



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1133341  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx)      (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1133341

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*  
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*  
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Chieftain Oil Co., Inc.
Well Name	Lichlyter 2
Doc ID	1133341

All Electric Logs Run

Dual Compensated Porosity Log
Dual Induction Log
Geological Log
Sector Bond - Gamma Ray Log

Form	ACO1 - Well Completion
Operator	Chieftain Oil Co., Inc.
Well Name	Lichlyter 2
Doc ID	1133341

Tops

Name	Top	Datum
Heebner	3514	-2046
Lansing	3776	-2308
Kansas City	4028	-2560
Stark Sh.	4190	-2722
Mississippian	4476	-3008
Kinderhook Sh.	4678	-3210
Misener Sd.	4766	-3298
Viola	4774	-3306
Lower Simpson Sd.	4994	-3596
Arbuckle	5018	-3550
Total Depth	5052	-3584



## DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co**

PO Box 124  
Kiowa, KS 67070

ATTN: Dave Barker

### **Lichlyter #2**

### **4-33s-10w Barber,KS**

Start Date: 2012.08.29 @ 00:17:34

End Date: 2012.08.29 @ 09:38:49

Job Ticket #: 49567                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.09.07 @ 13:19:25



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Chieftain Oil Co

**4-33s-10w Barber,KS**

PO Box 124  
Kiowa, KS 67070

**Lichlyter #2**

Job Ticket: 49567

**DST#: 1**

ATTN: Dave Barker

Test Start: 2012.08.29 @ 00:17:34

## GENERAL INFORMATION:

Formation: **Misner**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:28:19

Time Test Ended: 09:38:49

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 63

**Interval: 4753.00 ft (KB) To 4773.00 ft (KB) (TVD)**

Reference Elevations: 1468.00 ft (KB)

Total Depth: 4773.00 ft (KB) (TVD)

1456.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

**Serial #: 6798**

**Inside**

Press @ Run Depth: 104.67 psig @ 4754.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.29

End Date: 2012.08.29

Last Calib.: 2012.08.29

Start Time: 00:17:35

End Time: 09:38:49

Time On Btm: 2012.08.29 @ 04:27:04

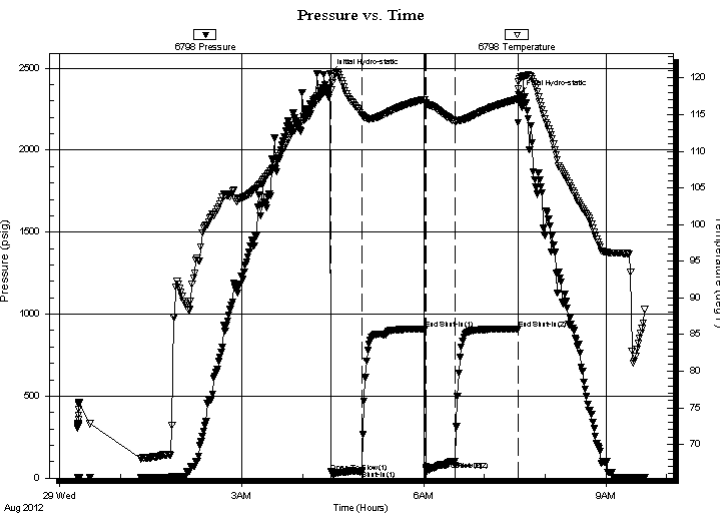
Time Off Btm: 2012.08.29 @ 07:33:49

**TEST COMMENT:** IF: Strong Blow, BOB in 2 minutes, GTS in 27 minutes, TSTM

IS: Surface Blow Back

FF: Strong Blow, BOB & GTS Immediate, TSTM

FS: No Blow Back



## PRESSURE SUMMARY

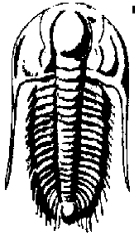
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2468.66	118.73	Initial Hydro-static
2	37.42	118.37	Open To Flow (1)
32	47.12	114.96	Shut-In(1)
95	909.45	117.11	End Shut-In(1)
96	50.94	116.48	Open To Flow (2)
124	104.67	114.12	Shut-In(2)
186	910.11	117.11	End Shut-In(2)
187	2337.61	119.51	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	4565 GIP	0.00
120.00	GOCM 20%G 25%O 55%M	0.59
62.00	GOCM 10%G 35%O 55%M	0.58

## Gas Rates

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



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Chieftain Oil Co  
PO Box 124  
Kiowa, KS 67070  
ATTN: Dave Barker

**4-33s-10w Barber, KS**  
**Lichlyter #2**  
Job Ticket: 49567 **DST#: 1**  
Test Start: 2012.08.29 @ 00:17:34

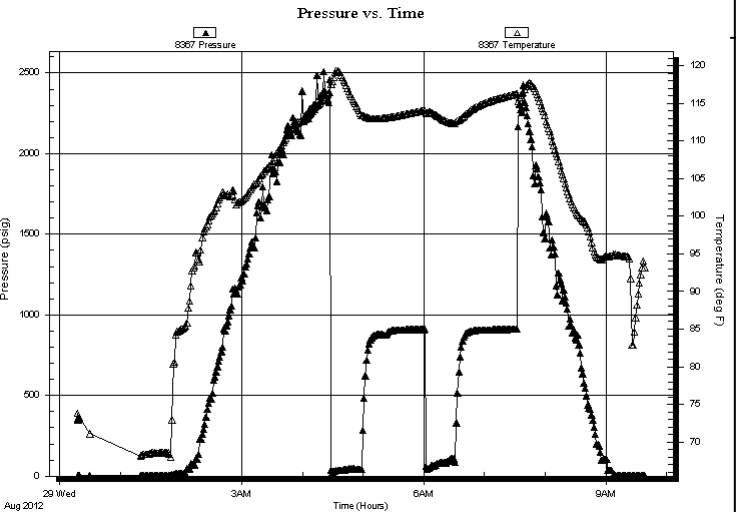
**GENERAL INFORMATION:**

Formation: **Misner**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 04:28:19  
Time Test Ended: 09:38:49  
Interval: **4753.00 ft (KB) To 4773.00 ft (KB) (TVD)**  
Total Depth: 4773.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Reference Elevations: 1468.00 ft (KB)  
1456.00 ft (CF)  
KB to GR/CF: 12.00 ft  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Leal Cason  
Unit No: 63

**Serial #: 8367 Outside**

Press@RunDepth: psig @ 4754.00 ft (KB)  
Start Date: 2012.08.29 End Date: 2012.08.29  
Start Time: 00:17:35 End Time: 09:38:49  
Capacity: 8000.00 psig  
Last Calib.: 2012.08.29  
Time On Btm:  
Time Off Btm:

**TEST COMMENT:** IF: Strong Blow , BOB in 2 minutes, GTS in 27 minutes, TSTM  
IS: Surface Blow Back  
FF: Strong Blow , BOB & GTS Immediate, TSTM  
FS: No Blow Back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

**Recovery**

**Gas Rates**

Length (ft)	Description	Volume (bbl)
0.00	4565 GIP	0.00
120.00	GOCM 20%G 25%O 55%M	0.59
62.00	GOCM 10%G 35%O 55%M	0.58

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Chieftain Oil Co

**4-33s-10w Barber, KS**

PO Box 124  
Kiowa, KS 67070

**Lichlyter #2**

Job Ticket: 49567

**DST#: 1**

ATTN: Dave Barker

Test Start: 2012.08.29 @ 00:17:34

## Tool Information

Drill Pipe:	Length: 4595.00 ft	Diameter: 3.80 inches	Volume: 64.46 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: 25000.00 lb
Drill Collar:	Length: 152.00 ft	Diameter: 2.25 inches	Volume: 0.75 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 65.21 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4753.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	47.00 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			4731.00	
Hydraulic tool	5.00			4736.00	
Jars	5.00			4741.00	
Safety Joint	2.00			4743.00	
Packer	5.00			4748.00	27.00 Bottom Of Top Packer
Packer	5.00			4753.00	
Stubb	1.00			4754.00	
Recorder	0.00	6798	Inside	4754.00	
Recorder	0.00	8367	Outside	4754.00	
Perforations	16.00			4770.00	
Bullnose	3.00			4773.00	20.00 Bottom Packers & Anchor

**Total Tool Length: 47.00**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Chieftain Oil Co

**4-33s-10w Barber,KS**

PO Box 124  
Kiowa, KS 67070

**Lichlyter #2**

Job Ticket: 49567

**DST#: 1**

ATTN: Dave Barker

Test Start: 2012.08.29 @ 00:17:34

## 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:

bbbl

Water Loss: 5.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5600.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	4565 GIP	0.000
120.00	GOCM 20%G 25%O 55%M	0.590
62.00	GOCM 10%G 35%O 55%M	0.578

Total Length: 182.00 ft      Total Volume: 1.168 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

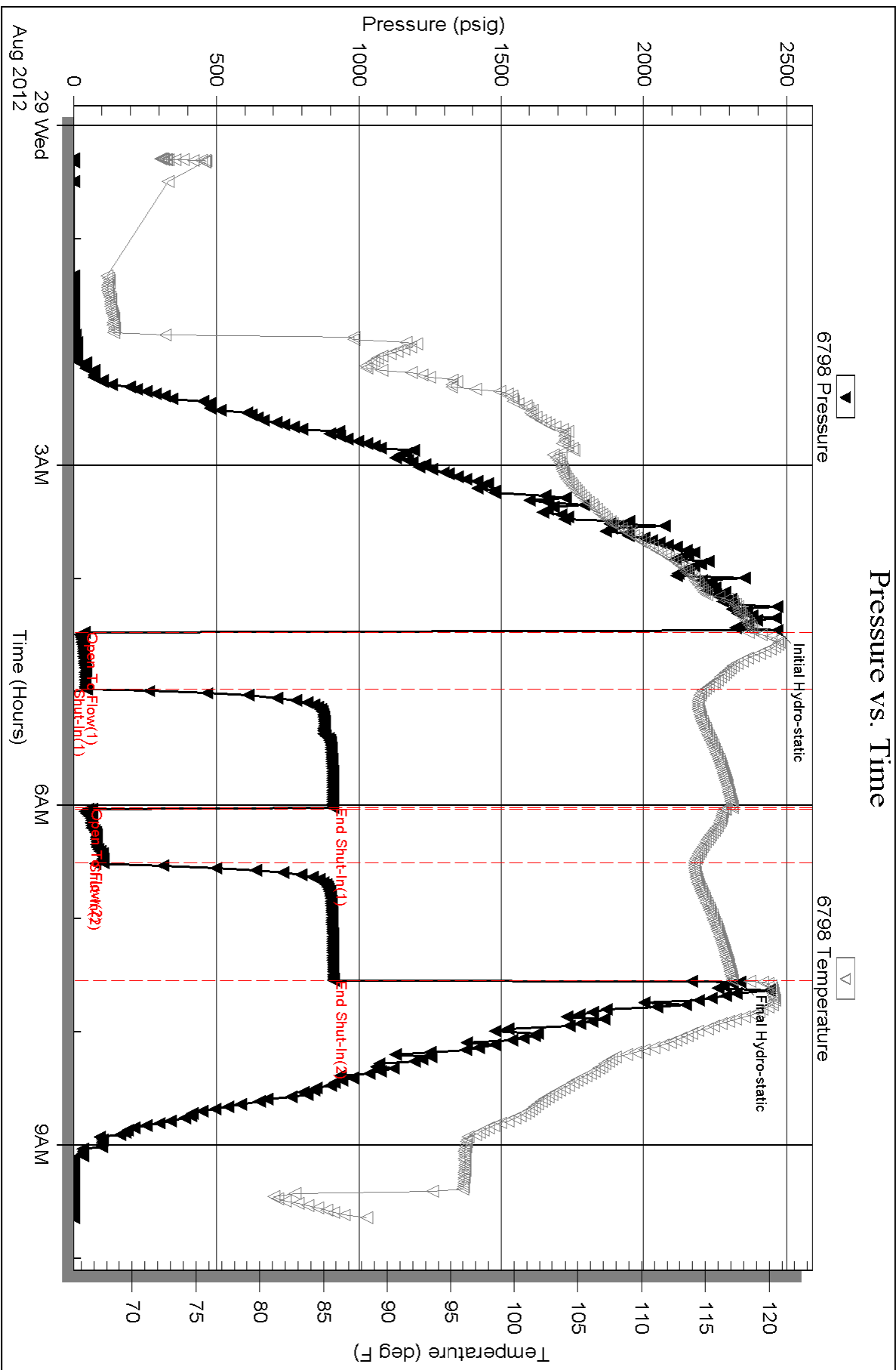
Serial #: 6798

Inside

Chieftain Oil Co

Lichlyer #2

DST Test Number: 1

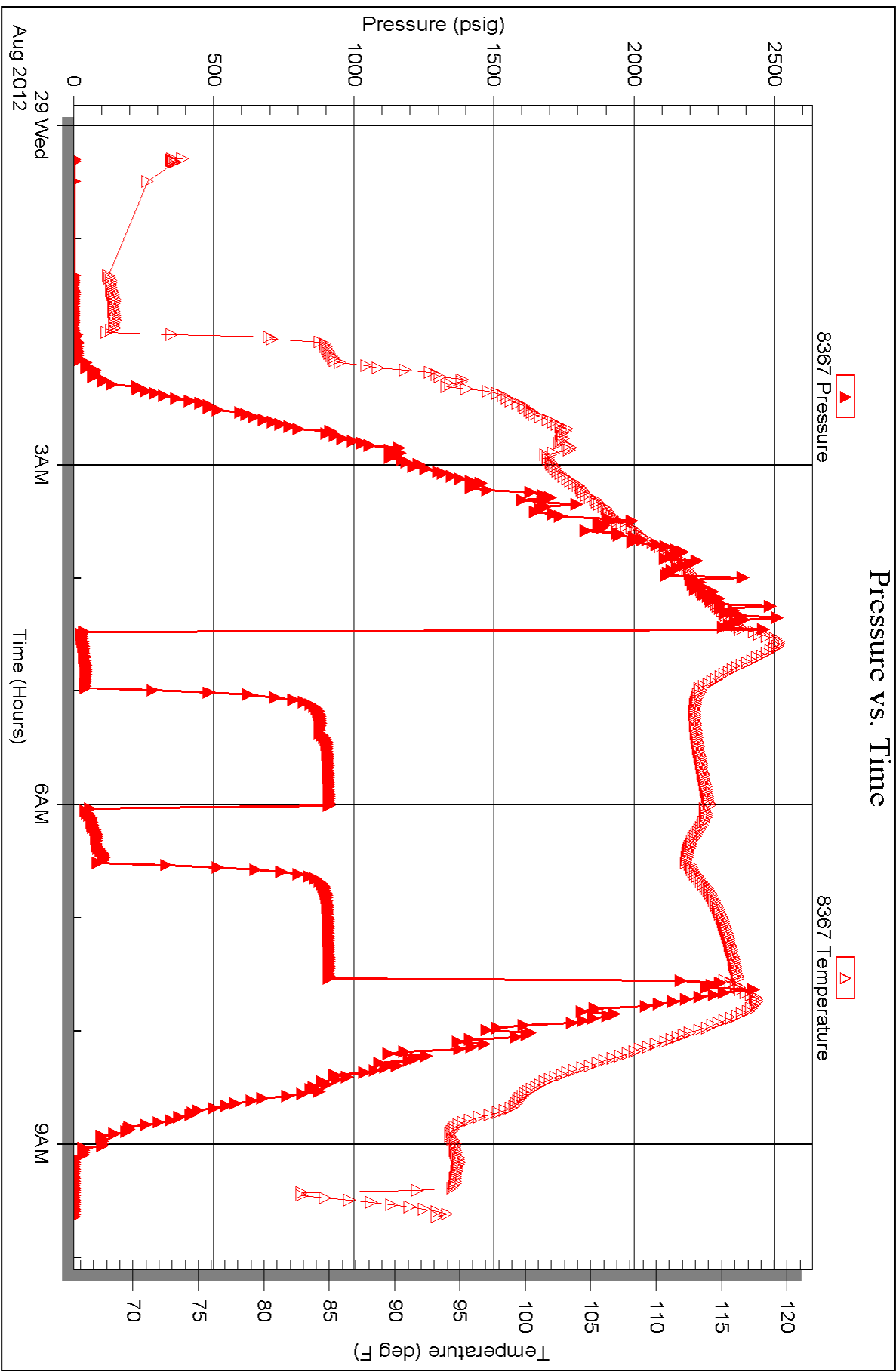


Serial #: 8367

Outside Chieftain Oil Co

Lichtlyer #2

DST Test Number: 1





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 49567

4/10

Well Name & No. Lichlyter 2 Test No. 1 Date 08/28/12  
 Company Chittain Oil Co Elevation 1468 KB 1456 GL  
 Address PO Box 124 Kiowa, KS 67070  
 Co. Rep / Geo. Dave Barker Rig Fossil 3  
 Location: Sec. 4 Twp. 33S Rge. 10W Co. Barber State KS

Interval Tested 4753 - 4773 Zone Tested Misner  
 Anchor Length 20 Drill Pipe Run 4753 Mud Wt. 9.2  
 Top Packer Depth 4748 Drill Collars Run 152 Vis 60  
 Bottom Packer Depth 4753 Wt. Pipe Run 0 WL 6.0  
 Total Depth 4773 Chlorides 5600 ppm System LCM 3

Blow Description IF: Strong Blow, BOB in 2 minutes, GTS in 27 minutes, TSTM  
ISI: surface Blow Back  
FF: Strong Blow, BOB+GTS immediate, TSTM  
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>4565</u>	<u>GIP</u>				
<u>62</u>	<u>GOCM</u>	<u>10</u>	<u>35</u>	<u>55</u>	<u>55</u>
<u>120</u>	<u>GOCM</u>	<u>20</u>	<u>25</u>	<u>55</u>	<u>55</u>

Rec Total 182 BHT 119 Gravity NIC API RW NIC @ NIC °F Chlorides NIC ppm

(A) Initial Hydrostatic 2468  Test 1250 T-On Location 23:00  
 (B) First Initial Flow 37  Jars 250 T-Started 06:17  
 (C) First Final Flow 47  Safety Joint 75 T-Open 04:28  
 (D) Initial Shut-In 909  Circ Sub T-Pulled 07:32  
 (E) Second Initial Flow 51  Hourly Standby T-Out 09:38  
 (F) Second Final Flow 105  Mileage 100 155 Comments \_\_\_\_\_  
 (G) Final Shut-In 910  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2338  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1730  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1730

Approved By Q B 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.

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

April 18, 2013

Ron Molz  
Chieftain Oil Co., Inc.  
101 S. 5TH ST.  
PO BOX 124  
KIOWA, KS 67070-1912

Re: ACO1  
API 15-007-23905-00-00  
Lichlyter 2  
SE/4 Sec.04-33S-10W  
Barber County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Ron Molz