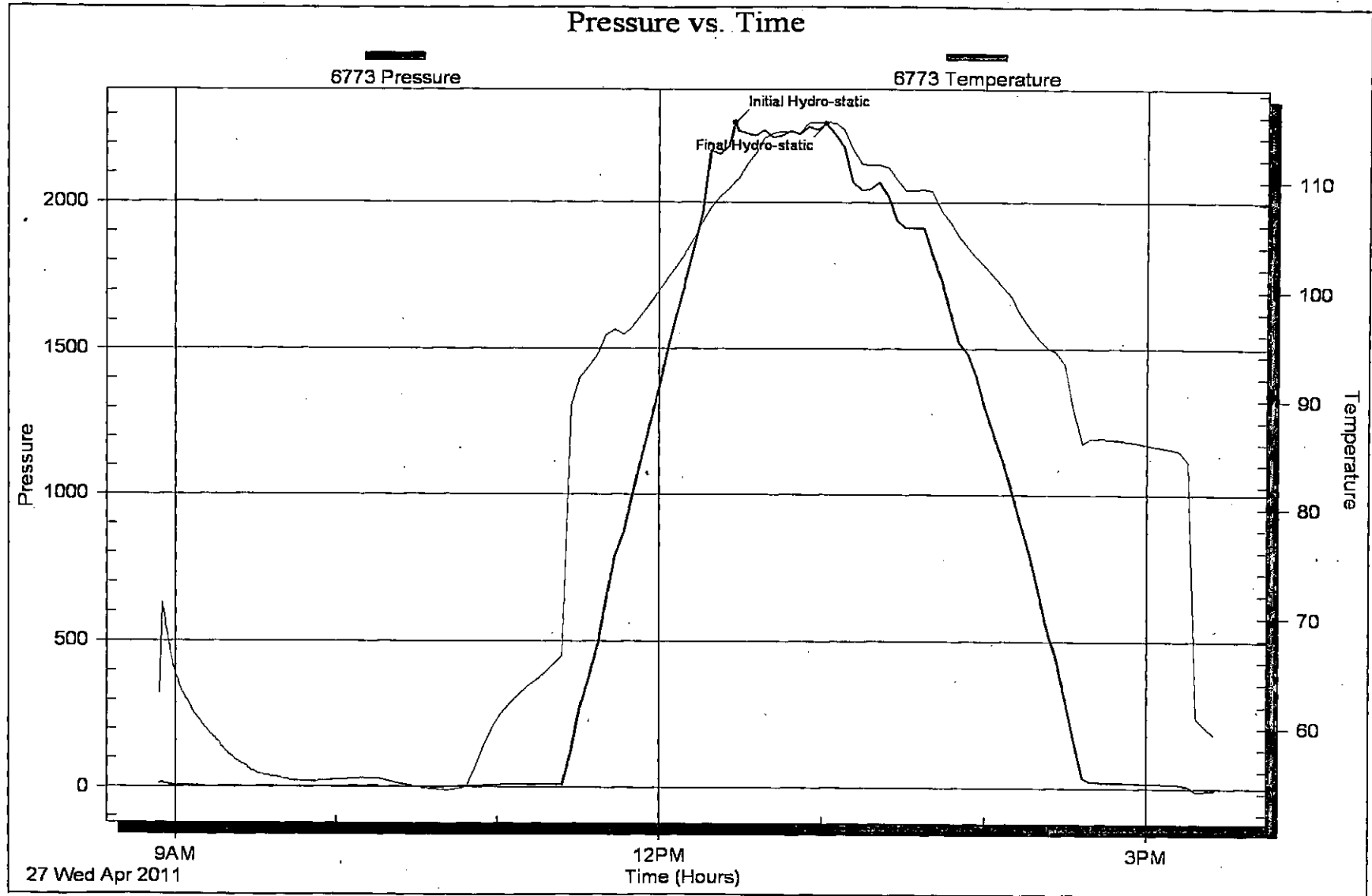
Oil API: deg API  
Water Salinity: ppm

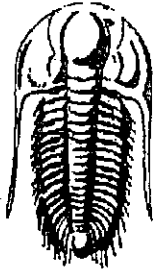
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length:                      ft      Total Volume:                      bbl  
Num Fluid Samples: 0                      Num Gas Bombs: 0                      Serial #:  
Laboratory Name:                      Laboratory Location:  
Recovery Comments:





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## DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co Inc**

605 S 6th Po Box 124  
Kiowa KS 67070-1912

ATTN: Ron Molz

**21-33s-11w Barber KS**

**Lake #1**

Start Date: 2011.04.27 @ 21:51:44

End Date: 2011.04.28 @ 07:47:14

Job Ticket #: 41650                      DST #: 2

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PO Box 1733 Hays, KS 67601

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

Chieftain Oil Co Inc

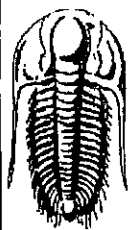
Lake #1

21-33s-11w Barber KS

DST # 2

Viola

2011.04.27



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# DRILL STEM TEST REPORT

Chieftain Oil Co Inc  
 605 S 6th Po Box 124  
 Kiowa KS 67070-1912  
 ATTN: Ron Molz

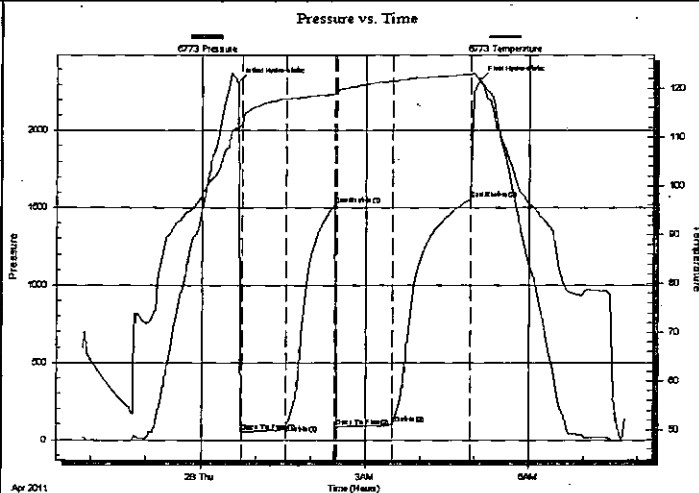
Lake #1  
 21-33s-11w Barber KS  
 Job Ticket: 41650 DST#: 2  
 Test Start: 2011.04.27 @ 21:51:44

## GENERAL INFORMATION:

Formation: Viola  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:43:29  
 Time Test Ended: 07:47:14  
 Interval: 4742.00 ft (KB) To 4760.00 ft (KB) (TVD)  
 Total Depth: 4760.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Chris Staats  
 Unit No: 34  
 Reference Elevations: 1386.00 ft (KB)  
 1376.00 ft (CF)  
 KB to GR/CF: 10.00 ft

Serial #: 6773 Outside  
 Press@RunDepth: 104.74 psig @ 4743.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2011.04.27 End Date: 2011.04.28 Last Calib.: 2011.04.28  
 Start Time: 21:51:49 End Time: 07:47:14 Time On Btm: 2011.04.28 @ 00:39:29  
 Time Off Btm: 2011.04.28 @ 05:05:29

TEST COMMENT: IF: Strong blow BOB in 18 min  
 IS: No blow back  
 FF: Strong blow BOB 47 min  
 FSI: No blow back



## PRESSURE SUMMARY

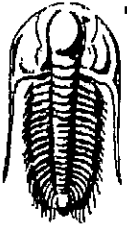
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2316.52	111.81	Initial Hydro-static
4	50.30	112.71	Open To Flow (1)
54	94.11	117.86	Shut-In(1)
107	1517.64	118.81	End Shut-In(1)
109	82.65	119.49	Open To Flow (2)
170	104.74	121.49	Shut-In(2)
256	1553.94	122.79	End Shut-In(2)
266	2331.21	121.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	560' GIP	0.00
152.00	G,O,CW,M 2%oil 8%gas 45%water 45% m1.03	

## Gas Rates

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



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TOOL DIAGRAM

Chieftain Oil Co Inc

Lake #1

605 S 6th Po Box 124  
Kiowa KS 67070-1912

21-33s-11w Barber KS

Job Ticket: 41650

DST#: 2

ATTN: Ron Molz

Test Start: 2011.04.27 @ 21:51:44

### Tool Information

Drill Pipe:	Length: 4610.00 ft	Diameter: 3.80 inches	Volume: 64.67 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 65.27 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4742.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.25 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4719.00	
Shut In Tool	5.00			4724.00	
Hydraulic tool	5.00			4729.00	
Safety Joint	3.00			4732.00	
Packer	5.00			4737.00	24.00 Bottom Of Top Packer
Packer	5.00			4742.00	
Stubb	1.00			4743.00	
Recorder	0.00	6773	Outside	4743.00	
Recorder	0.00	8166	Outside	4743.00	
Perforations	14.00			4757.00	
Bullnose	3.00			4760.00	18.00 Bottom Packers & Anchor

**Total Tool Length: 42.00**





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ATTN: Ron Molz

Lake #1  
21-33s-11w Barber KS  
Job Ticket: 41650      DST#: 2  
Test Start: 2011.04.27 @ 21:51:44

### 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:	51.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	7.97 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	0.02 inches				

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	560' GIP	0.000
152.00	G.O,CW,M 2%oil 8%gas45%water45%mud	1.030

Total Length: 152.00 ft      Total Volume: 1.030 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

