



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1079532  
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: \_\_\_\_\_

1079532

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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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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  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

April 25, 2012

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

Re: ACO1  
API 15-193-20832-00-00  
Towns 'A' 2-21  
NW/4 Sec.21-10S-34W  
Thomas 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 Towns 'A' #2-21 2100' FNL 330' FWL Sec. 21-T10S-R34W 3249' KB					MDCI Steele 'A' #2-20 2200' FNL 550' FEL Sec. 20-T10S-R34W 3250' KB		
Formation	Sample Top	Datum	Ref	Log Tops	Datum	Ref	Log Top	Datum	
Anhydrite	2754	+495	-3	2752	+497	-1	2752	+498	
B/Anhydrite	2784	+465	-8	2779	+470	-3	2777	+473	
Topeka	3919	-670	-12	3915	-666	-8	3908	-658	
Heebner	4131	-882	-10	4131	-882	-10	4122	-872	
Lansing	4172	-923	-8	4173	-924	-9	4165	-915	
Stark	4397	-1148	-12	4393	-1144	-8	4386	-1136	
Pawnee	4593	-1344	-14	4593	-1344	-14	4580	-1330	
Fort Scott	4650	-1401	-13	4645	-1396	-8	4638	-1388	
Johnson Zn	4722	-1473	-9	4718	-1469	-5	4714	-1464	
Mississippi	4824	-1575	-21	4820	-1571	-17	4804	-1554	
RTD	4910						4900		
LTD				4908			4900		



**Thomas J. Funk**  
**Petroleum Geologist**  
**785-542-3359**

**Geologists Report**  
**Drilling Time and Sample Log**

**OPERATOR** Murfin Drilling Co., Inc  
**LEASE** Towns 'A'  
**WELL NO** #2-21

**FIELD** Development  
**LOCATION** 2100' FNL & 335' FWL  
**SEC.** 21  
**COUNTY** Thomas

**API** 15-193-20832  
**RGE** 34W  
**TWP.** 10S  
**STATE** Kansas

**CONTRACTOR** Murfin Dring Co  
**COMM** 1/16/2012  
**RTD** 4/30  
**SAMPLES SAVED FROM** 3800  
**DRILLING TIME KEPT FROM** 3800  
**SAMPLES EXAMINED FROM** 3800

**COAL** TO TD  
**TYPE** MUD  
**CEMENT** Chemical

**FORMATION**  
**LOG DATUM**  
**TOP DATUM**  
**STRUC**  
**COM**  
**DIL**  
**MEI**  
**CNL/CDL**  
**BHCS**

FORMATION	LOG DATUM	TOP DATUM	STRUC	COM	DIL	MEI
Attyndite	2752 (4497)	2754 (4495)	-2			
B/Attyndite	2778 (4470)	2784 (4465)	-3			
Topeka	3913 (4666)	3917 (4662)	-10			
Hebbner Sh	4131 (4882)	4131 (4882)	-10			
Lansing	4173 (4924)	4172 (4923)	-9			
Winroe Creek	4308 (1059)	4309 (1060)	-9			
Stark Sh	4393 (1144)	4397 (1148)	-8			
Marmaton	4482 (1233)	4485 (1236)	-8			
Pawnee	4593 (1344)	4596 (1347)	-7			
Cherokee Sh	4678 (1429)	4722 (1473)	-10			
Mississippian	4820 (1571)	4824 (1575)	-5			

**GEOLOGICAL SUPERVISION FROM** 3854 TO TD  
**MUD UP** 3500  
**REFERENCE WELL FOR STRUCTURAL COMPARISON:** Murfin Dring Co. #2-20 Steele 'A'  
**2200' FNL & 550' FEL sec. 20-10S-34W, Thomas Co. KS**

Daily Progress	NOI Size	Make	Type	Depth Out	Feet	Hours
1/16/12	Spud	1 1/2 1/4"	HTC	RR	278	278
1/17/12	278 WOC	2 7/8"	Security	M619	3749	3471
1/18/12	1794	2 7/8"	HTC	GX22s	4910	52
1/19/12	2997	2 7/8"	HTC		1161	54
1/20/12	3896					
1/21/12	4095					
1/22/12	4420					
1/23/12	4597					
1/24/12	4738					
1/25/12	4910					

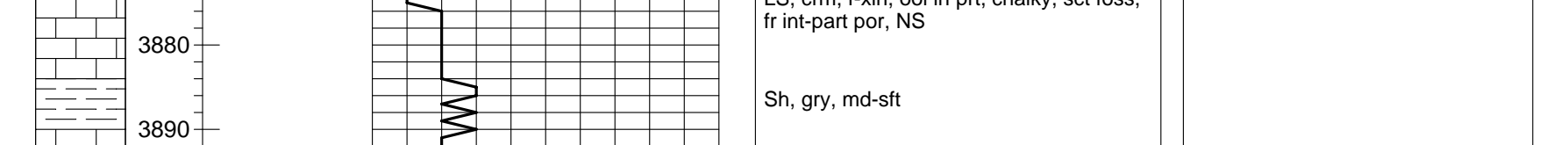
**CASING RECORD**  
**SURFACE** 8 5/8" at 278'KB w/200sx  
**PRODUCTION**

**ELEVATION**  
**KB** 3249  
**DF** 3236  
**GL** 3236  
**Measurements Are All From KB**

**REMARKS AND RECOMMENDATIONS:**  
 Based upon log analysis, DST recovery, and sample examination, it was recommended that casing be run in the #2-21 Towns 'A' for further testing.

**Thomas Funk**  
**Petroleum Geologist**

**LEGEND**



**DRILLING TIME IN MINUTES PER FOOT**

**Lithology**

**Depth**

**Sample Descriptions**

**Remarks**

Deviation Surveys:  
 0.8 deg @ 278'  
 1.2 deg @ 1003'  
 0.9 deg @ 2997'  
 0.8 deg @ 3749'  
 2.2 deg @ 4420'  
 1.8 deg @ 4660'  
 1.8 deg @ 4910'

Stuck pipe on connection @ 4095'  
 Spot 60 bbls of oil, came loose

DST #1 4394-4420  
 30"-60"-60"-90"  
 Blow built to 4 inches on IFP  
 Blow built to 3 inches on FFP  
 REC:  
 90' GIP  
 90' HOCM (40%o, 60% m)  
 IFP 20-35 ISIP 347  
 FFP 37-55 FSP 336  
 IHP 2244 FHP 2089  
 Temp: 122 deg F

DST #2 4619-4660  
 30"-60"-60"-90"  
 Blow built to 3 inch on IFP  
 Blow built to 1.5 inch on FFP  
 REC:  
 95' Mud  
 IFP 20-35 ISIP 334  
 FFP 37-55 FSP 336  
 IHP 2303 FHP 2123  
 Temp: 128 deg F

DST #3 4698-4750  
 30"-60"-60"-90"  
 Blow built to 4 inches on IFP  
 Blow built to 9 inches on FFP  
 REC:  
 70' OCM (30%o, 70% m)  
 IFP 36-43 ISIP 461  
 FFP 38-58 FSP 328  
 IHP 2385 FHP 2261  
 Temp: 122 deg F

TD 4910 @ 7:00 AM 1/25/2012

**DRILLING TIME IN MINUTES PER FOOT**

**Lithology**

**Depth**

**Sample Descriptions**

**Remarks**

**COMPANY** Murfin Drilling Co., Inc  
**ELEVATION** 3249 **KB**

**LEASE** #2-21 Towns 'A'

**LOCATION** 2100' FNL & 335' FWL **Sec** 21 **TWP** 10S **RGE** 34W

**COUNTY** Thomas **STATE** Kansas



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water  
Wichita KS 67202+1216

ATTN: Tom Funk

### **Towns "A" #2-21**

#### **21- 10s-34w Thomas,KS**

Start Date: 2012.01.22 @ 10:31:05

End Date: 2012.01.22 @ 18:39:39

Job Ticket #: 44599                      DST #: 1

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

Printed: 2012.01.27 @ 12:12:06



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44599 **DST#: 1**  
Test Start: 2012.01.22 @ 10:31:05

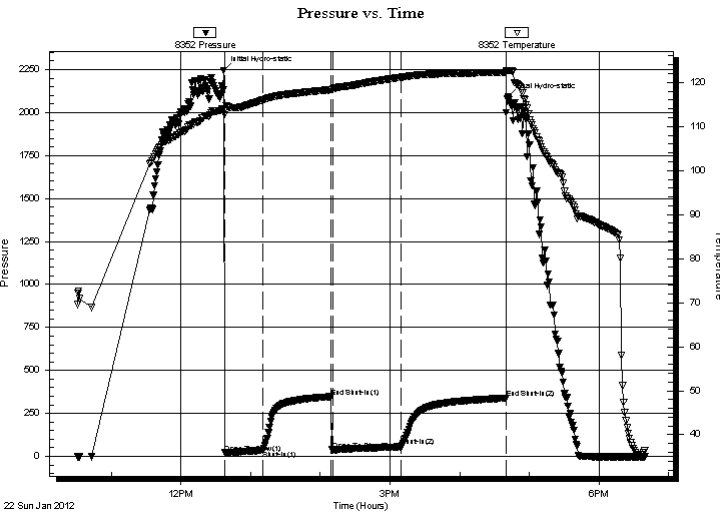
## GENERAL INFORMATION:

Formation: **LKC"K"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 12:37:30  
Time Test Ended: 18:39:39  
Interval: **4394.00 ft (KB) To 4420.00 ft (KB) (TVD)**  
Total Depth: 4420.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Andy Carreira  
Unit No: 39  
Reference Elevations: 3249.00 ft (KB)  
3236.00 ft (CF)  
KB to GR/CF: 13.00 ft

## Serial #: 8352 Outside

Press @RunDepth: 55.95 psig @ 4395.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2012.01.22 End Date: 2012.01.22 Last Calib.: 2012.01.22  
Start Time: 10:31:05 End Time: 18:39:40 Time On Btm: 2012.01.22 @ 12:37:00  
Time Off Btm: 2012.01.22 @ 16:41:39

TEST COMMENT: IF:(30min) Fair 4" blow  
IS:(60min) No Return  
FF:(60min) 3" blow  
FS:(90min) No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2244.66	114.09	Initial Hydro-static
1	20.51	112.72	Open To Flow (1)
33	35.80	115.96	Shut-In(1)
93	347.32	118.33	End Shut-In(1)
94	37.83	118.46	Open To Flow (2)
153	55.95	121.17	Shut-In(2)
243	336.65	122.28	End Shut-In(2)
245	2089.38	122.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	HOCM o=40% m=60%	1.26
0.00	GIP= 90ft	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44599 **DST#: 1**  
Test Start: 2012.01.22 @ 10:31:05

### GENERAL INFORMATION:

Formation: **LKC"K"**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 12:37:30 Tester: Andy Carreira  
 Time Test Ended: 18:39:39 Unit No: 39  
**Interval: 4394.00 ft (KB) To 4420.00 ft (KB) (TVD)** Reference Elevations: 3249.00 ft (KB)  
 Total Depth: 4420.00 ft (KB) (TVD) 3236.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

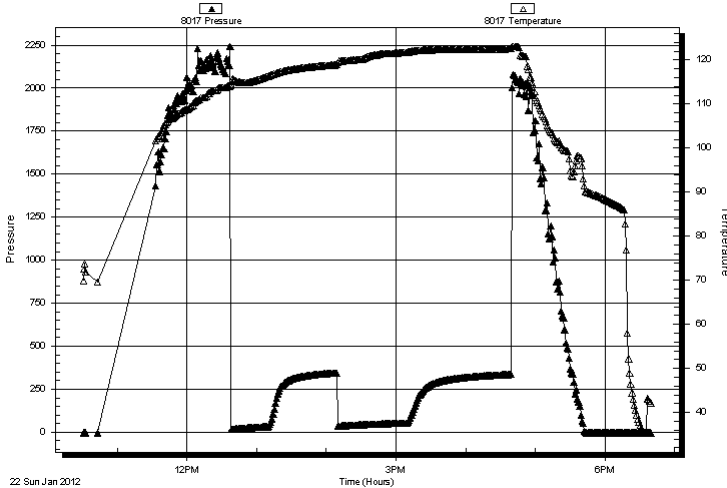
### Serial #: 8017

Inside

Press @RunDepth: psig @ 4395.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.01.22 End Date: 2012.01.22 Last Calib.: 2012.01.22  
 Start Time: 10:31:05 End Time: 18:39:40 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF:(30min) Fair 4" blow  
 IS:(60min) No Return  
 FF:(60min) 3" blow  
 FS:(90min) No Return

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
90.00	HOCM o=40% m=60%	1.26
0.00	GIP= 90ft	0.00

### Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44599      **DST#: 1**  
Test Start: 2012.01.22 @ 10:31:05

**Tool Information**

Drill Pipe:	Length: 4382.00 ft	Diameter: 3.80 inches	Volume: 61.47 bbl	Tool Weight:	3000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	68000.00 lb
			<u>Total Volume: 61.47 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	4394.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	54.00 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>
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Change Over Sub	1.00			4367.00	
Shut In Tool	5.00			4372.00	
Hydraulic tool	5.00			4377.00	
Jars	5.00			4382.00	
Safety Joint	3.00			4385.00	
Packer	5.00			4390.00	28.00      Bottom Of Top Packer
Packer	4.00			4394.00	
Stubb	1.00			4395.00	
Recorder	0.00	8017	Inside	4395.00	
Recorder	0.00	8352	Outside	4395.00	
Perforations	22.00			4417.00	
Bullnose	3.00			4420.00	26.00      Bottom Packers & Anchor

**Total Tool Length: 54.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44599      **DST#: 1**  
Test Start: 2012.01.22 @ 10:31:05

## 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: 76.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.17 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3400.00 ppm			
Filter Cake: inches			

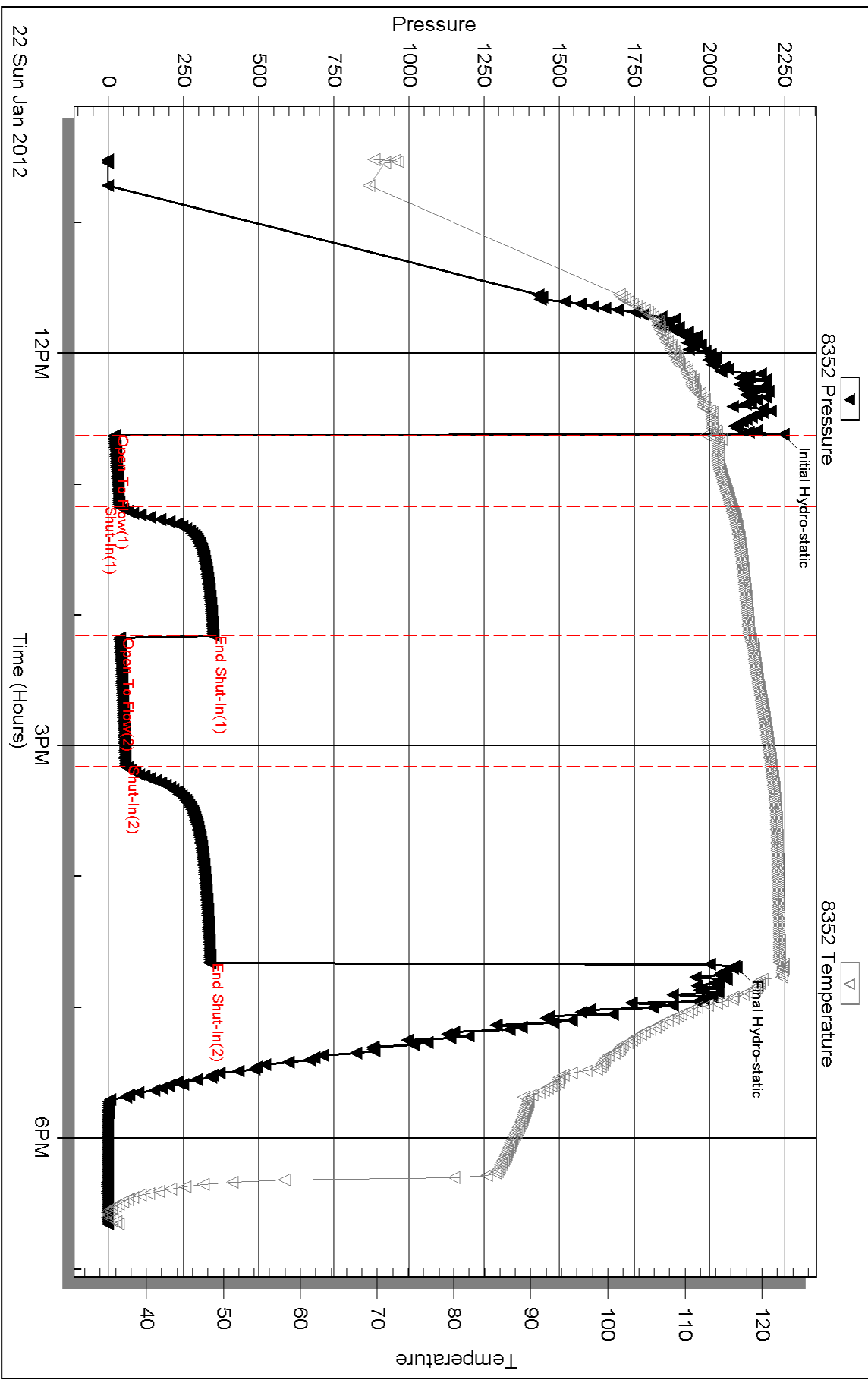
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	HOCM o=40% m=60%	1.262
0.00	GIP= 90ft	0.000

Total Length: 90.00 ft      Total Volume: 1.262 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

# Pressure vs. Time



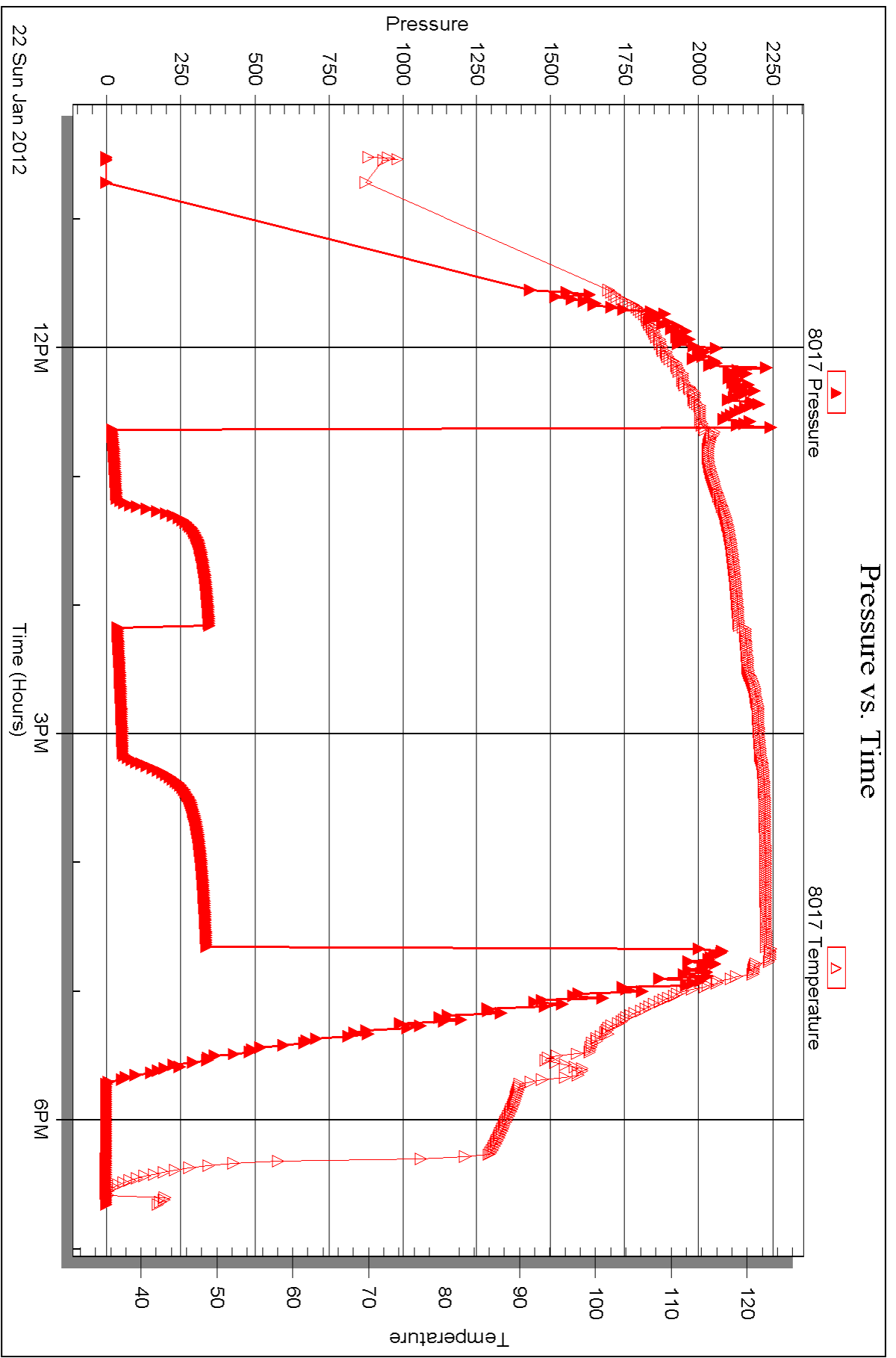
Serial #: 8017

Inside

Murfin Drilling Co

Tow ns "A" #2-21

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water  
Wichita KS 67202+1216

ATTN: Tom Funk

### **Towns "A" #2-21**

#### **21- 10s-34w Thomas,KS**

Start Date: 2012.01.23 @ 15:22:15

End Date: 2012.01.23 @ 22:55:00

Job Ticket #: 44920                      DST #: 2

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

Printed: 2012.01.27 @ 12:11:25



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44920      **DST#: 2**  
Test Start: 2012.01.23 @ 15:22:15

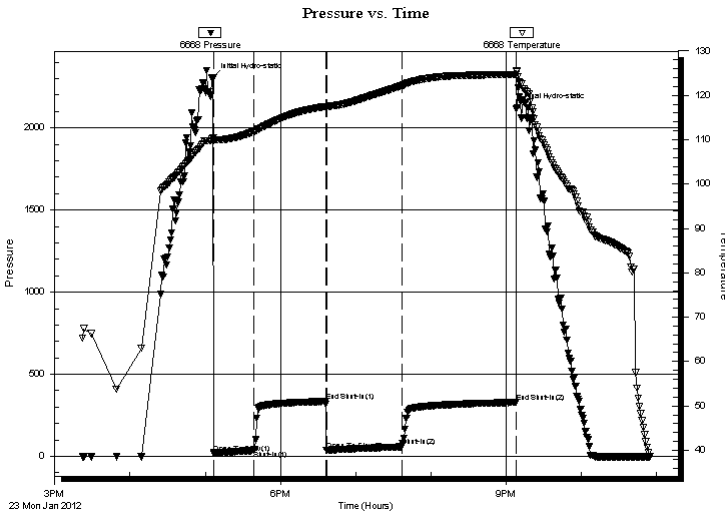
## GENERAL INFORMATION:

Formation: **Myrick St.**  
Deviated: No Whipstock:      ft (KB)  
Time Tool Opened: 17:06:45  
Time Test Ended: 22:55:00  
Interval: **4619.00 ft (KB) To 4660.00 ft (KB) (TVD)**  
Total Depth: 4660.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Reference Elevations: 3249.00 ft (KB)  
3236.00 ft (CF)  
KB to GR/CF: 13.00 ft  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Mike Roberts  
Unit No: 48

**Serial #: 6668      Outside**  
Press @ Run Depth: 58.82 psig @ 4655.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.01.23      End Date: 2012.01.23      Last Calib.: 2012.01.23  
Start Time: 15:22:15      End Time: 22:55:00      Time On Btm: 2012.01.23 @ 17:06:15  
Time Off Btm: 2012.01.23 @ 21:08:30

**TEST COMMENT:** IF: Built to 3" blow  
IS: No return blow  
FF: Built to 1 1/2" blow  
FS: No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2303.90	110.49	Initial Hydro-static
1	20.02	109.82	Open To Flow (1)
33	35.53	111.84	Shut-In(1)
90	334.63	117.50	End Shut-In(1)
91	38.12	117.49	Open To Flow (2)
151	58.82	122.17	Shut-In(2)
242	328.63	124.69	End Shut-In(2)
243	2123.49	125.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
95.00	mud 100% m	1.33

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co  
 250 N Water  
 Wichita KS 67202+1216  
 ATTN: Tom Funk

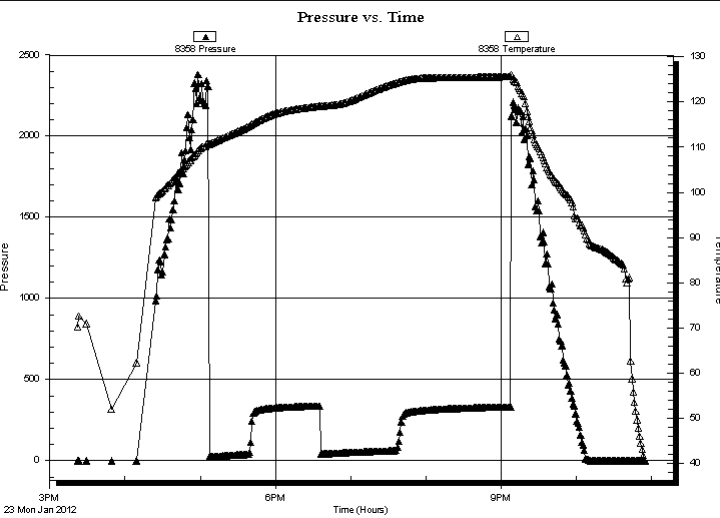
**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
 Job Ticket: 44920 **DST#: 2**  
 Test Start: 2012.01.23 @ 15:22:15

## GENERAL INFORMATION:

Formation: <b>Myrick St.</b>			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Reset)	
Time Tool Opened: 17:06:45		Tester: Mike Roberts	
Time Test Ended: 22:55:00		Unit No: 48	
<b>Interval: 4619.00 ft (KB) To 4660.00 ft (KB) (TVD)</b>		Reference Elevations: 3249.00 ft (KB)	
Total Depth: 4660.00 ft (KB) (TVD)		3236.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 13.00 ft	

<b>Serial #: 8358</b>	<b>Inside</b>				
Press @ Run Depth:	psig @	4655.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2012.01.23	End Date:	2012.01.23	Last Calib.:	2012.01.23
Start Time:	15:22:15	End Time:	22:55:00	Time On Btm:	
				Time Off Btm:	

**TEST COMMENT:** IF: Built to 3" blow  
 IS: No return blow  
 FF: Built to 1 1/2" blow  
 FS: No return blow



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

Recovery		
Length (ft)	Description	Volume (bbl)
95.00	mud 100% m	1.33

\* 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  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44920      **DST#: 2**  
Test Start: 2012.01.23 @ 15:22:15

**Tool Information**

Drill Pipe:	Length: 4603.00 ft	Diameter: 3.80 inches	Volume: 64.57 bbl	Tool Weight: 3000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 64.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4619.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	69.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<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			4592.00	
Shut In Tool	5.00			4597.00	
Hydraulic tool	5.00			4602.00	
Jars	5.00			4607.00	
Safety Joint	3.00			4610.00	
Packer	5.00			4615.00	28.00      Bottom Of Top Packer
Packer	4.00			4619.00	
Stubb	1.00			4620.00	
Perforations	1.00			4621.00	
Change Over Sub	1.00			4622.00	
Drill Pipe	32.00			4654.00	
Change Over Sub	1.00			4655.00	
Recorder	0.00	8358	Inside	4655.00	
Recorder	0.00	6668	Outside	4655.00	
Bullnose	5.00			4660.00	41.00      Bottom Packers & Anchor

**Total Tool Length: 69.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44920      **DST#: 2**  
Test Start: 2012.01.23 @ 15:22:15

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: 2.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
95.00	mud 100%m	1.333

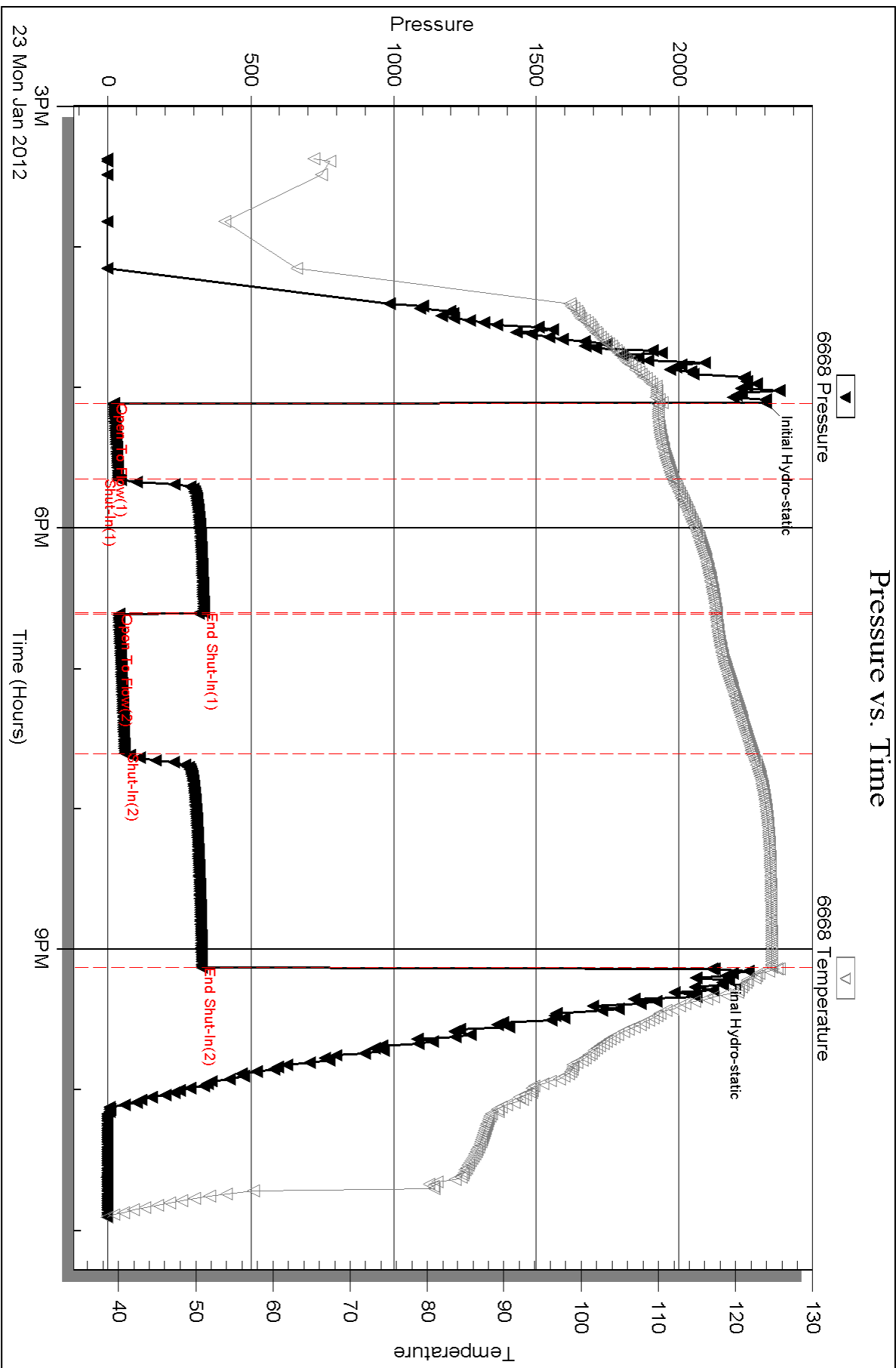
Total Length: 95.00 ft      Total Volume: 1.333 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

Serial #: 6668

Outside Murfin Drilling Co

Tow ns "A" #2-21

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 44920

Printed: 2012.01.27 @ 12:11:28

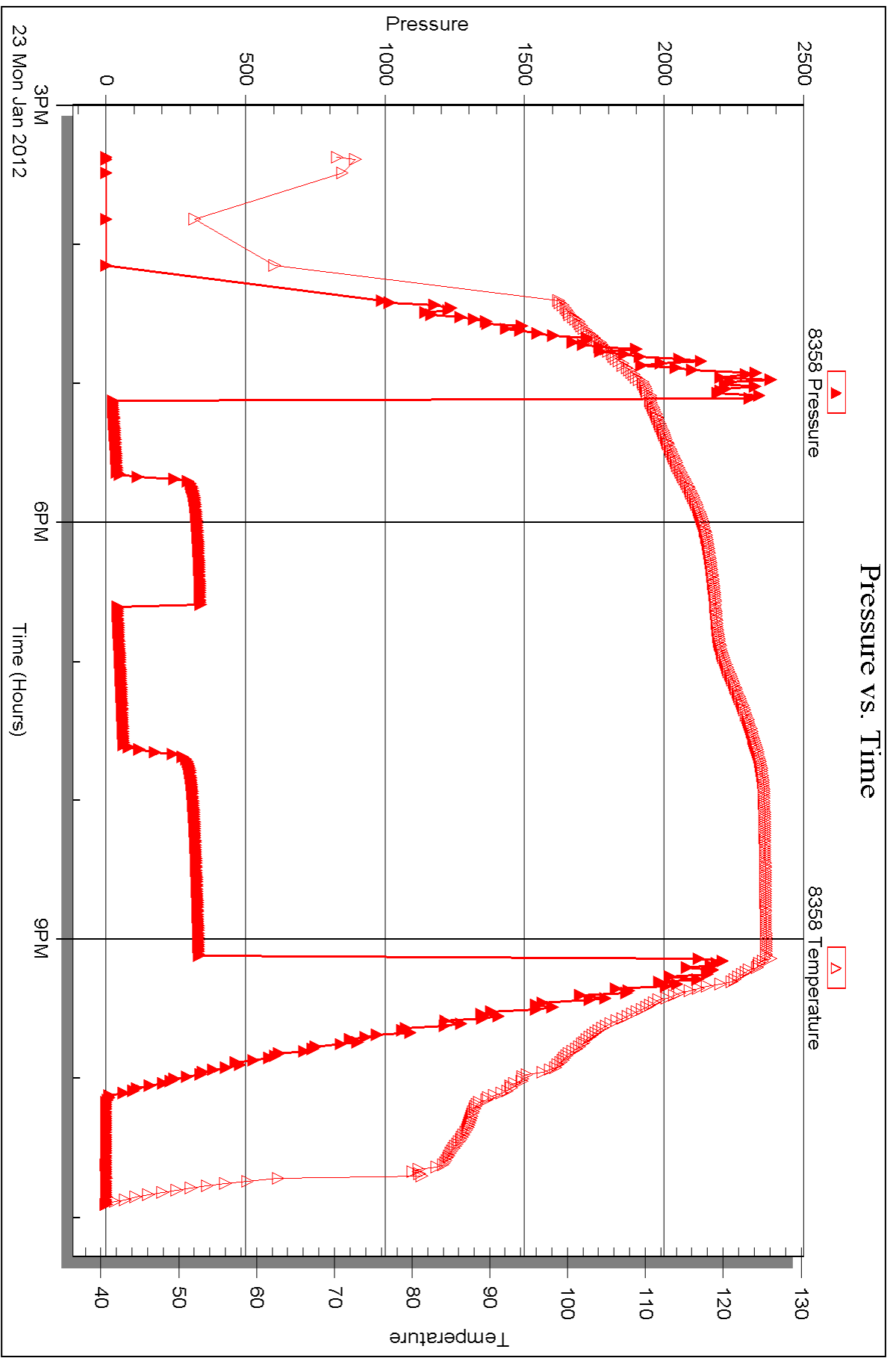
Serial #: 8358

Inside

Murfin Drilling Co

Tow ns "A" #2-21

DST Test Number: 2



23 Mon Jan 2012



## DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water  
Wichita KS 67202+1216

ATTN: Tom Funk

### **Towns "A" #2-21**

#### **21- 10s-34w Thomas,KS**

Start Date: 2012.01.24 @ 10:55:15

End Date: 2012.01.24 @ 18:39:00

Job Ticket #: 44921                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.01.27 @ 12:10:41



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

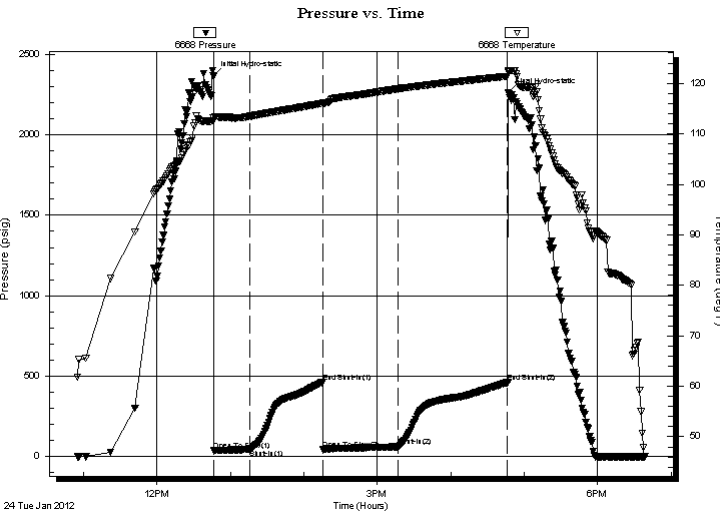
**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44921      **DST#: 3**  
Test Start: 2012.01.24 @ 10:55:15

## GENERAL INFORMATION:

Formation: **Johnson**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 12:46:15  
Time Test Ended: 18:39:00  
**Interval: 4698.00 ft (KB) To 4750.00 ft (KB) (TVD)**  
Total Depth: 4750.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Mike Roberts  
Unit No: 48  
Reference Elevations: 3249.00 ft (KB)  
3236.00 ft (CF)  
KB to GR/CF: 13.00 ft

**Serial #: 6668      Outside**  
Press @ Run Depth: 60.13 psig @ 4702.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.01.24      End Date: 2012.01.24      Last Calib.: 2012.01.24  
Start Time: 10:55:15      End Time: 18:39:00      Time On Btm: 2012.01.24 @ 12:46:00  
Time Off Btm: 2012.01.24 @ 16:46:45

**TEST COMMENT:** IF: Built to 4" blow  
IS: No return blow  
FF: Built to 9" blow  
FS: No return blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2365.69	113.15	Initial Hydro-static
1	36.10	112.61	Open To Flow (1)
30	43.50	113.45	Shut-In(1)
90	461.84	116.04	End Shut-In(1)
90	43.55	116.04	Open To Flow (2)
151	60.13	118.92	Shut-In(2)
240	460.03	121.40	End Shut-In(2)
241	2261.99	122.31	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	ocm 30%o 70%m	0.98

\* 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  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44921      **DST#: 3**  
Test Start: 2012.01.24 @ 10:55:15

**Tool Information**

Drill Pipe:	Length: 4695.00 ft	Diameter: 3.80 inches	Volume: 65.86 bbl	Tool Weight:	3000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 65.86 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4698.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	52.00 ft				
Tool Length:	80.00 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			4671.00	
Shut In Tool	5.00			4676.00	
Hydraulic tool	5.00			4681.00	
Jars	5.00			4686.00	
Safety Joint	3.00			4689.00	
Packer	5.00			4694.00	28.00      Bottom Of Top Packer
Packer	4.00			4698.00	
Stubb	1.00			4699.00	
Perforations	3.00			4702.00	
Recorder	0.00	8358	Inside	4702.00	
Recorder	0.00	6668	Outside	4702.00	
Change Over Sub	1.00			4703.00	
Drill Pipe	32.00			4735.00	
Change Over Sub	1.00			4736.00	
Perforations	9.00			4745.00	
Bullnose	5.00			4750.00	52.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>80.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co  
250 N Water  
Wichita KS 67202+1216  
ATTN: Tom Funk

**21- 10s-34w Thomas,KS**  
**Towns "A" #2-21**  
Job Ticket: 44921      **DST#: 3**  
Test Start: 2012.01.24 @ 10:55:15

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3300.00 ppm			
Filter Cake: 2.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	ocm 30%o 70%m	0.982

Total Length: 70.00 ft      Total Volume: 0.982 bbl

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

Laboratory Name:      Laboratory Location:

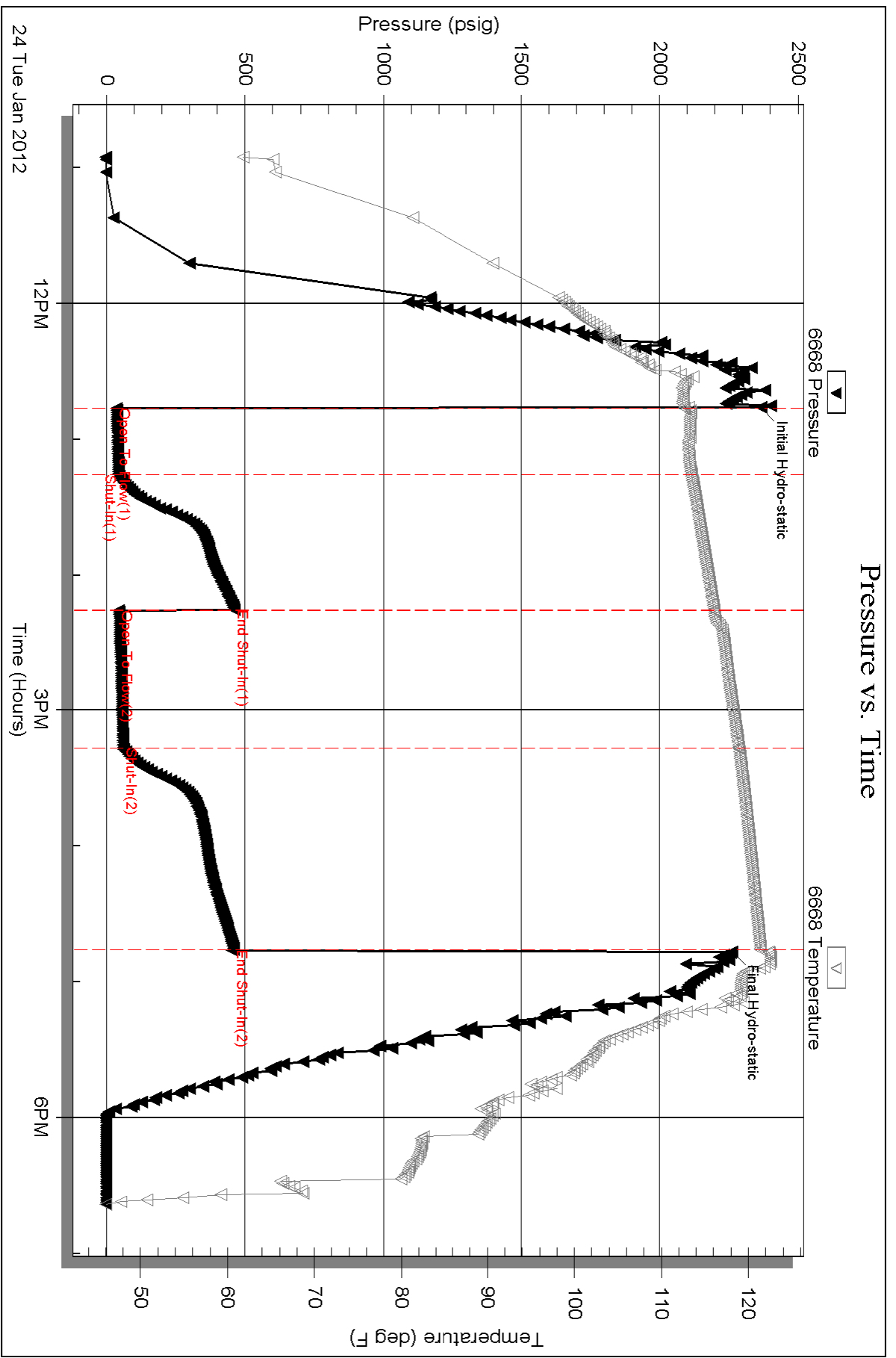
Recovery Comments:

Serial #: 6668

Outside Murfin Drilling Co

Town # "A" #2-21

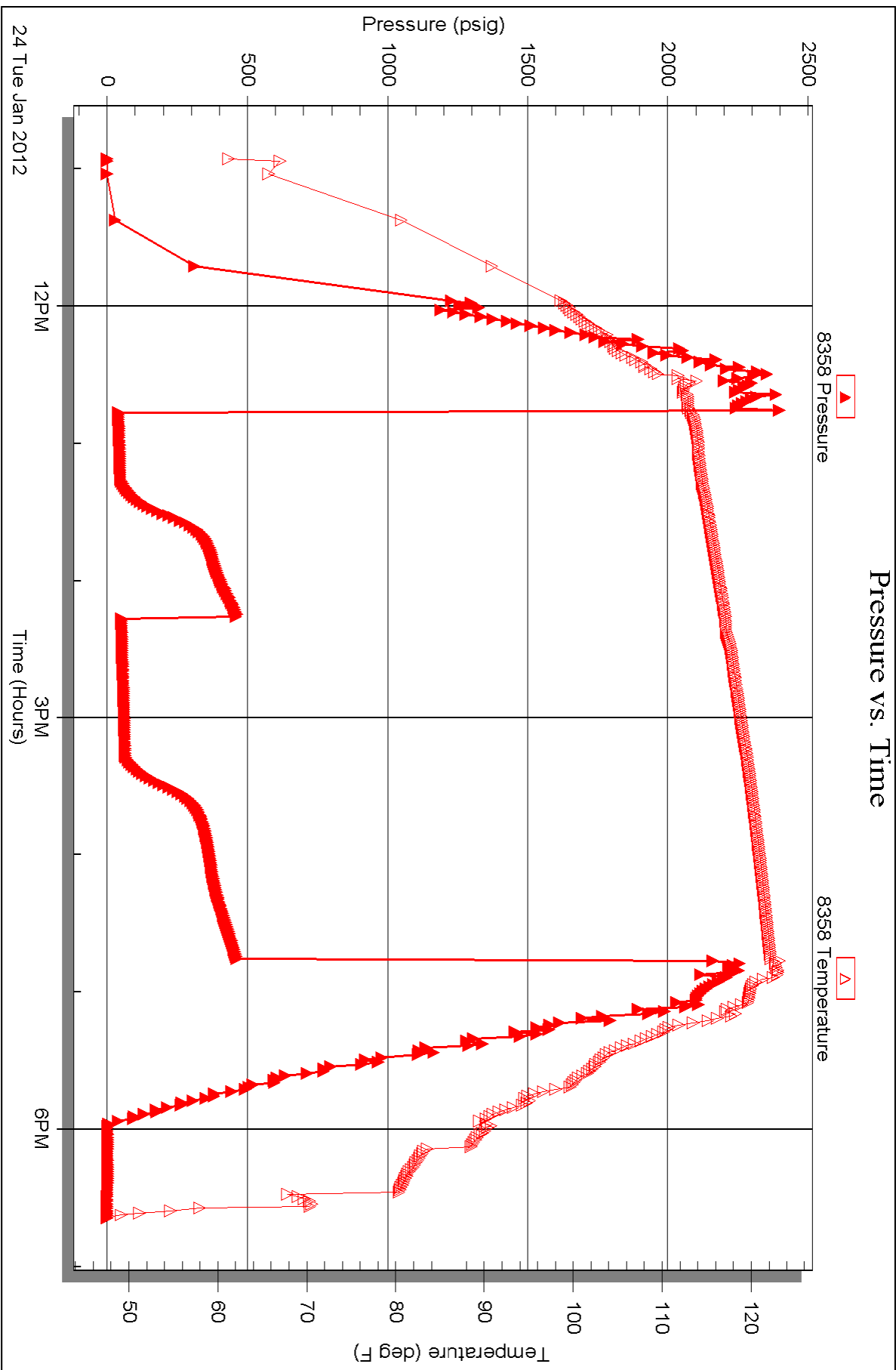
DST Test Number: 3



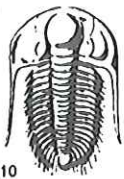
Triobite Testing, Inc

Ref. No: 44921

Printed: 2012.01.27 @ 12:10:43







# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
JAN 26 2012

## Test Ticket

NO. 44920

4/10

BY: \_\_\_\_\_

Well Name & No. Towns "A"-2-21 Test No. 2 Date 1-23-12

Company Murfin Drilling Co. Elevation 3249 KB 3236 GL \_\_\_\_\_

Address 250 N. Water Wichita KS 67202

Co. Rep / Geo. Tom Funk Rig Murfin 25

Location: Sec. 21 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4619-4660 Zone Tested Myrick Station

Anchor Length 41 Drill Pipe Run 4603 Mud Wt. 9.1

Top Packer Depth 4615 Drill Collars Run Ø Vis 58

Bottom Packer Depth 4619 Wt. Pipe Run Ø WL 5.6

Total Depth 4460 Chlorides 3300 ppm System LCM 8

Blow Description IF: Built to 3" Blow

IS: No Return Blow

FF: Built to 1 1/2" Blow

FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>95</u>	<u>M</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 95 BHT 128 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2303  Test 1225.00 T-On Location 14:25

(B) First Initial Flow 20  Jars 250.00 T-Started 15:22

(C) First Final Flow 35  Safety Joint 75.00 T-Open 17:06

(D) Initial Shut-In 334  Circ Sub NC T-Pulled 21:06

(E) Second Initial Flow 38  Hourly Standby \_\_\_\_\_ T-Out 22:55

(F) Second Final Flow 58  Mileage 128RT, 179.20' Comments \_\_\_\_\_

(G) Final Shut-In 328  Sampler \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

(H) Final Hydrostatic 2123  Straddle \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_

Initial Shut-In 60  Extra Packer \_\_\_\_\_  Extra Recorder \_\_\_\_\_

Final Flow 60  Extra Recorder \_\_\_\_\_ Sub Total Ø

Final Shut-In 90  Day Standby \_\_\_\_\_ Total 1729.20

Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Sub Total 1729.20

Approved By [Signature] Our Representative Mike Roberts

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





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
JAN 26 2012

## Test Ticket

NO. 44921

4/10

Well Name & No. Towns "A" 2-21 Test No. 3 Date 1-24-12  
 Company Murfin Drilling Elevation 3249 KB 3236 GL  
 Address 250 N. Water Wichita KS 67202  
 Co. Rep / Geo. Tom Funk Rig Murfin 25  
 Location: Sec. 21 Twp. 10S Rge. 34W Co. THOMAS State KS

Interval Tested 4698-4750 Zone Tested Johnson  
 Anchor Length 52' Drill Pipe Run 4695 Mud Wt. 9.1  
 Top Packer Depth 4694 Drill Collars Run Ø Vis 88  
 Bottom Packer Depth 4698 Wt. Pipe Run Ø WL 5.6  
 Total Depth 4750 Chlorides 3300 ppm System LCM 8  
 Blow Description IF: Built to 4" Bbw  
IS: No Return Blow  
FF: Built to 9" Blow  
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>Feet of OCM</u>	<u>30</u>	<u>0</u>	<u>70</u>	<u>0</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 122 Gravity / API RW / @ / ° F Chlorides / ppm  
 (A) Initial Hydrostatic 2365  Test \$1225.00 T-On Location 09:45  
 (B) First Initial Flow 36  Jars "250.00" T-Started 10:55  
 (C) First Final Flow 43  Safety Joint "75.00" T-Open 12:45  
 (D) Initial Shut-In 461  Circ Sub NC T-Pulled 16:45  
 (E) Second Initial Flow 43  Hourly Standby T-Out 18:39  
 (F) Second Final Flow 60  Mileage 128RT 179.20 Comments \_\_\_\_\_  
 (G) Final Shut-In 460  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2261  Straddle \_\_\_\_\_  
 Initial Open 30  Shale Packer \_\_\_\_\_  
 Initial Shut-In 60  Extra Packer \_\_\_\_\_  
 Final Flow 60  Extra Recorder \_\_\_\_\_  
 Final Shut-In 90  Day Standby \_\_\_\_\_  
 Sub Total 1729.20  Accessibility \_\_\_\_\_  
 MP/DST Disc't \_\_\_\_\_

Approved By

Our Representative





**CONSOLIDATED**  
Oil Well Services, LLC

**REMIT TO**  
Consolidated Oil Well Services, LLC  
Dept. 970  
P.O. Box 4346  
Houston, TX 77210-4346

*W. J. ...*  
**MAIN OFFICE**  
P.O. Box 884  
Chanute, KS 66720  
620/431-9210 • 1-800/467-8676  
Fax 620/431-0012

INVOICE

Invoice # 247195

Invoice Date: 01/19/2012 Terms: 15/15/30,n/30 Page 1

MURFIN DRILLING  
P.O. BOX 288  
RUSSELL KS 67665  
( ) -

TOWNS A 2-21  
33601  
21-10S-34W  
1-17-2012  
KS

*operator pay*  
*mpc*  
*m*  
**PROD COPY**

Part Number	Description	Qty	Unit Price	Total
1104S	CLASS "A" CEMENT (SALE)	200.00	17.6500	3530.00
1102	CALCIUM CHLORIDE (50#)	565.00	.8900	502.85
1118B	PREMIUM GEL / BENTONITE	375.00	.2500	93.75

Sublet Performed	Description	Total
9999-130	CASH DISCOUNT	-618.99
9999-130	CASH DISCOUNT	-235.50

Description	Hours	Unit Price	Total
520 CEMENT PUMP (SURFACE)	1.00	1085.00	1085.00
520 EQUIPMENT MILEAGE (ONE WAY)	15.00	5.00	75.00
667 MIN. BULK DELIVERY	1.00	410.00	410.00

USED FOR  
APPROVED

Account	Unit Dig	W L	No.	Amount	Description
FD203				5098.16	Cement S. Csg A #2-21
	3.			8071.0002	

Amount Due 5997.84 if paid after 02/18/2012

Parts:	4126.60	Freight:	.00	Tax:	256.05	AR	5098.16
Labor:	.00	Misc:	.00	Total:	5098.16		
Sublt:	-854.49	Supplies:	.00	Change:	.00		

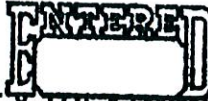
Signed \_\_\_\_\_ Date \_\_\_\_\_





**CONSOLIDATED**  
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676



TICKET NUMBER 33601

LOCATION OAKLEY

FOREMAN KEVIN MCCOY

**FIELD TICKET & TREATMENT REPORT**

**CEMENT API #15-193-20832**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
1-17-12	5406	Towns A 2-21	21	10S	34W	Thomas	
CUSTOMER <u>MURFIN DRILLING Co., INC.</u>		MURFIN Drig. Rig 25					
MAILING ADDRESS <u>250 N. WATER STE 300</u>				TRUCK #	DRIVER	TRUCK #	DRIVER
CITY <u>Wichita</u>		STATE <u>Ks</u>	ZIP CODE <u>67202</u>	<u>520</u>	<u>John S.</u>		
				<u>667</u>	<u>ALLEN B</u>		

JOB TYPE SURFACE O HOLE SIZE 12 1/4 HOLE DEPTH 278' KB CASING SIZE & WEIGHT 8 5/8  
 CASING DEPTH 278' KB DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 15\* SLURRY VOL 48 BBL WATER gal/sk 6.5 CEMENT LEFT in CASING 15'  
 DISPLACEMENT 16.7 BBL DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety Meeting: Rig up to 8 5/8 casing. BREAK Circulation w/ 2 BBL fresh water.  
Mixed 200 SKS CLASS "A" Cement w/ 3% CaCl2 2% GeL @ 15\*/gal. Displace w/ 16.7 BBL  
fresh water. Shut casing in. Good Cement Returns to SURFACE = 5 BBL SLURRY to Pit.  
Job Complete. Rig down.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401 S	1	PUMP CHARGE	1085.00	1085.00
5406	15	MILEAGE	5.00	75.00
1104 S	200 SKS	CLASS "A" Cement	17.65	3530.00
1102	565 *	CaCl2 3%	.89	502.85
1118 B	375 *	GeL 2%	.25	93.75
5407	9.4 TONS	Ton Mileage Bulk Delv.	M/C	410.00
			Sub Total	5696.60
			less 15%	854.49
			SALES TAX 7.3%	256.05
			ESTIMATED TOTAL	5098.16

Ravin 3737

AUTHORIZATION [Signature]

TITLE Toal Pus 2

DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



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



# Invoice

DATE	INVOICE #
2/2/2012	21276

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#2-21	Towns A	Thomas	Company Rig	Oil	Development	Cement Port Collar	Don
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	6.00	480.00
576D-D	Pump Charge - Port Collar - 2764 Feet				1	Job	1,250.00	1,250.00
290	D-Air				2	Gallon(s)	35.00	70.00T
330	Swift Multi-Density Standard (MIDCON II)				200	Sacks	16.50	3,300.00T
276	Flocele				50	Lb(s)	2.00	100.00T
581D	Service Charge Cement				350	Sacks	2.00	700.00
583D	Drayage				1,433.16	Ton Miles	1.00	1,433.16
	Subtotal							7,333.16
	Sales Tax Thomas County						7.30%	253.31
	USED FOR				1c	164		
	APPROVED							

**We Appreciate Your Business!**

**Total**

\$7,586.47





Services, Inc.

CHARGE TO: Martin Dry, Co.  
 ADDRESS: Martin Dry, Co.  
 CITY, STATE, ZIP CODE: \_\_\_\_\_

TICKET NO: 21276

PAGE 1 OF 1

SERVICE LOCATIONS

1. Hays, KS WELLPROJECT NO. \_\_\_\_\_ LEASE JOHNS 'A' COUNTY/PARISH Texas STATE KS CITY \_\_\_\_\_ DATE 2-2-12 OWNER \_\_\_\_\_  
 2. Ness City, KS TICKET TYPE R-SERVICE CONTRACTOR RS RIG NAME/NO. \_\_\_\_\_ SHIPPED VIA CT DELIVERED TO Swickalby, KS ORDER NO. \_\_\_\_\_  
 3. \_\_\_\_\_ WELLS TYPE \_\_\_\_\_ WELLS CATEGORY \_\_\_\_\_ WELL PERMIT NO. \_\_\_\_\_  
 4. \_\_\_\_\_ REFERRAL LOCATION in field JOB PURPOSE Revent Brit Celler WELLS LOCATION \_\_\_\_\_  
 INVOICE INSTRUCTIONS \_\_\_\_\_

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
575					#113	SPMI					600	48200
576 D					Revent Charge-out Brit Celler	100		27641			125000	125000
290					D-Air	2 gal					3500	7000
330					SUD Cement	200	SKS				1650	33000
276					Flare	50	lbs				200	10000
581					Service Charge	10	SKS		1200	165	200	20000
583					Drainage	1433.16	700	35829	165		120	143316

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: 2-2-12 TIME SIGNED: 11:00  A.M.  P.M.

DATE SIGNED: \_\_\_\_\_ TIME SIGNED: \_\_\_\_\_  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	UN-DECIDED	DIS-AGREE
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 type="checkbox"/> NO	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL: 2333 16

TOTAL: 7586 47

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

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

Thank You!



**JOB LOG**

**SWIFT Services, Inc.**

DATE 2-2-12 PAGE NO. 1

CUSTOMER Manoquin Co. WELL NO. 2-21 LEASE TOWNS 'A' JOB TYPE Cement Port Collar TICKET NO. 21276

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1045					278	5 1/2	On location Setup Test
	1105					c	1200	Test P.C. Closed @ 2764' - OK
	1115	3				c	800	Open P.C. est Rate to Have Bleed
								c Hook to Tbg
		3				800	c	Start H <sub>2</sub> O ahead - Have Bleed
		3	2			800 700	c	Start SMD cement - Have circ.
		3				600 500	c	
		3	97			600	c	Have cement circ - 175 SKS
		3	106			600	c	Mix 25 SKS Heavy @ 13# (9881)
		3	9			600	c	Fin out - Disp 9881 H <sub>2</sub> O
						c		Close P.C. & Test - OK
						c		Rig run to its H <sub>2</sub> O
		3	9 15			c	600	Rec-out 2 Flags clean
			30			c	500	Fin rec-out
	12:30							Job Complete Washup & Reekup Tote
								<del>Notes</del> 1.0m, Brian & Brandon Circ 25 SKS to Pit @ 11.2#/gal
								175 SKS @ 11.2# 25 SKS @ 13#
								200 SKS SMD

1.300

175 SKS @ 11.2#  
25 SKS @ 13#

200 SKS SMD

Acclg -

cc: w  
cc: pl  
Scan-Liz



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



# Invoice

DATE	INVOICE #
1/26/2012	21181

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661
USED FOR <u>1 C103</u>
APPROVED <u>[Signature]</u>

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#2-21	Towns A	Thomas	Murfin Drilling	Oil	Development	LongString	Dave
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				90	Miles	6.00	540.00
578D-L	Pump Charge - Long String				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)	2.50	1,250.00T
290	D-Air				2	Gallon(s)	35.00	70.00T
403-5	5 1/2" Cement Basket				2	Each	250.00	500.00T
404-5	5 1/2" Port Collar				1	Each	2,400.00	2,400.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	250.00	250.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	350.00	350.00T
409-5	5 1/2" Turbolizer				15	Each	90.00	1,350.00T
413-5	5 1/2" Roto Wall Scratcher				15	Each	40.00	600.00T
419-5	5 1/2" Rotating Head Rental				1	Each	200.00	200.00T
325	Standard Cement				225	Sacks	13.50	3,037.50T
276	Flocele				50	Lb(s)	2.00	100.00T
283	Salt				1,100	Lb(s)	0.20	220.00T
284	Calseal				11	Sack(s)	35.00	385.00T
285	CFR-1				150	Lb(s)	4.00	600.00T
581D	Service Charge Cement				225	Sacks	2.00	450.00
583D	Drayage				1,059.75	Ton Miles	1.00	1,059.75
	Subtotal							14,962.25
	Sales Tax Thomas County						7.30%	833.11

<b>Thank You For Your Business In 2011!</b> <b>We Look Forward To Serving You In 2012!</b>	<b>Total</b>	<b>\$15,795.36</b>
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CHARGE TO: MURKIN OIL  
 ADDRESS  
 CITY, STATE, ZIP CODE

TICKET  
 N° 21181

PAGE 1 OF 2

1. SERVICE LOCATION <u>HWS</u>	WELL/PROJECT NO. <u>2-21</u>	LEASE <u>THOMAS A</u>	COUNTY/PARISH <u>THOMAS</u>	STATE <u>LA</u>	CITY	DATE <u>01-26-12</u>	OWNER
2. <u>HSS</u>	TICKET TYPE <input type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR	RIG NAME/NO. <u>MURKIN OIL # 25</u>	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>S. CRYB</u>	ORDER NO.	
3.	WELL TYPE <u>OIL</u>	WELL CATEGORY <u>Develop</u>	JOB PURPOSE <u>LONG TERM</u>	WELL PERMIT NO. <u>15-193-20832</u>	WELL LOCATION <u>S21, T10, R34</u>		
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 #112	90	mi			6.00	540.00
578					Ramp Service	1	EA			1500.00	1500.00
281					LIQUID WCL	4	BAR			25.00	100.00
280					FLOCCULANT	500	LB			0.50	250.00
290					D-41E	2	BAR			35.00	70.00
403					Basinet	2	EA			250.00	500.00
404					Beer Cooler	1	EA			2400.00	2400.00
406					Archlow Acubrake	1	EA			250.00	250.00
407					Foster's shoe W/brake	1	EA			350.00	350.00
409					MULLERIZE	15	EA			90.00	1350.00
413					Rotolmscan tires	15	EA			40.00	600.00
419					Portline Head Rental	1	EA			200.00	200.00

**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 01-26-12 TIME SIGNED 0000  A.M.  P.M.

SWIFT OPERATOR Dave Bell APPROVAL

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

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

**SURVEY**

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	OUR SERVICE WAS PERFORMED WITHOUT DELAY?	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	ARE YOU SATISFIED WITH OUR SERVICE?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOTAL 15,795.36

Thomas TAX 8.33 11

14,962.25

506 15,468.25

9110 21

5852 25

833 11

200 200

2400 2400

250 250

350 350

600 600

200 200

540 540

1500 1500

100 100

250 250

70 70

500 500

2400 2400

250 250

70 70

350 350

600 600

200 200

Thank You!





Swifton, Inc.

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

TICKET CONTINUATION

TICKET No. 21181

CUSTOMER Muller/DAC

WELL 2-01, TOWNS A

DATE 01-26-12 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	UM		
285		2				STD EA-2	285	54	13.50	3837.50
276		2				FLOOR	50	68	2.00	100.00
283		2				SALT	1000	48	20	200.00
284		2				GREEN	11	54	35.00	385.00
285		2				CEL-1	150	148	4.00	600.00
281		2				SEARCHLIGHT	285	54	2.00	450.00
283		2				DAMP	1059	25	1.00	1059.25
						SERVICE CHARGE				
						MILEAGE CHARGE				
						TOTAL WEIGHT				
						LOADED MILES				
						CUBIC FEET				
						TON MILES				

CONTINUATION TOTAL 5852.25



**JOB LOG**

**SWIFT Services, Inc.**

DATE 01-26-12 PAGE NO. 1

CUSTOMER MURFINDRILL WELL NO. 2-21 LEASE TOWNS A JOB TYPE LONGSTRIK TICKET NO. 21181

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0000							ONLOCATION CMT 225 S&S STD EA-2
								RTO 4910 SET @ PER 4900 SJ 20.92 IN SET 4879 5 1/2" 15.5" PER COLLAR W/ #51 2772 FT TUBING 1-1/4, 50 JOINTS 50, 51 RTO W/ MISC. JOINTS 1 SET 75 FT
	0315							START C&L FLUSH
	0615							TALBOTT DEEP BRN, JOINTS 57 CIRC W/ RIG BREAK CIRC W/ RIG & RIGGED PIPE
	0715		7.5					PLUG RH 3D, MH 20
	0725	5.5	15	-		300		15 BBL WCL FLUSH
			12	-				12 BBL FLUOROC 21 - SOLIDMS
			5	-				5 BBL WCL FLUSH
			42.5	-				175 S&S EA-2 CMT
								DD-FLD PLUG, WASHOUT PL
	0740	6.5	0	-		200		START DEEP W/ 20 BBL WCL
			20	-		200		
			74	-		400		CMT ON SYSTEM
			105	-		800		
			110	-		900		
	0800	4.5	116.1	-		1500		LAND PLUG
								RELEASE DCT
	0845							JOB COMPLETE
								THANK YOU! DAE, J&KB, DAVID