



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1146904  
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: \_\_\_\_\_



1146904

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> _____ <i>(Submit ACO-4)</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

June 11, 2013

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

Re: ACO1  
API 15-051-26480-00-00  
Hanway 1-12  
SE/4 Sec.12-15S-19W  
Ellis 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 Hanway #1-12 800' FSL 1750' FEL Sec. 12-T15S-R19W 2050' KB							Source Petroleum Urban #3 1025FSL 2935FEL Sec. 12-T15S-R19W 2057' KB	
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	1236	+814	+8	1236	+814	+8	1251	+806
B/Anhydrite	1275	+775	+4	1276	+774	+3	1286	+771
Topeka	3030	-980	Flat	3033	-983	-3	3037	-980
Heebner	3292	-1242	-3	3294	-1244	-5	3296	-1239
Toronto	3312	-1262	-3	3314	-1264	-5	3316	-1259
Lansing	3336	-1286	-2	3339	-1289	-5	3341	-1284
Stark	3533	-1483	-2	3534	-1484	-3	3538	-1481
BKC	3578	-1528	-2	3579	-1529	-3	3583	-1526
Arbuckle	3660	-1610	-8	3660	-1610	-8	3659	-1602
RTD	3760						3710	
LTD				3764			3710	

# Robert D. Hendrix

Petroleum Geologist

## GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY **Murfin Drilling Company Inc.**

LEASE **Hanway #1-12**

FIELD **Dechant**

LOCATION **800'FSL & 1750'FEL**

SEC **12 TWP S 15 S RGE 19W**

COUNTY **Ellis Kansas**

CONTRACTOR **Murfin Drilling Rig #2**

SPUD **2/18/2013 COMP 2/22/2013**

RTD **3760' LTD 3764'**

MUD UP **2810' TYPE MUD Chemical**

SAMPLES SAVED FROM **2930' TO RTD**

DRILLING TIME KEPT FROM **2930' TO RTD**

SAMPLES EXAMINED FROM **2930' TO RTD**

GEOLOGICAL SUPERVISION FROM **2904' to RTD**

GEOLOGIST ON WELL **Robert D. Hendrix**

FORMATION TOPS

ANHYDRITE **1236 (+814)**

TOPEKA **3021 (-971)**

HEEBNER SH **3294 (-1244)**

LANSING **3339 (-1289)**

STARK SH **3533 (-1483)**

BKC **3577 (-1527)**

ARBUCKLE **3660 (-1610)**

ELEVATIONS

KB **2050'**

DF

GL **2039'**

Measurements Are All From **Kelly Bushing**

CASING

CONDUCTOR **8-5/8" at 223'**

SURFACE **8-5/8" at 223'**

PRODUCTION **none**

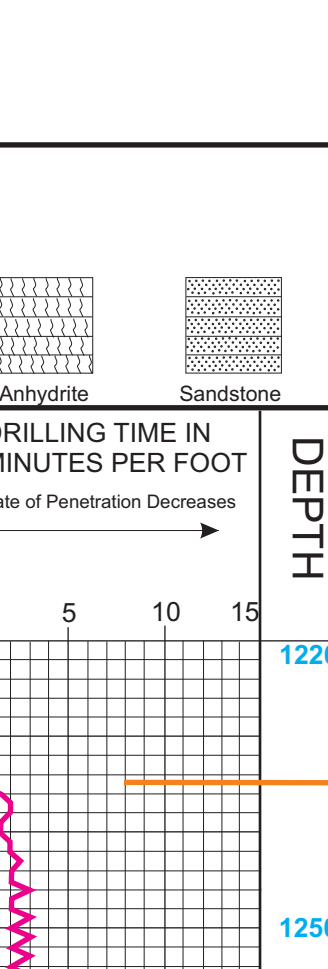
ELECTRICAL SURVEYS

DH / CN-CD /

MICROSONIC

Pioneer

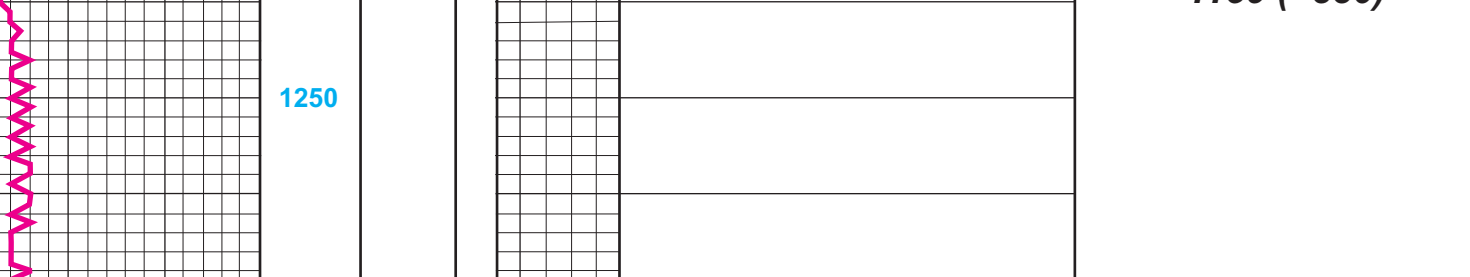
AT# 15-051-26480



REMARKS:

Due to the negative results on the DST's and poor structural position it is recommended that this hole be plugged and abandoned.

### LEGEND



DEPTH	LITHOLOGY	SAMPLE DESCRIPTION	REMARKS
1220	Anhydrite		<b>Anhydrite 1159 (+830)</b>
1250	Anhydrite		<b>Base Anhydrite 1193 (+796)</b>
2950	Limestone	tan, fxl, dense, silty	Geologist on location @ 2904' 2:45 am, 2/24/2013
3000	Limestone	tan, fxl, dense, silty	
3030	Limestone	tan, fxl, dense, silty	<b>Topeka 3030 (-980)</b>
3100	Limestone	tan, fxl, granular, chalky, silty	8:00 am, 2/24/2013
3200	Limestone	tan, fxl, granular, chalky, silty	wt. 8.6, vis. 58, lcm 1 Morgan Mud, Dave Lines
3300	Limestone	tan, fxl, granular, chalky, silty	<b>Heebner 3292 (-1242)</b>
3310	Limestone	tan, fxl, granular, chalky, silty	<b>Toronto 3312 (-1262)</b>
3330	Limestone	tan, fxl, granular, chalky, silty	<b>Lansing 3336 (-1286)</b>
3400	Limestone	tan, fxl, granular, chalky, silty	<b>DST #1</b> 3373-3398 30-60-30-60 1st open: wk blow built to 3/4" then died back to surface 2nd open: wk surface for 2 min then died no returns Rec: 30' mud hydro: 1666-1639 psi lf: 30-32 psi ff: 32-33 psi sip: 375-255 psi bht: 99°F
3500	Limestone	tan, fxl, granular, chalky, silty	<b>DST #2</b> 3464-3530 30-60-60-90 1st open: wk building blow bob 24 1/2 min 2nd open: wk building blow bob 21 1/2 min 2nd close: return built to 3" Rec: 30' go 20/80 60' gmo 20/20/60 60' glocm 20/30/50 156' gip hydro: 1727-1687 psi lf: 19-51 psi ff: 57-80 psi sip: 931-866 psi bht: 103°F gravity: 32°
3530	Limestone	tan, fxl, granular, chalky, silty	8:00 am, 2/26/2013 wt. 9.0, vis. 57, lcm 2.0 Morgan Mud, Dave Lines <b>Stark Shale 3533 (-1483)</b>
3570	Limestone	tan, fxl, granular, chalky, silty	<b>BKC 3518 (-1528)</b>
3660	Limestone	tan, fxl, granular, chalky, silty	8:00 am, 1/21/2013 wt. 8.9, vis. 59, lcm 6.0 Morgan Mud, Dave Lines <b>Arbuckle 3660 (-1610)</b>
3700	Dolomite	tan, mxln, granular, hard, cherty, fr ppt to vug por. several pieces it to dark sat stain, silfo on break, faint odor	<b>DST #3</b> 3660-3670 15-60-15-60 1st open: bob 30 sec 2nd open: bob 30 sec no return's Rec: 141' wm 40/60 378' mw 10/50 2131' mw 5/95 hydro: 1890-1784 psi lf: 505-1000 psi ff: 1065-1201 psi sip: 1208-1208 psi bht: 115°F chl: 9000 api rw: 1.18@42°F
3800	Dolomite	tan, mxln, granular, hard, gd interxln por, ns	Geologist off site at 3:45 am, 2/28/2013



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Ste. #300  
Wichita, KS 67202

ATTN: Robert Hendrix

### **Hanway #1-12**

#### **12-15s-19w Ellis,KS**

Start Date: 2013.02.25 @ 03:52:30

End Date: 2013.02.25 @ 11:28:00

Job Ticket #: 51679                      DST #: 1

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

Printed: 2013.03.07 @ 11:26:11



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.  
250 N. Water Ste. #300  
Wichita, KS 67202  
ATTN: Robert Hendrix

**12-15s-19w Ellis, KS**  
**Hanway #1-12**  
Job Ticket: 51679 **DST#: 1**  
Test Start: 2013.02.25 @ 03:52:30

## GENERAL INFORMATION:

Formation: **Lansing "D"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 06:28:30  
Time Test Ended: 11:28:00  
Interval: **3373.00 ft (KB) To 3398.00 ft (KB) (TVD)**  
Total Depth: 3398.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Dustin Rash  
Unit No: 66  
Reference Elevations: 2050.00 ft (KB)  
2036.00 ft (CF)  
KB to GR/CF: 14.00 ft

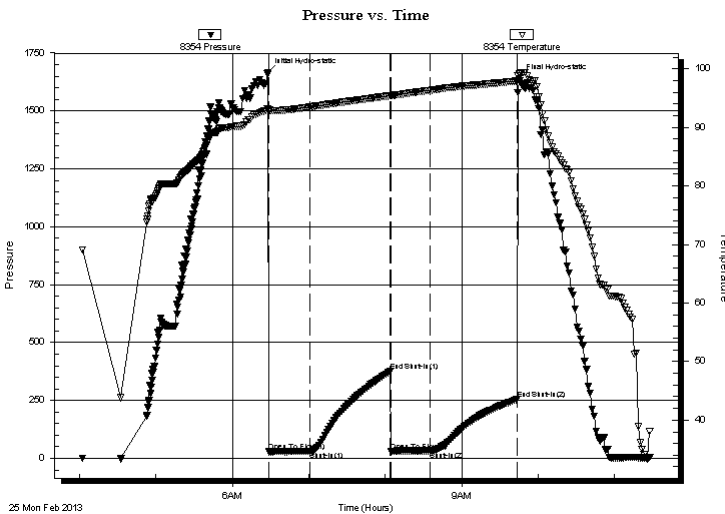
## Serial #: 8354

Inside

Press @ Run Depth: 32.88 psig @ 3375.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2013.02.25 End Date: 2013.02.25 Last Calib.: 2013.02.25  
Start Time: 04:02:30 End Time: 11:28:00 Time On Btm: 2013.02.25 @ 06:28:00  
Time Off Btm: 2013.02.25 @ 09:45:00

TEST COMMENT: IF-Very weak blow . Built to 3/4 inch. Died off to surface.  
ISI-No Return.  
FF-Weak surface blow . Died @ 2 minutes.  
FSI-No Return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1666.28	93.18	Initial Hydro-static
1	29.69	92.74	Open To Flow (1)
33	32.02	93.47	Shut-In(1)
96	375.12	95.41	End Shut-In(1)
97	31.90	95.39	Open To Flow (2)
127	32.88	96.35	Shut-In(2)
196	254.79	97.93	End Shut-In(2)
197	1638.53	99.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	100%Mud	0.15

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51679

**DST#: 1**

ATTN: Robert Hendrix

Test Start: 2013.02.25 @ 03:52:30

## Tool Information

Drill Pipe:	Length: 3188.00 ft	Diameter: 3.80 inches	Volume: 44.72 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 178.00 ft	Diameter: 2.25 inches	Volume: 0.88 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 45.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3373.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	48.00 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			3351.00	
Shut In Tool	5.00			3356.00	
Hydraulic tool	5.00			3361.00	
Safety Joint	3.00			3364.00	
Packer	5.00			3369.00	23.00 Bottom Of Top Packer
Packer	4.00			3373.00	
Stubb	1.00			3374.00	
Perforations	1.00			3375.00	
Recorder	0.00	8354	Inside	3375.00	
Recorder	0.00	8520	Outside	3375.00	
Perforations	20.00			3395.00	
Bullnose	3.00			3398.00	25.00 Bottom Packers & Anchor

**Total Tool Length: 48.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51679

**DST#: 1**

ATTN: Robert Hendrix

Test Start: 2013.02.25 @ 03:52:30

**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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
30.00	100%Mud	0.148

Total Length: 30.00 ft      Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

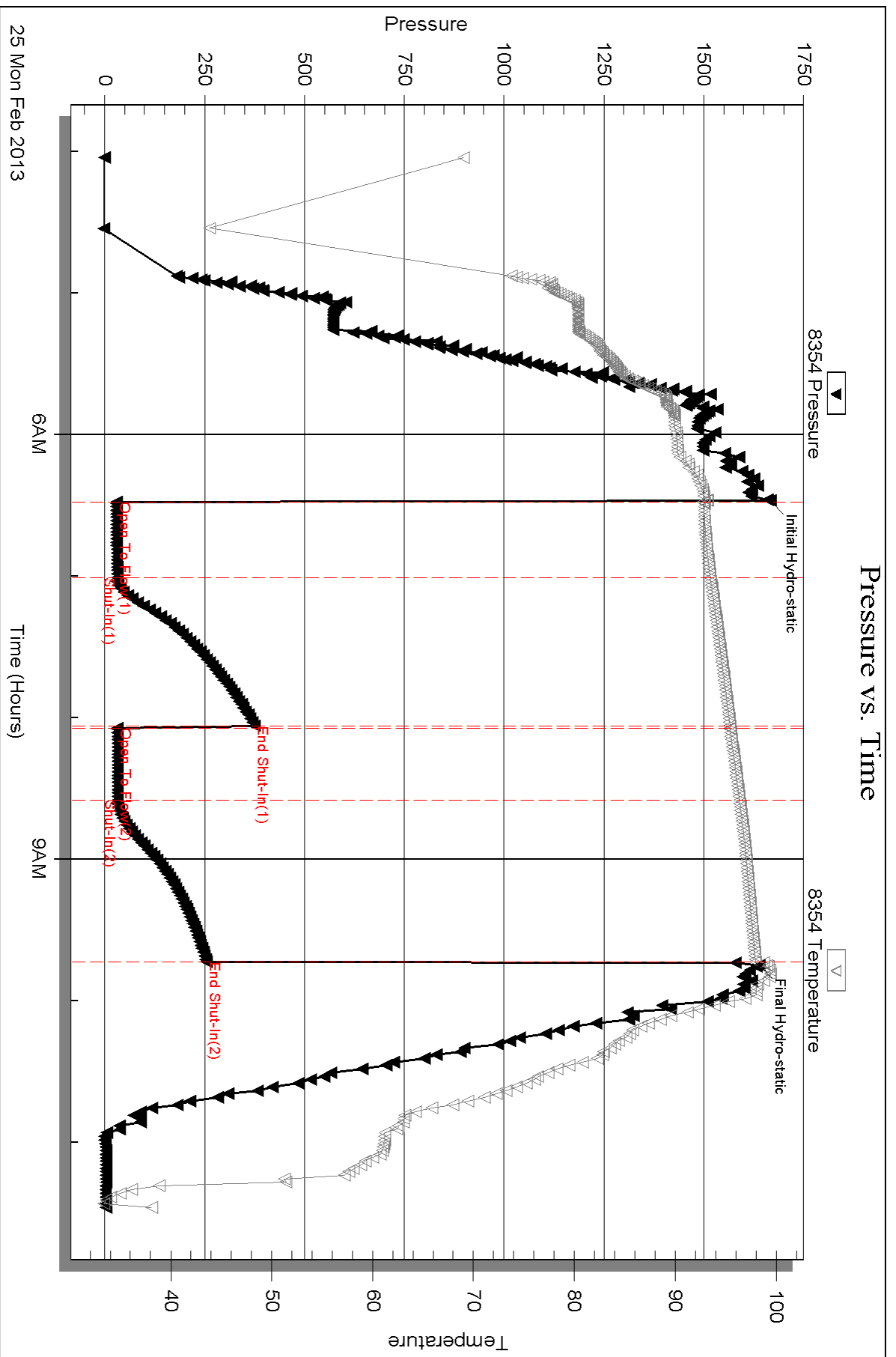
Serial #: 8354

Inside

Murfin Drilling Co., Inc.

Hanway #1-12

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 51679

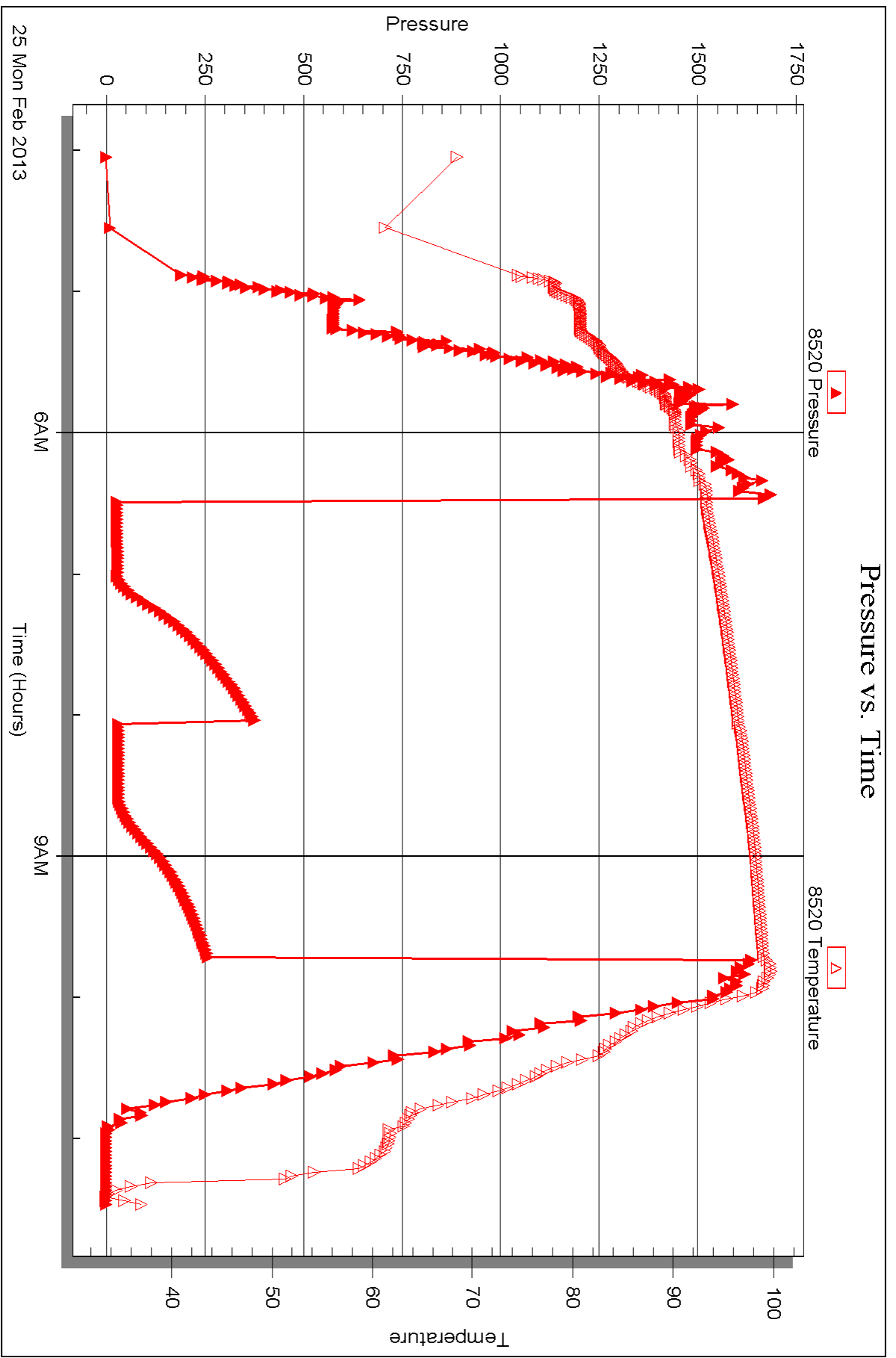
Printed: 2013.03.07 @ 11:26:13

Serial #: 8520

Outside Murfin Drilling Co., Inc.

Harway #1-12

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 51679

Printed: 2013.03.07 @ 11:26:14



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Ste. #300  
Wichita, KS 67202

ATTN: Robert Hendrix

### **Hanway #1-12**

### **12-15s-19w Ellis,KS**

Start Date: 2013.02.26 @ 03:40:30

End Date: 2013.02.26 @ 11:49:30

Job Ticket #: 51680                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.07 @ 11:25:30

Murfin Drilling Co., Inc.

12-15s-19w Ellis,KS

Hanway #1-12

DST # 2

Lansing "H,I,&J"

2013.02.26



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51680

**DST#: 2**

ATTN: Robert Hendrix

Test Start: 2013.02.26 @ 03:40:30

## GENERAL INFORMATION:

Formation: **Lansing "H,I,&J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:20:00

Time Test Ended: 11:49:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 66

**Interval: 3464.00 ft (KB) To 3530.00 ft (KB) (TVD)**

Reference Elevations: 2050.00 ft (KB)

Total Depth: 3530.00 ft (KB) (TVD)

2036.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 14.00 ft

**Serial #: 8354 Inside**

Press @ Run Depth: 79.87 psig @ 3504.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.26

End Date: 2013.02.26

Last Calib.: 2013.02.26

Start Time: 03:40:30

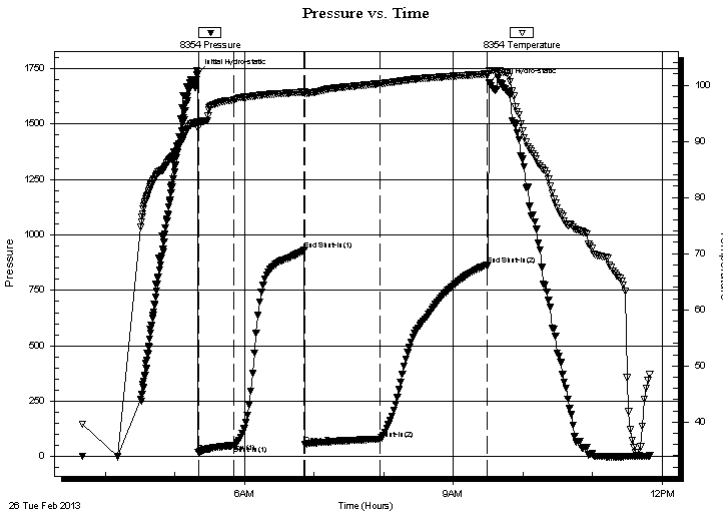
End Time: 11:49:30

Time On Btm: 2013.02.26 @ 05:19:50

Time Off Btm: 2013.02.26 @ 09:31:00

**TEST COMMENT:** IF-Weak building blow . BOB @ 24 minutes 30 seconds.  
ISI-Weak surface return for 7 minutes.  
FF-Weak building blow . BOB @ 21 minutes 30 seconds.  
FSI-Return @ 1 minute. Built to 3 inches.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1727.01	93.54	Initial Hydro-static
1	18.77	92.48	Open To Flow (1)
32	50.92	97.34	Shut-In(1)
92	931.25	98.78	End Shut-In(1)
93	57.09	98.58	Open To Flow (2)
157	79.87	100.26	Shut-In(2)
250	865.69	101.98	End Shut-In(2)
252	1687.18	102.58	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	20%Gas/30%Oil/50%Mud	0.30
60.00	20%Gas/60%Oil/20%Mud	0.30
30.00	20%Gas/80%Oil	0.15
0.00	156' G.I.P.	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.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51680

**DST#: 2**

ATTN: Robert Hendrix

Test Start: 2013.02.26 @ 03:40:30

## Tool Information

Drill Pipe:	Length: 3281.00 ft	Diameter: 3.80 inches	Volume: 46.02 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 178.00 ft	Diameter: 2.25 inches	Volume: 0.88 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 46.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3464.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	89.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

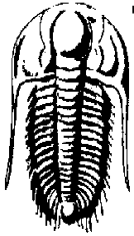
## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3442.00	
Shut In Tool	5.00			3447.00	
Hydraulic tool	5.00			3452.00	
Safety Joint	3.00			3455.00	
Packer	5.00			3460.00	23.00 Bottom Of Top Packer
Packer	4.00			3464.00	
Stubb	1.00			3465.00	
Perforations	5.00			3470.00	
Change Over Sub	1.00			3471.00	
Drill Pipe	32.00			3503.00	
Change Over Sub	1.00			3504.00	
Recorder	0.00	8354	Inside	3504.00	
Recorder	0.00	8520	Outside	3504.00	
Perforations	23.00			3527.00	
Bullnose	3.00			3530.00	66.00 Bottom Packers & Anchor

**Total Tool Length: 89.00**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51680

**DST#: 2**

ATTN: Robert Hendrix

Test Start: 2013.02.26 @ 03:40:30

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6200.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	20%Gas/30%Oil/50%Mud	0.295
60.00	20%Gas/60%Oil/20%Mud	0.295
30.00	20%Gas/80%Oil	0.148
0.00	156' G.I.P.	0.000

Total Length: 150.00 ft

Total Volume: 0.738 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

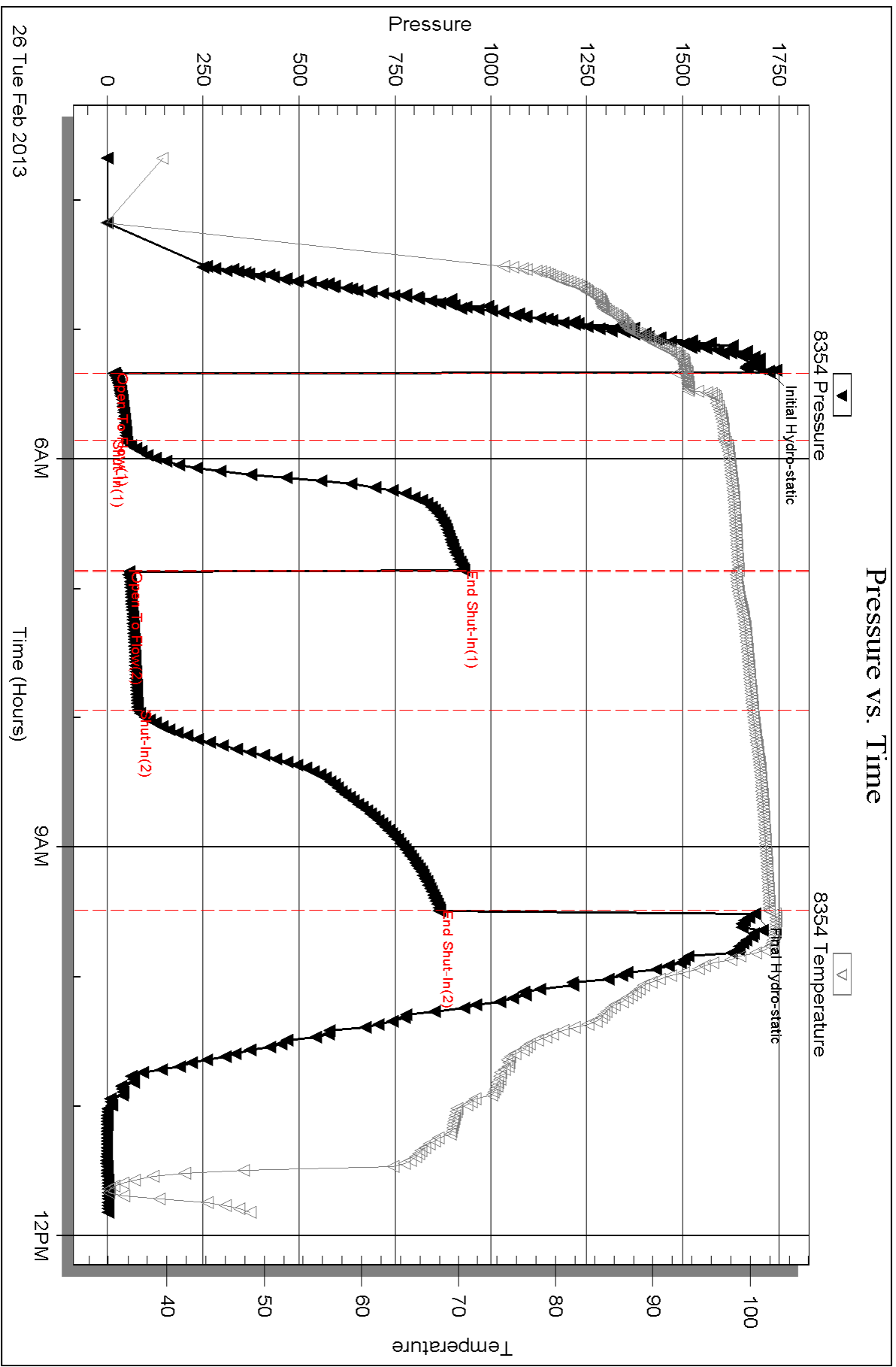
Serial #: 8354

Inside

Murfin Drilling Co., Inc.

Harway #1-12

DST Test Number: 2

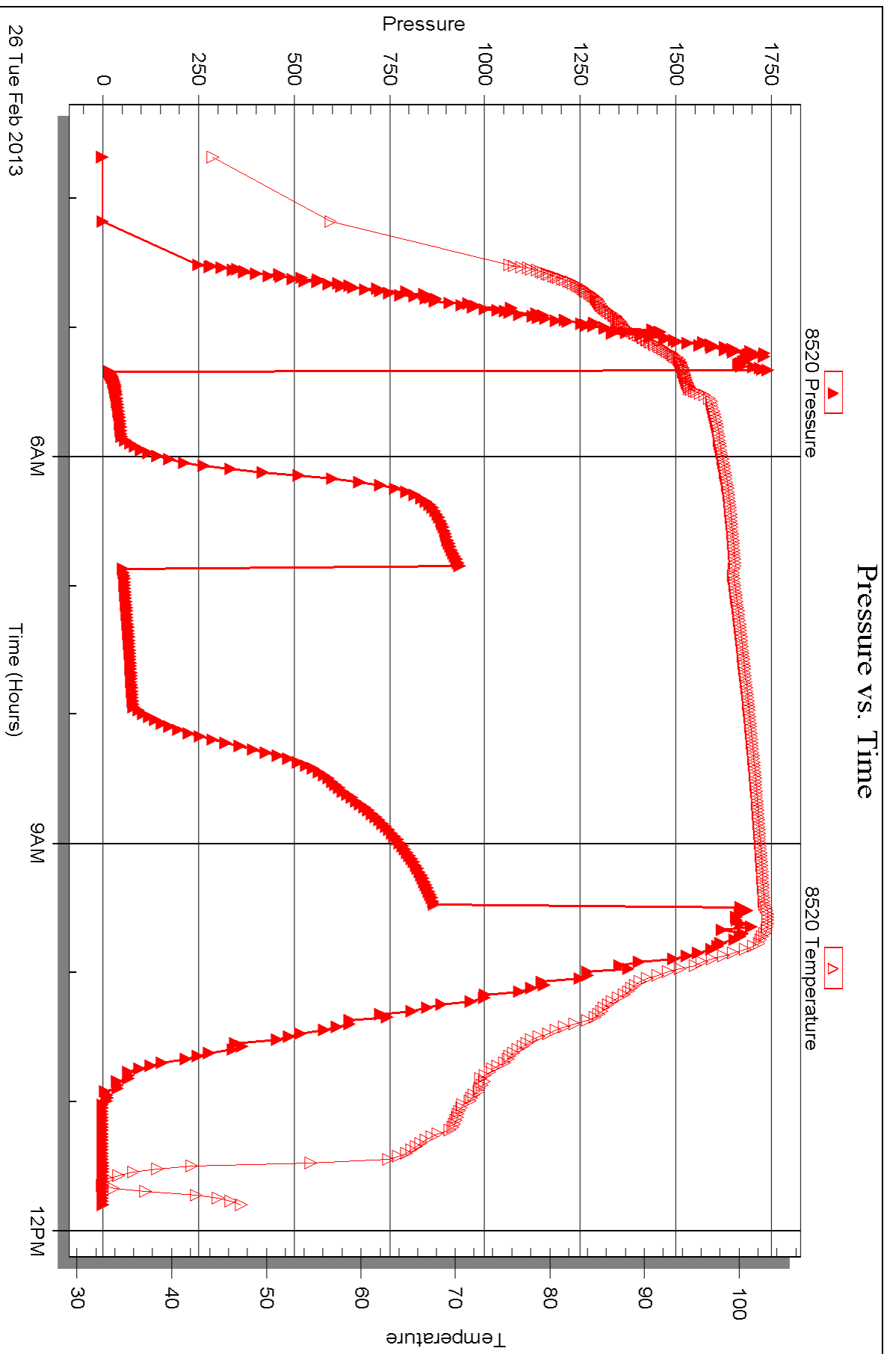


Serial #: 8520

Outside Murfin Drilling Co., Inc.

Harway #1-12

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 51680

Printed: 2013.03.07 @ 11:25:33



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Ste. #300  
Wichita, KS 67202

ATTN: Robert Hendrix

**Hanway #1-12**

**12-15s-19w Ellis,KS**

Start Date: 2013.02.27 @ 04:42:30

End Date: 2013.02.27 @ 12:04:30

Job Ticket #: 51681                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.03.07 @ 11:24:54



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.  
250 N. Water Ste. #300  
Wichita, KS 67202  
ATTN: Robert Hendrix

**12-15s-19w Ellis, KS**  
**Hanway #1-12**  
Job Ticket: 51681 **DST#: 3**  
Test Start: 2013.02.27 @ 04:42:30

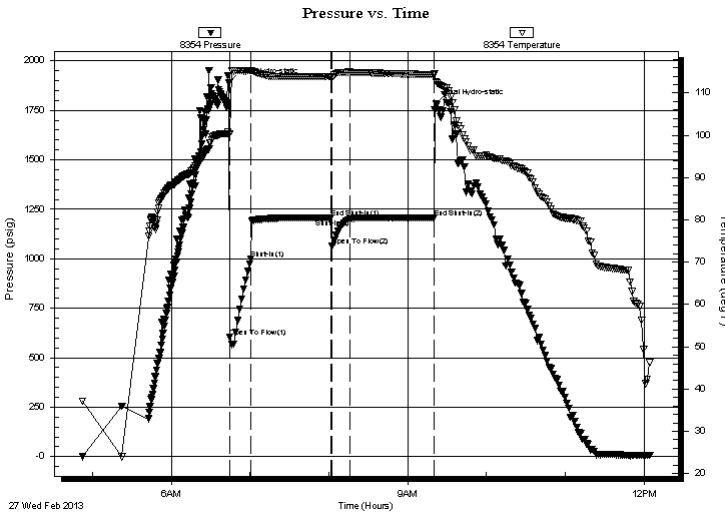
## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 06:44:30  
Time Test Ended: 12:04:30  
Interval: **3660.00 ft (KB) To 3670.00 ft (KB) (TVD)**  
Total Depth: 3670.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Dustin Rash  
Unit No: 66  
Reference Elevations: 2050.00 ft (KB)  
2036.00 ft (CF)  
KB to GR/CF: 14.00 ft

**Serial #: 8354 Inside**  
Press @ Run Depth: 1200.73 psig @ 3662.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2013.02.27 End Date: 2013.02.27 Last Calib.: 2013.02.27  
Start Time: 04:52:30 End Time: 12:04:30 Time On Btm: 2013.02.27 @ 06:44:00  
Time Off Btm: 2013.02.27 @ 09:21:30

**TEST COMMENT:** IF-Very strong blow . BOB @ 30 seconds.  
ISI-No Return.  
FF-Very strong blow . BOB @ 30 seconds.  
FSI-No Return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1889.88	100.19	Initial Hydro-static
1	604.52	100.39	Open To Flow (1)
17	999.53	115.25	Shut-In(1)
78	1208.40	113.90	End Shut-In(1)
79	1065.14	113.65	Open To Flow (2)
92	1200.73	114.93	Shut-In(2)
156	1208.42	114.36	End Shut-In(2)
158	1784.43	112.72	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2131.00	95%Water/5%Mud	28.27
378.00	90%Water/10%Mud	5.30
141.00	40%Water/60%Mud	1.98

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51681

**DST#: 3**

ATTN: Robert Hendrix

Test Start: 2013.02.27 @ 04:42:30

## Tool Information

Drill Pipe:	Length: 3467.00 ft	Diameter: 3.80 inches	Volume: 48.63 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 178.00 ft	Diameter: 2.25 inches	Volume: 0.88 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 49.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3660.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 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			3633.00	
Shut In Tool	5.00			3638.00	
Hydraulic tool	5.00			3643.00	
Jars	5.00			3648.00	
Safety Joint	3.00			3651.00	
Packer	5.00			3656.00	28.00 Bottom Of Top Packer
Packer	4.00			3660.00	
Stubb	1.00			3661.00	
Perforations	1.00			3662.00	
Recorder	0.00	8354	Inside	3662.00	
Recorder	0.00	8520	Outside	3662.00	
Perforations	5.00			3667.00	
Bullnose	3.00			3670.00	10.00 Bottom Packers & Anchor

**Total Tool Length: 38.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**12-15s-19w Ellis,KS**

250 N. Water Ste. #300  
Wichita, KS 67202

**Hanway #1-12**

Job Ticket: 51681

**DST#: 3**

ATTN: Robert Hendrix

Test Start: 2013.02.27 @ 04:42:30

## 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:

9000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 1.18 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2131.00	95%Water/5%Mud	28.271
378.00	90%Water/10%Mud	5.302
141.00	40%Water/60%Mud	1.978

Total Length: 2650.00 ft      Total Volume: 35.551 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



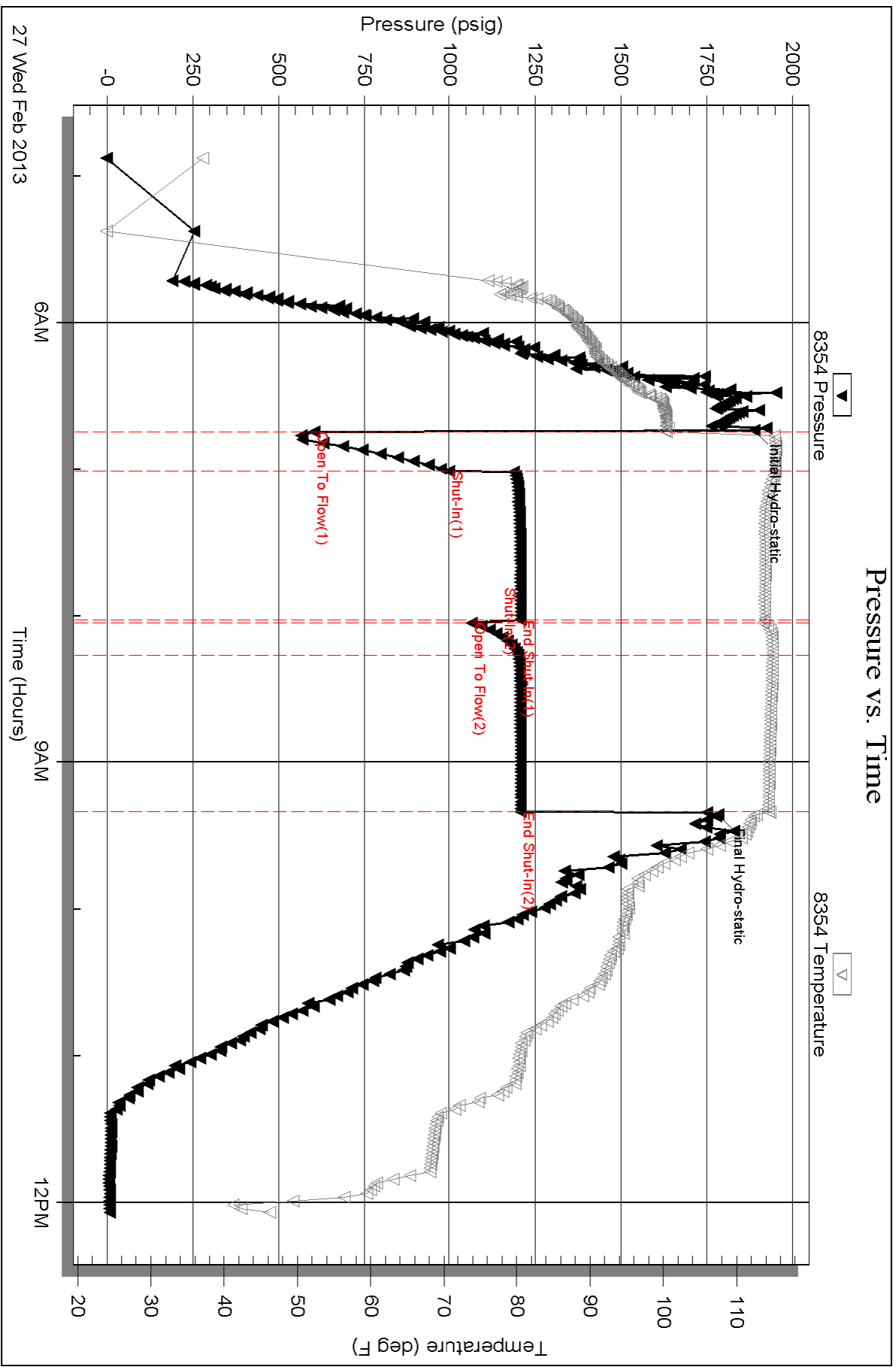
Serial #: 8354

Inside

Murfin Drilling Co., Inc.

Hanway #1-12

DST Test Number: 3

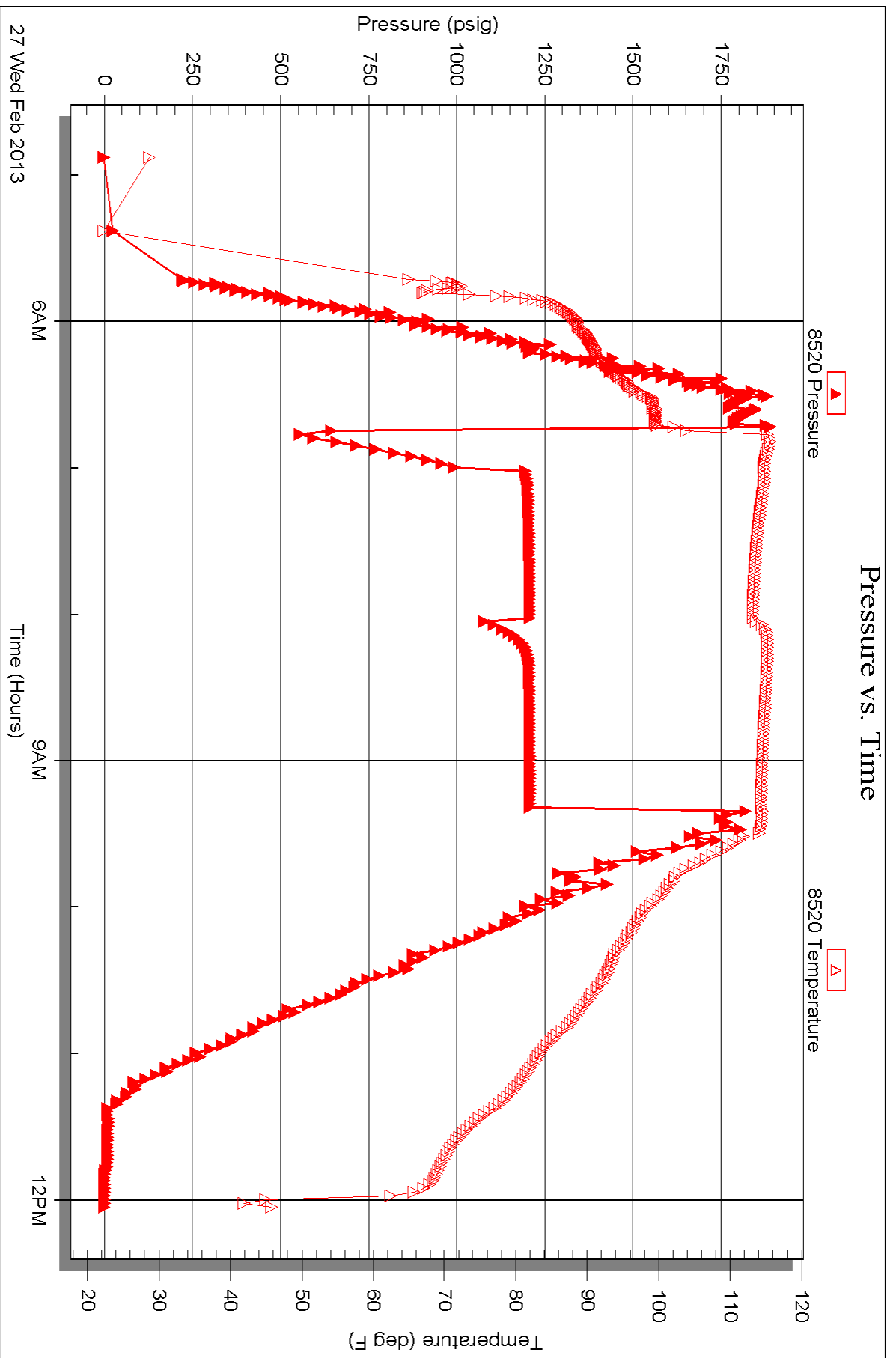


Serial #: 8520

Outside Murfin Drilling Co., Inc.

Harway #1-12

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 51681

Printed: 2013.03.07 @ 11:24:57



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51679

Well Name & No. Harway # 1-R Test No. 1 Date 2-25-13  
 Company Murphy Drilling Co., Inc. Elevation 2050 KB 2036 GL  
 Address 250 N. Water St. #300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Murphy #2  
 Location: Sec. 12 Twp. 15S Rge. 19W Co. Ellis State KS

Interval Tested 3373-3398 Zone Tested Lansing "D"  
 Anchor Length 25' Drill Pipe Run 3188 Mud Wt. 8.6  
 Top Packer Depth 3368 Drill Collars Run 177.78 Vis 58  
 Bottom Packer Depth 3373 Wt. Pipe Run 0 WL 6.0  
 Total Depth 3398 Chlorides 4800 ppm System LCM 1#

Blow Description IF - Very weak blow. Burt to 3/4 inch. Died off to surface.  
FST - No Return.  
FF - Weak surface blow. Died @ 2 minutes.  
FST - No Return.

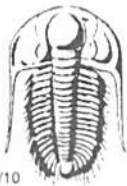
Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 99 Gravity  Test 1150 API RW 0 @ 0 °F Chlorides 0 ppm  
 (A) Initial Hydrostatic 1666  Jars 0 T-On Location 0215  
 (B) First Initial Flow 30  Safety Joint 75 T-Started 0430  
 (C) First Final Flow 32  Circ Sub 0 T-Open 0628  
 (D) Initial Shut-In 375  Hourly Standby 0 T-Pulled 0940  
 (E) Second Initial Flow 32  Mileage 16x2 49.60 T-Out 1130  
 (F) Second Final Flow 33  Sampler 0 Comments BHT-0352  
 (G) Final Shut-In 255  Straddle 0  Ruined Shale Packer 0  
 (H) Final Hydrostatic 1639  Shale Packer 0  Ruined Packer 0

Initial Open 30  Extra Packer 0  Extra Copies 0  
 Initial Shut-In 60  Extra Recorder 0 Sub Total 0  
 Final Flow 30  Day Standby 0 Total 1274.60  
 Final Shut-In 60  Accessibility 0 MP/DST Disc't 0  
 Sub Total 1274.60

Approved By \_\_\_\_\_ 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.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51680

4/10

Well Name & No. Harway # 1-12 Test No. 2 Date 2-26-13  
 Company Murphy Drilling Co., Inc. Elevation 2050 KB 2036 GL  
 Address 250 N. Water St. #300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Murphy #2  
 Location: Sec. 12 Twp. 15S Rge. 19W Co. Ellis State KS

Interval Tested 3464-3530 Zone Tested Lansing "H-I-J"  
 Anchor Length 66' Drill Pipe Run 3281' Mud Wt. 8.9  
 Top Packer Depth 3459 Drill Collars Run 177.78 Vis 59  
 Bottom Packer Depth 3464 Wt. Pipe Run 0 WL 6.0  
 Total Depth 3530 Chlorides 6200 ppm System LCM 2#

Blow Description IF- Weak building blow. BOB @ 24 minutes 30 seconds.  
IST- Weak surface return for 7 minutes.  
FF- Weak building blow. BOB @ 21 minutes 30 seconds.  
FST- Return @ 1 minute. Built to 3 inches.

Rec	Feet of	%gas	%oil	%water	%mud
30	Gassy Oil	20	80		
60	GMO	20	60		20
60	HOCGM	20	30		50

Rec Total 150 BHT 103 Gravity 32 API RW @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1727  Test 1150 T-On Location 0300  
 (B) First Initial Flow 19  Jars T-Started 0345  
 (C) First Final Flow 57  Safety Joint 75 T-Open 0520  
 (D) Initial Shut-In 931  Circ Sub T-Pulled 0925  
 (E) Second Initial Flow 57  Hourly Standby T-Out 1145  
 (F) Second Final Flow 80  Mileage 16X2 49.60 Comments BUTT-0330  
 (G) Final Shut-In 866  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1687  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 60  Day Standby \_\_\_\_\_ Total 1274.60  
 Final Shut-In 90  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1274.60

Approved By \_\_\_\_\_ Our Representative D. Rash

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.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 51681

Well Name & No. Harway #1-12 Test No. 3 Date 2-27-13  
 Company Mulfin Drilling Co., Inc. Elevation 2050 KB 2036 GL  
 Address 250 N. Water Ste. #300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Mulfin #2  
 Location: Sec. 12 Twp. 15S Rge. 19W Co. Ellis State KS

Interval Tested 3660-3670 Zone Tested Arbuckle  
 Anchor Length 10' Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.0  
 Top Packer Depth 3655 Drill Collars Run 177.78 Vis 57  
 Bottom Packer Depth 3660 Wt. Pipe Run 0 WL 6.4  
 Total Depth 3670 Chlorides 7800 ppm System LCM 2.0#

Blow Description IF - Very strong blow, BOB @ 30 seconds,  
ISF - No Return,  
FF - Very strong blow, BOB @ 30 seconds,  
FSE - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>141</u>	<u>Watery Mud</u>		<u>40</u>	<u>60</u>	
<u>378</u>	<u>Muddy water</u>		<u>90</u>	<u>10</u>	
<u>2131</u>	<u>Muddy water</u>		<u>95</u>	<u>5</u>	
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 2650 BHT 115 Gravity \_\_\_\_\_ API RW 1.18 @ 48 °F Chlorides 9000 ppm

(A) Initial Hydrostatic 1890  Test 1150 T-On Location 0415  
 (B) First Initial Flow 605  Jars \_\_\_\_\_ T-Started 0500  
 (C) First Final Flow 1000  Safety Joint 75 T-Open 0644  
 (D) Initial Shut-In 1208  Circ Sub \_\_\_\_\_ T-Pulled 0920  
 (E) Second Initial Flow 1065  Hourly Standby \_\_\_\_\_ T-Out 1200  
 (F) Second Final Flow 1201  Mileage 16X2 49.60 Comments Bot-0442  
 (G) Final Shut-In 1208  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1784  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 15  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 60  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 15  Day Standby \_\_\_\_\_ Total 1274.60  
 Final Shut-In 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1274.60

Approved By \_\_\_\_\_ Our Representative D. Rash

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acct. Prod-LizH



PO Box 93999  
Southlake, TX 76092

Voice: (817) 546-7282  
Fax: (817) 246-3361

OPERATOR PAY MDC  
LEASE: Hanway 1-12 / R

# INVOICE

Invoice Number: 134974  
Invoice Date: Feb 18, 2013  
Page: 1

**Bill To:**

Murfin Drig. Co., Inc.  
250 N. Water  
STE #300  
Wichita, KS 67202



Customer ID	Field Ticket #	Payment Terms	
Murfin	59291	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-01	Great Bend	Feb 18, 2013	3/20/13

Quantity	Item	Description	Unit Price	Amount
150.00	MAT	Hanway #1-12		
		Class A Common	17.90	2,685.00
3.00	MAT	Gel	23.40	70.20
5.00	MAT	Chloride	64.00	320.00
162.09	SER	Cubic Feet	2.48	401.98
111.00	SER	Ton Mileage	2.60	288.60
1.00	SER	Surface	1,512.25	1,512.25
15.00	SER	Pump Truck Mileage	7.70	115.50
15.00	SER	Light Vehicle Mileage	4.40	66.00
1.00	CEMENTER	Charles Elkins		
1.00	EQUIP OPER	Joshua Isaac		
1.00	EQUIP OPER	Daniel Casper		

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 1,910.83

ONLY IF PAID ON OR BEFORE  
Mar 15, 2013

Subtotal	5,459.53
Sales Tax	193.74
Total Invoice Amount	5,653.27
Payment/Credit Applied	
<b>TOTAL</b>	<b>5,653.27</b>

Product →

01500

- 1910.83

# ALLIED OIL & GAS SERVICES, LLC 059291

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT:  
Great Bend, KS

DATE <u>2-18-13</u>	SEC. <u>12</u>	TWP. <u>15S</u>	RANGE <u>19W</u>	CALLED OUT	ON LOCATION <u>6:12 PM</u>	JOB START <u>8:30 AM</u>	JOB FINISH <u>9:00 AM</u>
LEASE <u>Hanway</u>		WELL # <u>1-12</u>		LOCATION <u>LeCrosse: 15M to North Fork Rd. 3m W. North into location</u>		COUNTY <u>Ellis</u>	STATE <u>KS</u>
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Murfin 2  
 TYPE OF JOB Surface Casing  
 HOLE SIZE 12 1/4" T.D. 223 FT  
 CASING SIZE 8 5/8" 23# DEPTH 216 FT  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT 20 FT  
 CEMENT LEFT IN CSG. 20ft, 1.272 bbls, 5.3 sy  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 12.75 bbls Fresh Water

**EQUIPMENT**

PUMP TRUCK CEMENTER Charles E Kirk  
 # 398 HELPER Josh Isaac  
 BULK TRUCK \_\_\_\_\_  
 # 344/170 DRIVER Dan Casper  
 BULK TRUCK \_\_\_\_\_  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

OWNER Murfin Drilling Company  
 CEMENT AMOUNT ORDERED 150 sk "A" + 3 3/8 Cccl + 2 9/16 Gcl

COMMON	<u>150</u>	@ <u>17.90</u>	<u>2,685.00</u>
POZMIX		@	
GEL	<u>3</u>	@ <u>23.40</u>	<u>70.20</u>
CHLORIDE	<u>5</u>	@ <u>64.00</u>	<u>320.00</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>162.09</u>	@ <u>2.48</u>	<u>401.28</u>
MILEAGE	<u>7.4 x 15 X</u>	@ <u>2.60</u>	<u>288.00</u>
			<b>TOTAL <u>3,765.78</u></b>

**REMARKS:**  
Pump 5 bbls Fresh Water  
Pump 36 bbls Cement (150 sy)  
Displace with 12.75 bbls Fresh Water  
Leave 20 ft, 1.272 bbls, 5.3 sy cement in casing  
Circulate 6 bbls, 2.5 sy Cement to Surface

**SERVICE**

DEPTH OF JOB			
PUMP TRUCK CHARGE	<u>1512.25</u>		
EXTRA FOOTAGE	@		
MILEAGE	<u>Hum 15</u>	@ <u>7.70</u>	<u>115.50</u>
MANIFOLD	@		
	<u>Hum 15</u>	@ <u>4.40</u>	<u>66.00</u>
	@		

CHARGE TO: Murfin Drilling Company  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**TOTAL 1,693.75**

**PLUG & FLOAT EQUIPMENT**

_____	@		
_____	@		
_____	@		
_____	@		
_____	@		
			<b>TOTAL _____</b>

To: Allied Oil & Gas Services, LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Bruce Cebalosa  
 SIGNATURE Bruce Cebalosa

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 5,459.53  
 DISCOUNT 35% 1,910.83 IF PAID IN 30 DAYS  
3,548.69



PO Box 93999  
Southlake, TX 76092

Voice: (817) 546-7282  
Fax: (817) 246-3361

*Acct.  
Prod. Lit*

# INVOICE

Invoice Number: 135049  
Invoice Date: Feb 28, 2013  
Page: 1

**Bill To:**  
Murfin Drg. Co., Inc.  
250 N. Water  
STE #300  
Wichita, KS 67202

Now Includes:



Customer ID	Field Ticket #	Payment Terms	
Murfin	59297	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-03	Great Bend	Feb 28, 2013	3/30/13

Quantity	Item	Description	Unit Price	Amount
162.00	MAT	Hayway #1-12		
		Class A Common	17.90	2,899.80
108.00	MAT	Pozmix	9.35	1,009.80
9.00	MAT	Gel	23.40	210.60
68.00	MAT	Flo Seal	2.97	201.96
289.53	SER	Cubic Feet	2.48	718.03
181.40	SER	Ton Mileage	2.60	471.66
1.00	SER	Plug to Abandon	2,600.47	2,600.47
10.00	SER	Pump Truck Mileage	7.70	77.00
10.00	SER	Light Vehicle Mileage	4.40	44.00
1.00	CEMENTER	Charles Elkins		
1.00	EQUIP OPER	Joshua Isaac		
1.00	EQUIP OPER	Joel Monahan		

*01400*

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 2,879.91 *ok*

ONLY IF PAID ON OR BEFORE

Mar 25, 2013

Subtotal	8,233.32
Sales Tax	518.70
Total Invoice Amount	8,752.02
Payment/Credit Applied	
<b>TOTAL</b>	<b>8,752.02</b>

*- 2879.91*

5872.11



