



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1109913
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
-----------------------------------	-----------------	---

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: _____



1109913

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
-----------------------------------	-----------	---------	-------------	---------------	---------

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <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> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

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

February 14, 2013

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

Re: ACO1
API 15-153-20910-00-00
PTL 1-22
SE/4 Sec.22-02S-36W
Rawlins 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 PTL #1-22 1550' FSL 2210'FEL Sec. 22-2S-36W 3344' KB							MDCI Kacirek #1-21 1800' FNL 2310'FEL Sec. 21-2S-36W 3355' KB	
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	3219	+125	+17	3208	+136	+28	3247	+108
B/Anhydrite	3258	+86	+17	3247	+97	+28	3286	+69
Neva	3717	-373	+22	3710	-366	+29	3750	-395
Topeka	4062	-718	+23	4055	-711	+30	4096	-741
Heebner	4223	-879	+22	4215	-871	+30	4256	-901
Lansing	4273	-929	+26	4265	-921	+34	4310	-955
Stark	4493	-1149	+30	4490	-1146	+33	4534	-1179
BKC	4544	-1200	+34	4538	-1194	+40	4589	-1234
Pawnee	4672	-1328	+31	4668	-1324	+35	4714	-1359
Cherokee	4740	-1396	+36	4737	-1393	+39	4787	-1432
Mississippi	4948	-1604	+36	4951	-1607	+33	4995	-1640
RTD	5060						5100	-1745
LTD				5060			5105	-1750



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolzle

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.10.27 @ 17:10:00

End Date: 2012.10.29 @ 10:01:00

Job Ticket #: 48222 DST #: 1

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

Printed: 2012.11.13 @ 14:42:42



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48222

DST#: 1

ATTN: Bob Stolzle

Test Start: 2012.10.27 @ 17:10:00

Tool Information

Drill Pipe:	Length: 3486.00 ft	Diameter: 3.80 inches	Volume: 48.90 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 0.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose: 0.00 lb
			<u>Total Volume: 51.51 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4026.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4003.00	
Hydraulic tool	5.00			4008.00	
Jars	5.00			4013.00	
Safety Joint	3.00			4016.00	
Packer	5.00			4021.00	28.00 Bottom Of Top Packer
Packer	5.00			4026.00	
Stubb	1.00			4027.00	
Perforations	2.00			4029.00	
Change Over Sub	1.00			4030.00	
Recorder	0.00	8791	Inside	4030.00	
Recorder	0.00	8673	Outside	4030.00	
Drill Pipe	31.00			4061.00	
Change Over Sub	1.00			4062.00	
Perforations	25.00			4087.00	
Bullnose	3.00			4090.00	64.00 Bottom Packers & Anchor

Total Tool Length: 92.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48222

DST#: 1

ATTN: Bob Stolzle

Test Start: 2012.10.27 @ 17:10:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length: ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

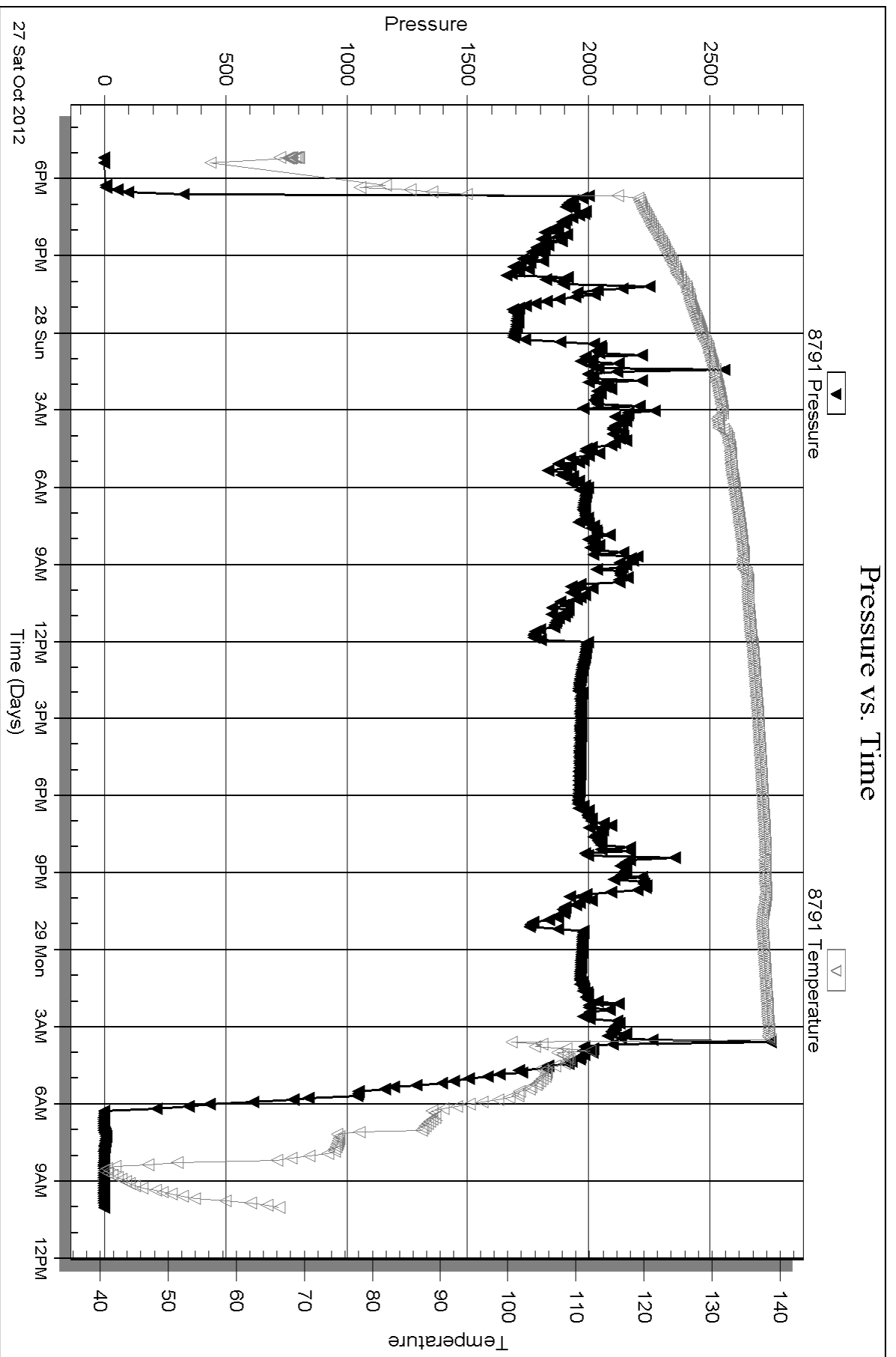
Serial #: 8791

Inside

Murfin Drilling Co.

PTL #1-22

DST Test Number: 1

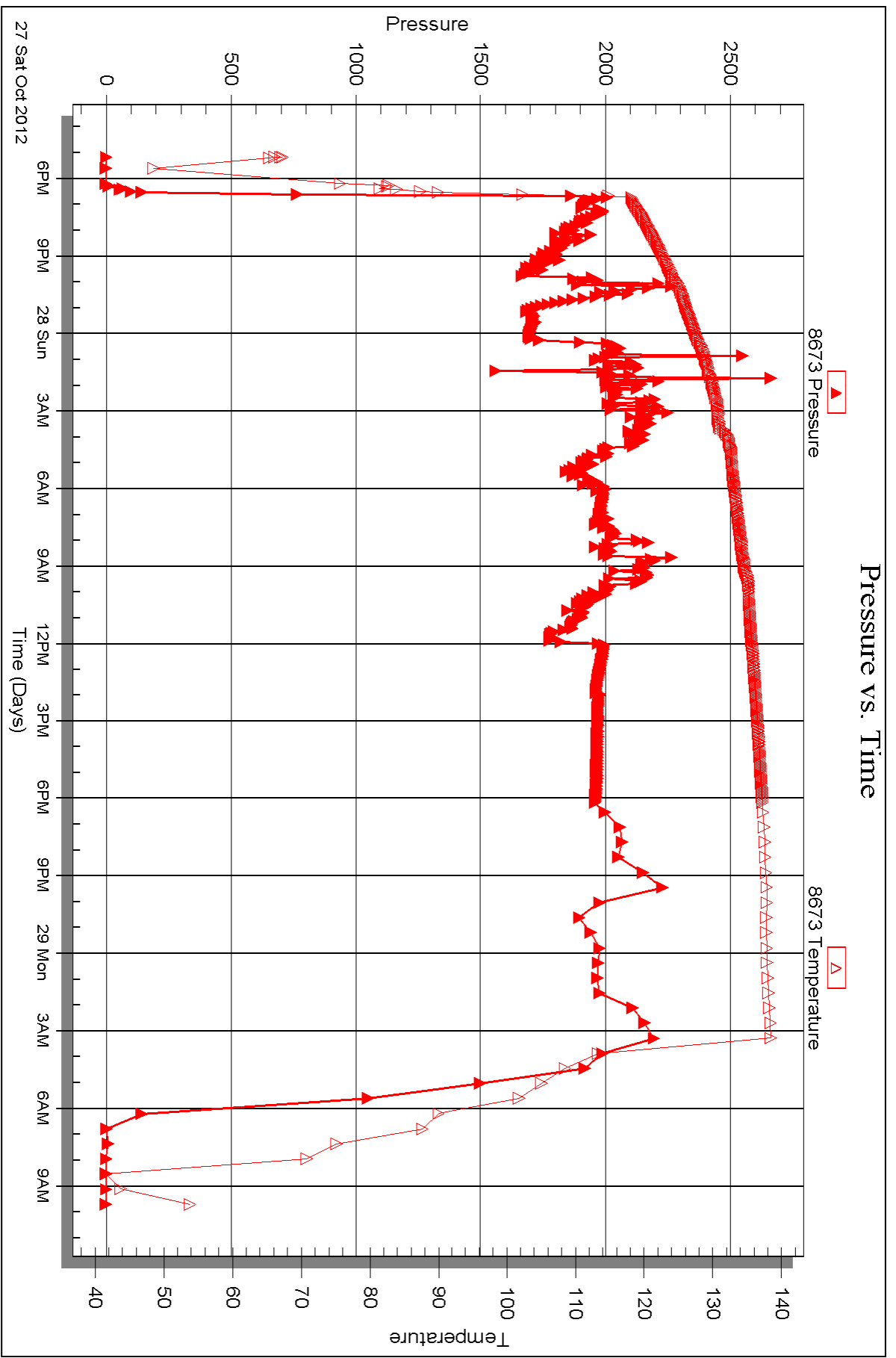


Serial #: 8673

Outside Murfin Drilling Co.

PTL #1-22

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 48222

Printed: 2012.11.13 @ 14:42:47



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolzle

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.10.29 @ 18:25:00

End Date: 2012.10.30 @ 02:25:30

Job Ticket #: 48223 DST #: 2

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

Printed: 2012.11.13 @ 14:42:00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co.
250 N. Water Ste 300
Wichita KS 67202
ATTN: Bob Stolzle

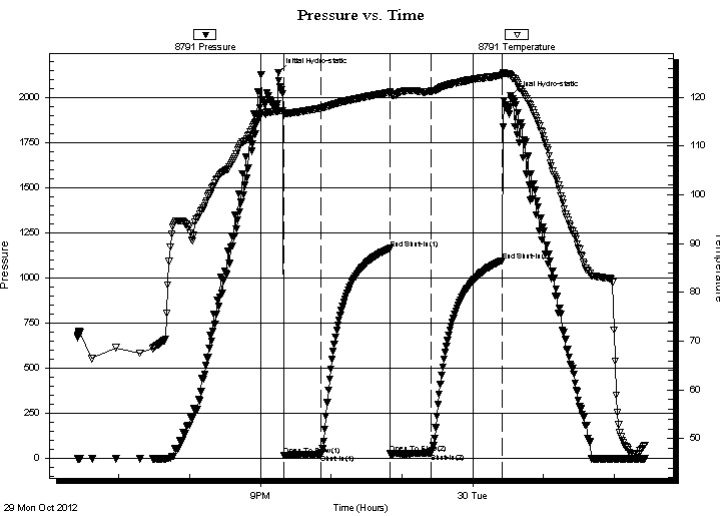
22-2s-36w Rawlins, KS
PTL #1-22
Job Ticket: 48223 **DST#: 2**
Test Start: 2012.10.29 @ 18:25:00

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:19:30
Time Test Ended: 02:25:30
Interval: **4026.00 ft (KB) To 4090.00 ft (KB) (TVD)**
Total Depth: 4090.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Kreuzer Jr.
Unit No: 61
Reference Elevations: 3344.00 ft (KB)
3334.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8791 Inside
Press @ Run Depth: 30.61 psig @ 4029.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.10.29 End Date: 2012.10.30 Last Calib.: 2012.10.30
Start Time: 18:25:01 End Time: 02:25:30 Time On Btm: 2012.10.29 @ 21:15:00
Time Off Btm: 2012.10.30 @ 00:32:00

TEST COMMENT: IF: Weak blow, Built to 1/2 in. in 10 mins. Started to die Died to surface in 30 mins.
IS: No blow back
FF: No blow
FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.46	117.26	Initial Hydro-static
5	17.44	116.72	Open To Flow (1)
36	25.64	117.79	Shut-In(1)
95	1163.17	121.05	End Shut-In(1)
95	25.74	120.58	Open To Flow (2)
130	30.61	121.25	Shut-In(2)
190	1096.19	124.54	End Shut-In(2)
197	2011.82	124.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	vsocm-10%o90%m	0.15

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48223

DST#: 2

ATTN: Bob Stolzle

Test Start: 2012.10.29 @ 18:25:00

Tool Information

Drill Pipe:	Length: 3486.00 ft	Diameter: 3.80 inches	Volume: 48.90 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 51.51 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4026.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4003.00	
Hydraulic tool	5.00			4008.00	
Jars	5.00			4013.00	
Safety Joint	3.00			4016.00	
Packer	5.00			4021.00	28.00 Bottom Of Top Packer
Packer	5.00			4026.00	
Stubb	1.00			4027.00	
Perforations	1.00			4028.00	
Change Over Sub	1.00			4029.00	
Recorder	0.00	8791	Inside	4029.00	
Recorder	0.00	8673	Outside	4029.00	
Drill Pipe	31.00			4060.00	
Change Over Sub	1.00			4061.00	
Perforations	25.00			4086.00	
Magnent	4.00			4090.00	64.00 Bottom Packers & Anchor

Total Tool Length: 92.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Witchita KS 67202

PTL #1-22

Job Ticket: 48223

DST#: 2

ATTN: Bob Stolzle

Test Start: 2012.10.29 @ 18:25:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	vsocm-10%o90%m	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

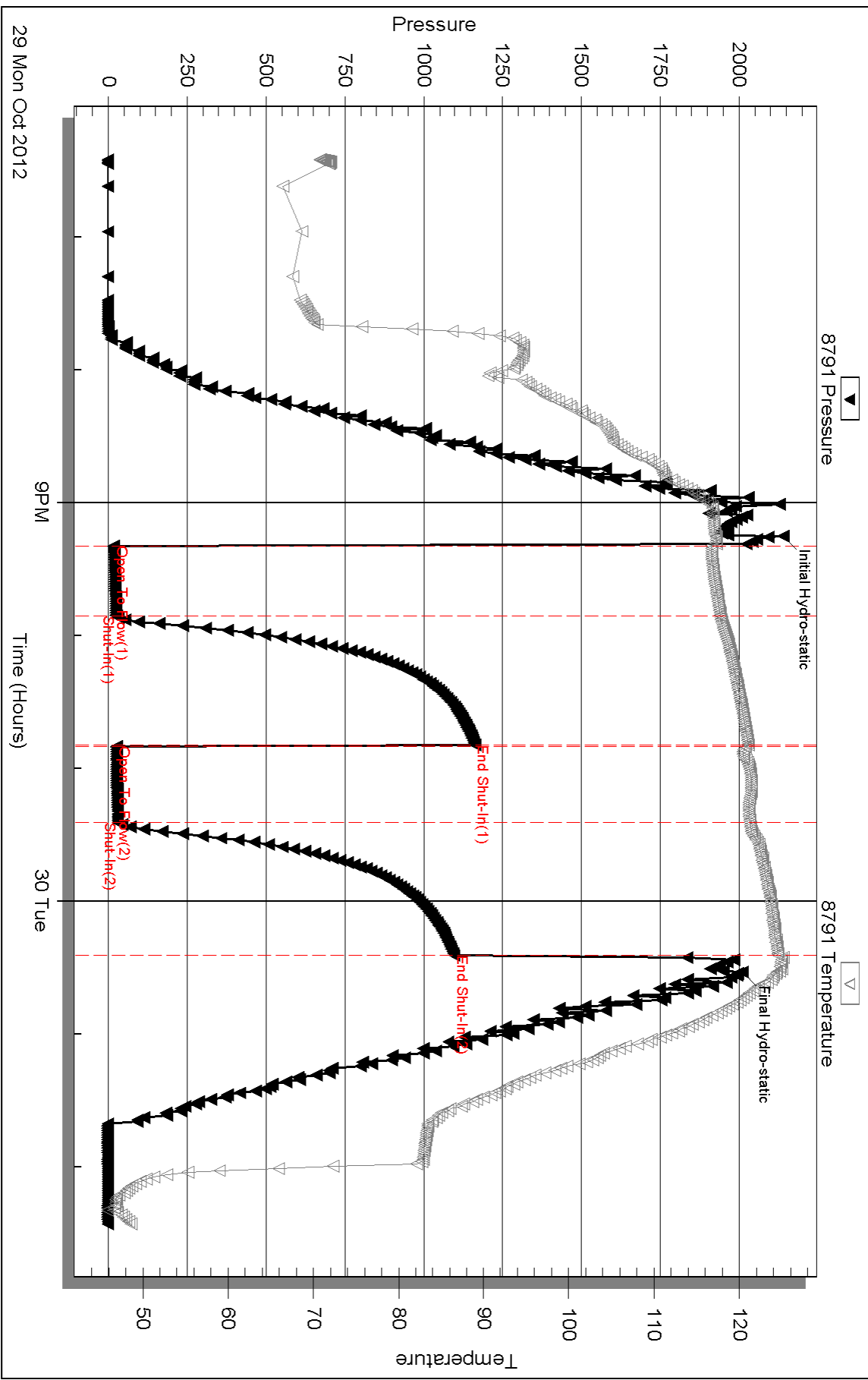
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



29 Mon Oct 2012

9PM

Time (Hours)

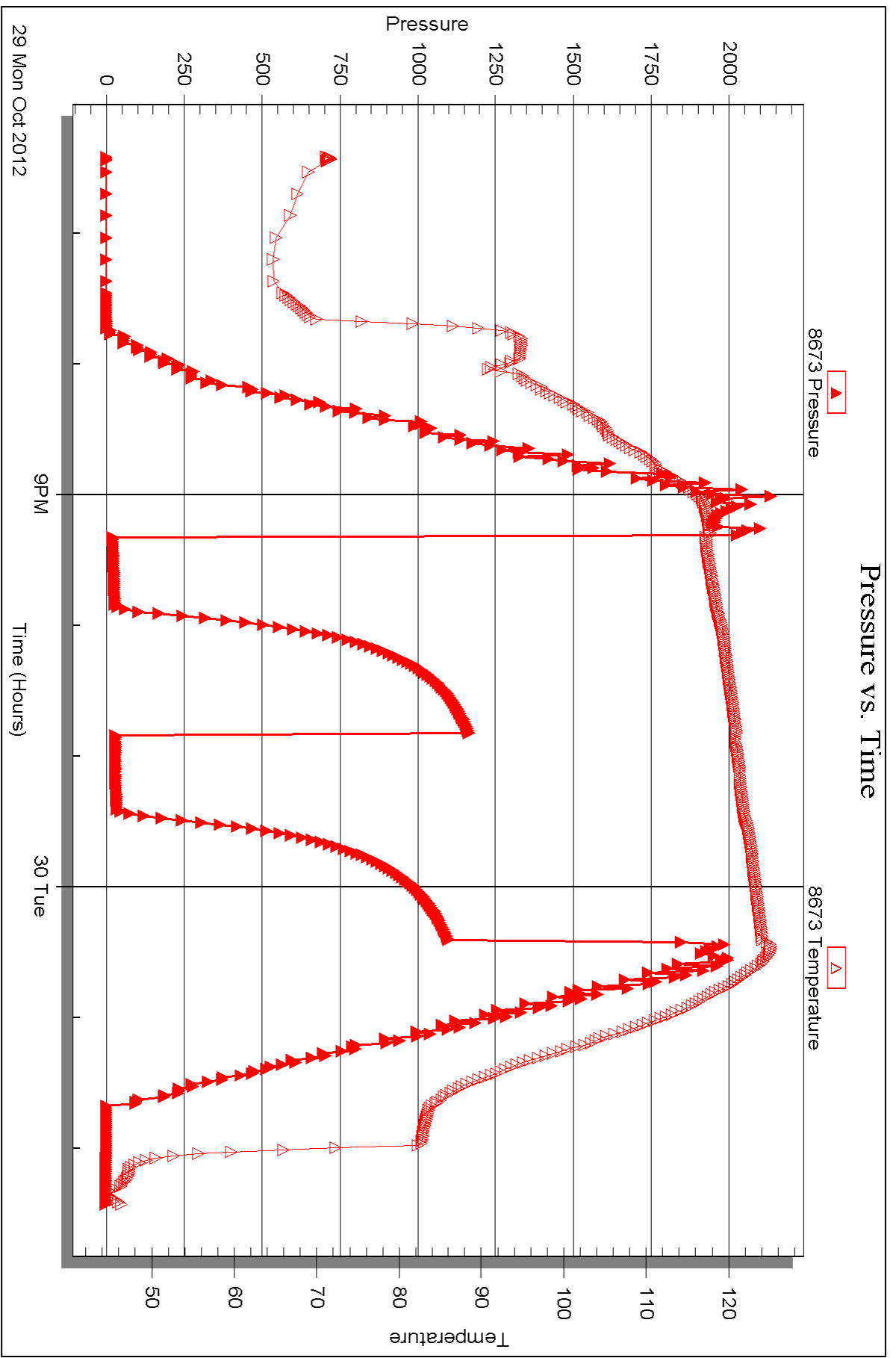
30 Tue

Serial #: 8673

Outside Murfin Drilling Co.

PTL #1-22

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 48223

Printed: 2012.11.13 @ 14:42:05



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolzle

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.10.31 @ 16:55:00

End Date: 2012.11.01 @ 01:35:30

Job Ticket #: 48224 DST #: 3

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

Printed: 2012.11.13 @ 14:41:19



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48224

DST#: 3

ATTN: Bob Stolzle

Test Start: 2012.10.31 @ 16:55:00

Tool Information

Drill Pipe:	Length: 3585.00 ft	Diameter: 3.80 inches	Volume: 50.29 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 52.90 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4136.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	84.00 ft			
Tool Length:	112.00 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
Shut In Tool	5.00			4113.00	
Hydraulic tool	5.00			4118.00	
Jars	5.00			4123.00	
Safety Joint	3.00			4126.00	
Packer	5.00			4131.00	28.00 Bottom Of Top Packer
Packer	5.00			4136.00	
Stubb	1.00			4137.00	
Perforations	1.00			4138.00	
Change Over Sub	1.00			4139.00	
Recorder	0.00	8791	Inside	4139.00	
Recorder	0.00	8673	Outside	4139.00	
Drill Pipe	64.00			4203.00	
Change Over Sub	1.00			4204.00	
Perforations	13.00			4217.00	
Bullnose	3.00			4220.00	84.00 Bottom Packers & Anchor

Total Tool Length: 112.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48224

DST#: 3

ATTN: Bob Stolzle

Test Start: 2012.10.31 @ 16:55:00

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:

3800 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: 0.08 ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
265.00	mcw -25% m75% w	1.303
265.00	w cm-35% w 65% m	1.303
127.00	mud-100%	1.772
0.00	.08 @ 138* = 3800	0.000

Total Length: 657.00 ft

Total Volume: 4.378 bbf

Num Fluid Samples: 0

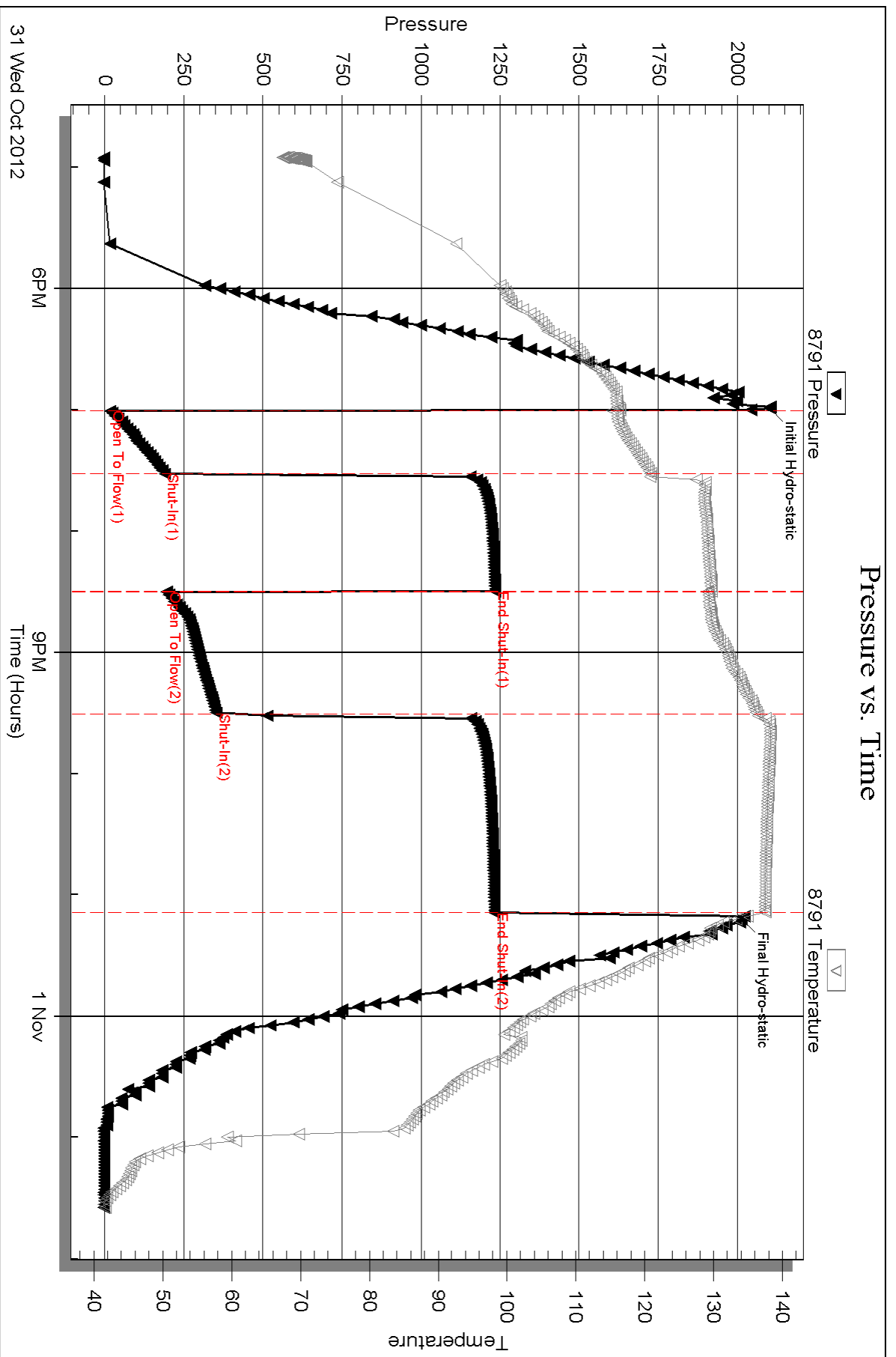
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

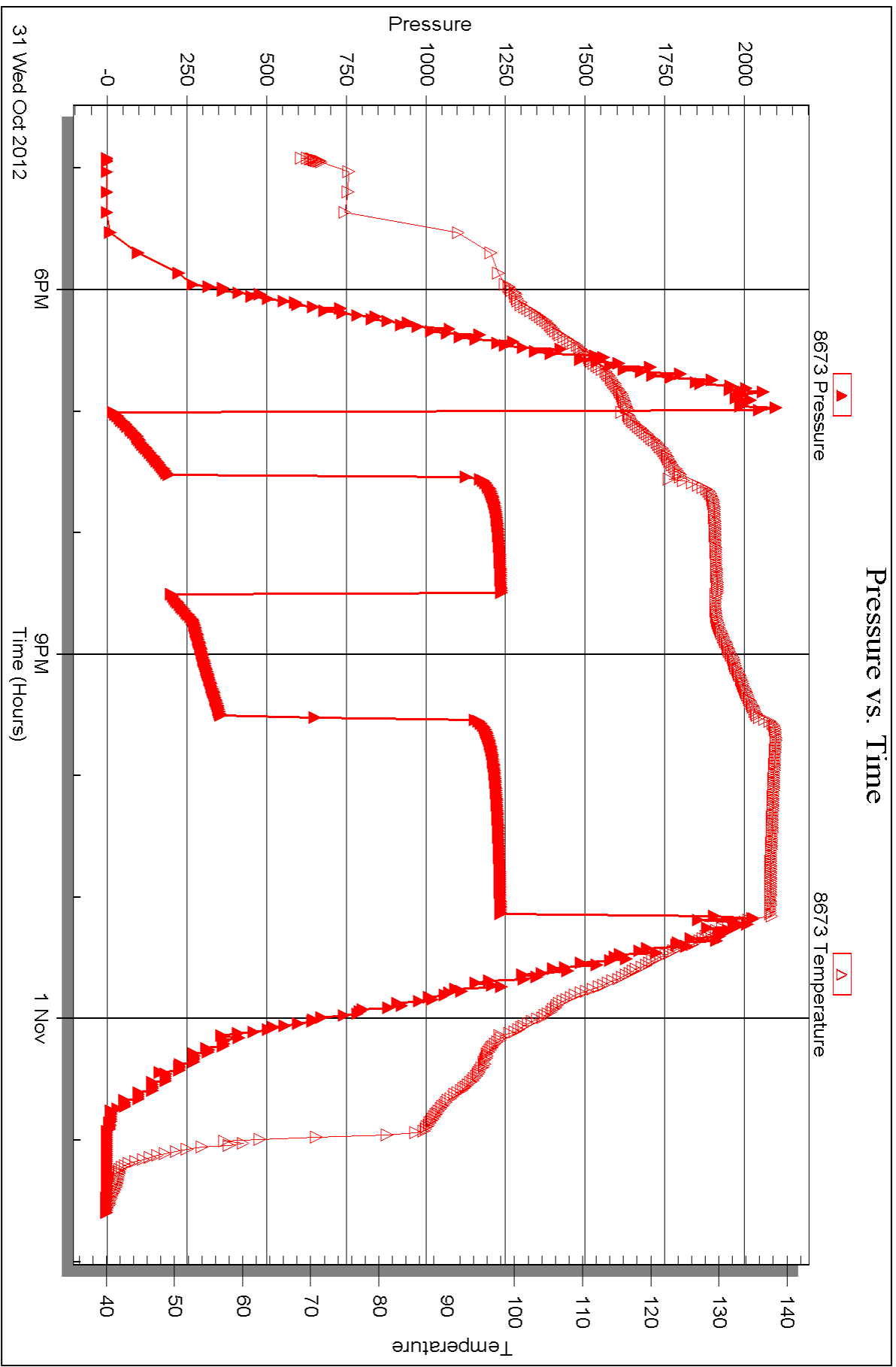


Serial #: 8673

Outside Murfin Drilling Co.

PTL #1-22

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 48224

Printed: 2012.11.13 @ 14:41:24



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolzle

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.11.01 @ 15:55:00

End Date: 2012.11.02 @ 00:47:30

Job Ticket #: 48225 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.13 @ 14:40:39



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water Ste 300
 Wichita KS 67202
 ATTN: Bob Stolzle

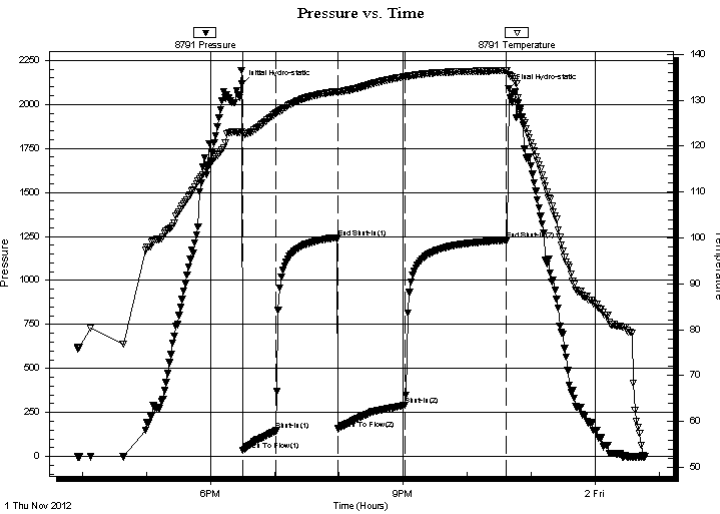
22-2s-36w Rawlins, KS
PTL #1-22
 Job Ticket: 48225 **DST#: 4**
 Test Start: 2012.11.01 @ 15:55:00

GENERAL INFORMATION:

Formation: **LKC-A,B**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:30:00
 Time Test Ended: 00:47:30
 Interval: **4210.00 ft (KB) To 4360.00 ft (KB) (TVD)**
 Total Depth: 4360.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Kreuzer Jr.
 Unit No: 61
 Reference Elevations: 3344.00 ft (KB)
 3334.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8791 Inside
 Press @ Run Depth: 291.37 psig @ 4213.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.01 End Date: 2012.11.02 Last Calib.: 2012.11.02
 Start Time: 15:55:01 End Time: 00:47:30 Time On Btm: 2012.11.01 @ 18:29:00
 Time Off Btm: 2012.11.01 @ 22:39:00

TEST COMMENT: IF: Fair blow, built to B.O.B in 25 mins.
 IS: Bled off, Blow back after 10 mins. Built to 1/4in. over 60 mins.
 FF: Fair blow, Built to B.O.B in 30 mins.
 FS: Bled off, No blow back over 90 mins.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2115.33	123.15	Initial Hydro-static
1	34.78	122.65	Open To Flow (1)
32	146.87	127.15	Shut-In(1)
90	1243.22	131.90	End Shut-In(1)
90	157.29	131.65	Open To Flow (2)
153	291.37	135.12	Shut-In(2)
248	1229.51	136.48	End Shut-In(2)
250	2088.65	135.57	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
151.00	gocm-20%g40%o40%m	0.74
190.00	gvsocm-10%g5%o85%m	0.93
190.00	gvsocw m-10%g10%w 30%o50%m	0.93
95.00	go-20%g80%	1.33
0.00	194 ft. gas in pipe	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.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48225

DST#: 4

ATTN: Bob Stolzle

Test Start: 2012.11.01 @ 15:55:00

Tool Information

Drill Pipe:	Length: 3680.00 ft	Diameter: 3.80 inches	Volume: 51.62 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose: 98000.00 lb
			<u>Total Volume: 54.23 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4210.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	150.00 ft			
Tool Length:	178.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4187.00	
Hydraulic tool	5.00			4192.00	
Jars	5.00			4197.00	
Safety Joint	3.00			4200.00	
Packer	5.00			4205.00	28.00 Bottom Of Top Packer
Packer	5.00			4210.00	
Stubb	1.00			4211.00	
Perforations	1.00			4212.00	
Change Over Sub	1.00			4213.00	
Recorder	0.00	8791	Inside	4213.00	
Recorder	0.00	8673	Outside	4213.00	
Drill Pipe	128.00			4341.00	
Change Over Sub	1.00			4342.00	
Perforations	15.00			4357.00	
Bullnose	3.00			4360.00	150.00 Bottom Packers & Anchor

Total Tool Length: 178.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 48225

DST#: 4

ATTN: Bob Stolzle

Test Start: 2012.11.01 @ 15:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
151.00	gocm-20%g40%o40%m	0.743
190.00	gvsocm-10%g5%o85%m	0.934
190.00	gvsocw m-10%g10%w 30%o50%m	0.934
95.00	go-20%g80%	1.333
0.00	194 ft. gas in pipe	0.000

Total Length: 626.00 ft

Total Volume: 0.743 bbl

Num Fluid Samples: 0

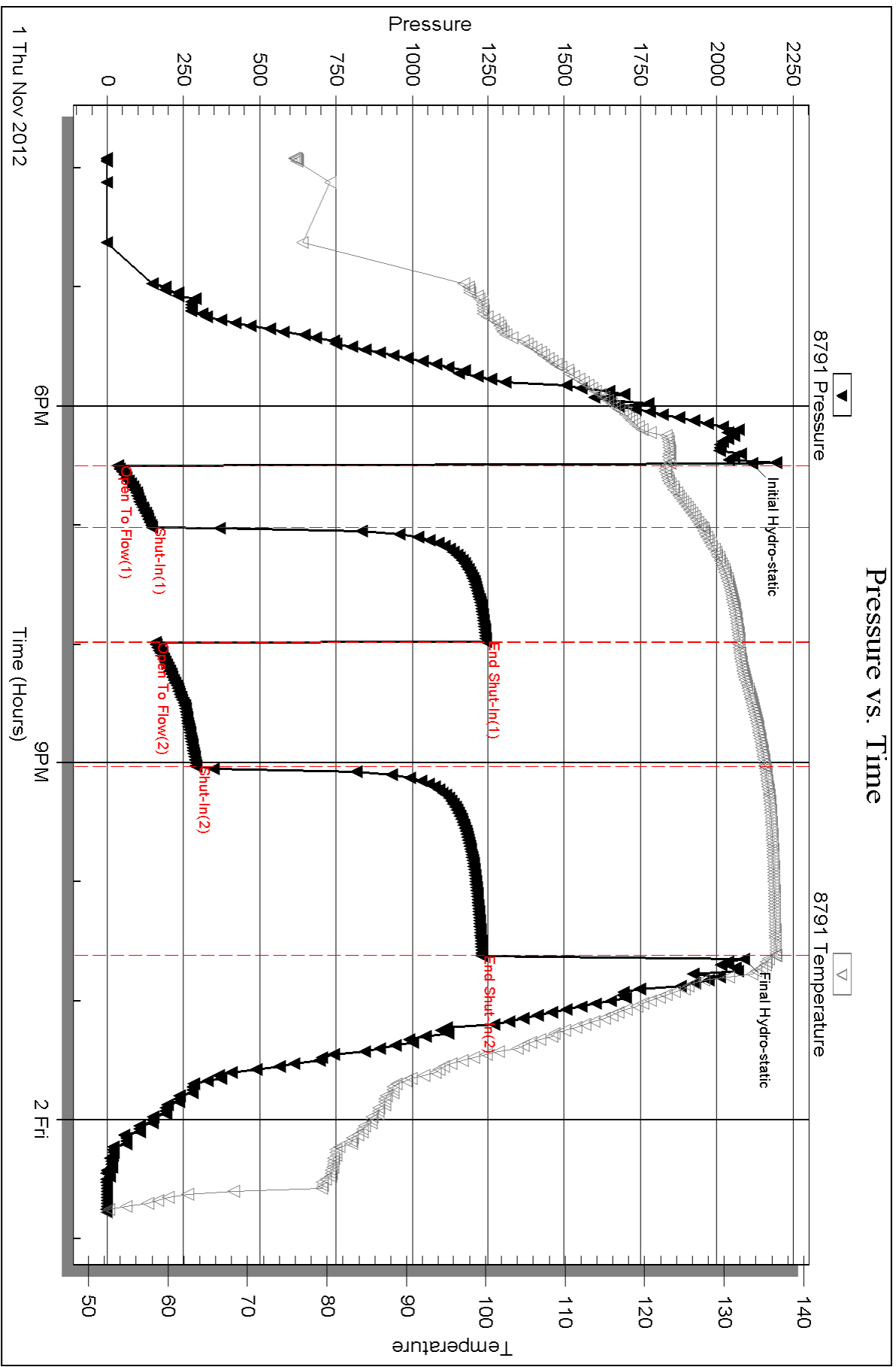
Num Gas Bombs: 0

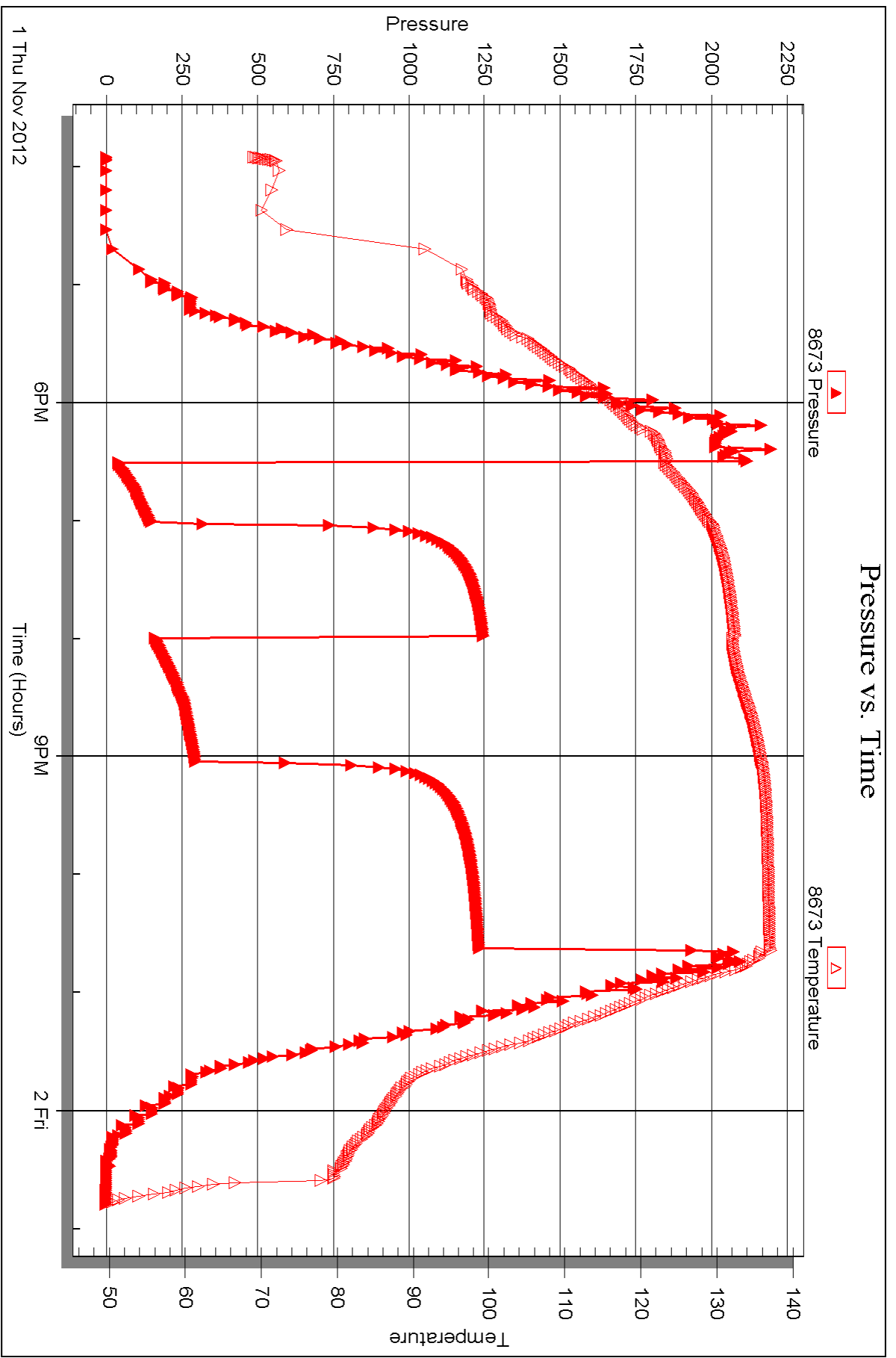
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolzle

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.11.02 @ 17:10:00

End Date: 2012.11.03 @ 02:20:00

Job Ticket #: 043001 DST #: 5

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

Printed: 2012.11.13 @ 14:39:44



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water Ste 300
 Wichita KS 67202
 ATTN: Bob Stolzle

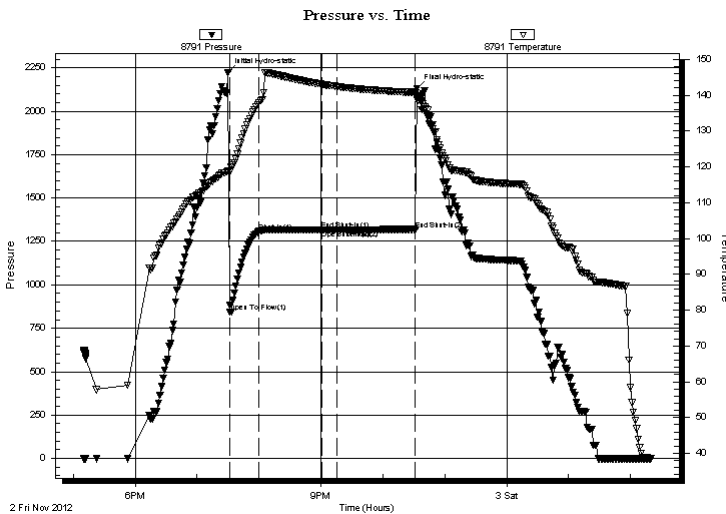
22-2s-36w Rawlins,KS
PTL #1-22
 Job Ticket: 043001 **DST#: 5**
 Test Start: 2012.11.02 @ 17:10:00

GENERAL INFORMATION:

Formation: **LKC-G,H**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 19:32:00
 Tester: Chuck Kreuzer Jr.
 Time Test Ended: 02:20:00
 Unit No: 61
 Interval: **4354.00 ft (KB) To 4460.00 ft (KB) (TVD)**
 Reference Elevations: 3344.00 ft (KB)
 Total Depth: 4460.00 ft (KB) (TVD)
 3334.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 10.00 ft

Serial #: 8791 Inside
 Press @ Run Depth: 1318.52 psig @ 4360.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.02 End Date: 2012.11.03 Last Calib.: 2012.11.03
 Start Time: 17:10:01 End Time: 02:20:00 Time On Btm: 2012.11.02 @ 19:30:00
 Time Off Btm: 2012.11.02 @ 22:33:00

TEST COMMENT: IF: Strong blow , Built to B.O.B in 30 sec. Blow started to die back. After 20 mins. blow w as 4 in. after 30 mins.
 IS: No blow back over 60 mins.
 FF: No blow over 30 mins.
 FS: No blow back over 60 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2223.59	118.86	Initial Hydro-static
2	842.42	118.91	Open To Flow (1)
30	1307.61	137.95	Shut-In(1)
90	1318.39	143.10	End Shut-In(1)
91	1318.39	143.07	Open To Flow (2)
105	1318.52	142.47	Shut-In(2)
182	1318.81	140.76	End Shut-In(2)
183	2130.14	138.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2052.00	water-100%	23.95
476.00	w cm-10% m90%w	6.68
476.00	mcw -40%w 60%m	6.68
20.00	mud-100%	0.28

* 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.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 043001

DST#: 5

ATTN: Bob Stolzle

Test Start: 2012.11.02 @ 17:10:00

Tool Information

Drill Pipe:	Length: 3807.00 ft	Diameter: 3.80 inches	Volume: 53.40 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 56.01 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4354.00 ft			Final 92000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	105.00 ft			
Tool Length:	133.00 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
Shut In Tool	5.00			4331.00	
Hydraulic tool	5.00			4336.00	
Jars	5.00			4341.00	
Safety Joint	3.00			4344.00	
Packer	5.00			4349.00	28.00 Bottom Of Top Packer
Packer	5.00			4354.00	
Stubb	1.00			4355.00	
Perforations	4.00			4359.00	
Change Over Sub	1.00			4360.00	
Recorder	0.00	8791	Inside	4360.00	
Recorder	0.00	8673	Outside	4360.00	
Drill Pipe	95.00			4455.00	
Change Over Sub	1.00			4456.00	
Bullnose	3.00			4459.00	105.00 Bottom Packers & Anchor

Total Tool Length: 133.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 043001

DST#: 5

ATTN: Bob Stolzle

Test Start: 2012.11.02 @ 17:10:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
2052.00	water-100%	23.947
476.00	w cm-10% m90%w	6.677
476.00	mcw -40%w 60%m	6.677
20.00	mud-100%	0.281

Total Length: 3024.00 ft

Total Volume: 37.582 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

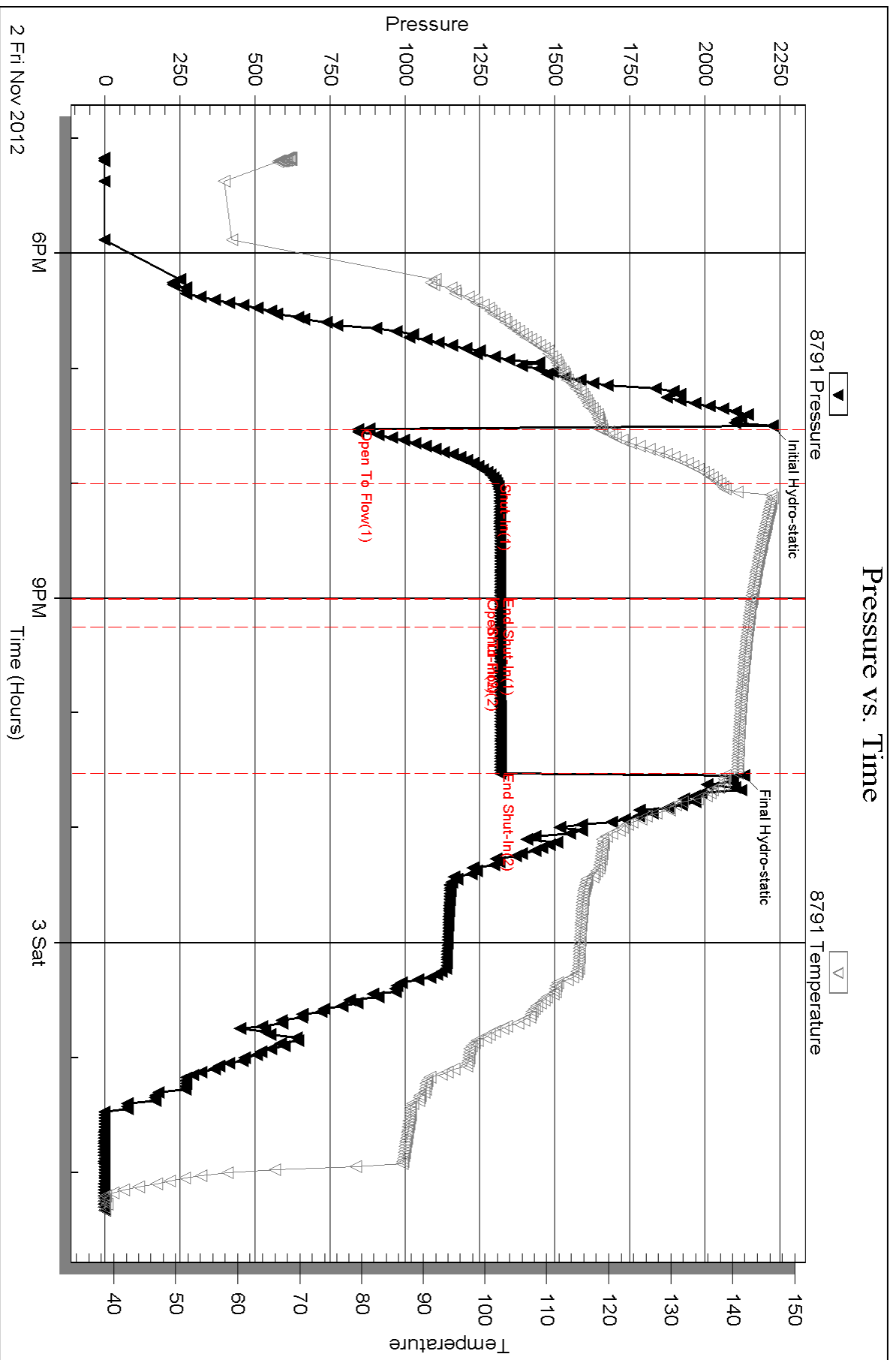
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

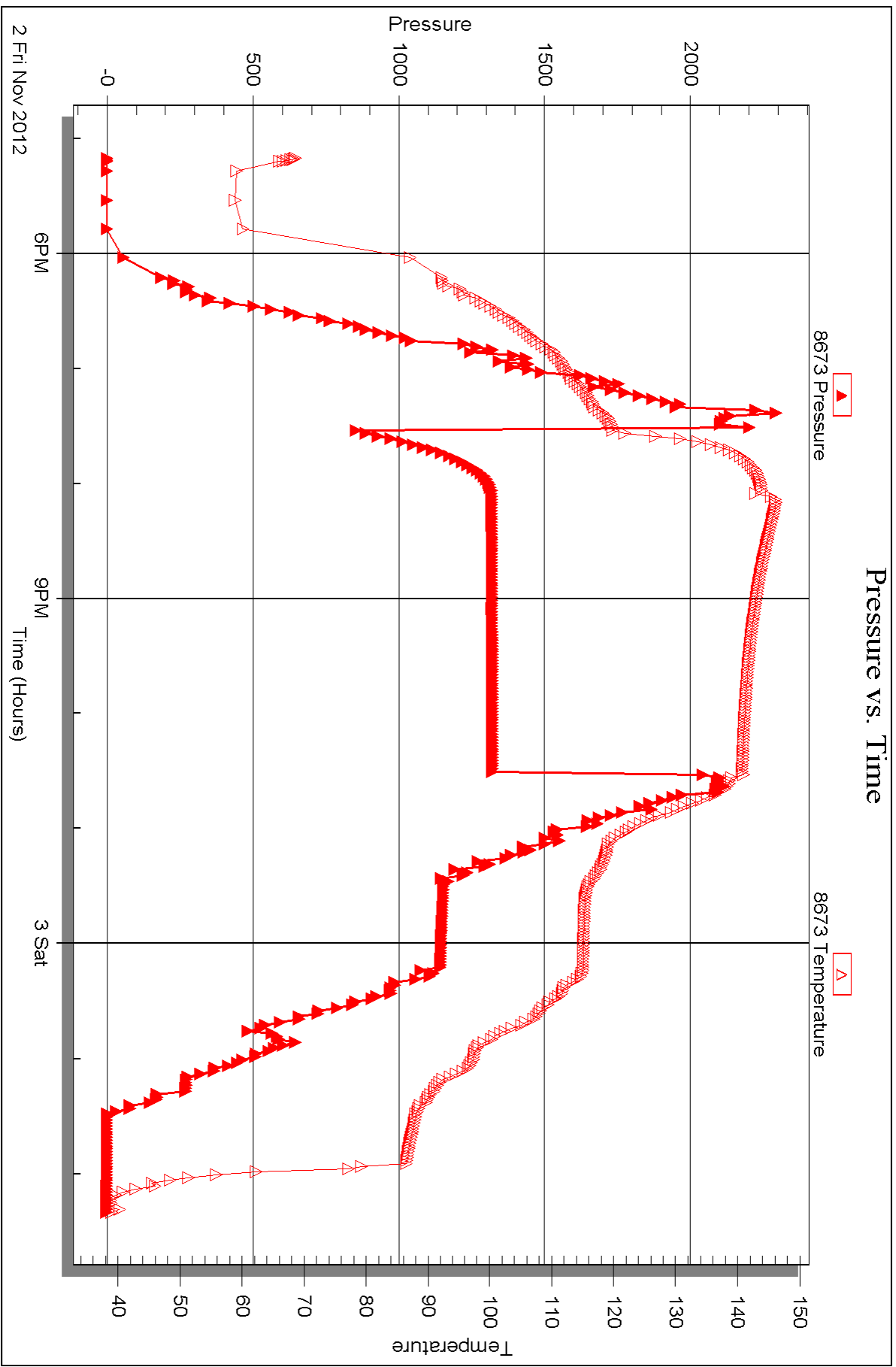


Serial #: 8673

Outside Murfin Drilling Co.

PTL #1-22

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolze

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.11.03 @ 14:05:00

End Date: 2012.11.03 @ 23:07:00

Job Ticket #: 43002 DST #: 6

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

Printed: 2012.11.13 @ 14:39:03



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water Ste 300
 Wichita KS 67202
 ATTN: Bob Stolzle

22-2s-36w Rawlins, KS
PTL #1-22
 Job Ticket: 43002 **DST#: 6**
 Test Start: 2012.11.03 @ 14:05:00

GENERAL INFORMATION:

Formation: **LKC-J,K**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 16:15:00
 Tester: Chuck Kreuzer Jr.
 Time Test Ended: 23:07:00
 Unit No: 61
 Interval: **4446.00 ft (KB) To 4535.00 ft (KB) (TVD)**
 Reference Elevations: 3344.00 ft (KB)
 Total Depth: 4535.00 ft (KB) (TVD)
 3334.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 10.00 ft

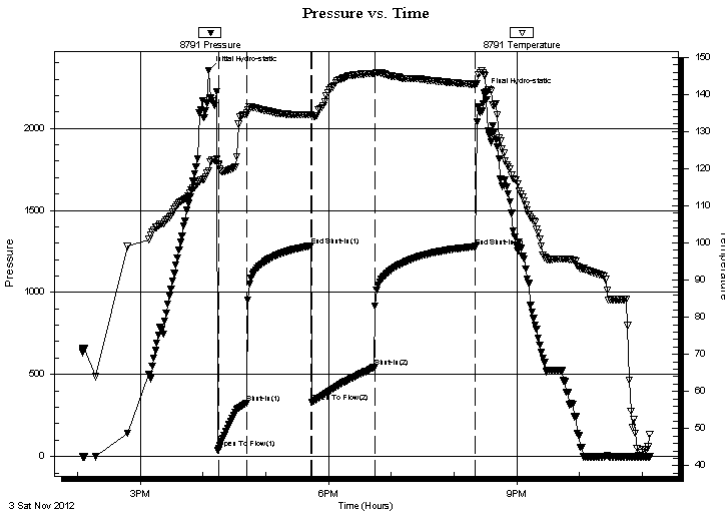
Serial #: 8791

Inside

Press @ Run Depth: 544.04 psig @ 4452.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.03 End Date: 2012.11.03 Last Calib.: 2012.11.03
 Start Time: 14:05:01 End Time: 23:07:00 Time On Btm: 2012.11.03 @ 16:05:30
 Time Off Btm: 2012.11.03 @ 20:29:00

TEST COMMENT: IF: Fair blow , Built to B.O.B in 11 mins.
 IS: No blow back over 60 mins.
 FF: Fair blow , Built to B.O.B in 11 mins.
 FS: No blow back over 90 mins.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2353.03	119.41	Initial Hydro-static
10	47.25	120.94	Open To Flow (1)
37	326.69	135.02	Shut-In(1)
98	1283.88	134.47	End Shut-In(1)
99	329.58	134.19	Open To Flow (2)
159	544.04	145.54	Shut-In(2)
255	1279.50	142.69	End Shut-In(2)
264	2216.97	145.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
531.00	water-100%	2.61
285.00	mcw -40% m60%w	4.00
285.00	mud-100%	4.00

* 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.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 43002

DST#: 6

ATTN: Bob Stolzle

Test Start: 2012.11.03 @ 14:05:00

Tool Information

Drill Pipe:	Length: 3898.00 ft	Diameter: 3.80 inches	Volume: 54.68 bbl	Tool Weight:	2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume: 57.29 bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4446.00 ft			Final	82000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	89.00 ft				
Tool Length:	117.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

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

Shut In Tool	5.00			4423.00	
Hydraulic tool	5.00			4428.00	
Jars	5.00			4433.00	
Safety Joint	3.00			4436.00	
Packer	5.00			4441.00	28.00 Bottom Of Top Packer
Packer	5.00			4446.00	
Stubb	1.00			4447.00	
Perforations	4.00			4451.00	
Change Over Sub	1.00			4452.00	
Recorder	0.00	8791	Inside	4452.00	
Recorder	0.00	8673	Outside	4452.00	
Drill Pipe	64.00			4516.00	
Change Over Sub	1.00			4517.00	
Perforations	15.00			4532.00	
Bullnose	3.00			4535.00	89.00 Bottom Packers & Anchor

Total Tool Length: 117.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 43002

DST#: 6

ATTN: Bob Stolzle

Test Start: 2012.11.03 @ 14:05:00

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:

4000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: 0.08 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
531.00	water-100%	2.611
285.00	mcw -40% m60%w	3.998
285.00	mud-100%	3.998

Total Length: 1101.00 ft Total Volume: 10.607 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

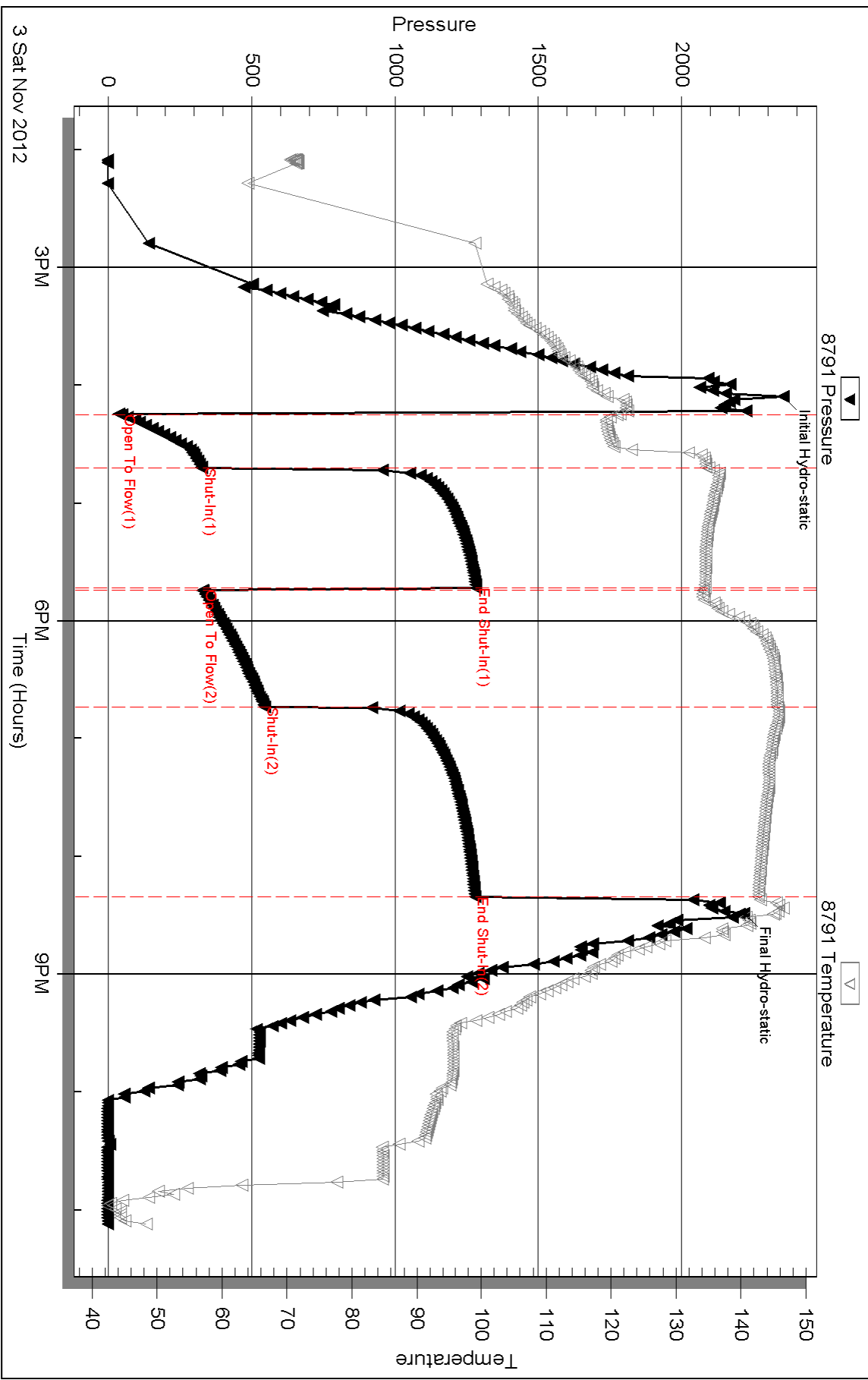
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 145 temp.

Pressure vs. Time

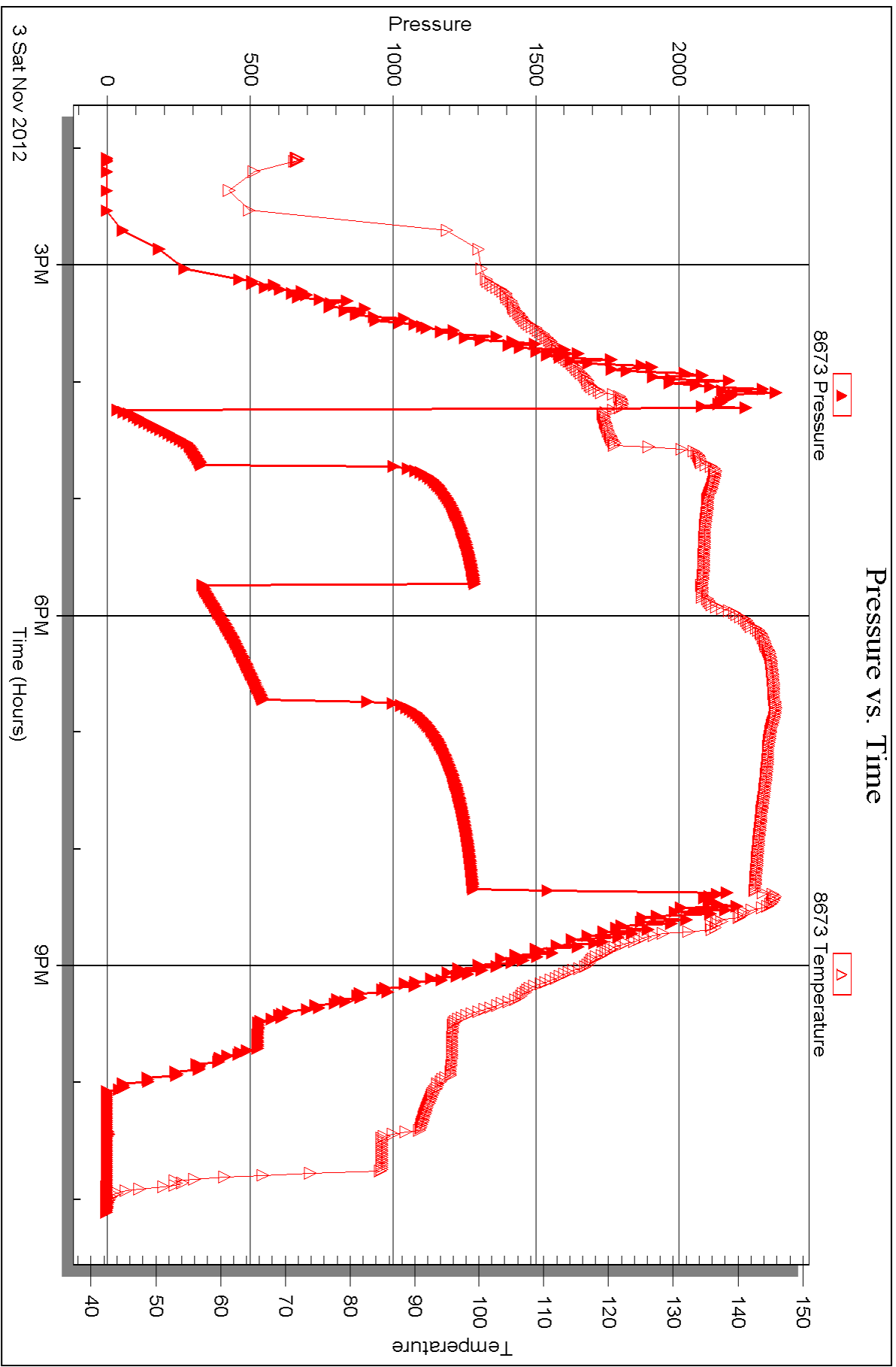


Serial #: 8673

Outside Murfin Drilling Co.

PTL #1-22

DST Test Number: 6





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Bob Stolzle

PTL #1-22

22-2s-36w Rawlins,KS

Start Date: 2012.11.04 @ 19:05:00

End Date: 2012.11.05 @ 01:56:30

Job Ticket #: 43003 DST #: 7

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

Printed: 2012.11.13 @ 14:38:20



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co.

22-2s-36w Rawlins, KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 43003

DST#: 7

ATTN: Bob Stolzle

Test Start: 2012.11.04 @ 19:05:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:13:30

Time Test Ended: 01:56:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 4638.00 ft (KB) To 4720.00 ft (KB) (TVD)

Reference Elevations: 3344.00 ft (KB)

Total Depth: 4720.00 ft (KB) (TVD)

3334.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 212.02 psig @ 4643.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.04

End Date:

2012.11.05

Last Calib.: 2012.11.05

Start Time: 19:05:01

End Time:

01:56:30

Time On Btm: 2012.11.04 @ 21:03:30

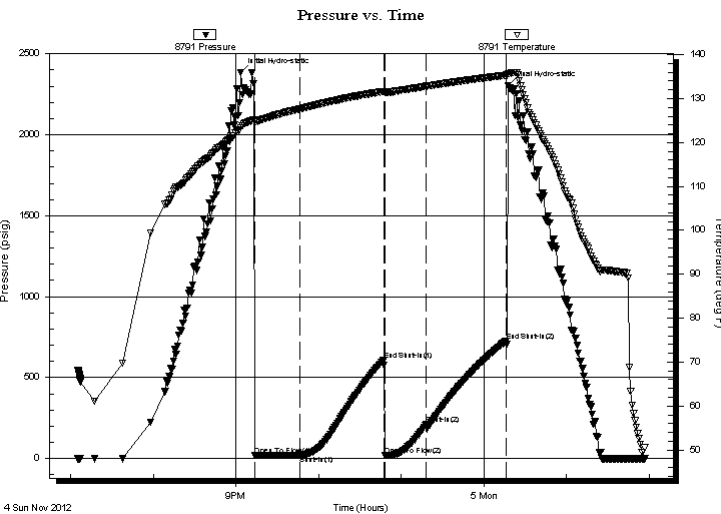
Time Off Btm: 2012.11.05 @ 00:17:30

TEST COMMENT: IF: Blow started at 1/4 in. Died in 18 mins.

IS: No blow back

FF: No blow

FS: No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2385.15	123.32	Initial Hydro-static
10	18.25	124.77	Open To Flow (1)
43	20.68	127.69	Shut-In(1)
104	608.20	131.64	End Shut-In(1)
105	21.10	131.44	Open To Flow (2)
135	212.02	132.81	Shut-In(2)
193	726.62	135.32	End Shut-In(2)
194	2305.39	135.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud-100%	0.02

* 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.

22-2s-36w Rawlins, KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 43003

DST#: 7

ATTN: Bob Stolzle

Test Start: 2012.11.04 @ 19:05:00

Tool Information

Drill Pipe:	Length: 4091.00 ft	Diameter: 3.80 inches	Volume: 57.39 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 531.00 ft	Diameter: 2.25 inches	Volume: 2.61 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 60.00 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	4638.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	110.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4615.00	
Hydraulic tool	5.00			4620.00	
Jars	5.00			4625.00	
Safety Joint	3.00			4628.00	
Packer	5.00			4633.00	28.00 Bottom Of Top Packer
Packer	5.00			4638.00	
Stubb	1.00			4639.00	
Perforations	3.00			4642.00	
Change Over Sub	1.00			4643.00	
Recorder	0.00	8791	Inside	4643.00	
Recorder	0.00	8651	Outside	4643.00	
Drill Pipe	63.00			4706.00	
Change Over Sub	1.00			4707.00	
Perforations	10.00			4717.00	
Bullnose	3.00			4720.00	82.00 Bottom Packers & Anchor

Total Tool Length: 110.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

22-2s-36w Rawlins,KS

250 N. Water Ste 300
Wichita KS 67202

PTL #1-22

Job Ticket: 43003

DST#: 7

ATTN: Bob Stolzle

Test Start: 2012.11.04 @ 19:05:00

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: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud-100%	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

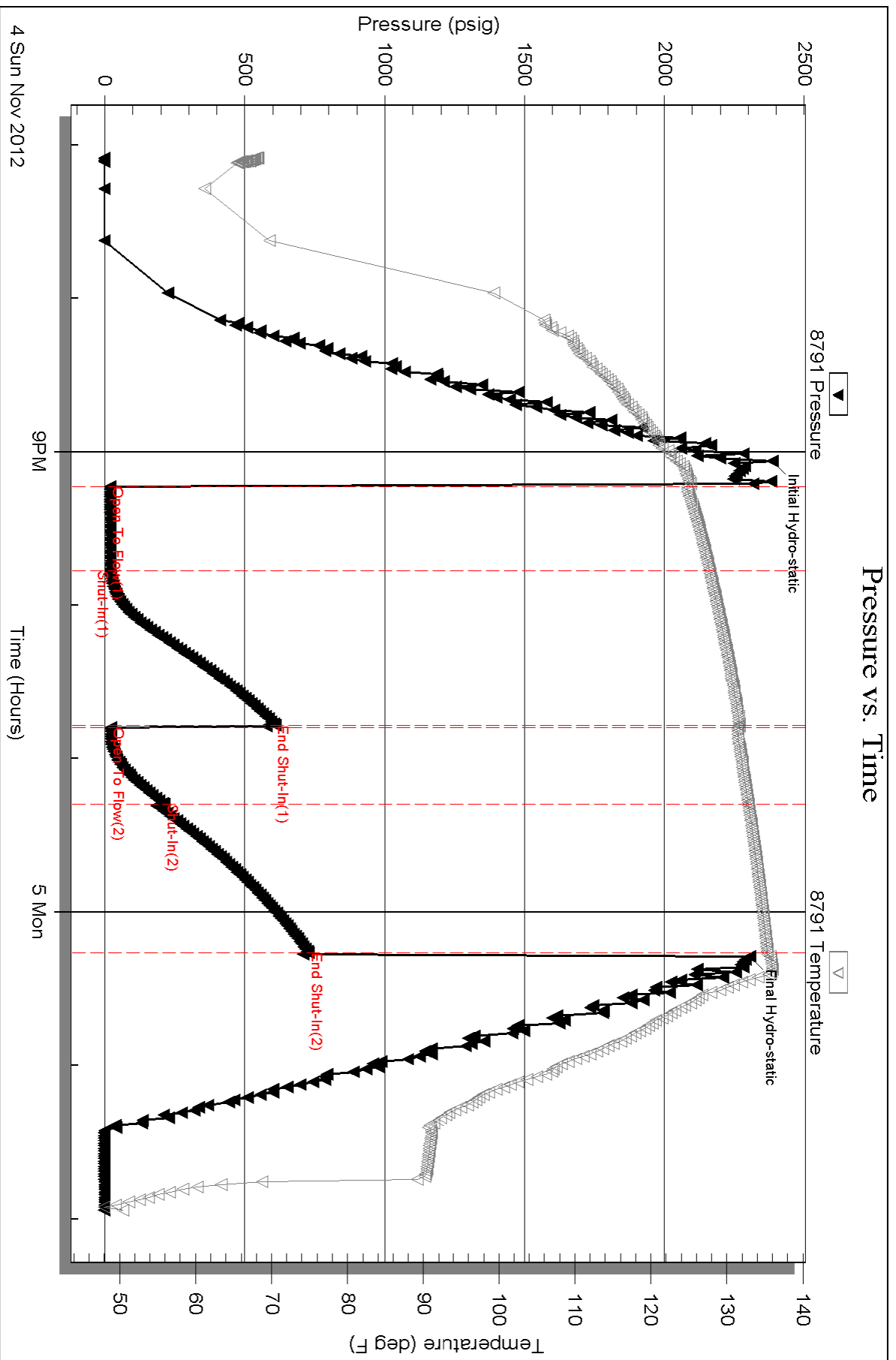
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

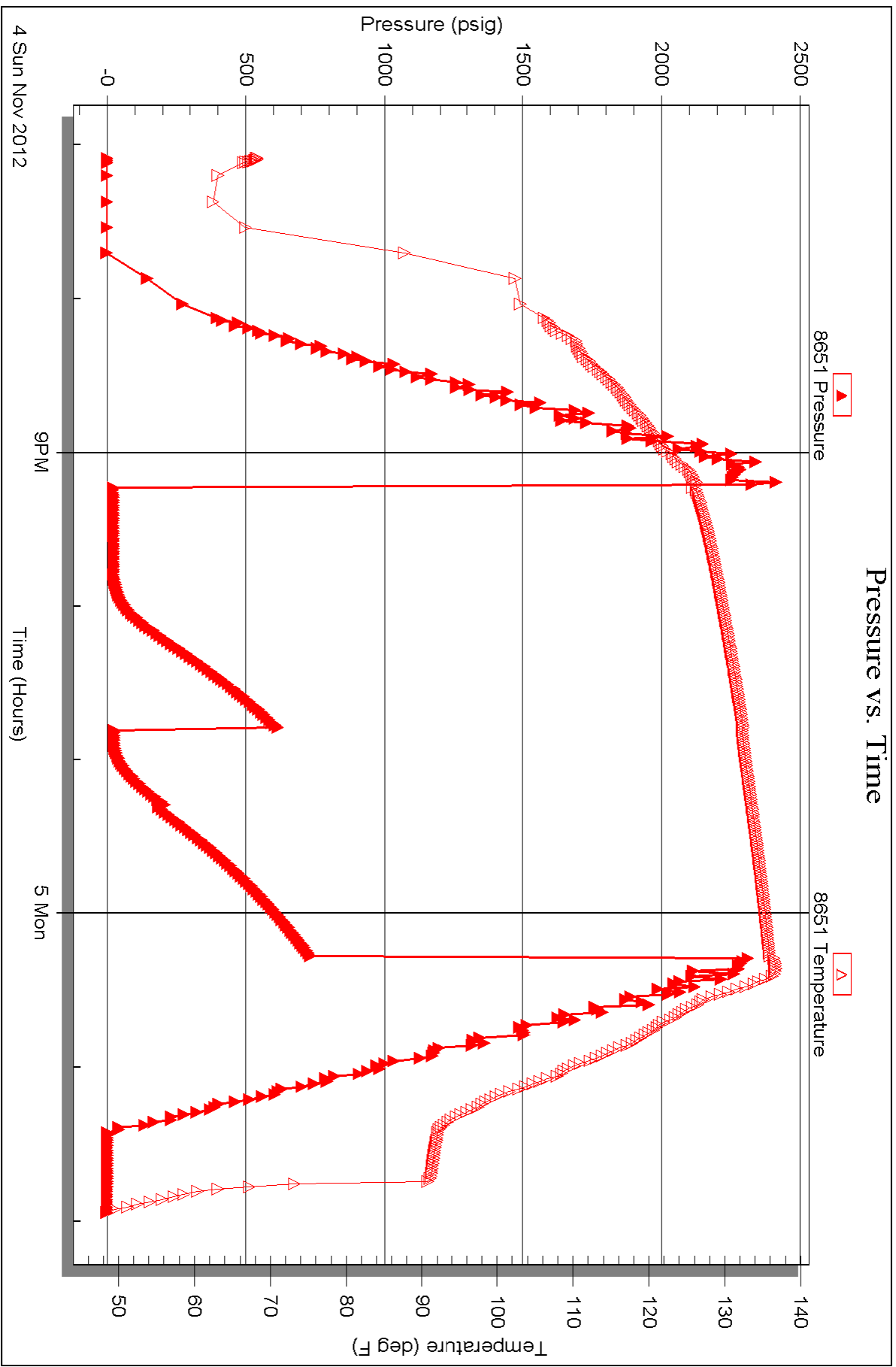


Serial #: 8651

Outside Murfin Drilling Co.

PTL #1-22

DST Test Number: 7





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

NO. 48222

Well Name & No. PTL #1-22 Test No. 11 Date 10/27/2012
 Company Murfin Drilling Co Elevation 3344 KB 3334 GL
 Address 250 N. Water Ste 300 Wichita KS. 67202
 Co. Rep / Geo. Bob Stolzle Rig Murfin #14
 Location: Sec. 22 Twp. 25 Rge. 36W Co. Rawlins State KS

Interval Tested 4026 4090 Zone Tested Topeka Fm.
 Anchor Length 64 Drill Pipe Run 3486 Mud Wt. 9.1
 Top Packer Depth 4021 Drill Collars Run 531 Vis 52
 Bottom Packer Depth 4036 Wt. Pipe Run -0- WL 6.4
 Total Depth 4090 Chlorides 1000 ppm System LCM 4#

Blow Description Running collars in hole had pressure on sub. checked and was taking on mud
check circ. sub pin was good come out to tool all that was there was head of shaft tool 19:30 - 21:30
went in with over shot. Hit bridge at 1800ft. came out went in with bit. went back in with over shot
came out didn't get tool. Got different fishing tool from Kansas fishing tool. bit tipped in with fish. Trip out
14:00. 16:30. 18:00. 19:10 - 21:10. 22:30 - 00:15
~~1:30~~ Trip in with 58 grapple got a hold of tool come out. Break tool down -
~~1:30~~ 14:00 4:00 7:40 11:10 %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	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

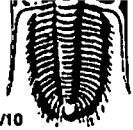
Rec Total _____ BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm
 (A) Initial Hydrostatic _____ Test Wait on Paul T-On Location 15:20
 (B) First Initial Flow _____ Jars _____ T-Started 18:05
 (C) First Final Flow _____ Safety Joint _____ T-Open _____
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled _____
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 10:AM on 10/29/2012
 (F) Second Final Flow _____ Mileage 55x2=110x1.55=170.50 Comments Worked on Air Com.
 (G) Final Shut-In _____ Sampler to get tools from Paul 1 hr. After they got out of hole
 (H) Final Hydrostatic _____ Straddle _____

Initial Open 30 Shale Packer _____ Ruined Shale Packer _____
 Initial Shut-In 66 Extra Packer _____ Ruined Packer _____
 Final Flow 30 Extra Recorder _____ Extra Copies _____
 Final Shut-In 60 Day Standby _____ Sub Total _____
 Accessibility _____ Total _____
 Sub Total _____ MP/DST Disc't _____

Approved By Robert Stolzle, Agent

Our Representative Chuck Meyer

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.



TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

NO. 48223

Well Name & No. PTL # 1-22 Test No. 2 Date 10-27-2012
 Company Murphy Drilling Co. Elevation 3344 KB 3334 GL
 Address 250 N. Water St. 300. Wichita Ks 67202
 Co. Rep / Geo. Bob Stolze Rig Murphy # 14
 Location: Sec. 22 Twp. 25 Rge. 36W Co. Rawlins State Ks

Interval Tested 4026 4090 Zone Tested Topeka Fm.
 Anchor Length 64 Drill Pipe Run 3488 Mud Wt. 9.1
 Top Packer Depth 4021 Drill Collars Run 531 Vis 52
 Bottom Packer Depth 4026 Wt. Pipe Run -0- WL 6.4
 Total Depth 4090 Chlorides 1000 ppm System LCM 4#

Blow Description IF: Weak blow, Built to 1/2 in. over 10 mins started to circ. Weak surface after 30 mins.
FSI: No blow back
FF: No blow
FSI: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>150cm</u>				<u>90</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 121 Gravity 170.50 API RW 170.50 @ 170.50 ° F Chlorides 170.50 ppm

(A) Initial Hydrostatic <u>2139</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>15:50</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>18:25</u>
(C) First Final Flow <u>26</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>21:19</u>
(D) Initial Shut-In <u>1163</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>00:25</u>
(E) Second Initial Flow <u>26</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2:25</u>
(F) Second Final Flow <u>31</u>	<input checked="" type="checkbox"/> Mileage <u>55x2 = 110x2 = 220</u> <u>170.50</u>	Comments
(G) Final Shut-In <u>1096</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2012</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1745.50</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't

Approved By Robert Stolze, Agent Our Representative Chuck Meyer

Librite 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.

T.L. #1-22

Test No. 3 Date 10-31-2012

Company MurFin Drilling Co. Elevation 3344 KB 3334 GL

Address 250 N. Water STE 300 Wichita Drilling Co.

Co. Rep / Geo. Bob Stolzle Rig MurFin #14

Location: Sec. 22 Twp. 25 Rge. 36W Co. Rawlins State Ks

Interval Tested 4136 4220 Zone Tested Oread

Anchor Length 84 Drill Pipe Run 3585 Mud Wt. 9.1

Top Packer Depth 4131 Drill Collars Run 531 Vis 65

Bottom Packer Depth 4136 Wt. Pipe Run -0- WL 6.0

Total Depth 4220 Chlorides 900 ppm System LCM 6#

Blow Description IF: Fair blow, Built to 8 in. over 30mins.

ISI: Bled off, No blow back over 60mins

FF: Fair blow, Built to B.O.B in 40mins.

FSI: Bled off, No blow back over 90mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>127</u>	<u>mud</u>				<u>100</u>
<u>265</u>	<u>wcm</u>			<u>35</u>	<u>65</u>
<u>265</u>	<u>mcw</u>			<u>75</u>	<u>25</u>

Rec Total 657 BHT 137 Gravity _____ API RW .68 @ 140 ° F Chlorides 3800 ppm

(A) Initial Hydrostatic 2102 Test 1250 T-On Location 16:50

(B) First Initial Flow 18 Jars 250 T-Started 16:55

(C) First Final Flow 190 Safety Joint 75 T-Open 19:00

(D) Initial Shut-In 1235 Circ Sub T-Pulled 23:00

(E) Second Initial Flow 196 Hourly Standby T-Out 1:35

(F) Second Final Flow 353 Mileage 170.50 Comments _____

(G) Final Shut-In 1233 Sampler _____

(H) Final Hydrostatic 2014 Straddle _____

Shale Packer 250 Ruined Shale Packer _____

Extra Packer _____ Ruined Packer _____

Extra Recorder _____ Sub Total 0

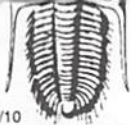
Day Standby _____ Total 1995.50

Accessibility _____ MP/DST Disc't _____

Sub Total 1995.50

Approved By _____ Our Representative Chuck Kayer

Triolite 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.



TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

NO. 48225

Well Name & No. P.T.L. # 1-22 Test No. 4 Date 11-01-2012
 Company Murfin Drilling Co. Elevation 3344 KB 3334 GL
 Address 250 N. Water Ste. 300 Wichita Ks. 67202
 Co. Rep / Geo. Bob Stolze Rig Murfin # 14
 Location: Sec. 22 Twp. 2S Rge. 36W Co. Rawlins State Ks.

Interval Tested 4210 4360 Zone Tested EKE=A, B
 Anchor Length 150 Drill Pipe Run 3680 Mud Wt. 9.1
 Top Packer Depth 4205 Drill Collars Run 574 Vis 62
 Bottom Packer Depth 4210 Wt. Pipe Run - 0' WL 6.4
 Total Depth 4360 Chlorides 1,400 ppm System LCM 6#

Blow Description IF: Fair blow, Built to B.O.B in 25 mins.
ISI: Bled off, Blow back after 10 mins. Built to 1/4 in. over 60 mins.
FF: Fair blow, Built to B.O.B in 30 mins.
FSI: Bled off, ~~Blow~~ ^{NO Flow} back after 90 mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>95</u>	<u>go</u>	<u>20</u>	<u>80</u>		
<u>190</u>	<u>gvsocwm</u>	<u>10</u>	<u>30</u>	<u>10</u>	<u>50</u>
<u>190</u>	<u>gvsocm</u>	<u>10</u>	<u>5</u>		<u>85</u>
<u>151</u>	<u>gocm</u>	<u>20</u>	<u>40</u>		<u>40</u>
<u>200</u>	<u>gas in pipe</u>	<u>20</u>	<u>20</u>		<u>20</u>

Rec Total 626 BHT 135 Gravity 28 API RW @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 2115 Test 1250 T-On Location 15:30
 (B) First Initial Flow 35 Jars 250 T-Started 15:55
 (C) First Final Flow 147 Safety Joint 75 T-Open 18:30
 (D) Initial Shut-In 1243 Circ Sub T-Pulled 22:30
 (E) Second Initial Flow 157 Hourly Standby T-Out 00:47
 (F) Second Final Flow 291 Mileage 55 x 2 = 110 x 1.55 = 170.50 Comments _____
 (G) Final Shut-In 1230 Sampler _____
 (H) Final Hydrostatic 2089 Straddle _____ Ruined Shale Packer 350
 Shale Packer 250 Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 350
 Day Standby _____ Total 2345.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1995.50

Approved By _____ Our Representative Chuck Payer

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 043001

4/10

Well Name & No. P.T.L # 1-22 Test No. 5 Date 11-02-2012
 Company Murfin Drilling Co. Elevation 3344 KB 3334 GL
 Address 250 N. water ste. 300 Wichita Ks 67202
 Co. Rep / Geo. Bob Stolze Rig Murfin #14
 Location: Sec. 22 Twp. 2s Rge. 36w Co. Rawlins State Ks

Interval Tested 4354 4460 Zone Tested LKC-G, H
 Anchor Length 106 Drill Pipe Run 3807 Mud Wt. 9.2
 Top Packer Depth 4349 Drill Collars Run 531 Vis 54
 Bottom Packer Depth 4354 Wt. Pipe Run 0 WL 6.4
 Total Depth 4460 Chlorides 1,400 ppm System LCM 7#

Blow Description IF: strong blow, Built to B. QB in 30 sec. Blow Died to 4in. over 30 mins
ISI: Bled off in one min. No blow back over 60 mins
FF: No blow on sec. open over 15 mins.
FST: No blow back over 60 mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>mud</u>			<u>100</u>	
<u>476</u>	<u>mcw</u>			<u>40</u>	<u>60</u>
<u>476</u>	<u>wcm</u>			<u>90</u>	<u>10</u>
<u>2052</u>	<u>100</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 3024 BHT _____ Gravity _____ API RW .63 @ .33 ° F Chlorides 24,000 ppm

(A) Initial Hydrostatic <u>2224</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>17:00</u>
(B) First Initial Flow <u>842</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>17:05</u>
(C) First Final Flow <u>1308</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>19:32</u>
(D) Initial Shut-In <u>1318</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>22:30</u>
(E) Second Initial Flow <u>1318</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2:20</u>
(F) Second Final Flow <u>1319</u>	<input checked="" type="checkbox"/> Mileage <u>55x2 = 110x1.55</u> 170.50	Comments _____
(G) Final Shut-In <u>1319</u>	<input type="checkbox"/> Sampler	<input checked="" type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2130</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>15</u>	<input type="checkbox"/> Day Standby	Total <u>1745.50</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
Sub Total <u>1745.50</u>		

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 043002

Well Name & No. P.T.L # 1-22 Test No. 6 Date 11-03-2012
 Company Murfin Drilling Co. Elevation 3344 KB 3334 GL
 Address 250 N. Water Ste. 300 Wichita Ks. 67202
 Co. Rep / Geo. Bob Stolze Rig Murfin #14
 Location: Sec. 22 Twp. 2S Rge. 36W Co. Rawlins State Ks

Interval Tested 4446 4535 Zone Tested LKC-J, K
 Anchor Length 89 Drill Pipe Run 3898 Mud Wt. 9.0
 Top Packer Depth 4441 Drill Collars Run 531 Vis 58
 Bottom Packer Depth 4446 Wt. Pipe Run - 0 - WL 5.6
 Total Depth 4535 Chlorides 1200 ppm System LCM 8#

Blow Description IF: Fair blow, Built to B.O.B in 11 mins.
ISI: No blow back over 60 mins.
FF: Fair blow, Built to B.O.B in 11 mins.
FSI: No blow back over 90 mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>285</u>	<u>mud</u>				<u>100%</u>
<u>285</u>	<u>MCWD</u>			<u>60%</u>	<u>40%</u>
<u>531</u>	<u>Water</u>			<u>100%</u>	

Rec Total 1101 BHT 145 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2353</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>14:00</u>
(B) First Initial Flow <u>47</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>14:00</u>
(C) First Final Flow <u>327</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>16:15</u>
(D) Initial Shut-In <u>1284</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>20:15</u>
(E) Second Initial Flow <u>330</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>23:07</u>
(F) Second Final Flow <u>544</u>	<input checked="" type="checkbox"/> Mileage <u>55x2 = 110x1.55</u> 170.50	Comments _____
(G) Final Shut-In <u>1280</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2217</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total 0
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total 1745.50
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total 1745.50	

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

Rec. # 871
Rec out 8651

NO. 043003

Well Name & No. P.T.L #1-22 Test No. 7 Date 11-04-2012
 Company Mur Fin Drilling Co. Elevation 3344 KB 3334 GL
 Address 250 N. Water Ste. 300 Wichita Ks. 67202
 Co. Rep / Geo. Bob Stolzle Rig Mur Fin #14
 Location: Sec. 22 Twp. 25 Rge. 36W Co. Rawlins State K5

Interval Tested 4638 4720 Zone Tested Pawnee
 Anchor Length 82 Drill Pipe Run 4091 Mud Wt. 9.1
 Top Packer Depth 4633 Drill Collars Run 531 Vis 73
 Bottom Packer Depth 4638 Wt. Pipe Run -0- WL 6.0
 Total Depth 4720 Chlorides 1,200 ppm System LCM 6#

Blow Description IF: Blow started at 1/4 in. Dried in 18 mins.
ISI: No blow Back
FF: No blow
FSI: No blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>mud</u>			<u>100</u>	

Rec Total 5 BHT 135 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2385 Test 1250 T-On Location 18:45
 (B) First Initial Flow 18 Jars 250 T-Started 19:05
 (C) First Final Flow 21 Safety Joint 75 T-Open 21:13
 (D) Initial Shut-In 608 Circ Sub _____ T-Pulled 00:10
 (E) Second Initial Flow 210 Hourly Standby _____ T-Out 1:56
 (F) Second Final Flow 212 Mileage 55 x 2 = 110 x 1.55 = 341 Comments Lead tools on 11-05
 (G) Final Shut-In 727 Sampler _____ at _____
 (H) Final Hydrostatic 2305 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1916.00
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1916.00

Approved By _____ Our Representative Chuck [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.



PO Box 93999
Southlake, TX 76092

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

*acct.
Prod-Liz H*

INVOICE

Invoice Number: 133255
Invoice Date: Oct 24, 2012
Page: 1



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

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Murfin	PTL #1-22	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Oct 24, 2012	11/23/12

Quantity	Item	Description	Unit Price	Amount
350.00	MAT	Class A Common	17.90	6,265.00
12.00	MAT	Chloride	64.00	768.00
367.50	SER	Cubic Feet	2.48	911.40
1,355.51	SER	Ton Mileage	2.60	3,524.35
1.00	SER	Surface	1,512.25	1,512.25
80.00	SER	Pump Truck Mileage	7.70	616.00
1.00	SER	Manifold & Head Rental	275.00	275.00
80.00	SER	Light Vehicle Mileage	4.40	352.00
1.00	EQP	8.5/8 Wooden Plug	107.64	107.64
1.00	CEMENTER	Alan Ryan		
1.00	EQUIP OPER	Wayne McGhghy		

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

\$5231.04

ONLY IF PAID ON OR BEFORE
Nov 18, 2012

Subtotal	14,331.64
Sales Tax	574.82
Total Invoice Amount	14,906.46
Payment/Credit Applied	
TOTAL	14,906.46

OK

- 5231.04
9,675.42

ALLIED OIL & GAS SERVICES, LLC 058796

Federal Tax I.D.# 20-5976804

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

SERVICE POINT:

Oakley, Ki

DATE <i>10/24/12</i>	SEC <i>80</i>	TWP <i>2</i>	RANGE <i>36</i>	CALLED OUT	ON LOCATION <i>12:00pm</i>	JOB START <i>2:00pm</i>	JOB FINISH <i>2:30pm</i>
LEASE <i>PTC</i>	WELL # <i>1-22</i>	LOCATION <i>McDonald 52 1/4 E 10 into</i>	COUNTY <i>Beckham</i>	STATE <i>OK</i>			
OLD OR NEW (Circle one)							

CONTRACTOR <i>Marfin 14</i>	OWNER <i>Same</i>		
TYPE OF JOB <i>System</i>			
HOLE SIZE <i>12 1/4</i>	T.D. <i>390'</i>	CEMENT	
CASING SIZE <i>8 7/8</i>	DEPTH <i>390'</i>	AMOUNT ORDERED	<i>350 Com 370 CC</i>
TUBING SIZE	DEPTH		
DRILL PIPE	DEPTH		
TOOL	DEPTH		
PRES. MAX	MINIMUM		
MEAS. LINE	SHOE JOINT		
CEMENT LEFT IN CSO.	<i>15'</i>	COMMON <i>350</i>	<i>@ 17.80 6265.00</i>
PERES.		POZMIX	<i>@</i>
DISPLACEMENT		GBL	<i>@</i>
		CHLORIDE <i>12</i>	<i>@ 69.00 828.00</i>
		ASC	<i>@</i>

EQUIPMENT

PUMP TRUCK	CEMENTER <i>Alan Ryan 1</i>
# <i>422</i>	HELPER <i>Wayne M. Gagey 2</i>
BULK TRUCK	
# <i>323</i>	DRIVER <i>Tom Tuss</i>
BULK TRUCK	
#	DRIVER

HANDLING <i>367.50</i>	<i>@ 2.40</i>	<i>911.40</i>
MILBAGE <i>2.22 mil/mile</i>	<i>@ 16.949/mile</i>	<i>3524.31</i>
		TOTAL <i>11462.20</i>

REMARKS:

Analogy, Circulate, Mix Cement, Displacement

Shut in

Cement did Circulate

Truck for Alan, Wayne, Tom

CHARGE TO: *Marfin Drilling*

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB <i>390'</i>	
PUMP TRUCK CHARGE	<i>1512.25</i>
EXTRA FOOTAGE	<i>@</i>
MILBAGE <i>80</i>	<i>@ 7.22 610.00</i>
MANIFOLD <i>Head</i>	<i>@ 275.00</i>
<i>UT Vehicle 80</i>	<i>@ 4.00 320.00</i>
TOTAL <i>2755.25</i>	

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.

PLUG & FLOAT EQUIPMENT

<i>8 7/8 Woodruff Plug</i>	<i>@</i>	<i>107.00</i>
	<i>@</i>	
	<i>@</i>	
	<i>@</i>	
	<i>@</i>	
		TOTAL <i>107.00</i>
SALUS TAX (If Any) <i>574.82</i>	<i>State 1.5</i>	
TOTAL CHARGES	<i>14,331.64</i>	
DISCOUNT <i>5231.04</i>	IF PAID IN 30 DAYS	

PRINTED NAME *Craig Unruh*

SIGNATURE *Craig Unruh*

36.520



CONSOLIDATED
Oil Well Services, LLC

Accts - cc:shir cc:WF cc:LR-1

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

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

INVOICE

Invoice # 254283

Invoice Date: 11/12/2012 Terms: 10/10/30,n/30

Page 1

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

PTL 1-22
39115
22-2-36
11-07-2012
KS

USED FOR 10103
APPROVED JFR

Part Number	Description	Qty	Unit Price	Total
1126	OIL WELL CEMENT	225.00	22.5500	5073.75
1110A	KOL SEAL (50# BAG)	1125.00	.5600	630.00
4159	FLOAT SHOE AFU 5 1/2"	1.00	413.0000	413.00
4454	5 1/2" LATCH DOWN PLUG	1.00	567.0000	567.00
4136	TURBOLIZER 5 1/2"	15.00	72.0000	1080.00
1102	CALCIUM CHLORIDE (50#)	240.00	.8900	213.60
1111A	SODIUM METASILICATE	200.00	2.4000	480.00
1215	KCL SUB MB6875 CC3107	2.00	35.7000	71.40
4315	ROTATING SCRATCHERS	12.00	90.0000	1080.00
1144G	MUD FLUSH (SALE)	500.00	1.0000	500.00
1111	SODIUM CHLORIDE (GRANULA)	100.00	.0000	.00

Sublet Performed	Description	Total
9996-130	CEMENT MATERIAL DISCOUNT	-1003.74
9996-130	CEMENT MATERIAL DISCOUNT	-7.14
9995-130	CEMENT EQUIPMENT DISCOUNT	-431.02

Description	Hours	Unit Price	Total
399 CEMENT PSI CHARGES	1.00	2950.00	2950.00
399 EQUIPMENT MILEAGE (ONE WAY)	60.00	5.00	300.00
566 TON MILEAGE DELIVERY	1.00	1060.20	1060.20

Amount Due 15226.96 if paid after 12/12/2012

Parts:	10108.75	Freight:	.00	Tax:	727.21	AR	13704.26
Labor:	.00	Misc:	.00	Total:	13704.26		
Sublt:	-1441.90	Supplies:	.00	Change:	.00		

Signed _____ Date _____



CONSOLIDATED
Oil Well Services, LLC

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

FIELD TICKET & TREATMENT REPORT
CEMENT

TICKET NUMBER 39115
LOCATION Oakley, KS
FOREMAN Kelly Gabe
Walt Dinkel

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
11-7-12	5406	PTL 1-22	22	2	36	Rawlins	
CUSTOMER		Mc Donal		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS		E toras		399	Damon M		
CITY		5 N		566	Travis W		
STATE		1/2 W					
ZIP CODE		N.S.					

JOB TYPE Prod HOLE SIZE 7 7/8 HOLE DEPTH 5060' CASING SIZE & WEIGHT 5 1/2 15.5 #
CASING DEPTH 5053' DRILL PIPE _____ TUBING _____ OTHER Shoe (23.45)
SLURRY WEIGHT 13 # SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 22.45
DISPLACEMENT 119 3/4 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: safety meeting, ran float equip on JT #3 cent. 1, 4, 7, 10, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, ran 58 JTs broke circulation, finished running pipe to bottom & circulated for _____, 118 JTs total pumped 5 bbl water, flush, 5 bbl water, mixed 175 sks OWC 5 # Kol-seal, down center, mixed 305Ks RH, 205Ks RMH, released plug & displaced with 118 1/4 bbl water with 850 # lift & plug landed @ 1500 #, released pressure float held, washed out pumps & lines, rigged down

I thank you Kelly & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401P	1	PUMP CHARGE	2950 ⁰⁰	2950 ⁰⁰
5406	60	MILEAGE	5 ⁰⁰	300 ⁰⁰
1126	225 sks	OWC	22 ⁵³	5073 ⁷⁵
110A	1125 #	Kol-seal	.56	630 ⁰⁰
5407A	10.58	TON mileage delivery	167	1060 ²⁰
4159	1	5 1/2 AFU float shoe (w)	413 ⁰⁰	413 ⁰⁰
4454	1	5 1/2 latchdown / plug (w)	567 ⁰⁰	567 ⁰⁰
4136	15	5 1/2 turbalizer	72 ⁰⁰	1080 ⁰⁰
1102	240 #	calcium chloride } Floocheck	9.79	2360
111A	200 #	sodium Metasilicate	24 ⁰⁰	480 ⁰⁰
1215	2 gal	KCl	35 ⁷⁰	71 ⁴⁰
4315	12	Rotating scratchers	90 ⁰⁰	1080 ⁰⁰
1144G	500 gal	mud flush	1 ⁰⁰	500 ⁰⁰
1111	100 #	salt		NC
		Subtotal		14418.95
		Less 10% discount		1441.90
		total 12,977.05		
		SALES TAX		727.21
		ESTIMATED TOTAL		13704.26

Ravin 3737

10:20 PM
AUTHORIZATION *[Signature]*

TITLE _____

DATE 11-7-12

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.

254283