



## DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co., Inc.**

101 S. 5th. St.  
Kiowa, KS 67070-1912

ATTN: Arden Ratzlaff

### **Molz Family SWD #1**

### **2-35s-12w Barber,KS**

Start Date: 2013.08.01 @ 23:35:47

End Date: 2013.08.02 @ 08:30:02

Job Ticket #: 52345                      DST #: 1

Trilobite Testing, Inc  
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**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Chieftain Oil Co., Inc.  
 101 S. 5th. St.  
 Kiowa, KS 67070-1912  
 ATTN: Arden Ratzlaff

**2-35s-12w Barber, KS**  
**Molz Family SWD #1**  
 Job Ticket: 52345 **DST#: 1**  
 Test Start: 2013.08.01 @ 23:35:47

## GENERAL INFORMATION:

Formation: **Misener**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 01:56:02 Tester: Ryan Reynolds  
 Time Test Ended: 08:30:02 Unit No: 48  
 Interval: **5140.00 ft (KB) To 5170.00 ft (KB) (TVD)** Reference Elevations: 1423.00 ft (KB)  
 Total Depth: 5170.00 ft (KB) (TVD) 1411.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 12.00 ft

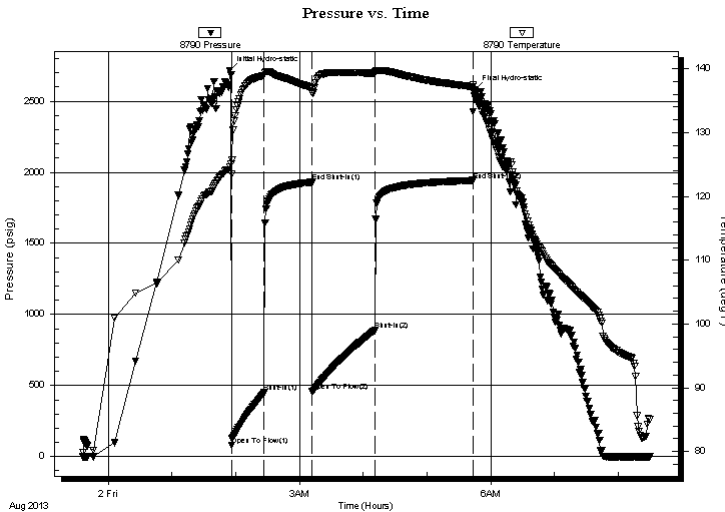
## Serial #: 8790

Inside

Press @ Run Depth: 888.39 psig @ 5141.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.08.01 End Date: 2013.08.02 Last Calib.: 2013.08.02  
 Start Time: 23:35:52 End Time: 08:30:02 Time On Btm: 2013.08.02 @ 01:54:32  
 Time Off Btm: 2013.08.02 @ 05:45:02

TEST COMMENT: IF: Strong blow . 1/2" - BOB @ 4 1/2 min.  
 IS: Weak blow . surf. - 2"  
 FF: Strong blow . 1/4" - BOB @ 7 min.  
 FS: Weak blow . surf. - 2"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2717.29	124.68	Initial Hydro-static
2	81.52	123.48	Open To Flow (1)
33	451.83	138.98	Shut-In(1)
77	1931.01	137.06	End Shut-In(1)
78	457.97	136.32	Open To Flow (2)
137	888.39	139.31	Shut-In(2)
229	1942.90	137.18	End Shut-In(2)
231	2578.69	135.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1385.00	MGCW 5% mud, 6% gas, 89% w tr	17.76
360.00	MCW 17% mud, 83% w tr	5.05

## Gas Rates

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





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TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Chieftain Oil Co., Inc.

**2-35s-12w Barber, KS**

101 S. 5th. St.  
Kiowa, KS 67070-1912

**Molz Family SWD #1**

Job Ticket: 52345

**DST#: 1**

ATTN: Arden Ratzlaff

Test Start: 2013.08.01 @ 23:35:47

## Tool Information

Drill Pipe:	Length: 4942.00 ft	Diameter: 3.80 inches	Volume: 69.32 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 70.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	5140.00 ft			Final 69000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	52.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			5123.00	
Hydraulic tool	5.00			5128.00	
Safety Joint	2.00			5130.00	
Packer - Shale	5.00			5135.00	
Packer	5.00			5140.00	22.00 Bottom Of Top Packer
Stubb	1.00			5141.00	
Recorder	0.00	8790	Inside	5141.00	
Recorder	0.00	8792	Outside	5141.00	
Perforations	26.00			5167.00	
Bullnose	3.00			5170.00	30.00 Anchor Tool
<b>Total Tool Length:</b>	<b>52.00</b>				



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Chieftain Oil Co., Inc.

**2-35s-12w Barber,KS**

101 S. 5th. St.  
Kiowa, KS 67070-1912

**Molz Family SWD #1**

Job Ticket: 52345

**DST#: 1**

ATTN: Arden Ratzlaff

Test Start: 2013.08.01 @ 23:35:47

## 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:

76000 ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3900.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1385.00	MGCW 5%mud, 6%gas, 89%w tr	17.761
360.00	MCW 17%mud, 83%w tr	5.050

Total Length: 1745.00 ft      Total Volume: 22.811 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8790

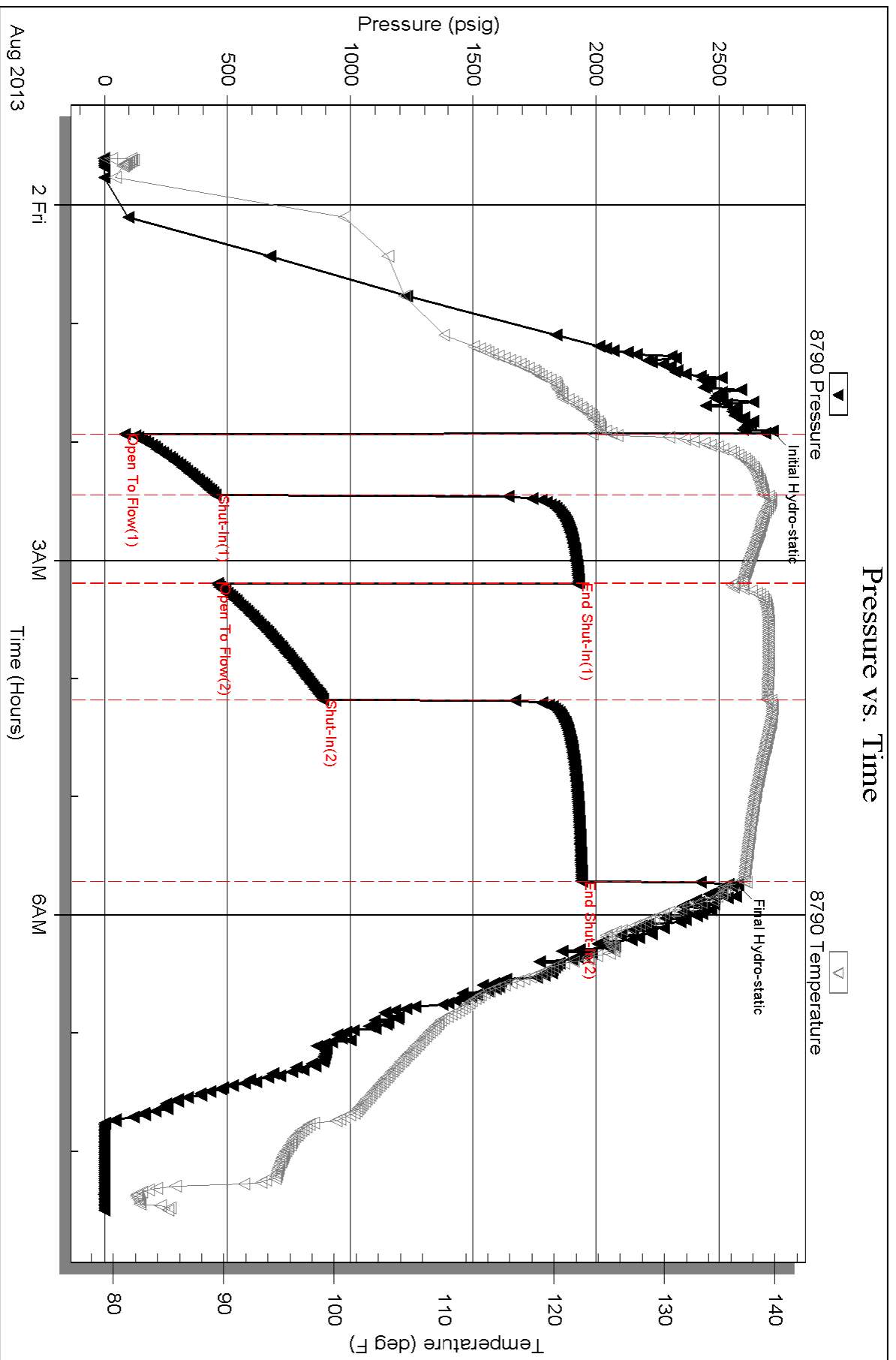
Inside

Chieftain Oil Co., Inc.

Molz Family SWD #1

DST Test Number: 1

### Pressure vs. Time

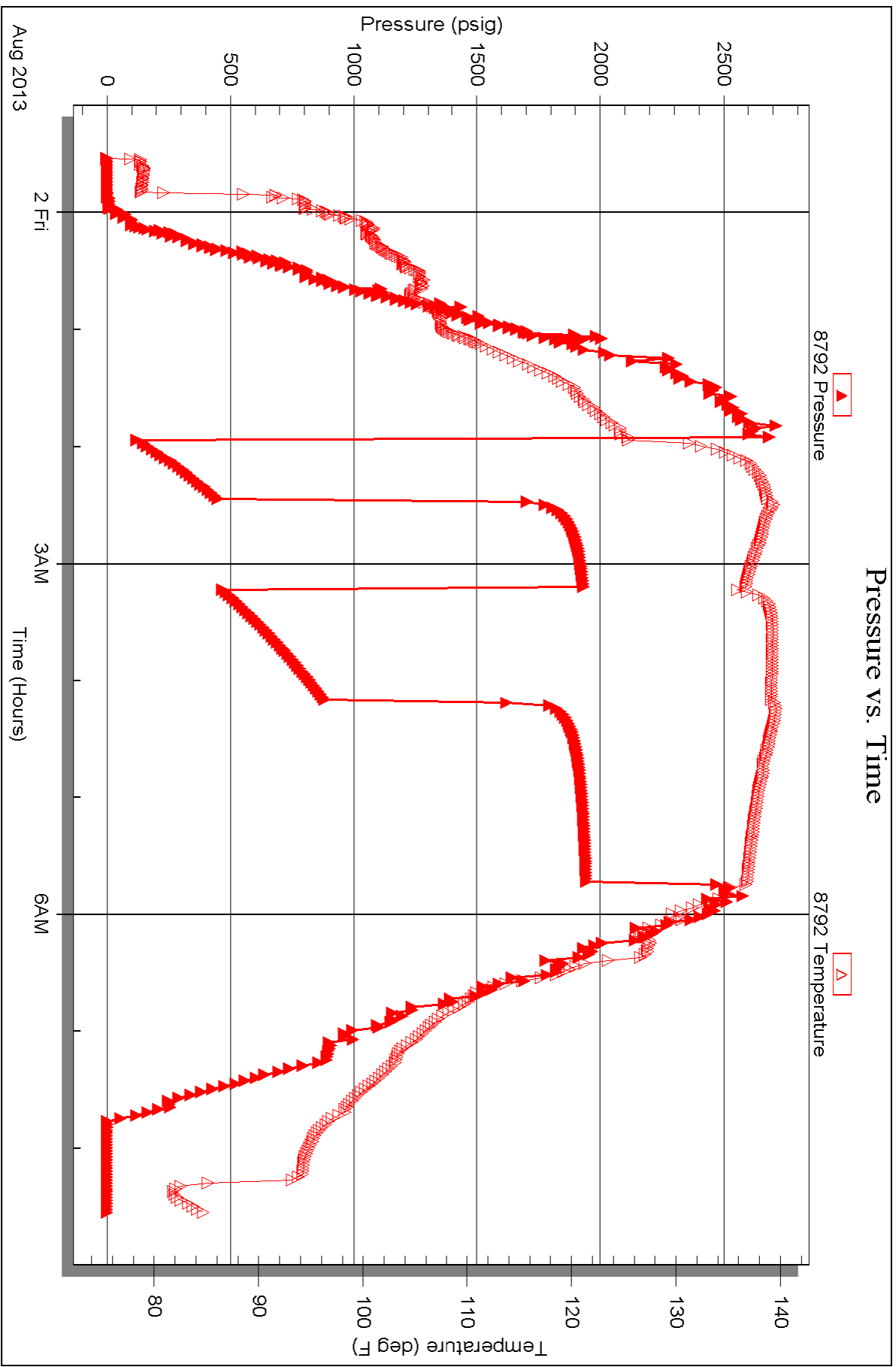


Serial #: 8792

Outside Chieftain Oil Co., Inc.

Molz Family SWD #1

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 52345

Well Name & No. Molz Family SWD #1 Test No. 1 Date 8-1-13  
 Company Chieftain Oil Co., Inc. Elevation 1423 KB 1411 GL  
 Address 101 S. 5th St. Kiowa, KS 67070-1912  
 Co. Rep / Geo. Arden Ratzlaff Rig Fossil #3  
 Location: Sec. 2 Twp. 35s. Rge. 12w. Co. Barber State KS

Interval Tested 5140-5170 Zone Tested Miesner  
 Anchor Length 30 Drill Pipe Run 4942 Mud Wt. 9.1  
 Top Packer Depth 5135 Drill Collars Run 183 Vis 63  
 Bottom Packer Depth 5140 Wt. Pipe Run Ø WL 7.6  
 Total Depth 5170 Chlorides 3900 ppm System LCM 3#

Blow Description IF: Strong blow. 1/2" - BOB@4 1/2 min.  
ISI: Weak blow. surf. - 2"  
FF: Strong blow. 1/4" - BOB@7 min.  
FSI: Weak blow. surf. - 2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>360</u>	<u>MCW</u>		<u>83</u>	<u>17</u>	
<u>1385</u>	<u>MGLW</u>	<u>6</u>	<u>89</u>	<u>5</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1745 BHT 139 Gravity N/C API RW 08 @ 87° F Chlorides 7600 ppm

(A) Initial Hydrostatic 2717  Test 1350 T-On Location 2245  
 (B) First Initial Flow 82  Jars T-Started 2336  
 (C) First Final Flow 452  Safety Joint 75 T-Open 0156  
 (D) Initial Shut-In 1931  Circ Sub T-Pulled 0543  
 (E) Second Initial Flow 458  Hourly Standby T-Out 0830  
 (F) Second Final Flow 888  Mileage 110 X2 341 Comments  
 (G) Final Shut-In 1943  Sampler loaded tools 8/3 13:25  
 (H) Final Hydrostatic 2579  Straddle  Ruined Shale Packer

Initial Open 30  Extra Packer  Ruined Packer  
 Initial Shut-In 45  Extra Recorder Sub Total 800  
 Final Flow 60  Day Standby 1 day 4.75h Total 2816  
 Final Shut-In 90  Accessibility MP/DST Disc't  
 Sub Total 2016

Approved By Arden Ratzlaff Our Representative Ryan Reynolds

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