

**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Chieftain Oil Company, Inc.

Yates A #3

P.O.Box 124  
Kiowa, KS 67070

36-34s-12w Barber KS

Job Ticket: 36915

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2010.06.21 @ 14:52:05

## GENERAL INFORMATION:

Formation: **Misener**  
 Deviated: **No Whipstock** ft (KB)  
 Time Tool Opened: 17:56:35  
 Time Test Ended: 00:21:35

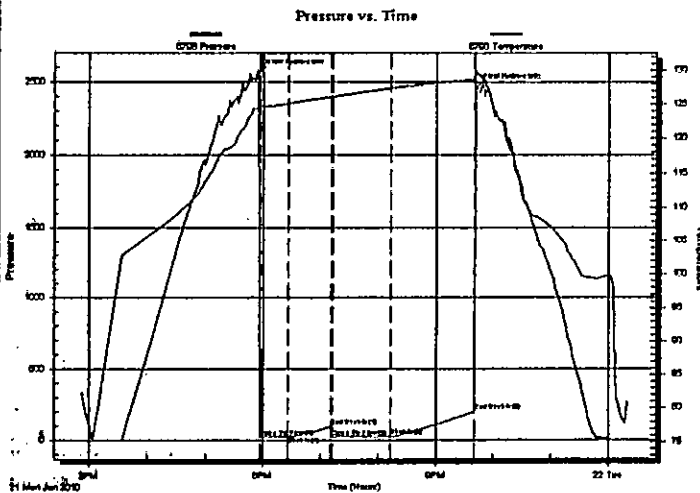
Test Type: **Conventional Bottom Hole**  
 Tester: **Jerry Adams**  
 Unit No: **45**

Interval: **5054.00 ft (KB) To 5084.00 ft (KB) (TVD)**  
 Total Depth: **5084.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1374.00 ft (KB)**  
**1365.00 ft (CF)**  
 KB to GR/CF: **9.00 ft**

Serial #: **6798** Inside  
 Press@RunDepth: **23.36 psig @ 5055.00 ft (KB)** Capacity: **8000.00 psig**  
 Start Date: **2010.06.21** End Date: **2010.06.22** Last Calib.: **2010.06.22**  
 Start Time: **14:52:06** End Time: **00:21:35** Time On Btm: **2010.06.21 @ 17:55:05**  
 Time Off Btm: **2010.06.21 @ 21:42:05**

TEST COMMENT: IF:Weak blow . Built to 4 3/4".  
 IS:No blow .  
 FF:Weakblow . Built to 3".  
 FS:No blow .



## PRESSURE SUMMARY

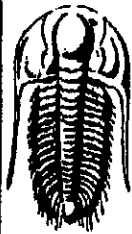
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2558.42	124.74	Initial Hydro-static
2	21.88	124.68	Open To Flow (1)
31	24.83	125.09	Shut-in(1)
76	94.27	126.07	End Shut-in(1)
78	21.45	126.07	Open To Flow (2)
139	23.36	127.35	Shut-in(2)
226	198.85	128.64	End Shut-in(2)
227	2457.59	129.84	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	2%g 98%m	0.21
0.00	50' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Chieftain Oil Company, Inc.

**Yates A #3**

P.O.Box 124  
Kiowa, KS 67070

**36-34s-12w Barber KS**

Job Ticket: 36915

**DST#: 1**

ATTN: Arden Ratzlaff

Test Start: 2010.06.21 @ 14:52:05

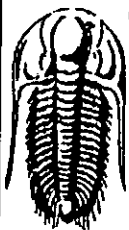
### Tool Information

Drill Pipe:	Length: 5039.00 ft	Diameter: 3.80 inches	Volume: 70.68 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 70.68 bbl</u>	Tool Chased: 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	5054.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	53.00 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			5036.00	
Hydraulic tool	5.00			5041.00	
Safety Joint	3.00			5044.00	
Packer	5.00			5049.00	23.00 Bottom Of Top Packer
Packer	5.00			5054.00	
Stubb	1.00			5055.00	
Recorder	0.00	6798	Inside	5055.00	
Recorder	0.00	8367	Inside	5055.00	
Perforations	26.00			5081.00	
Bullnose	3.00			5084.00	30.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>53.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Chieftain Oil Company, Inc.

**Yates A #3**

P.O.Box 124  
Kiowa, KS 67070

**36-34s-12w Barber KS**

Job Ticket: 36915      DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2010.06.21 @ 14:52:05

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 78.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.37 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm-m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.21 inches			

## Recovery Information

Recovery Table

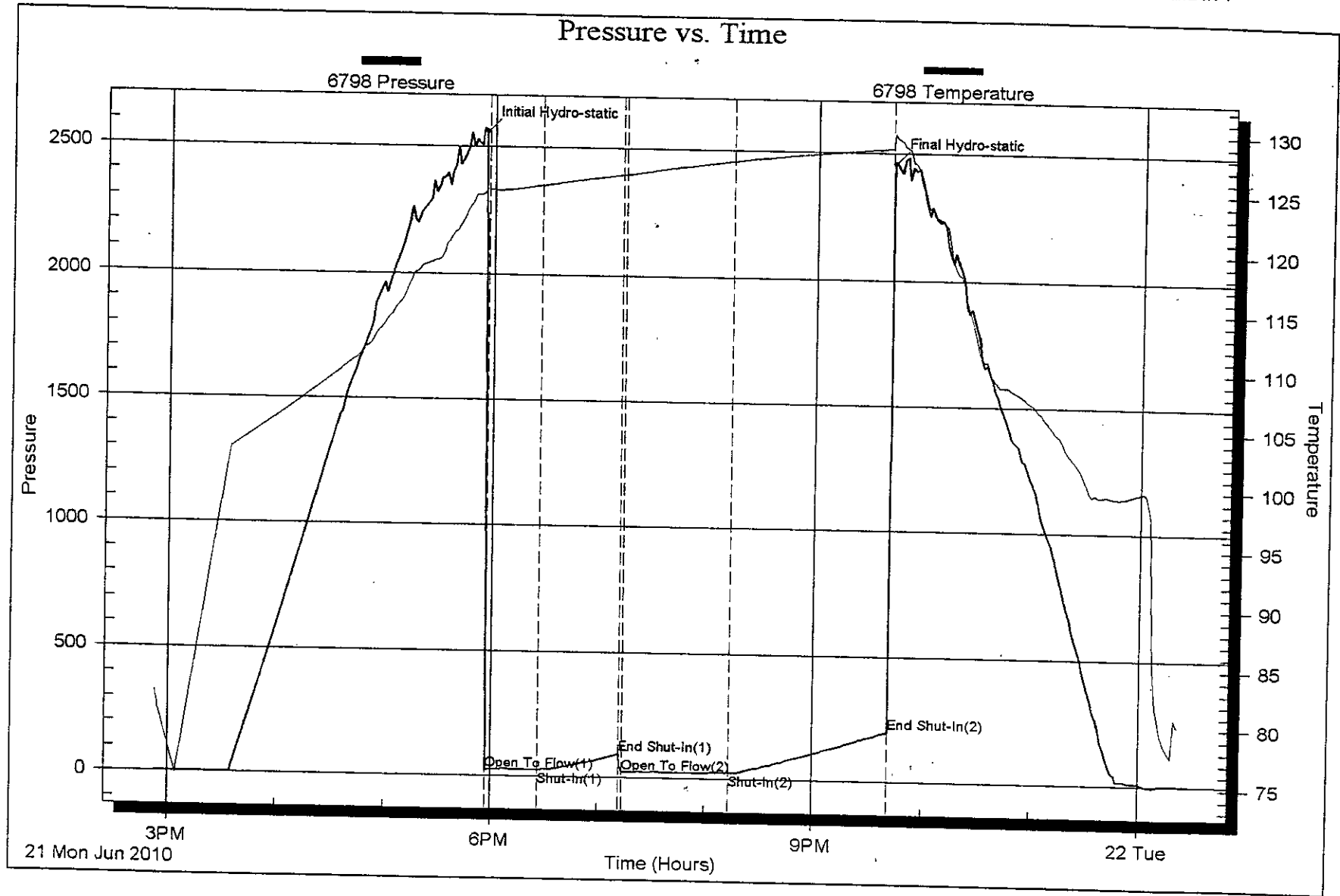
Length ft	Description	Volume bbl
15.00	2%g 98%m	0.210
0.00	50' GIP	0.000

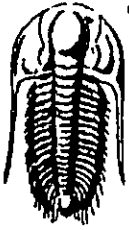
Total Length: 15.00 ft      Total Volume: 0.210 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Chieftain Oil Company, Inc.

Yates A #3

P.O.Box 124  
Klowa, KS 67070

36-34s-12w Barber KS

Job Ticket: 36916

DST#: 2

ATTN: Arden Ratzlaff

Test Start: 2010.06.22 @ 23:02:11

## GENERAL INFORMATION:

Formation: **Simpson**

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

Time Tool Opened: 02:02:41

Time Test Ended: 08:49:41

Test Type: **Conventional Bottom Hole**

Tester: **Jerry Adams**

Unit No: **45**

Interval: **5179.00 ft (KB) To 5216.00 ft (KB) (TVD)**

Reference Elevations: **1374.00 ft (KB)**

Total Depth: **5216.00 ft (KB) (TVD)**

**1365.00 ft (CF)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

KB to GR/CF: **9.00 ft**

## Serial #: 6798

Inside

Press@RunDepth: **24.67 psig @ 5180.00 ft (KB)**

Capacity: **8000.00 psig**

Start Date: **2010.06.22**

End Date:

**2010.06.23**

Last Calib.: **2010.06.23**

Start Time: **23:02:12**

End Time:

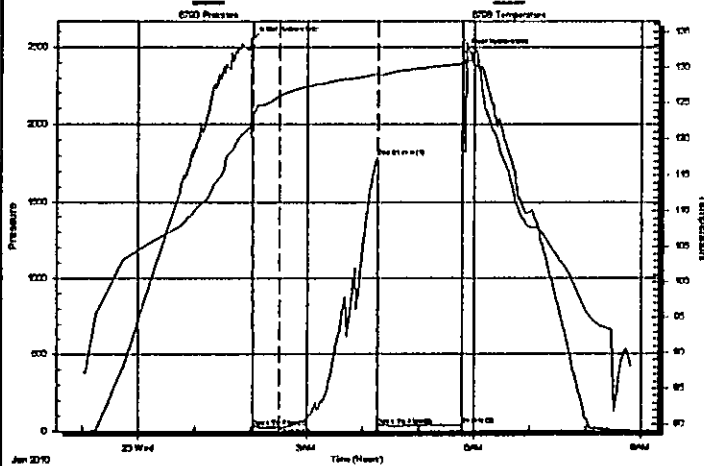
**08:49:41**

Time On Btm: **2010.06.23 @ 02:00:41**

Time Off Btm: **2010.06.23 @ 05:47:41**

TEST COMMENT: IF: Fair blow. Built to 11".  
IS: Fair blow. B.O.B. in 39 mins.  
FF: Weak blow. Steady at 1".  
FS: Strong blow. B.O.B. immediately.

Pressure vs. Time



## PRESSURE SUMMARY

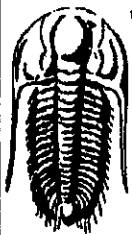
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2544.45	121.86	Initial Hydro-static
2	26.94	123.15	Open To Flow (1)
30	24.67	125.94	Shut-In(1)
135	1788.65	128.94	End Shut-In(1)
136	31.83	128.66	Open To Flow (2)
226	35.39	130.42	Shut-In(2)
227	2460.55	133.89	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	SGCOilyMud 12%g 37%o 51%m	0.63
0.00	2495' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Chieftain Oil Company, Inc.

**Yates A #3**

P.O.Box 124  
Kiowa, KS 67070

**36-34s-12w Barber KS**

Job Ticket: 36916

**DST#: 2**

ATTN: Arden Ratzlaff

Test Start: 2010.06.22 @ 23:02:11

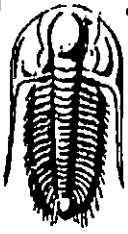
### Tool Information

Drill Pipe:	Length: 5164.00 ft	Diameter: 3.80 inches	Volume: 72.44 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 120000.0 lb
			<u>Total Volume: 72.44 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	5179.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	60.00 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			5161.00	
Hydraulic tool	5.00			5166.00	
Safety Joint	3.00			5169.00	
Packer	5.00			5174.00	23.00 Bottom Of Top Packer
Packer	5.00			5179.00	
Stubb	1.00			5180.00	
Recorder	0.00	6798	Inside	5180.00	
Recorder	0.00	8367	Inside	5180.00	
Perforations	33.00			5213.00	
Bullnose	3.00			5216.00	37.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>60.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Chieftain Oil Company, Inc.

**Yates A #3**

P.O.Box 124  
Kiowa, KS 67070

**36-34s-12w Barber KS**

Job Ticket: 36916      **DST#: 2**

ATTN: Arden Ratzlaff

Test Start: 2010.06.22 @ 23:02:11

**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: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.97 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 0.21 inches			

**Recovery Information**

Recovery Table

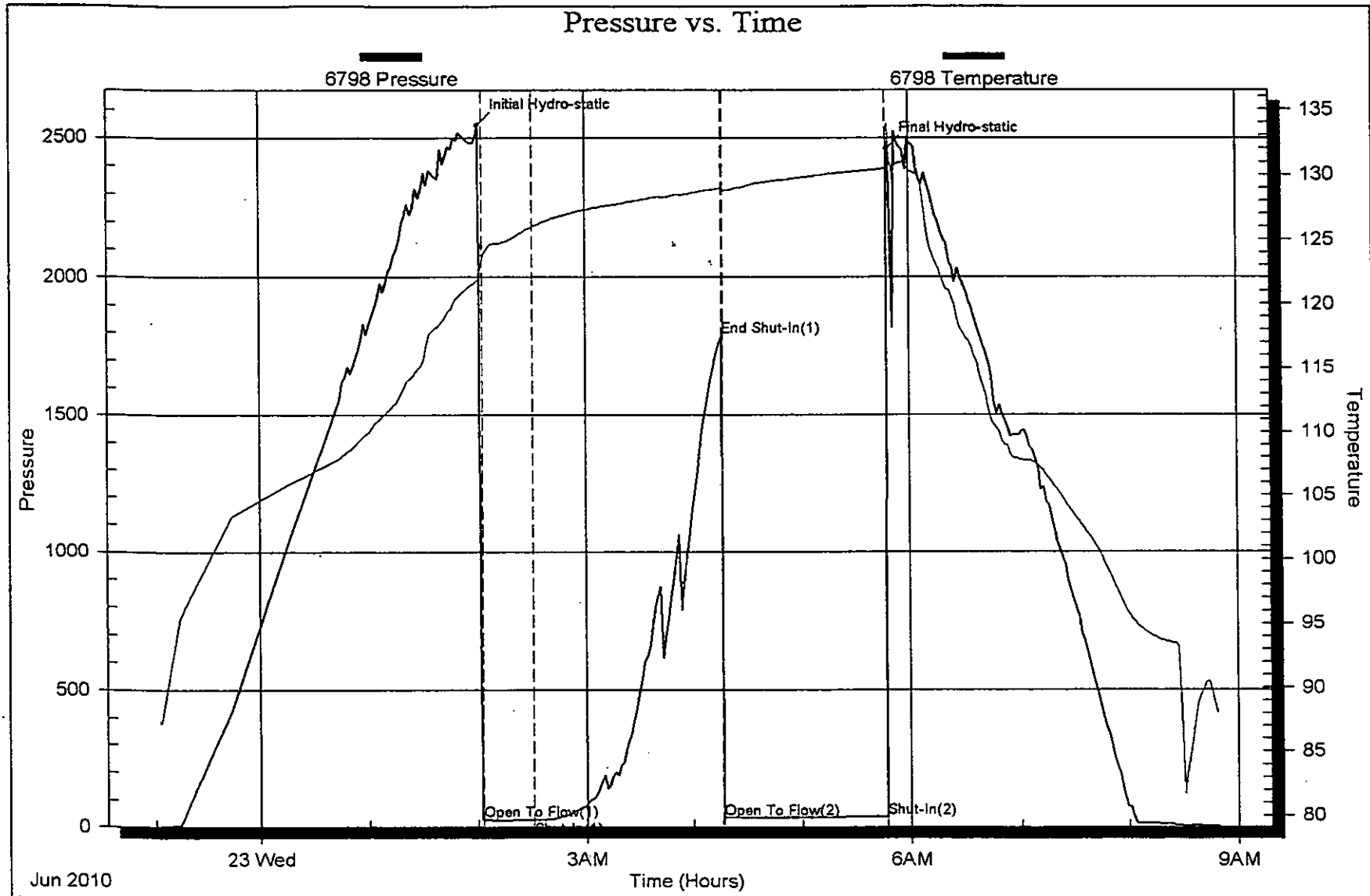
Length ft	Description	Volume bbl
45.00	SGCOOilyMud 12%g 37%o 51%m	0.631
0.00	2495' GIP	0.000

Total Length: 45.00 ft      Total Volume: 0.631 bbl

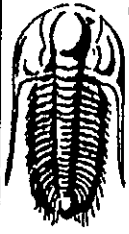
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none

Laboratory Name:      Laboratory Location:

Recovery Comments:







**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

Chieftain Oil Company, Inc.

Yates A #3

P.O.Box 124  
Kowa, KS 67070

36-34s-12w Barber KS

Job Ticket: 36917 DST#: 3

ATTN: Arden Ratzlaff

Test Start: 2010.06.23 @ 21:29:39

**GENERAL INFORMATION:**

Formation: Simpson  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 00:35:09  
Time Test Ended: 08:07:09

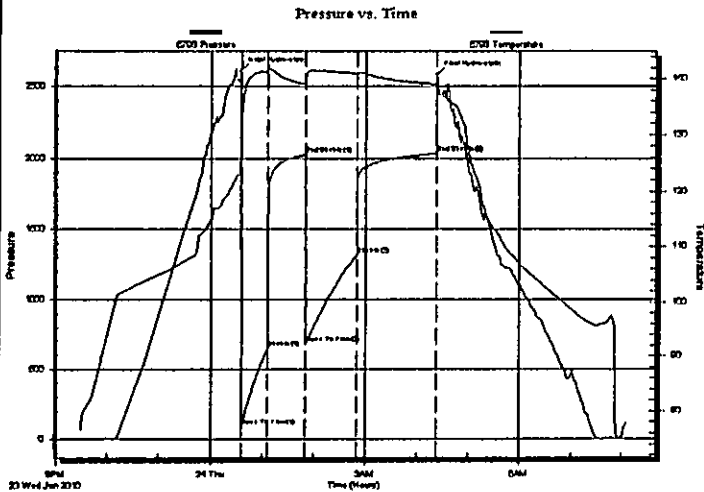
Test Type: Conventional Bottom Hole  
Tester: Jerry Adams  
Unit No: 45

Interval: 5225.00 ft (KB) To 5238.00 ft (KB) (TVD)  
Total Depth: 5238.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1374.00 ft (KB)  
1365.00 ft (CF)  
KB to GR/CF: 9.00 ft

Serial #: 6798 Inside  
Press@RunDepth: 1315.75 psig @ 5226.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2010.06.23 End Date: 2010.06.24 Last Calib.: 2010.06.24  
Start Time: 21:29:40 End Time: 08:07:09 Time On Btmm: 2010.06.24 @ 00:33:39  
Time Off Btmm: 2010.06.24 @ 04:23:09

TEST COMMENT: IF: Strong blow . B.O.B. in 2 mins.  
IS: Weak blow . Built to 5", decreased to 3".  
FF: Strong blow . B.O.B. in 3 mins.  
FS: Weak blow . Built to 2".



**PRESSURE SUMMARY**

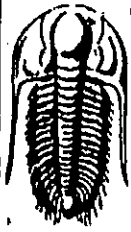
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2608.65	122.97	Initial Hydro-static
2	91.82	127.82	Open To Flow (1)
32	646.17	141.36	Shut-In (1)
77	2024.62	139.04	End Shut-In (1)
78	683.53	139.85	Open To Flow (2)
137	1315.75	140.93	Shut-In (2)
229	2032.07	138.99	End Shut-In (2)
230	2585.27	137.63	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
100.00	Drilling Mud 100% m	1.40
340.00	MCW 80%w 20% m	4.77
2780.00	SMCW 95%w 5% m	39.00
0.00	RW = .085 @ 90 deg.	0.00

**Gas Rates**

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



**TRILLOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Chieftain Oil Company, Inc.

Yates A #3

P.O.Box 124  
Kiowa, KS 67070

36-34s-12w Barber KS

Job Ticket: 36917

DST#: 3

ATTN: Arden Ratzlaff

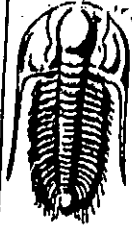
Test Start: 2010.06.23 @ 21:29:39

**Tool Information**

Drill Pipe:	Length: 5226.00 ft	Diameter: 3.80 inches	Volume: 73.31 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 73.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	5225.00 ft			Final 92000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	36.00 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			5207.00	
Hydraulic tool	5.00			5212.00	
Safety Joint	3.00			5215.00	
Packer	5.00			5220.00	23.00 Bottom Of Top Packer
Packer	5.00			5225.00	
Stubb	1.00			5226.00	
Recorder	0.00	6798	Inside	5226.00	
Recorder	0.00	8367	Inside	5226.00	
Perforations	9.00			5235.00	
Bullnose	3.00			5238.00	13.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>36.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Chieftain Oil Company, Inc.

**Yates A #3**

P.O.Box 124  
Kiowa, KS 67070

**36-34s-12w Barber KS**

Job Ticket: 36917

**DST#: 3**

ATTN: Arden Ratzlaff

Test Start: 2010.06.23 @ 21:29:39

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 60.00 sec/qt

Water Loss: 9.96 in<sup>2</sup>

Resistivity: 0.00 ohm.m

Salinity: 5500.00 ppm

Filter Cake: 0.21 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity: 80000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	Drilling Mud 100% <sub>m</sub>	1.403
340.00	MCW 80% <sub>w</sub> 20% <sub>m</sub>	4.769
2780.00	SMCW 95% <sub>w</sub> 5% <sub>m</sub>	38.996
0.00	RW = .085 @ 90 deg.	0.000

Total Length: 3220.00 ft

Total Volume: 45.168 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

