



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1162895  
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: \_\_\_\_\_



1162895

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. 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
--	---

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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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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

October 14, 2013

Leon Rodak  
Murfin Drilling Co., Inc.  
250 N WATER STE 300  
WICHITA, KS 67202-1216

Re: ACO1  
API 15-195-22866-00-00  
Ruder 'A' 3-1  
NE/4 Sec.01-11S-24W  
Trego 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,  
Leon Rodak

MDCI Ruder 'A' #3-1 2600' FNL 400' FEL Sec. 1-T11S-R24W 2303' KB							Phillips Expl Herman/Ruder #1-6 2640' FSL 330' FEL Sec. 6-T11S-R23W 2308' KB	
Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Anhydrite	1889	+414	-2	1887	+416	Flat	1892	+416
B/Anhydrite	1931	+372	-2	1929	+374	Flat	1934	+374
Topeka	3397	-1094	-3	3395	-1092	-1	3399	-1091
Heebner	3621	-1318	-2	3618	-1315	+1	3624	-1316
Toronto	3642	-1339	-2	3639	-1336	+1	3645	-1337
Lansing	3656	-1353	-1	3653	-1350	+2	3660	-1352
BKC	3891	-1588	-2	3891	-1588	-2	3894	-1586
Marmaton	3938	-1635		3936	-1633		NR	NR
RTD	4000	-1697					4000	
LTD				3999	-1696		4000	

# Robert L. Milford

PETROLEUM GEOLOGIST  
Wichita, Kansas

## GEOLOGISTS' REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR **Murfin Drilling Company, Inc.**  
LEASE **Ruder 'A' #3-1**  
LOC. SPOT **40N & 70' W of C E2 E2 E2**

LOC. FOOTAGE **2,600' FNL 400 FEL**  
SEC. **1** TWP. **11S** R. **24W**  
COUNTY **Trego** STATE **Kansas**

API **15-195-22866-00-00**  
CONTRACTOR **Murfin Drilling Co., Inc.** RIG NO. **16**  
DRILLING STARTED **6-18-2013** COMPLETED **6-24-2013**  
MUD DISPLACED **2,985'** MUD TYPE **Chemical**  
DRILLING TIME KEPT FROM **3,290'** TO **RTD**  
SAMPLES SAVED FROM **3,290'** TO **RTD**  
SAMPLES EXAMINED FROM **3,290'** TO **RTD**  
GEOLOGICAL SUPERVISION FROM **3144'** TO **RTD**

MEASUREMENTS FROM KB  
ELEVATIONS  
KB **2,303'**  
GL **2,298'**

CASING RECORD  
Conductor  
Surface **8.5/8" @ 219'**  
w/ 150 sacks cement  
Production **5-1/2" @ 3989'**  
w/ 150 sacks cement

ELECTRICAL SURVEYS:  
Pioneer Wireline:  
Dual Induction Log  
Dual Compensated -  
Porosity Log  
Microresistivity Log  
Borehole Compensated -  
Sonic Log

FORMATION NAME	LOG TOP DATUM	LOG BOTTOM DATUM	SAMPLE TOP DATUM	SAMPLE BOTTOM DATUM
Stone Corral	1,887'	+416	1,889'	-414
Base Stone Corral	1,929'	+374	1,931'	+372
Topeka	3,395'	-1092	3,398'	-1095
Heebner	3,618'	-1315	3,621'	-1318
Toronto	3,639'	-1336	3,642'	-1339
Lansing	3,653'	-1350	3,656'	-1353
Stark	3,845'	-1542	3,848'	-1545
B/KC	3,891'	-1588	3,893'	-1590
Marmaton	3,936'	-1633	3,938'	-1635
Total Depth	3,999'	-1696	4,000'	-1697

DATE	7:00 AM DEPTH	REMARKS
6-18-13	0'	Spud @ 8:30 am. Plug down @ 12:45 pm. Drilled out plug @ 8:45 pm. Dev. 0.25° @ 220'
6-19-13	1,140'	Cut 1,140' in last 24 hrs. Dev. 0.75° @ 2636'
6-20-13	2,760'	Cut 1,620' in last 24 hrs; 21.75 hrs drlg.
6-21-13	3,651'	Cut 891' in last 24 hrs; 22 hrs drlg. DST #1 @ 3720'
6-22-13	3,748'	Cut 97' in last 24 hrs; 4.5 hrs drlg. DST #2 @ 3748', DST #3 @ 3870'
6-23-13	3,870'	Cut 122' in last 24 hrs; 7 hrs drlg. RTD 4000' @ 11:19 pm
6-24-13	4,000'	Cut 130' in last 24 hrs; 6.5 hrs drlg. Ran production casing

**Remarks**

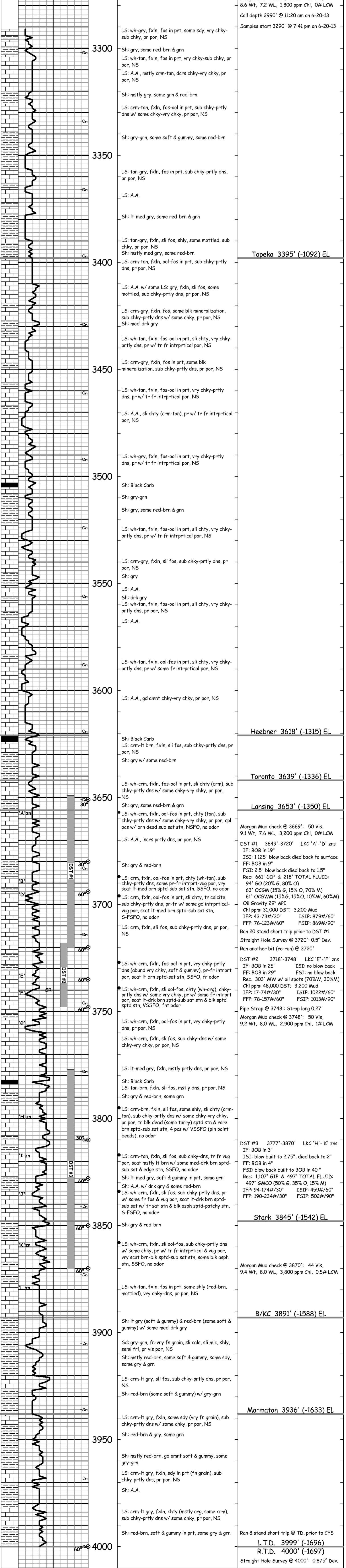
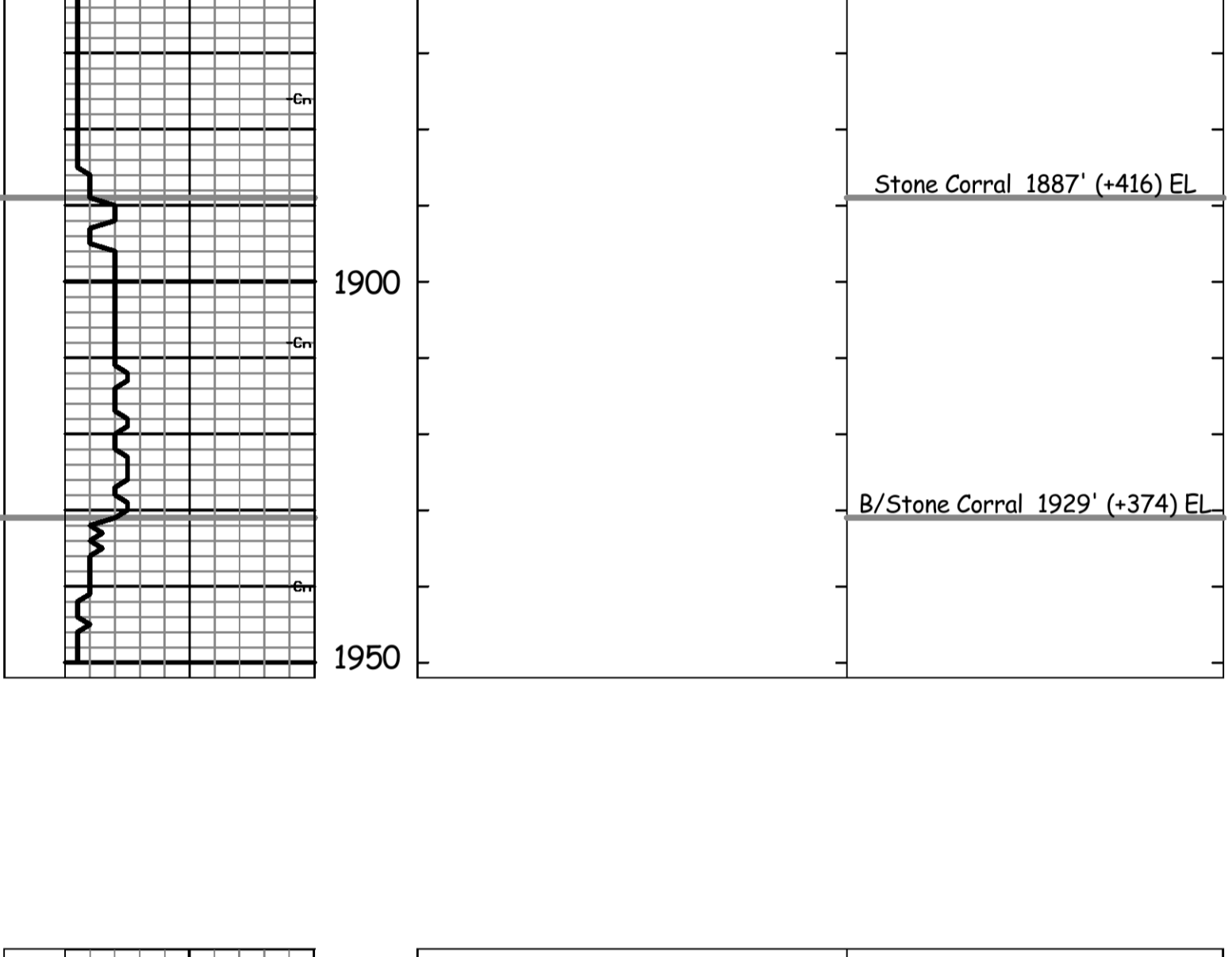
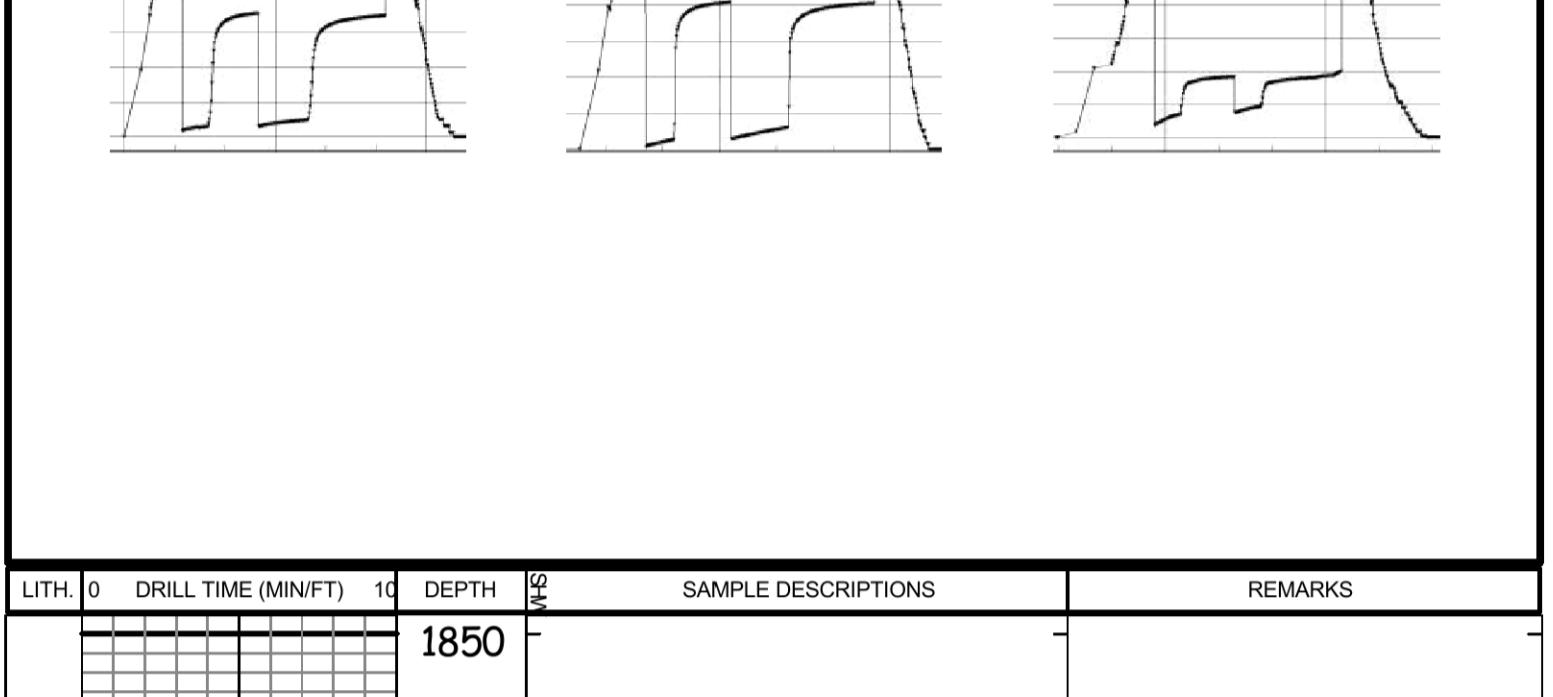
The electric log measurements correlate from 2' to 3' higher to the drilling measurements.

Formation tops and lithology on this report have been corrected to the electric log.

The drilling samples were deposited at the Kansas Geological Survey office in Wichita.

Respectfully submitted,

Robert L. Milford





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita KS 67202-1216

ATTN: Rocky Milford

### **Ruder A #3-1**

### **1-11s-24w Trego,KS**

Start Date: 2013.06.21 @ 17:27:51

End Date: 2013.06.22 @ 01:38:21

Job Ticket #: 53871                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.06.28 @ 09:19:39



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53871 **DST#: 1**  
Test Start: 2013.06.21 @ 17:27:51

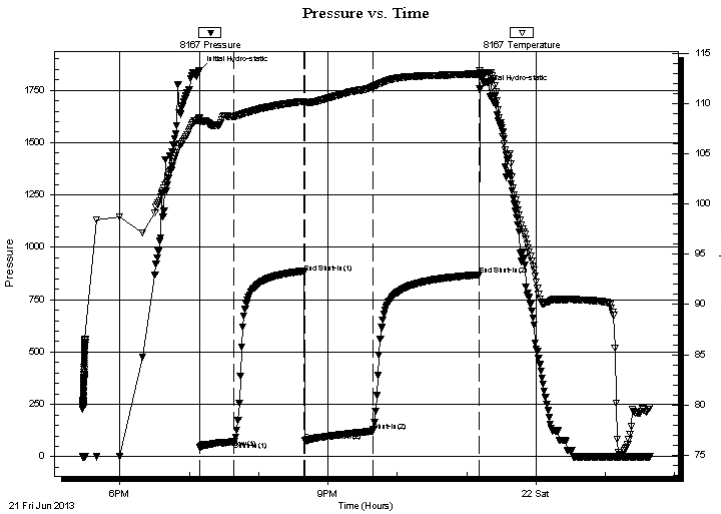
## GENERAL INFORMATION:

Formation: **LKC A-D**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 19:09:21  
Time Test Ended: 01:38:21  
Interval: **3649.00 ft (KB) To 3720.00 ft (KB) (TVD)**  
Total Depth: 3720.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Jeff Brown  
Unit No: 67  
Reference Elevations: 2303.00 ft (KB)  
2298.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8167 Inside**  
Press @ Run Depth: 122.55 psig @ 3688.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2013.06.21 End Date: 2013.06.22 Last Calib.: 2013.06.22  
Start Time: 17:27:52 End Time: 01:38:21 Time On Btm: 2013.06.21 @ 19:08:51  
Time Off Btm: 2013.06.21 @ 23:11:21

**TEST COMMENT:** IFP=Good blow BOB in 19 min  
ISI=Weak blow built to 1 1/8" Died back to a surface blow  
FFP=Good blow BOB in 9 min  
FSI=Weak blow back built to 2 1/2" died back to 1 1/2"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1844.68	108.53	Initial Hydro-static
1	42.53	108.18	Open To Flow (1)
30	72.91	108.71	Shut-In(1)
91	879.08	110.20	End Shut-In(1)
91	75.61	110.05	Open To Flow (2)
150	122.55	111.64	Shut-In(2)
242	869.12	112.93	End Shut-In(2)
243	1754.92	113.28	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
61.00	OCGWM 15%G 15%O 10%W 60%M	0.59
63.00	OCGM 15%G 15%O 70%M	0.88
94.00	Gassy Oil 20%G 80%O	1.32
0.00	661=GIP	0.00

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53871 **DST#: 1**  
Test Start: 2013.06.21 @ 17:27:51

## Tool Information

Drill Pipe:	Length: 3614.00 ft	Diameter: 3.80 inches	Volume: 50.69 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 50.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3649.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	99.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3622.00	
Shut In Tool	5.00			3627.00	
Hydraulic tool	5.00			3632.00	
Jars	5.00			3637.00	
Safety Joint	3.00			3640.00	
Packer	4.00			3644.00	28.00 Bottom Of Top Packer
Packer	5.00			3649.00	
Stubb	1.00			3650.00	
Perforations	5.00			3655.00	
Change Over Sub	1.00			3656.00	
Drill Pipe	31.00			3687.00	
Change Over Sub	1.00			3688.00	
Recorder	0.00	6625	Outside	3688.00	
Recorder	0.00	8167	Inside	3688.00	
Perforations	29.00			3717.00	
Bullnose	3.00			3720.00	71.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>99.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53871      **DST#: 1**  
Test Start: 2013.06.21 @ 17:27:51

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 29 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.58 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3200.00 ppm		
Filter Cake: inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	OCGWM 15%G 15%O 10%W 60%M	0.591
63.00	OCGM 15%G 15%O 70%M	0.884
94.00	Gassy Oil 20%G 80%O	1.319
0.00	661=GIP	0.000

Total Length: 218.00 ft      Total Volume: 2.794 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

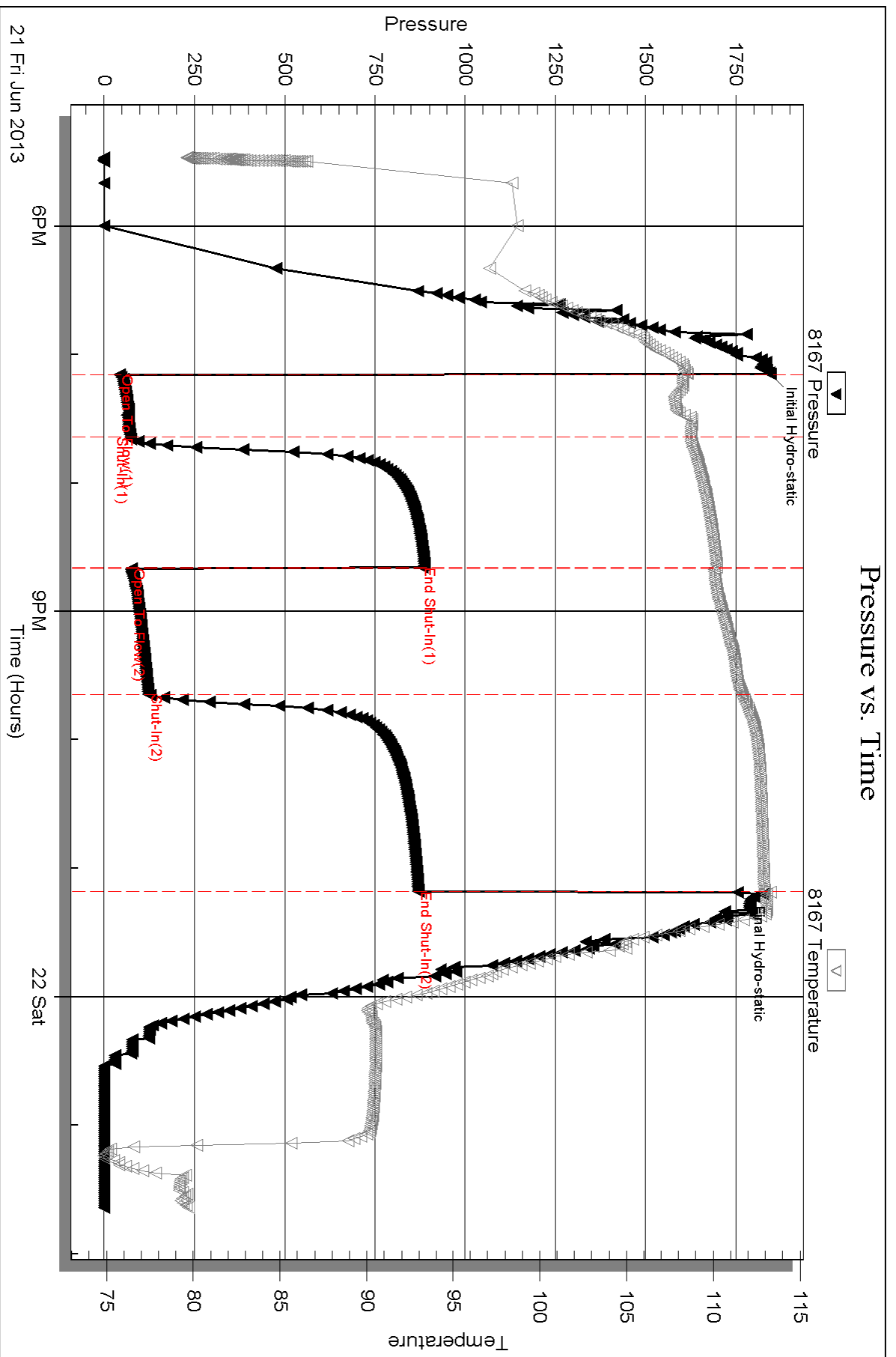
Serial #: 8167

Inside

Murfin Drilling Co Inc

Ruder A#3-1

DST Test Number: 1

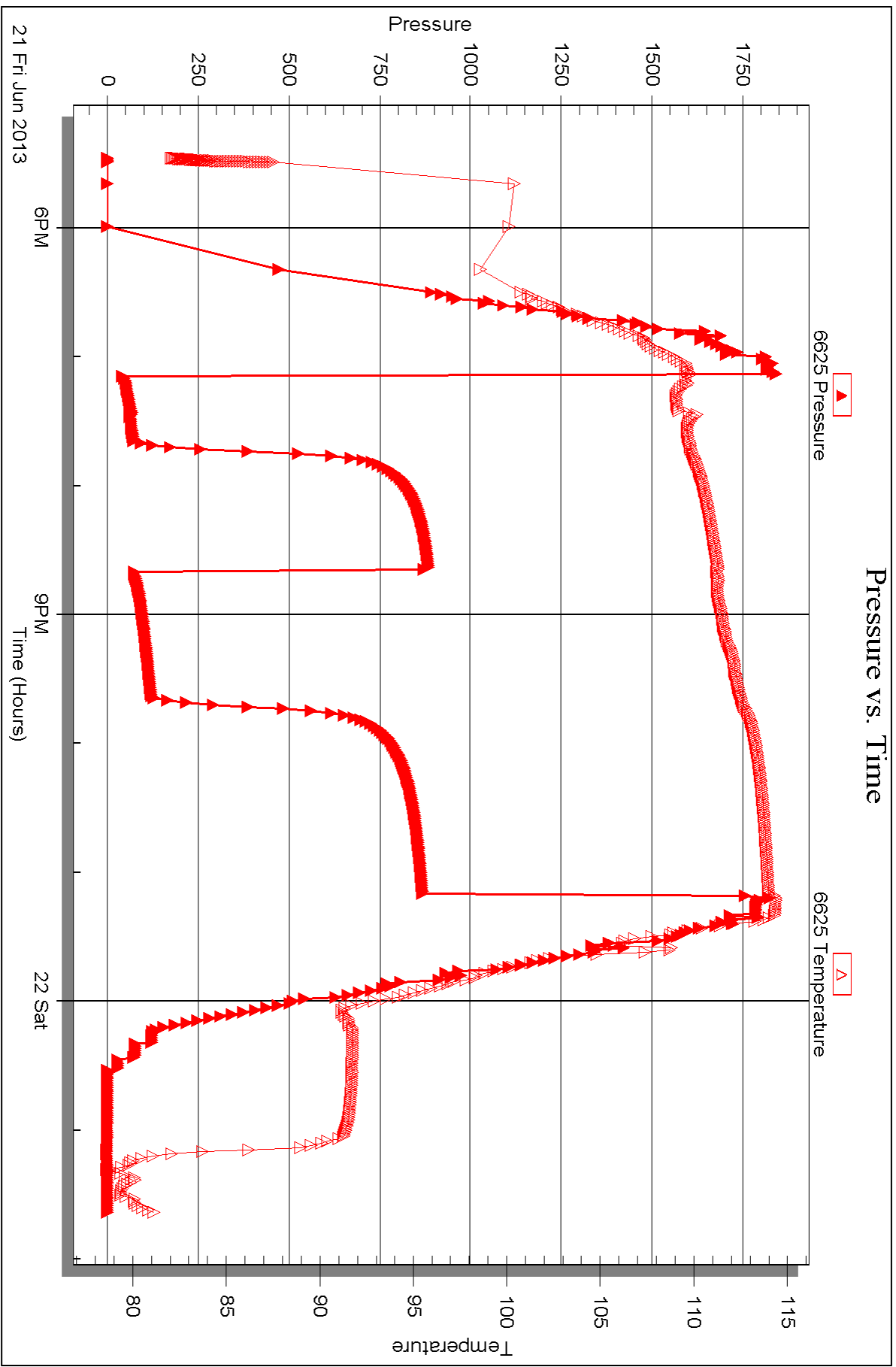


Serial #: 6625

Outside Murfin Drilling Co Inc

Ruder A#3-1

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita KS 67202-1216

ATTN: Rocky Milford

### **Ruder A #3-1**

### **1-11s-24w Trego,KS**

Start Date: 2013.06.22 @ 09:00:19

End Date: 2013.06.22 @ 16:20:19

Job Ticket #: 53872                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.06.28 @ 09:18:57



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
 250 N Water Ste 300  
 Wichita KS 67202-1216  
 ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
 Job Ticket: 53872      **DST#: 2**  
 Test Start: 2013.06.22 @ 09:00:19

## GENERAL INFORMATION:

Formation: **LKC E-F**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:42:19  
 Time Test Ended: 16:20:19  
 Interval: **3718.00 ft (KB) To 3748.00 ft (KB) (TVD)**  
 Total Depth: 3748.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jeff Brown  
 Unit No: 67  
 Reference Elevations: 2303.00 ft (KB)  
 2298.00 ft (CF)  
 KB to GR/CF: 5.00 ft

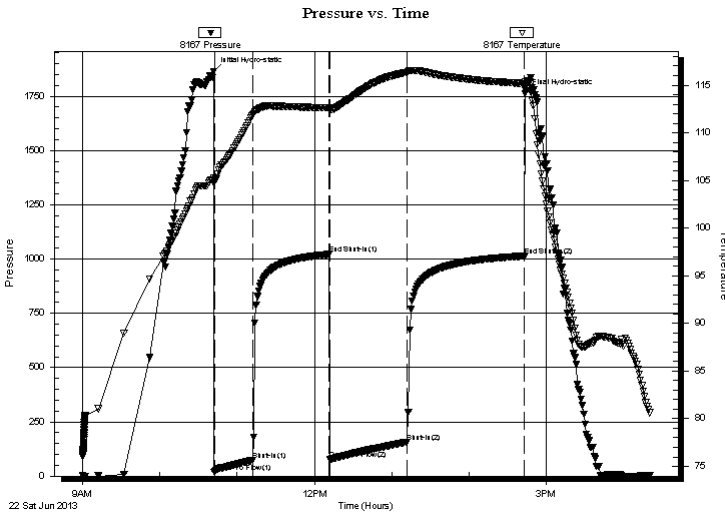
## Serial #: 8167

Inside

Press @ Run Depth: 157.08 psig @ 3721.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2013.06.22      End Date: 2013.06.22      Last Calib.: 2013.06.22  
 Start Time: 09:00:20      End Time: 16:20:19      Time On Btm: 2013.06.22 @ 10:41:49  
 Time Off Btm: 2013.06.22 @ 14:43:19

TEST COMMENT: IFP=Good blow BOB in 25 min  
 ISI=Dead no blow back  
 FFP=Good blow BOB in 29 min  
 FSI=Dead no blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1864.52	105.30	Initial Hydro-static
1	16.77	104.74	Open To Flow (1)
31	73.53	111.84	Shut-In(1)
90	1021.84	112.61	End Shut-In(1)
90	78.35	112.32	Open To Flow (2)
150	157.08	116.35	Shut-In(2)
241	1012.88	115.16	End Shut-In(2)
242	1763.01	115.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
303.00	MW with oil spots 30%M 70%W	3.99

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53872      **DST#: 2**  
Test Start: 2013.06.22 @ 09:00:19

**Tool Information**

Drill Pipe:	Length: 3677.00 ft	Diameter: 3.80 inches	Volume: 51.58 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose:	69000.00 lb
			<u>Total Volume: 51.72 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	57000.00 lb
Depth to Top Packer:	3718.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	50.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
Change Over Sub	1.00			3699.00	
Shut In Tool	5.00			3704.00	
Hydraulic tool	5.00			3709.00	
Packer	4.00			3713.00	20.00      Bottom Of Top Packer
Packer	5.00			3718.00	
Stubb	1.00			3719.00	
Perforations	2.00			3721.00	
Recorder	0.00	6625	Outside	3721.00	
Recorder	0.00	8167	Inside	3721.00	
Perforations	24.00			3745.00	
Bullnose	3.00			3748.00	30.00      Bottom Packers & Anchor

**Total Tool Length: 50.00**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53872      **DST#: 2**  
Test Start: 2013.06.22 @ 09:00:19

### 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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.57 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3200.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

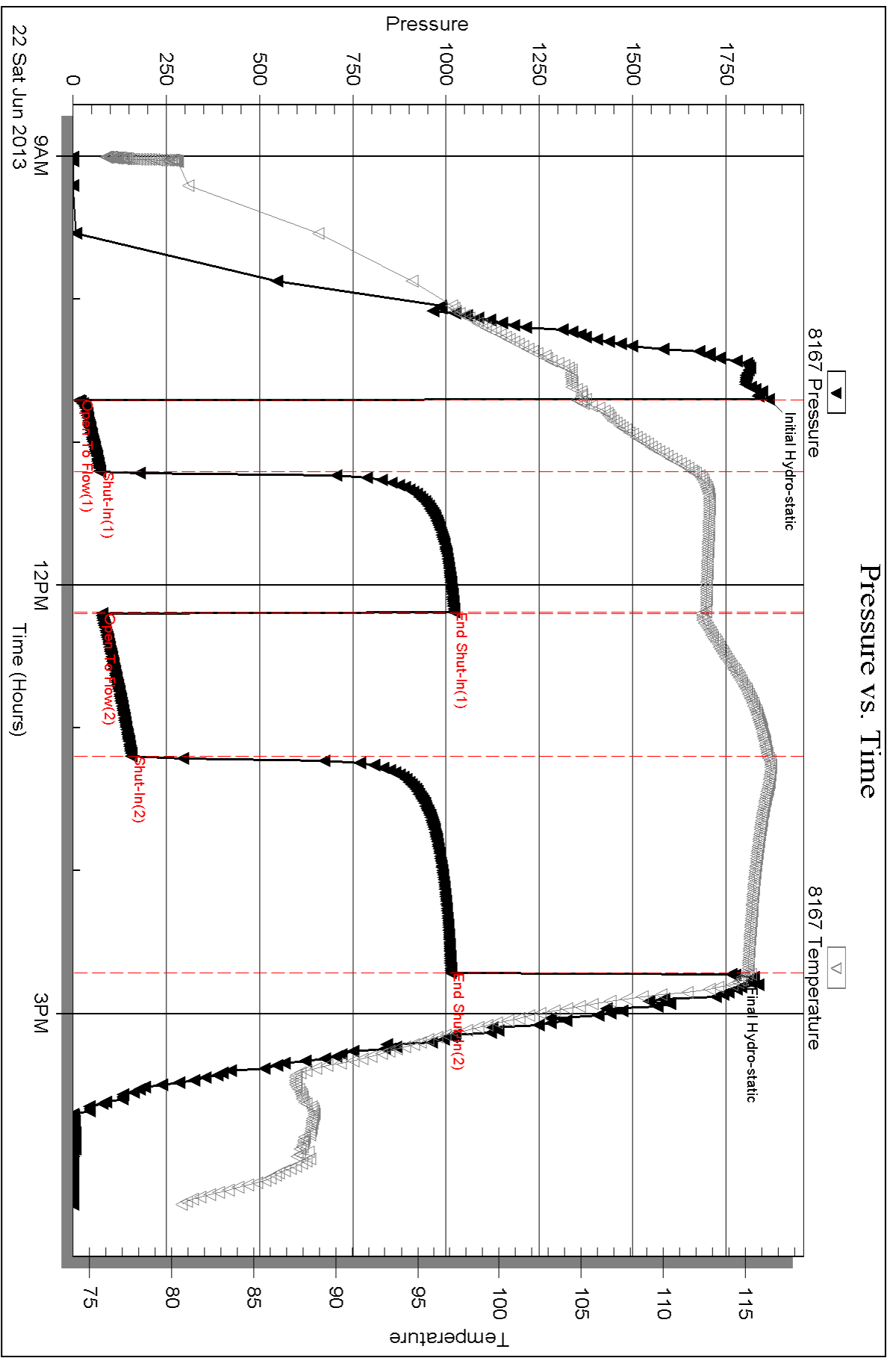
Length ft	Description	Volume bbl
303.00	MW w ith oil spots 30%M 70%W	3.986

Total Length: 303.00 ft      Total Volume: 3.986 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

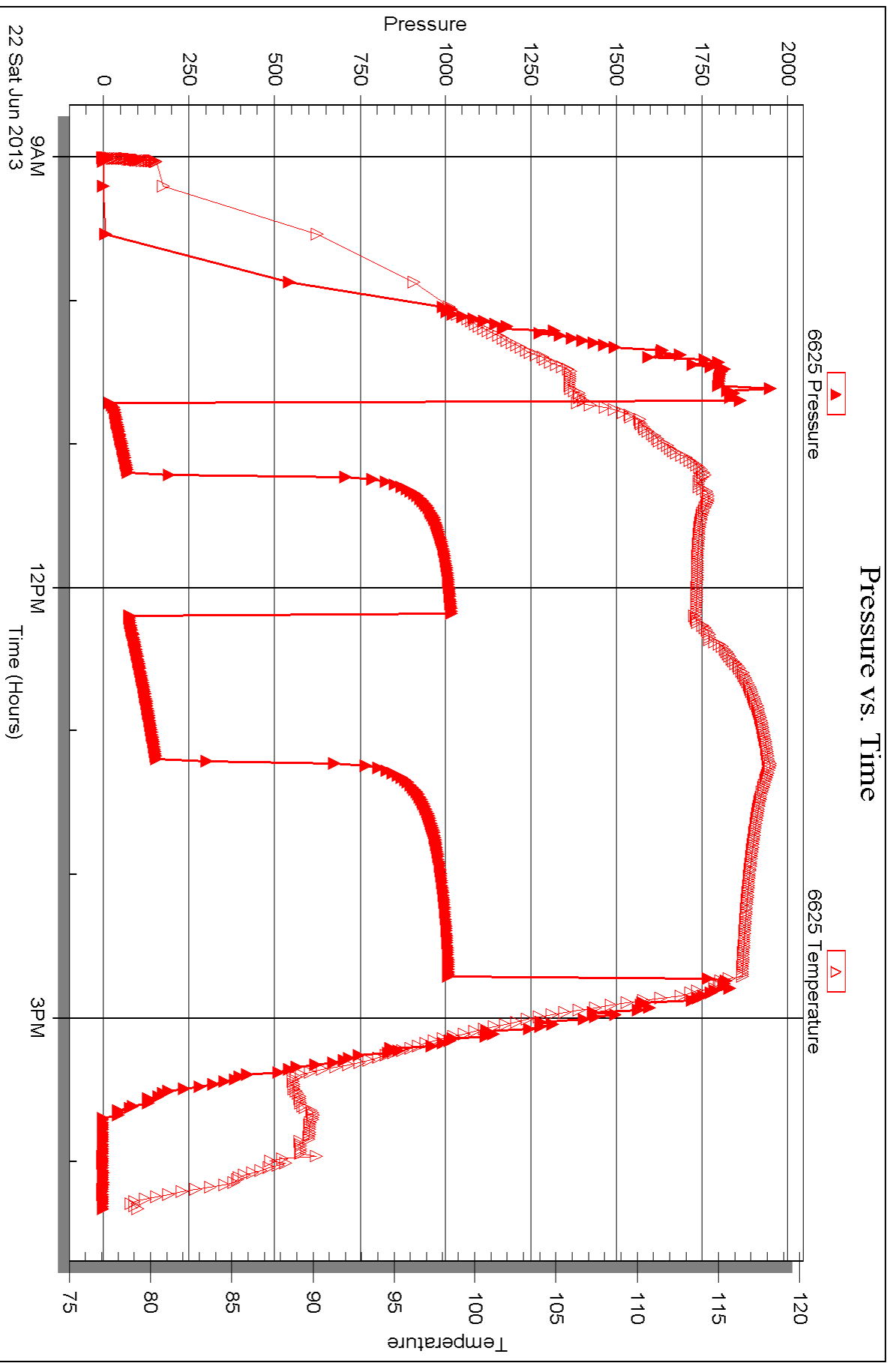


Serial #: 6625

Outside Murfin Drilling Co Inc

Ruder A#3-1

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300  
Wichita KS 67202-1216

ATTN: Rocky Milford

**Ruder A #3-1**

**1-11s-24w Trego,KS**

Start Date: 2013.06.23 @ 06:57:34

End Date: 2013.06.23 @ 14:48:31

Job Ticket #: 53873                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.06.28 @ 09:18:17



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc  
 250 N Water Ste 300  
 Wichita KS 67202-1216  
 ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
 Job Ticket: 53873 **DST#: 3**  
 Test Start: 2013.06.23 @ 06:57:34

## GENERAL INFORMATION:

Formation: **LKC H-K**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:48:31  
 Time Test Ended: 14:48:31  
 Interval: **3777.00 ft (KB) To 3870.00 ft (KB) (TVD)**  
 Total Depth: 3870.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jeff Brown  
 Unit No: 67  
 Reference Elevations: 2303.00 ft (KB)  
 2298.00 ft (CF)  
 KB to GR/CF: 5.00 ft

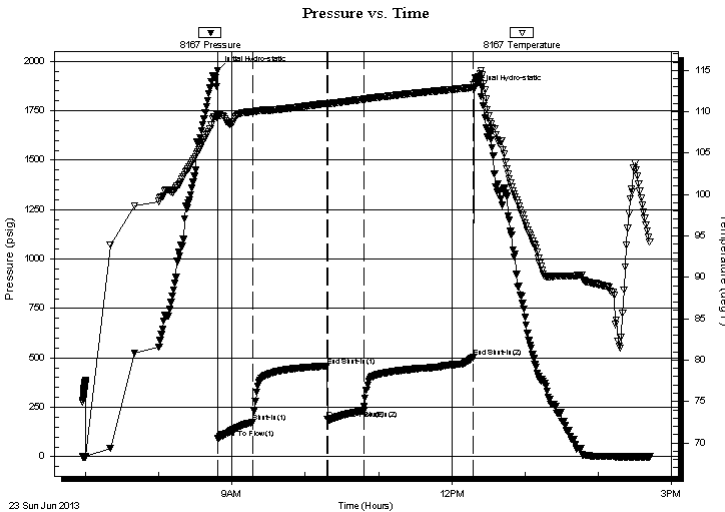
## Serial #: 8167

Inside

Press @ Run Depth: 233.65 psig @ 3847.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.06.23 End Date: 2013.06.23 Last Calib.: 2013.06.23  
 Start Time: 06:57:35 End Time: 14:42:30 Time On Btm: 2013.06.23 @ 08:48:01  
 Time Off Btm: 2013.06.23 @ 12:18:01

TEST COMMENT: IFP=Strong blow BOB in 3 min  
 ISI=Weak blow back built to 2 3/4" died back to 2"  
 FFP=Strong Blow BOB in 4 min  
 FSI=Good blow back BOB in 40 min

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1953.67	109.68	Initial Hydro-static
1	94.04	109.42	Open To Flow (1)
29	173.78	110.00	Shut-In(1)
90	458.60	111.01	End Shut-In(1)
90	189.77	110.95	Open To Flow (2)
120	233.65	111.50	Shut-In(2)
210	501.82	112.93	End Shut-In(2)
211	1858.81	113.27	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
497.00	GMO 50%G 35%O 15%M	6.71
0.00	1107' 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**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53873      **DST#: 3**  
Test Start: 2013.06.23 @ 06:57:34

**Tool Information**

Drill Pipe:	Length: 3741.00 ft	Diameter: 3.80 inches	Volume: 52.48 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 69000.00 lb
			<u>Total Volume: 52.62 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3777.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	93.00 ft			
Tool Length:	121.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3750.00	
Shut In Tool	5.00			3755.00	
Hydraulic tool	5.00			3760.00	
Jars	5.00			3765.00	
Safety Joint	3.00			3768.00	
Packer	4.00			3772.00	28.00      Bottom Of Top Packer
Packer	5.00			3777.00	
Stubb	1.00			3778.00	
Perforations	4.00			3782.00	
Change Over Sub	1.00			3783.00	
Drill Pipe	63.00			3846.00	
Change Over Sub	1.00			3847.00	
Recorder	0.00	6625	Outside	3847.00	
Recorder	0.00	8167	Inside	3847.00	
Perforations	20.00			3867.00	
Bullnose	3.00			3870.00	93.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>121.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc  
250 N Water Ste 300  
Wichita KS 67202-1216  
ATTN: Rocky Milford

**1-11s-24w Trego,KS**  
**Ruder A #3-1**  
Job Ticket: 53873      **DST#: 3**  
Test Start: 2013.06.23 @ 06:57:34

## 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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
497.00	GMO 50%G 35%O 15%M	6.707
0.00	1107' GIP	0.000

Total Length: 497.00 ft      Total Volume: 6.707 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



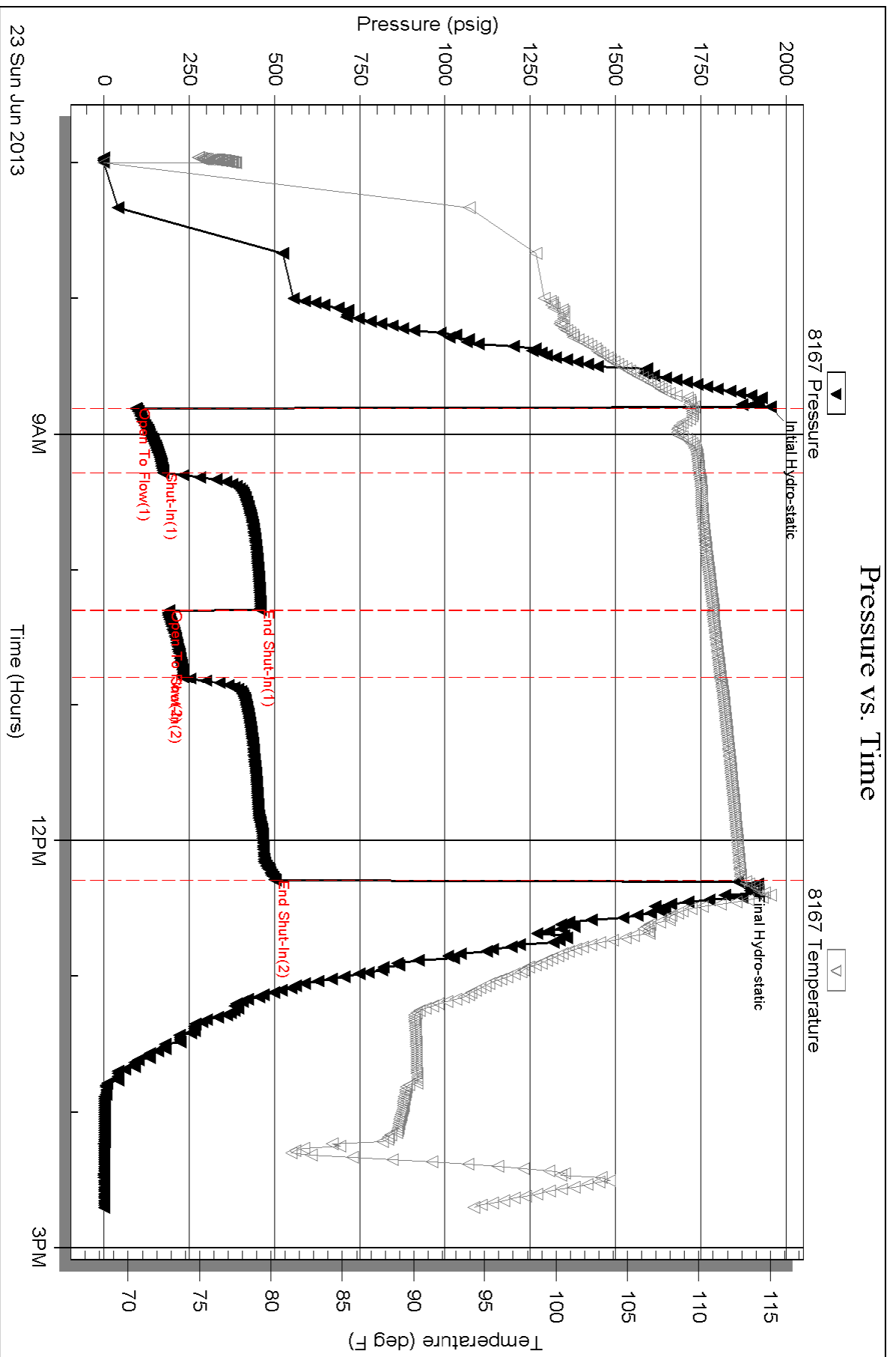
Serial #: 8167

Inside

Murfin Drilling Co Inc

Ruder A#3-1

DST Test Number: 3

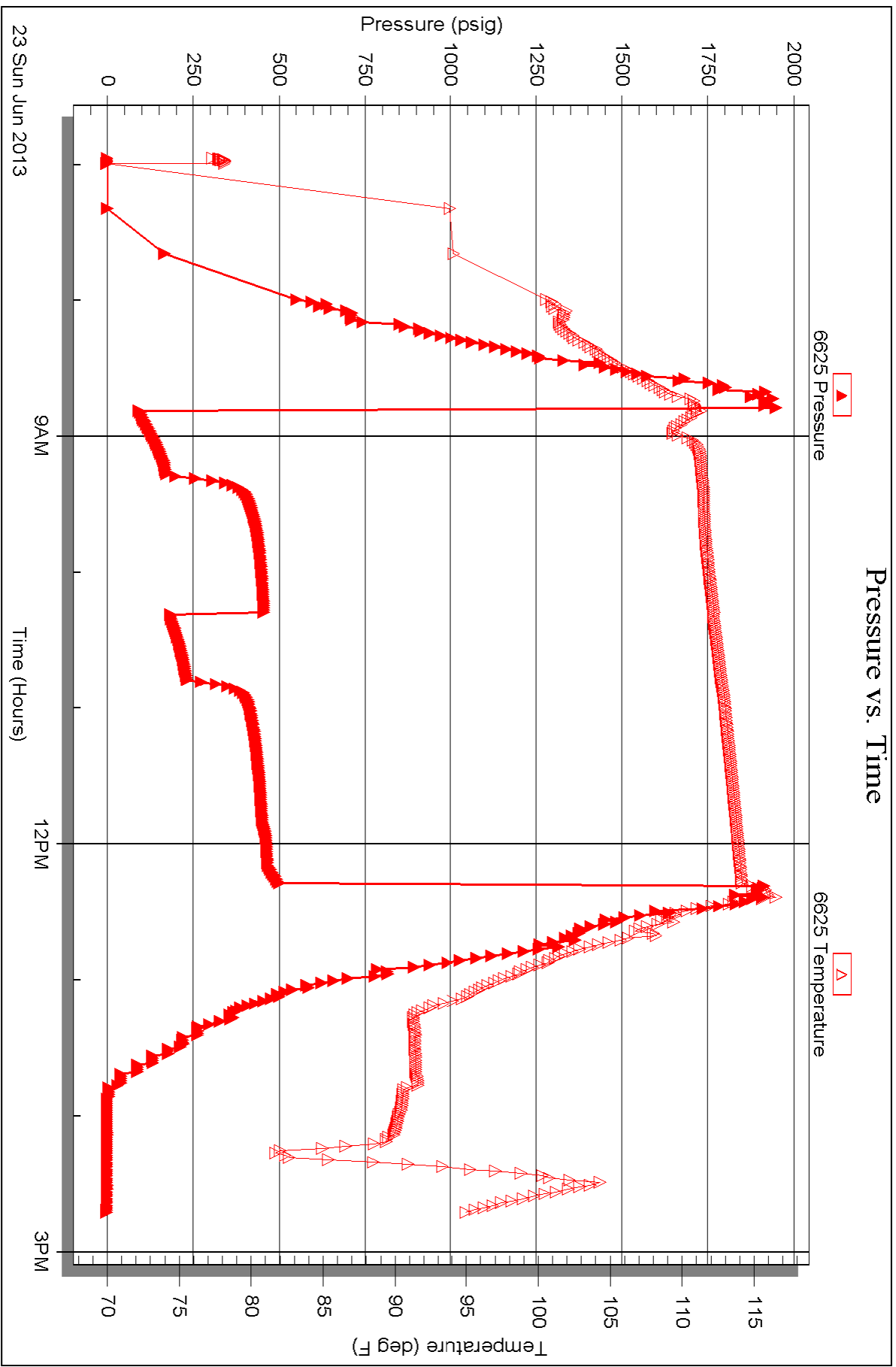


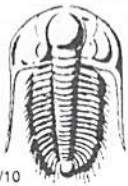
Serial #: 6625

Outside Murfin Drilling Co Inc

Ruder A #3-1

DST Test Number: 3





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53871

Well Name & No. Ruder 'A' #3-1 Test No. 1 Date 6-21-13  
 Company Murfin Drilling Co Inc Elevation 2303 KB 2298 GL  
 Address 250 N WATER STE 300 WICHITA KS 67202 + 1216  
 Co. Rep / Geo. Rocky M: Ford Rig Murfin #16  
 Location: Sec. 1 Twp. 11S Rge. 24W Co. Trego State KS

Interval Tested 3649 - 3720 Zone Tested LANS A-D  
 Anchor Length 71 Drill Pipe Run 3614 Mud Wt. 9.1  
 Top Packer Depth 3644 Drill Collars Run 29 Vis 50  
 Bottom Packer Depth 3649 Wt. Pipe Run 0 WL 7.6  
 Total Depth 3720 Chlorides 3200 ppm System LCM 0

Blow Description IP - Good Blow BOB IN 19 min  
BT - Weak Blow Back TO 1 1/8 IN Died back TO 9 Surface Blow  
FP - Good Blow BOB IN 9 min  
FST - Weak Blow Back Built TO 2 1/2 IN Died Back TO 1 1/2 IN

Rec	Feet of	%gas	%oil	%water	%mud
<u>41</u>	<u>OC Cam</u>	<u>15</u>	<u>15</u>	<u>10</u>	<u>60</u>
<u>43</u>	<u>OC Cam</u>	<u>15</u>	<u>15</u>	<u>70</u>	<u>70</u>
<u>94</u>	<u>Gassy Oil</u>	<u>20</u>	<u>80</u>		
	<u>1601-GIP</u>				

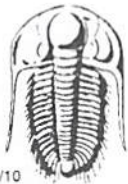
Rec Total 218 BHT 113 Gravity 29 API RW 203 @ 78.2° F Chlorides 31,000 ppm  
 (A) Initial Hydrostatic 1845  Test 1150 T-On Location 17:00  
 (B) First Initial Flow 43  Jars 250 T-Started 17:27  
 (C) First Final Flow 73  Safety Joint 75 T-Open 19:08  
 (D) Initial Shut-In 879  Circ Sub \_\_\_\_\_ T-Pulled 23:08  
 (E) Second Initial Flow 76  Hourly Standby \_\_\_\_\_ T-Out 18:38  
 (F) Second Final Flow 123  Mileage 90 RT 139.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 869  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1755  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1614.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90

Sub Total 1614.50

Approved By \_\_\_\_\_ Our Representative Jeff Brown

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53872

4/10

Well Name & No. Ryder 'A' #3-1 Test No. 2 Date 6-22-13  
 Company Muffin Drilling Co INC Elevation 2303 KB 2298 GL  
 Address 250 N WATER STE 300 WICHITA KS 67202 +1214  
 Co. Rep / Geo. Rocky Milford Rig Muffin 1L0  
 Location: Sec. 1 Twp. 11S Rge. 24W Co. Trego State Ks

Interval Tested 3718-3748 Zone Tested Lansing - E - F  
 Anchor Length 30 Drill Pipe Run 3677 Mud Wt. 9.1  
 Top Packer Depth 3713 Drill Collars Run 29 Vis 50  
 Bottom Packer Depth 3718 Wt. Pipe Run 0 WL 7.6  
 Total Depth 3748 Chlorides 3200 ppm System LCM 0

Blow Description Full Good Blow Bob IN 25 min  
1st Dead NO Blow Back  
Full Good Blow Bob IN 29 min  
1st Dead NO Blow Back

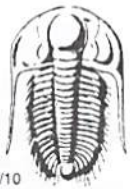
Rec	Feet of	%gas	%oil	%water	%mud
<u>303</u>	<u>MW WITH OIL SPOTS</u>		<u>70</u>	<u>30</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 303 BHT 115 Gravity \_\_\_\_\_ API RW .118 @ 92.4° F Chlorides 43000 ppm  
 (A) Initial Hydrostatic 1865  Test 1150 T-On Location 8:07  
 (B) First Initial Flow 17  Jars \_\_\_\_\_ T-Started 9:00  
 (C) First Final Flow 74  Safety Joint \_\_\_\_\_ T-Open 10:42  
 (D) Initial Shut-In 1022  Circ Sub \_\_\_\_\_ T-Pulled 19:42  
 (E) Second Initial Flow 78  Hourly Standby \_\_\_\_\_ T-Out 16:20  
 (F) Second Final Flow 157  Mileage 139.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1013  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1763  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1289.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 40  
 Final Flow 400  
 Final Shut-In 90  
 Sub Total 1289.50

Approved By \_\_\_\_\_ Our Representative Jeff Brown

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53873

Well Name & No. Ruder 'A' #3-1 Test No. 3 Date 6-23-13  
 Company Murfin Drilling Co INC Elevation 2303 KB 2298 GL  
 Address 250 N Water Ste 300 Wichita KS 67202 + 1216  
 Co. Rep / Geo. Rocky Milford Rig Murfin #16  
 Location: Sec. 1 Twp. 11 S Rge. 24 W Co. Trego State KS

Interval Tested 3777 - 3870 Zone Tested Lansing - H-K  
 Anchor Length 93 Drill Pipe Run 3741 Mud Wt. 9.2  
 Top Packer Depth 3772 Drill Collars Run 29 Vis 50  
 Bottom Packer Depth 3777 Wt. Pipe Run 0 WL 8.0  
 Total Depth 3870 Chlorides 2900 ppm System LCM 1

Blow Description FP-Strong Blow BoB IN 3 min  
ISI-Weak Blow Back Built To  
FP-Strong Blow BoB IN 4 min  
ISI-Good Blow Back BoB IN 40 min

Rec	Feet of	%gas	%oil	%water	%mud
<u>497</u>	<u>Hoe GA G M O</u>	<u>50</u>	<u>35</u>	<u>15</u>	
	<u>1107 - GEP</u>				

Rec Total 497 BHT 113 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ ° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1954</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>6:35</u>
(B) First Initial Flow <u>94</u>	<input type="checkbox"/> Jars _____	T-Started <u>6:57</u>
(C) First Final Flow <u>174</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>8:49</u>
(D) Initial Shut-In <u>459</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>12:19</u>
(E) Second Initial Flow <u>190</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>14:48</u>
(F) Second Final Flow <u>234</u>	<input checked="" type="checkbox"/> Mileage <u>139.50</u>	Comments _____
(G) Final Shut-In <u>502</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1859</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 30  
 Final Shut-In 90

Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Sub Total 1289.50

Sub Total \_\_\_\_\_  
 Total 1289.50  
 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Jeff Brown

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**QUALITY OILWELL CEMENTING, INC.**  
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665  
 Phone: 785-324-1041 fax: 785-483-1087  
 Email: cementing@ruraltel.net

Date: 6/18/2013  
 Invoice # 6924

*Acct. Prod - LH*

P.O.#:

Due Date: 7/18/2013  
 Division: *Russell*

# Invoice

**Contact:**  
 Murfin Drilling Company  
**Address/Job Location:**  
 Murfin Drilling Company  
 P.O. Box 288  
 Russell Ks 67665

USED FOR \_\_\_\_\_

APPROVED   *l*  

**OPERATOR PAY MDC**  
~~LEASE~~

**OPERATOR PAY MDC**  
 LEASE:   *DM*  

**Reference:**  
 RUDER A 3-1

**Description of Work:**  
 SURFACE JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,020.55	No				
Common-Class A	150	\$ 2,102.29	Yes				
Pump Truck Mileage-Job to Nearest Camp	52	\$ 580.01	No				
Bulk Truck Matl-Material Service Charge	158	\$ 353.18	No				
Bulk Truck Mileage-Job to Nearest Bulk Plant	52	\$ 339.41	No				
Calcium Chloride	5	\$ 266.34	Yes				
Premium Gel (Bentonite)	3	\$ 54.59	Yes				

**Invoice Terms:**

Net 30

SubTotal: \$ 4,716.36  
 Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (707.45)

SubTotal for Taxable Items: \$ 2,059.73  
 SubTotal for Non-Taxable Items: \$ 1,949.17

Total: \$ 4,008.91  
 Tax: \$ 140.06

6.80% Trego County Sales Tax

**Thank You For Your Business!**

**Amount Due: \$ 4,148.97**  
**Applied Payments:**  
**Balance Due: \$ 4,148.97**

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
 ©2008-2013 Straker Investments, LLC. All rights reserved.

*[Handwritten signature]*

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 6924

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-18-13	1	11	24	Russell	KS		12:45 PM
Lease				Location		Well No.	
Rider "A"				Wakarusa low RB 3rd 1/2 Winto		3-1	
Contractor				Owner			
Murtin #16				To Quality Oilwell Cementing, Inc.			
Type Job				You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Surface				Charge To			
Hole Size 12 1/4				Murtin Drilling			
Csg. 8 5/8				Street			
Tbg. Size				City			
Tool				State			
Cement Left in Csg. 15'				The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line				Cement Amount Ordered			
Displace 12 1/2 BBL				150 Lbm 30 pcc 2 1/2 BBL			
<b>EQUIPMENT</b>				Common			
Pumptrk 17 No. Cementer				150			
Bulktrk No. Helper				Poz. Mix			
Bulktrk 14 No. Driver				Gel. 3			
Bulktrk 14 No. Driver				Calcium 5			
<b>JOB SERVICES &amp; REMARKS</b>				Hulls			
Remarks:				Salt			
Rat Hole				Flowseal			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
8 5/8 on bottom. E4 Circulation.				Handling 155			
Mix 150 BBL 4 Displace.				Mileage			
				<b>FLOAT EQUIPMENT</b>			
				Guide Shoe			
				Centralizer 8 5/8 surge			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				Pumptrk Charge			
				Surface			
				Mileage 52			
				Tax			
				Discount			
				Total Charge			
Signature							
Ag. Seibel							

Accto — ac: W.F.  
: Liz  
: L-1



P. O. Box 466  
Ness City, KS 67560  
Off: 785-798-2300



# Invoice

DATE	INVOICE #
7/2/2013	24835

BILL TO
Murfin Drilling Co Inc P. O. Box 130 Hill City, KS 67642-0130
USED FOR
APPROVED

- Acidizing
- Cement
- Tool Rental

USED FOR IC 103  
APPROVED [Signature]

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#3	Ruder A	Trego	Company Tools	Oil	Development	Cement Port Collar	Roger
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				45	Miles	6.00	270.00
576D-D	Pump Charge - Port Collar				1	Job	1,500.00	1,500.00
290	D-Air				1	Gallon(s)	42.00	42.00T
279	Bentonite Gel				4	Sack(s)	25.00	100.00T
330	Swift Multi-Density Standard (MIDCON II)				200	Sacks	17.00	3,400.00T
276	Flocele				75	Lb(s)	2.00	150.00T
581D	Service Charge Cement				225	Sacks	2.00	450.00
583D	Drayage				503.78	Ton Miles	1.00	503.78
	Subtotal							6,415.78
	Sales Tax Trego County						7.65%	282.44
<b>We Appreciate Your Business!</b>							<b>Total</b>	\$6,698.22





Services, Inc.

CHARGE TO: Merlin Ark.  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE, ZIP CODE: \_\_\_\_\_

TICKET No. **24835**

PAGE 1 OF 1

SERVICE LOCATION: 1. Hays Co WELL/PROJECT NO.: A #3 LEASE: Rodan COUNTY/PARISH: Trego STATE: Ks CITY: \_\_\_\_\_ DATE: 7-2-13 OWNER: Same

TICKET TYPE:  SERVICE  SALES CONTRACTOR: Co. Tools RIG NAME/NO.: \_\_\_\_\_ ORDER NO.: \_\_\_\_\_

WELL TYPE: Oil WELL CATEGORY: Development JOB PURPOSE: CSL. Pitt Colbr WELLS PERMIT NO.: \_\_\_\_\_

INVOICE INSTRUCTIONS: \_\_\_\_\_

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE # 110	45	mi/l			6.00	270.00
576 D					Pump Service	1	ea			1500.00	1500.00
290					A-Air	1	gal			42.00	42.00
299					Gel Bentonite	4	sls			25.00	100.00
581					Service Charge	2	sls			225.00	450.00
583					Drayage	1	hr			503.78	503.78
330					Smd Cement	200	sls			17.00	3400.00
296					Floacle	75	#			2.00	150.00

**LEGAL TERMS:** Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

DATE SIGNED: [Signature] TIME SIGNED:  A.M.  P.M.

REMIT PAYMENT TO:  
**SWIFT SERVICES, INC.**  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

SURVEY		AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					6,415	178
WE UNDERSTOOD AND MET YOUR NEEDS?						
OUR SERVICE WAS PERFORMED WITHOUT DELAY?						
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?						
ARE YOU SATISFIED WITH OUR SERVICE?						
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND						
TAX: <u>1.990</u> TAX: <u>7.65%</u> TOTAL: <u>6698.22</u>						

SWIFT OPERATOR: [Signature] APPROVAL: \_\_\_\_\_

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 7-2-13 PAGE NO. 7

CUSTOMER *Muskegon Drilling* WELL NO. *A #3* LEASE *Ruder* JOB TYPE *Port Collar* TICKET NO. *24235*

CHART NO.	TIME	RATE (BPM)	VOLUME (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0805							on loc Set up truck
	0820						1200	Port Collar @ 1932' Press test csg. 1200psi hold
	0830	3					200	Open P.C. Inj. Rate 3BPM 200psi mix 4sk Gel
	0913	3	110					5" Pumped establish circulation Start mixing 225sk SMD Cement 11.2 Cement to surface Increase weight 13.5# cnt
			6.5					Displ. 6.5 <sup>ssi</sup> H <sub>2</sub> O Finish Displ. close P.C.
	0935						1200	Press test 1200psi P.C. Closed Run tubin to 2086'
	0945							Reverse out cnt. Hole clean 16 <sup>ssi</sup> pumped pull tool out of hole wash & Rack up truck
	10:30							JOB Complete
								Used 200psi cnt. 4sk Gel

*Mark*  
Roger, Tom, Bob



P. O. Box 466  
Ness City, KS 67560  
Off: 785-798-2300



Acidizing  
cc: WF  
cc: L12  
cc: L-1

# Invoice

E	INVOICE #
013	24785

BILL TO
Murfin Drilling Co Inc P. O. Box 130 Hill City, KS 67642-0130
USED FOR
APPROVED

IC 103  
*[Signature]*

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#3-1	Ruder A	Trego		Oil	Development	Cement LongStri...	Don
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				50	Miles	6.00	300.00
578D-L	Pump Charge - Long String - 3988 Feet				1	Job	1,500.00	1,500.00
221	Liquid KCL (Clayfix)				4	Gallon(s)	25.00	100.00T
280	Flocheck 21				500	Gallon(s)	3.00	1,500.00T
290	D-Air				2	Gallon(s)	42.00	84.00T
403-5	5 1/2" Cement Basket				1	Each	285.00	285.00T
404-5	5 1/2" Port Collar				1	Each	2,650.00	2,650.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	275.00	275.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	375.00	375.00T
409-5	5 1/2" Turbolizer				10	Each	90.00	900.00T
413-5	5 1/2" Roto Wall Scratcher				20	Each	40.00	800.00T
419-5	5 1/2" Rotating Head Rental				1	Each	200.00	200.00T
325	Standard Cement				200	Sacks	14.00	2,800.00T
276	Flocele				50	Lb(s)	2.00	100.00T
283	Salt				1,000	Lb(s)	0.20	200.00T
284	Calseal				10	Sack(s)	35.00	350.00T
285	CFR-1				141	Lb(s)	4.00	564.00T
581D	Service Charge Cement				200	Sacks	2.00	400.00
583D	Drayage				532.28	Ton Miles	1.00	532.28
	Subtotal							13,915.28
	Sales Tax Trego County						6.80%	760.44
<b>We Appreciate Your Business!</b>							<b>Total</b>	<b>\$14,675.72</b>



**Services, Inc.**

CHARGE TO: Whispering Dog Co.  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE, ZIP CODE: \_\_\_\_\_

TICKET No **24785**

PAGE 1 OF 2

1. SERVICE LOCATIONS	WELL/PROJECT NO. <u>3-1</u>	LEASE <u>RUDER 'A'</u>	COUNTY/PARISH <u>TREGO</u>	STATE <u>KS</u>	CITY _____	DATE <u>6-24-13</u>	OWNER _____
2. <u>Ness City, KS</u>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>Q</u>	RIG NAME/NO. _____	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>Ness City, KS</u>	ORDER NO. _____	
3. _____	WELL TYPE <u>D-1</u>	WELL CATEGORY <u>in Field</u>	JOB PURPOSE <u>Revent Longstring</u>	WELL PERMIT NO. _____	WELL LOCATION _____		
4. REFERRAL LOCATION _____	INVOICE INSTRUCTIONS _____						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE #113	57 mi				400	30000
578					Rimp Charge - cut Longstring	1 ea		3988 ft		150000	150000
221					Liquid Krel	4 gal				2500	10000
280					Anchor-21	500 gal				300	150000
290					D-Air	2 gal				4200	8400
403					Revent Basket	1 ea		5 1/2 in		28500	28500
404					Port Ballar	1 ea		5 1/2 in		265000	265000
406					Latex Drive Plug + Baller	1 ea		5 1/2 in		27500	27500
407					Insert Float Shoe w/ Auto Kill	1 ea		5 1/2 in		37500	37500
409					Turbolizers	10 ea		5 1/2 in		9000	90000
413					200 Lb Oil Scrubbers	30 ea		5 1/2 in		2700	81000
419					Rotating Head Rental	1 ea		5 1/2 in		20000	20000

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MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X Wade King DATE SIGNED 6-24-13 TIME SIGNED 1300  A.M.  P.M.

**REMIT PAYMENT TO:**  
 SWIFT SERVICES, INC.  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

**SURVEY**

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UNDECIDED	DISAGREE
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 8969.00  
 TOTAL 14,675.72

SWIFT OPERATOR: Wade King APPROVAL: \_\_\_\_\_

**CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES** The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You!



PO Box 466  
Ness City, KS 67560  
Of: 785-798-2300

TICKET CONTINUATION

TICKET No. 24785

CUSTOMER: *Nuss Air Dry Co* WEL: *#3-1 Ruder 'A'* DATE: *6-24-13* PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		TITLE	DESCRIPTION	QTY	LBS	QTY	LBS	UNIT PRICE	AMOUNT
		LOC	ACCT								
285					Standard Out EA-2	200	50	1000	1000	14.00	2800.00
276					Trace		50			20.00	1000.00
283					<del>Trace</del> Salt	1000	100			20.00	2000.00
284					<del>CFR-1</del> Trace	940	100	10	10	35.00	3500.00
285					CFR-1	141	100			40.00	5640.00
581											
583											
SERVICE CHARGE					<i>Concrete</i>						
MILEAGE CHANGE											
TOTAL WEIGHT											
LOADED MILES											
CUBIC FEET											
TON MILES											
CONTINUATION TOTAL											49,46.28

**JOB LOG**

**SWIFT Services, Inc.**

DATE 6-24-13 PAGE NO. 1

CUSTOMER Mudco WELL NO. 3-1 LEASE RUDER A JOB TYPE Cement Longstring TICKET NO. 24785

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								TD 4000'
	1330							On location w/ float assembly Start 5 1/2" 15.5 #/ft. casing to 3988' Insert Float Valve w/ Auto Fill L.D. Baffle - 83.20' = 3968' = 94 1/2 BBLs Cent. Turbos - 1-2-3-4-6-8-10-12-14-48' Cmt. Bskt. #49 Fin end Port Collar #49 collar @ 1932' 100' R/B - Scratchers
	15:00							Drop ball - 5 sts out -
	15:15							Start CIP / Rotate Casing
	16:15		7/5					Fin CIP (EA-2 cent) Plug RH (30 SKS - MH-20 SKS)
		6	15				200	Pump 15 BBL KCL Flush
		6	12				200	Pump 500 gal Flocheck-21
		6	5				200	Pump 5 BBL KCL Spacers
		5					150	Start cmt -
		4	36				100	Fin cent - Wash Pump & Lines
		9					200	Drop L.D. Plug - Start Displ
		9					300	1st Tank Displ - KCL w/ TR
		9					300	Cent. H <sub>2</sub> O
		9					400	Caught cent 1st - slow rate slowly
		7					600	Slow rate
		5 1/2					750	Plug Down - Hold - Release & held.
	1700		94 1/2				1500	Job Complete
	1715							Washup of Backup TR
	1745							<i>[Signature]</i> Dan, Son of John J.