



DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co Inc**

PO Box 124
Kiowa KS 67070

ATTN: David Barker

Palmer #2

3-33s-19w Barber,KS

Start Date: 2012.08.01 @ 06:21:17

End Date: 2012.08.01 @ 14:26:47

Job Ticket #: 47590 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.07 @ 13:55:43



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Chieftain Oil Co Inc

3-33s-19w Barber,KS

PO Box 124
Kiowa KS 67070

Palmer #2

Job Ticket: 47590

DST#: 1

ATTN: David Barker

Test Start: 2012.08.01 @ 06:21:17

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:34:32

Time Test Ended: 14:26:47

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 4741.00 ft (KB) To 4782.00 ft (KB) (TVD)

Reference Elevations: 1485.00 ft (KB)

Total Depth: 4782.00 ft (KB) (TVD)

1473.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 8352 Outside

Press @ Run Depth: 47.08 psig @ 4742.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.01 End Date: 2012.08.01

Last Calib.: 2012.08.01

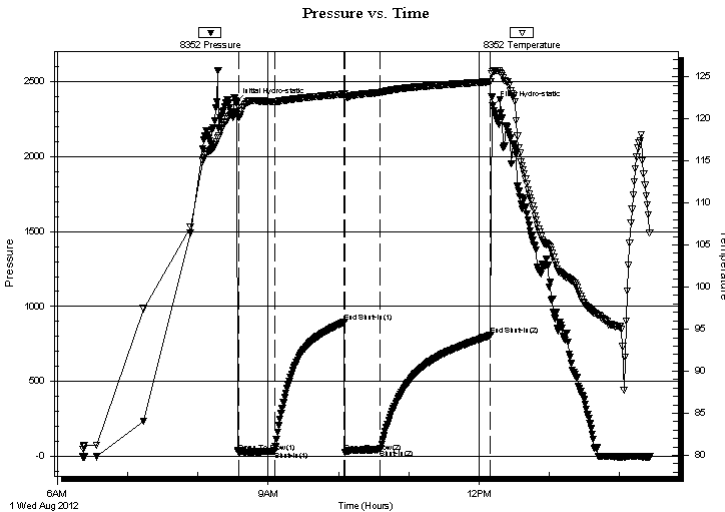
Start Time: 06:21:22 End Time: 14:26:46

Time On Btm: 2012.08.01 @ 08:32:32

Time Off Btm: 2012.08.01 @ 12:12:02

TEST COMMENT: IF: Strong blow . B.O.B. in 2 mins.
IS: No blow .
FF: Strong blow . B.O.B. in 2 - 3 seconds.
FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2359.59	120.80	Initial Hydro-static
2	30.21	120.23	Open To Flow (1)
33	36.67	122.02	Shut-In(1)
93	895.59	122.95	End Shut-In(1)
94	27.55	122.62	Open To Flow (2)
124	47.08	123.13	Shut-In(2)
218	808.26	124.42	End Shut-In(2)
220	2339.61	125.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	SOC, GM 4%o 32%g 64%m	0.39
0.00	3510 ft.of GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Chieftain Oil Co Inc

3-33s-19w Barber,KS

PO Box 124
Kiowa KS 67070

Palmer #2

Job Ticket: 47590

DST#: 1

ATTN: David Barker

Test Start: 2012.08.01 @ 06:21:17

Tool Information

Drill Pipe:	Length: 4594.00 ft	Diameter: 3.80 inches	Volume: 64.44 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 150.00 ft	Diameter: 2.25 inches	Volume: 0.74 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 65.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4741.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	69.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

C.O. Sub	1.00			4714.00	
Shut in tool	5.00			4719.00	
HMV	5.00			4724.00	
Jars	5.00			4729.00	
Safety Joint	3.00			4732.00	
Packer	4.00			4736.00	28.00 Bottom Of Top Packer
Packer	5.00			4741.00	
Stubb	1.00			4742.00	
Recorder	0.00	8370	Inside	4742.00	
Recorder	0.00	8352	Outside	4742.00	
Perforations	35.00			4777.00	
Bullnose	5.00			4782.00	41.00 Bottom Packers & Anchor

Total Tool Length: 69.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Chieftain Oil Co Inc

3-33s-19w Barber,KS

PO Box 124
Kiowa KS 67070

Palmer #2

Job Ticket: 47590

DST#: 1

ATTN: David Barker

Test Start: 2012.08.01 @ 06:21:17

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:

5300 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
80.00	SOC,GM 4%o 32%g 64%m	0.393
0.00	3510 ft.of GIP	0.000

Total Length: 80.00 ft Total Volume: 0.393 bbl

Num Fluid Samples: 0

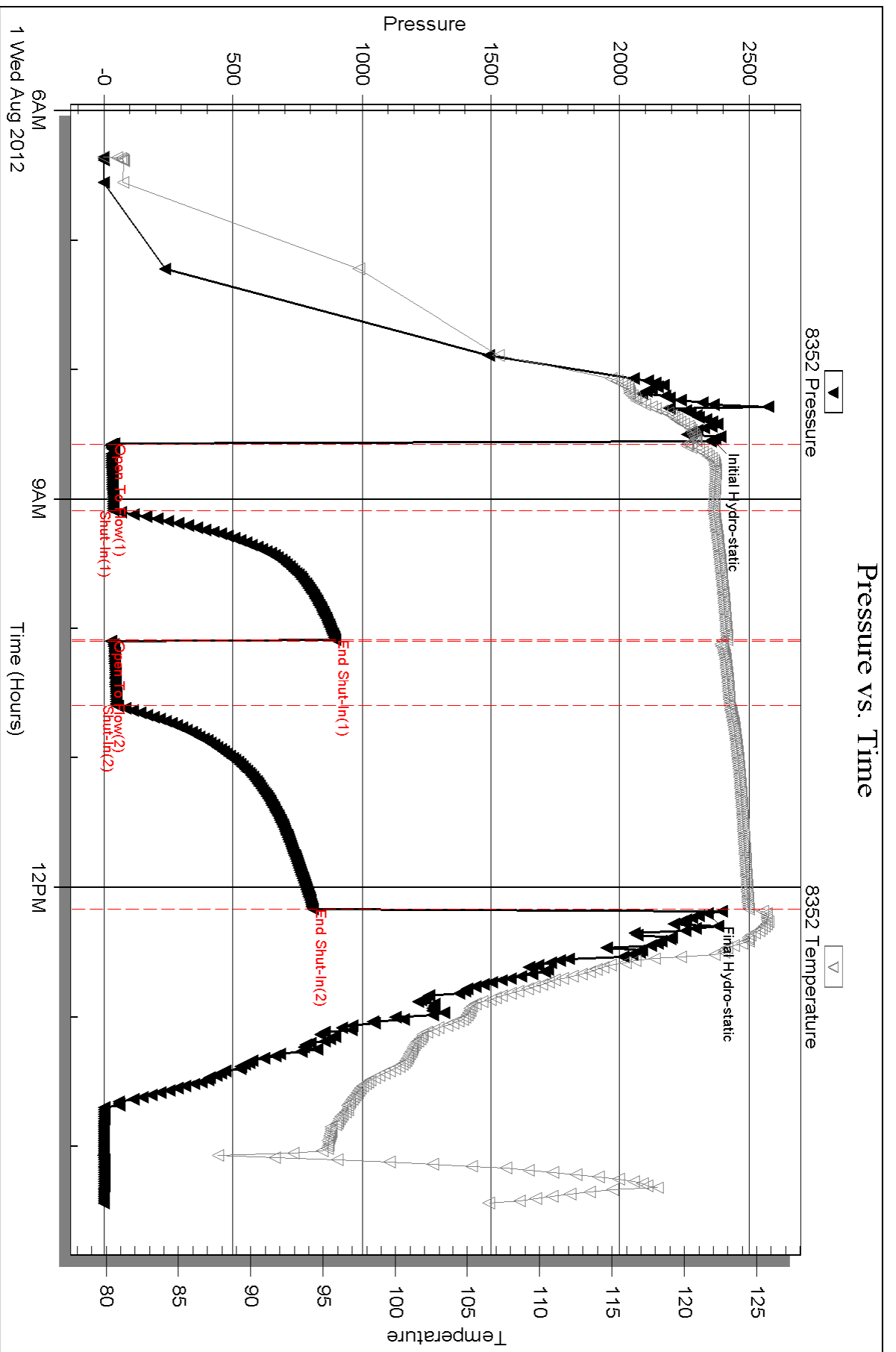
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:



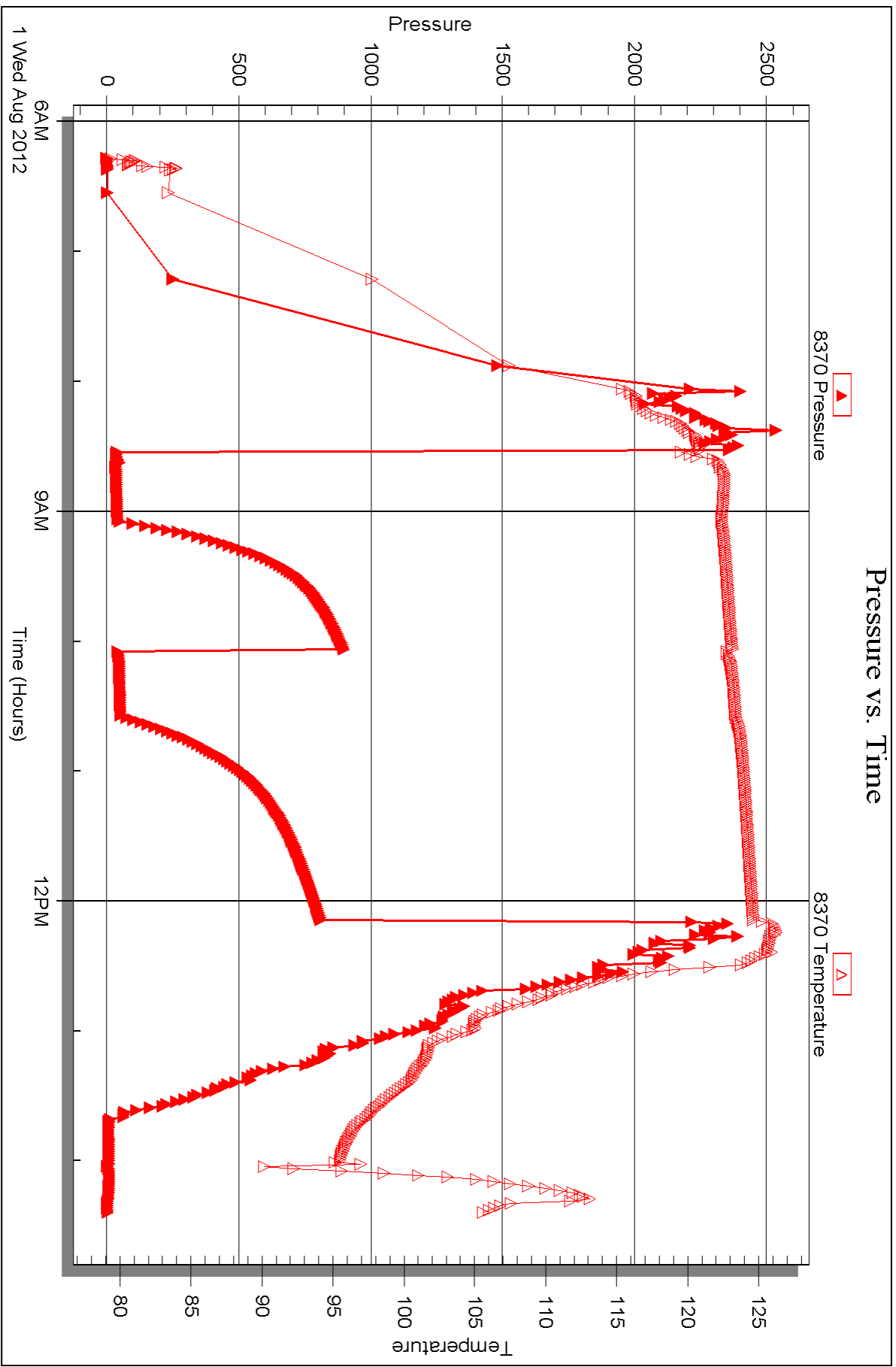
Serial #: 8370

Inside

Chieftain Oil Co Inc

Palmer #2

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co Inc**

PO Box 124
Kiowa KS 67070

ATTN: David Barker

Palmer #2

3-33s-19w Barber,KS

Start Date: 2012.08.02 @ 04:01:02

End Date: 2012.08.02 @ 11:17:17

Job Ticket #: 47591 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.07 @ 13:54:31



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Chieftain Oil Co Inc

3-33s-19w Barber,KS

PO Box 124
Kiowa KS 67070

Palmer #2

Job Ticket: 47591

DST#: 2

ATTN: David Barker

Test Start: 2012.08.02 @ 04:01:02

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:10:02

Time Test Ended: 11:17:17

Test Type: Conventional Bottom Hole (Reset)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 4833.00 ft (KB) To 4841.00 ft (KB) (TVD)

Reference Elevations: 1485.00 ft (KB)

Total Depth: 4841.00 ft (KB) (TVD)

1473.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 8352 Outside

Press @ Run Depth: 405.61 psig @ 4834.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.02

End Date:

2012.08.02

Last Calib.:

2012.08.02

Start Time: 04:01:07

End Time:

11:17:16

Time On Btm:

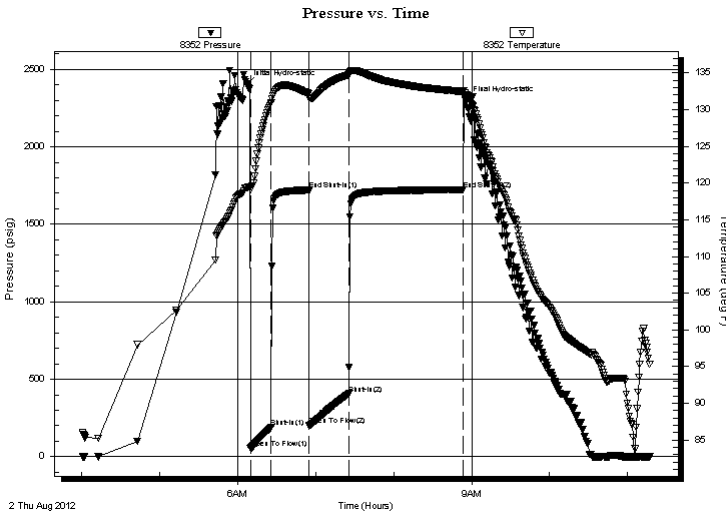
2012.08.02 @ 06:07:17

Time Off Btm:

2012.08.02 @ 08:55:32

TEST COMMENT: IF: Strong blow . B.O.B. in 96 seconds.
IS: Strong blow . B.O.B.
FF: Strong blow . B.O.B. in 4 mins.
FS: Strong blow . B.O.B.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2399.70	119.40	Initial Hydro-static
3	55.35	119.04	Open To Flow (1)
19	188.02	130.93	Shut-In(1)
48	1721.26	132.21	End Shut-In(1)
48	202.93	131.67	Open To Flow (2)
79	405.61	134.73	Shut-In(2)
167	1723.07	132.46	End Shut-In(2)
169	2295.99	131.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
625.00	SW	7.40
145.00	MW w /oil specs 19%m 81%w	2.03
60.00	CGO 4%g 96%o	0.84
0.00	2735 ft.of GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Chieftain Oil Co Inc

3-33s-19w Barber,KS

PO Box 124
Kiowa KS 67070

Palmer #2

Job Ticket: 47591

DST#: 2

ATTN: David Barker

Test Start: 2012.08.02 @ 04:01:02

Tool Information

Drill Pipe:	Length: 4660.00 ft	Diameter: 3.80 inches	Volume: 65.37 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 150.00 ft	Diameter: 2.25 inches	Volume: 0.74 bbl	Weight to Pull Loose: 87000.00 lb
			<u>Total Volume: 66.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 77000.00 lb
Depth to Top Packer:	4833.00 ft			Final 79500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 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
------------------	-------------	------------	----------	------------	----------------

C.O. Sub	1.00			4806.00	
Shut in tool	5.00			4811.00	
HMV	5.00			4816.00	
Jars	5.00			4821.00	
Safety Joint	3.00			4824.00	
Packer	4.00			4828.00	28.00 Bottom Of Top Packer
Packer	5.00			4833.00	
Stubb	1.00			4834.00	
Recorder	0.00	8370	Inside	4834.00	
Recorder	0.00	8352	Outside	4834.00	
Perforations	2.00			4836.00	
Bullnose	5.00			4841.00	8.00 Bottom Packers & Anchor

Total Tool Length: 36.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Chieftain Oil Co Inc

3-33s-19w Barber,KS

PO Box 124
Kiowa KS 67070

Palmer #2

Job Ticket: 47591

DST#: 2

ATTN: David Barker

Test Start: 2012.08.02 @ 04:01:02

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40.7 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

93000 ppm

Viscosity: 68.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
625.00	SW	7.401
145.00	MW w/oil specs 19%m 81%w	2.034
60.00	CGO 4%g 96%o	0.842
0.00	2735 ft.of GIP	0.000

Total Length: 830.00 ft Total Volume: 10.277 bbl

Num Fluid Samples: 0

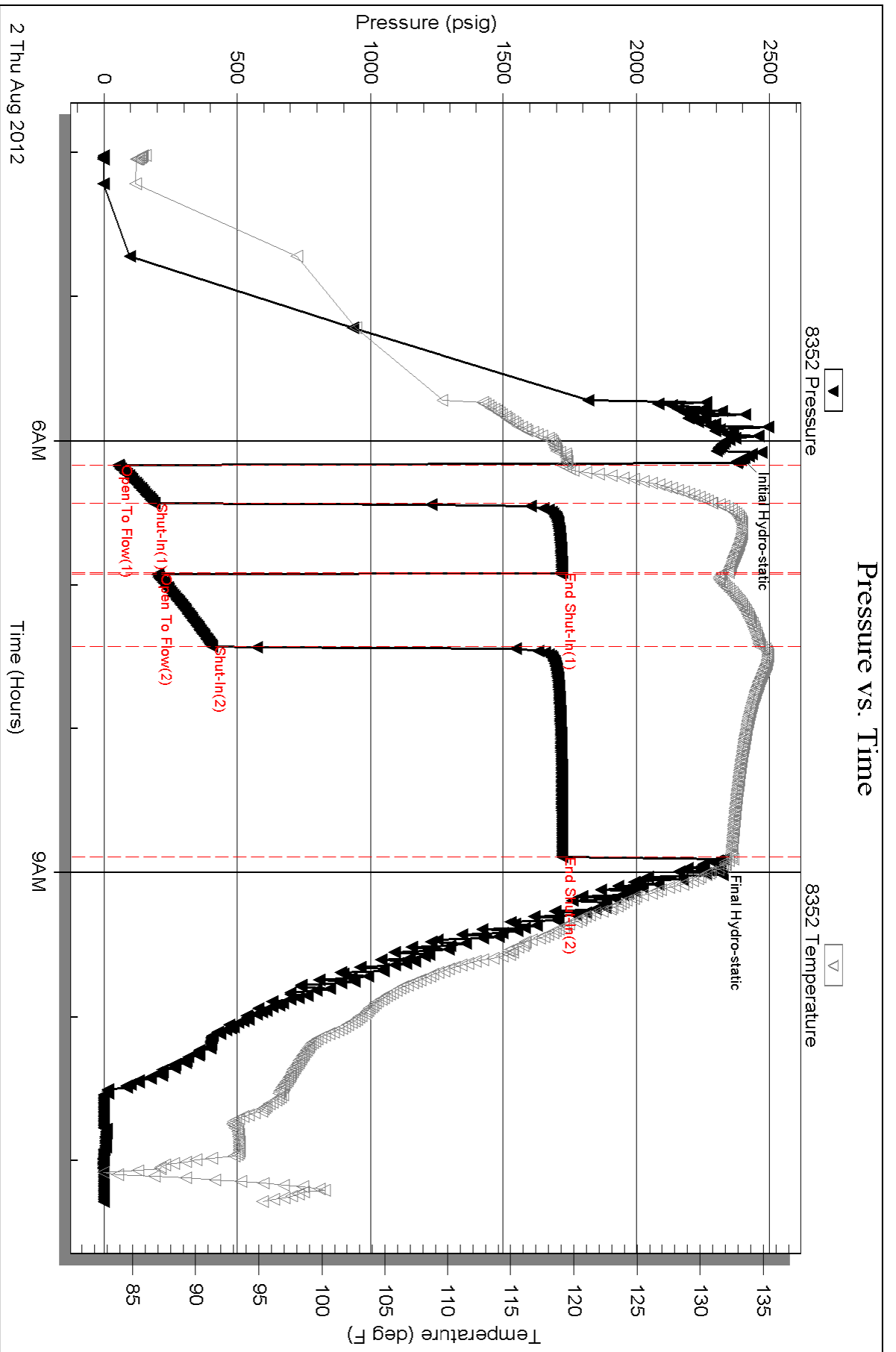
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .065 ohms @93deg



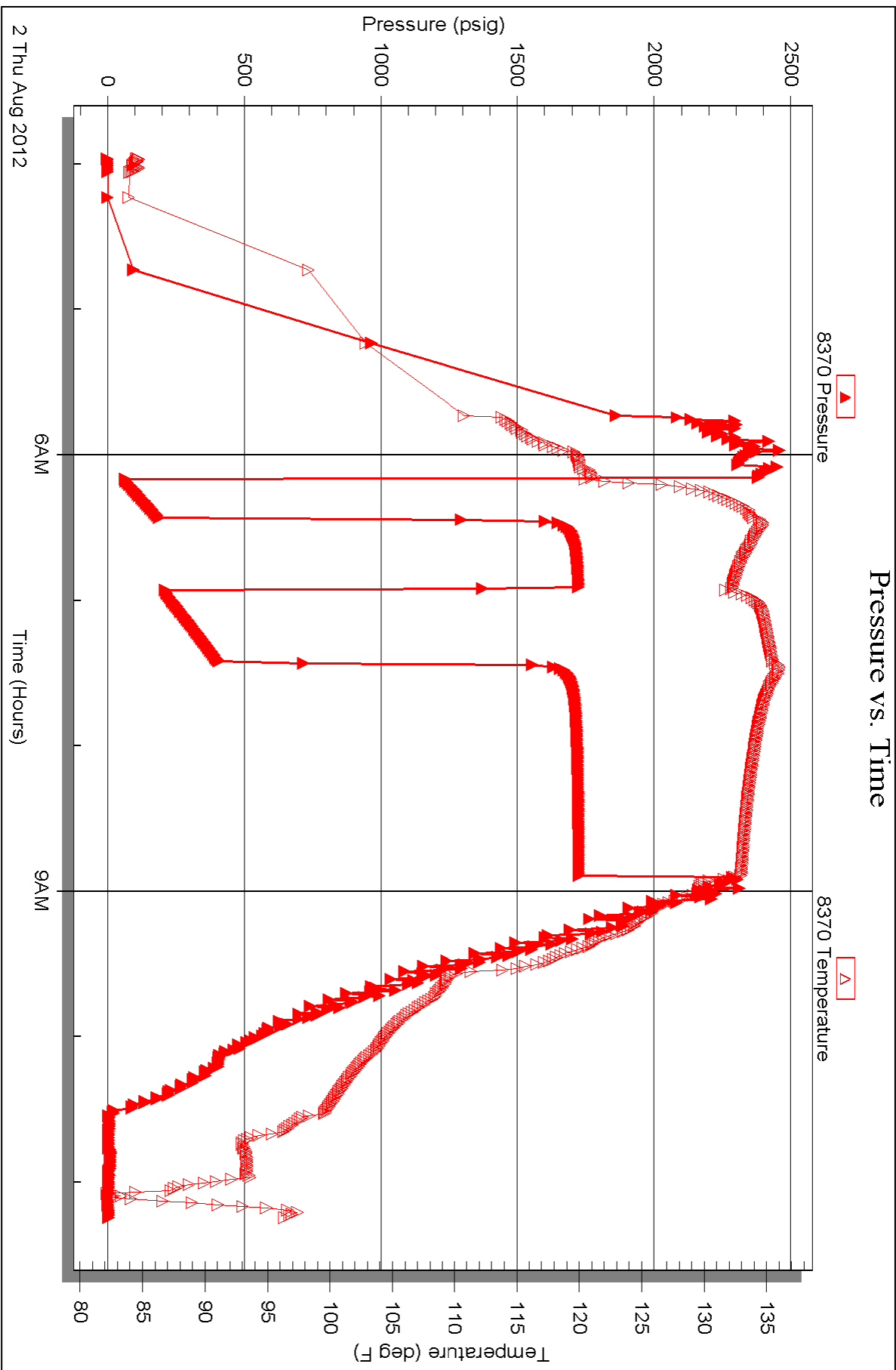
Serial #: 8370

Inside

Chieftain Oil Co Inc

Palmer #2

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47590

Well Name & No. PALMER # 2 Test No. 1 Date 8-1-12
 Company CHIEFTAIN OIL Co. Inc. Elevation 1485 KB 1473 GL
 Address P.O. Box 124, K20WA Ks. 67070
 Co. Rep / Geo. DAVID BARKER Rig Fossil DRUG #3
 Location: Sec. 3 Twp. 33S Rge. 10W Co. BARBER State Ks.

Interval Tested 4741 - 4782' Zone Tested VIOLA
 Anchor Length 41' Drill Pipe Run 4594' Mud Wt. 9.3
 Top Packer Depth 4736' Drill Collars Run 150 Vis 67
 Bottom Packer Depth 4741' Wt. Pipe Run 0 WL 88cc
 Total Depth 4782' Chlorides 5300 ppm System LCM 3#
 Blow Description IF: Strong blow. B.O.B. in 2 mins. ISI: No blow

FF: Strong blow. B.O.B. in 2-3 seconds. FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>3510</u>	<u>Gas in pipe</u>				
<u>80</u>	<u>SOC, GM</u>	<u>32%</u>	<u>4</u>	<u>%water</u>	<u>64</u>

Rec Total 80 Fluid BHT 124° Gravity N/A API RW N.C. @ — ° F Chlorides 5300 ppm
 (A) Initial Hydrostatic 2360 Test 1250 T-On Location 0437
 (B) First Initial Flow 30 Jars 250 T-Started 0621
 (C) First Final Flow 37 Safety Joint 75 T-Open 0834
 (D) Initial Shut-In 896 Circ Sub T-Pulled 1207
 (E) Second Initial Flow 28 Hourly Standby T-Out ~~1207~~ 1426
 (F) Second Final Flow 47 Mileage 104.1 161.20 Comments _____
 (G) Final Shut-In 808 Sampler _____
 (H) Final Hydrostatic 2340 Straddle _____
 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1736.20
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1736.20

Approved By [Signature] Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47591

Well Name & No. PALMER #2 Test No. 2 Date 8-2-12
 Company CHESTAIN Oil Co. Inc. Elevation 1485 KB 1473 GL
 Address P.O. Box 124, KIOWA Ks 67070
 Co. Rep / Geo. DAVID BARKER Rig Fossil DRUG #3
 Location: Sec. 3 Twp. 33^s Rge. 10^w Co. BARBER State Ks.

Interval Tested 4833 - 4841' Zone Tested SIMPSON
 Anchor Length 8' Drill Pipe Run 4660 Mud Wt. 9.1
 Top Packer Depth 4828' Drill Collars Run 150 Vis 68
 Bottom Packer Depth 4833' Wt. Pipe Run 0 WL 9.2cc
 Total Depth 4841' Chlorides 5300 ppm System LCM 7 #

Blow Description IF: Strong blow. B.O.B. in 96 seconds. ISI: Strong blow. B.O.B.
FF: Strong blow. B.O.B. in 4 mins. FSI: Strong blow. B.O.B.

Rec	Feet of	%gas	%oil	%water	%mud
<u>2735</u>	<u>Feet of Cas in pipe</u>				
<u>60</u>	<u>Feet of CGO</u>	<u>4</u>	<u>96</u>		
<u>145</u>	<u>Feet of MW w oil spec.</u>			<u>81</u>	<u>19</u>
<u>625</u>	<u>Feet of SW</u>				

Rec Total 830 Final BHT 128° Gravity 40.7 API RW 265 @ 93° F Chlorides 93,000 ppm

(A) Initial Hydrostatic <u>2400</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>0342</u>
(B) First Initial Flow <u>55</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>0401</u>
(C) First Final Flow <u>188</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>0610</u>
(D) Initial Shut-In <u>1721</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0848</u>
(E) Second Initial Flow <u>203</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1117</u>
(F) Second Final Flow <u>406</u>	<input checked="" type="checkbox"/> Mileage <u>1041</u> 161.20	*Comments <u>PLEASE E-MAIL PDF TO DAVE BARKER @ dbarker@5bcglobal.net</u>
(G) Final Shut-In <u>1723</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2296</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Total <u>1736.20</u>
Final Shut-In <u>60/75</u> <u>WORKING ON BARBER</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1736.20</u>	

Approved By [Signature] Our Representative Gray Pevetany
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.