



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1157078
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: _____



1157078

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

September 03, 2013

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

Re: ACO1
API 15-023-21362-00-00
Patti 'G' 1-4
SE/4 Sec.04-01S-37W
Cheyenne 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
Patti G #1-4
660' FSL 2200' FEL
Sec. 4-T1S-R37W
3147' KB

Berexco
Mears 'A' #1-9
1820' FNL 620' FEL
Sec. 9-T1S-R37W
3140' KB

Formation	Sample top	Datum	Ref	Log Top	Datum	Ref	Log Top	Datum
Anhydrite	3089	+58	+6	3110	+37	3110	3088	+52
B/Anhydrite	3123	+24	+7	3143	+4	3143	3123	+17
Neva	3563	-416	-12	3563	-416	3563	3544	-404
Red Eagle	3628	-481	-14	3626	-479	3626	3607	-467
Foraker	3674	-527	-11	3674	-527	3674	3656	-516
Stotler	3826	-679	-14	3822	-675	3822	3805	-665
Topeka	3897	-750	-13	3893	-746	3893	3877	-737
Oread	4029	-882	-12	4027	-880	4027	4010	-870
Lansing	4111	-964	-12	4108	-961	4108	4092	-952
Stark	4328	-1181	-13	4321	-1174	4321	4308	-1168
BKC	4383	-1236	-12	4380	-1233	4380	4364	-1224
Pawnee	4507	-1360	-14	4498	-1351	4498	4486	-1346
Cherokee	4588	-1441	-8	4586	-1439	4586	4673	-1533
Mississippi	NR			NR			4802	-1662
RTD	4670	-1523					5142	-2002
LTD				4669	-1522	4669	5084	-1944

Jeff Christian

PETROLEUM GEOLOGIST

Wichita, Kansas

GEOLOGISTS' REPORT
 THE LOGS AND SAMPLE LOGS

OPERATOR MUREN DRILLING COMPANY
LENS PATTTI 'G' # 1.4
LOCATION 660 FSL & 2200' FEL

SEC. 4 **TWP.** 1 S **RNG.** 37 W
COUNTY CHEYENNE **STATE** KANSAS
FIELD NA
APR 15-02-21362
CONTRACTOR COMPANY TOOLS
DRILLING STARTED 05/19/2013 **COMPLETION** 05/20/2013
MUD DISPLACED 2922' **MUD TYPE** CHEMICAL
DRILLING TIME KEPT FROM 3490' **TO** R/D
SAMPLES SAVED FROM 3490' **TO** R/D
SAMPLES EXAMINED FROM 3490' **TO** R/D
DEOLOGICAL SUPERVISION FROM 3900' **TO** R/D

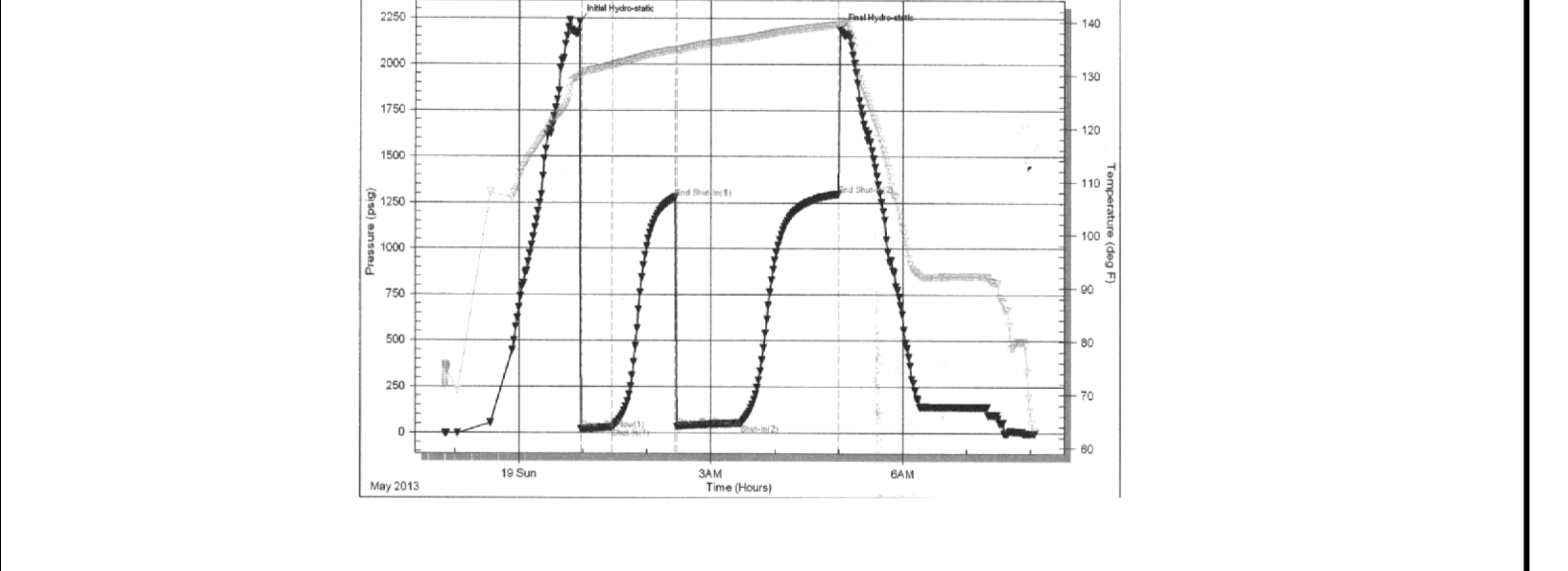
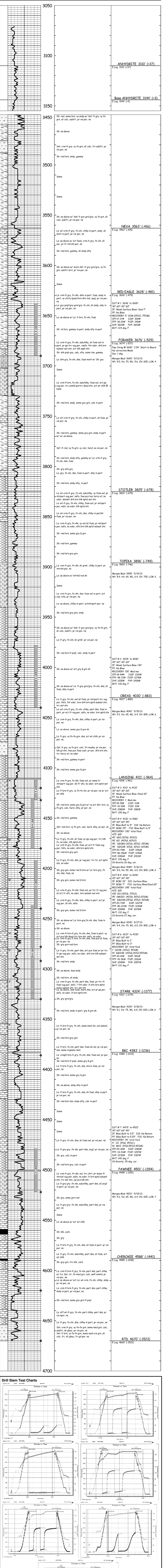
FORMATION TOP LOGS SAMPLE
NAME DATUM TOP DATUM BHCS
ANHYDRITE 3110' (-37) 3100' (-24)
FORAKER 3674' (-527) 3674' (-527)
TOPEKA 3893' (-746) 3897' (-780)
OREAD 4027' (-880) 4029' (-882)
LANSING 4108' (-961) 4111' (-964)
STARK 4321' (-1173) 4328' (-1181)
BKC 4380' (-1233) 4383' (-1236)
PAWNEE 4498' (-1351) 4502' (-1355)
CHEROKEE 4585' (-1438) 4588' (-1441)
 4669' (-1522) 4670' (-1523)

ELEVATIONS
KB 3147'
GL 3137'

MEASUREMENTS FROM K/S
CONDUCTOR NONE
CASING RECORD
Surface 8.5/ft @ 224'
W/ 190 SX
RIG NO. 14
Production 51/2 @ 4664'

DATE	7:00 AM DEPTH	REMARKS
5/19/13	MIRT	SPUD 6:00 pm
5/10/13	227'	WOC dev 1/2 deg.
5/11/13	1850'	DRLG.
5/12/13	3085'	DRLG.
5/13/13	3660'	DRLG.
5/14/13	3800'	DRLG dev. 1 deg. @ 3690'
5/15/13	4040'	TIH after DST # 2
5/16/13	4180'	TOH for DST # 4
5/17/13	4240'	OB w/ DST # 5 dev. 2 deg.
5/18/13	4330'	TIH after DST # 6
5/19/13	4522'	TOH with DST # 7 RTD 4670' @ 7:15 pm dev. 2 1/4 deg.
5/20/13	4670'	Finish logging 5:00 am

Remarks
 5 1/2" production casing set to further test the Lansing / Kansas City and Pawnee formations.
 Electric log measurements correlate about 3' high compared to rotary measurements.
 Samples deposited at the Kansas Geological Survey.
 Respectfully Submitted,
Jeff Christian
 Jeff Christian





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.13 @ 15:45:00

End Date: 2013.05.13 @ 22:55:30

Job Ticket #: 50672 DST #: 1

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

Printed: 2013.05.24 @ 08:45:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50672

DST#: 1

Test Start: 2013.05.13 @ 15:45:00

GENERAL INFORMATION:

Formation: **Foraker**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:08:30

Time Test Ended: 22:55:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3638.00 ft (KB) To 3690.00 ft (KB) (TVD)

Reference Elevations: 3147.00 ft (KB)

Total Depth: 3690.00 ft (KB) (TVD)

3137.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 19.58 psig @ 3639.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.05.13

End Date:

2013.05.13

Last Calib.: 2013.05.13

Start Time: 15:45:01

End Time:

22:55:30

Time On Btm: 2013.05.13 @ 17:53:00

Time Off Btm: 2013.05.13 @ 21:28:00

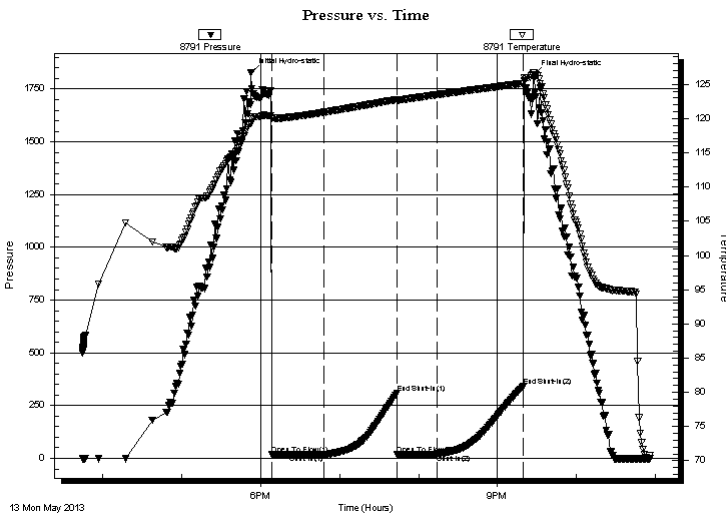
TEST COMMENT: IF: Weak blow, Died in 7 mins.

IS: No blow back

FF: No blow

FS: No blow back

PRESSURE SUMMARY



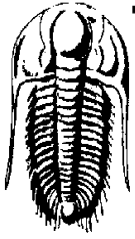
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1828.88	119.34	Initial Hydro-static
16	17.09	119.95	Open To Flow (1)
56	16.76	120.92	Shut-In(1)
111	309.47	122.76	End Shut-In(1)
111	17.60	122.67	Open To Flow (2)
141	19.58	123.47	Shut-In(2)
207	340.23	125.12	End Shut-In(2)
215	1819.83	126.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	vsocm-25%o75%m	0.02

Gas Rates

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



TRILLOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

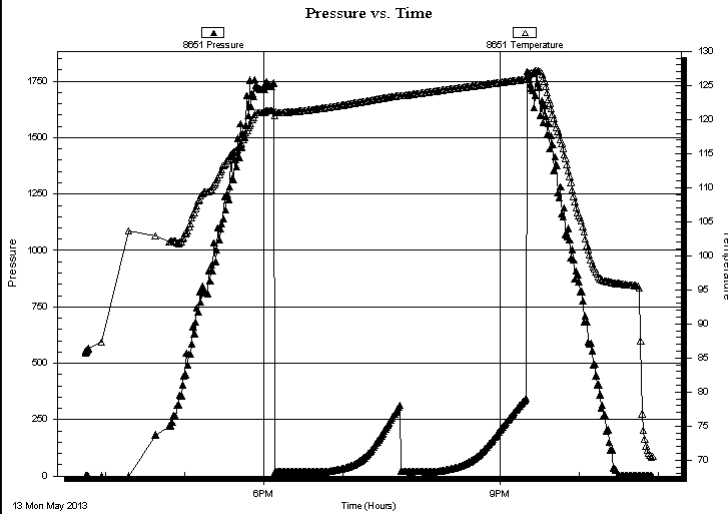
4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50672 **DST#: 1**
Test Start: 2013.05.13 @ 15:45:00

GENERAL INFORMATION:

Formation: Foraker
Deviated: No Whipstock: ft (KB)
Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 18:08:30
Tester: Chuck Kreuzer Jr.
Time Test Ended: 22:55:30
Unit No: 61
Interval: 3638.00 ft (KB) To 3690.00 ft (KB) (TVD)
Reference Elevations: 3147.00 ft (KB)
Total Depth: 3690.00 ft (KB) (TVD)
3137.00 ft (CF)
Hole Diameter: 7.88 inches **Hole Condition:** Good
KB to GR/CF: 10.00 ft

Serial #: 8651 **Outside**
Press @ Run Depth: psig @ 3639.00 ft (KB) **Capacity:** 8000.00 psig
Start Date: 2013.05.13 **End Date:** 2013.05.13 **Last Calib.:** 2013.05.13
Start Time: 15:45:01 **End Time:** 22:55:30 **Time On Btm:**
Time Off Btm:

TEST COMMENT: IF: Weak blow, Died in 7 mins.
IS: No blow back
FF: No blow
FS: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	vsocm-25%o75% m	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50672 **DST#: 1**
Test Start: 2013.05.13 @ 15:45:00

Tool Information

Drill Pipe:	Length: 3109.00 ft	Diameter: 3.80 inches	Volume: 43.61 bbl	Tool Weight: 2500.00 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: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 46.23 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3638.00 ft			Final 70000.00 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
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut In Tool	5.00			3615.00	
Hydraulic tool	5.00			3620.00	
Jars	5.00			3625.00	
Safety Joint	3.00			3628.00	
Packer	5.00			3633.00	28.00 Bottom Of Top Packer
Packer	5.00			3638.00	
Stubb	1.00			3639.00	
Recorder	0.00	8791	Inside	3639.00	
Recorder	0.00	8651	Outside	3639.00	
Perforations	2.00			3641.00	
change Over Sub	1.00			3642.00	
Drill Pipe	31.00			3673.00	
Change Over Sub	1.00			3674.00	
Perforations	13.00			3687.00	
Bullnose	3.00			3690.00	52.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50672 **DST#: 1**
Test Start: 2013.05.13 @ 15:45:00

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: 70.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 600.00 ppm			
Filter Cake: 2.00 inches			

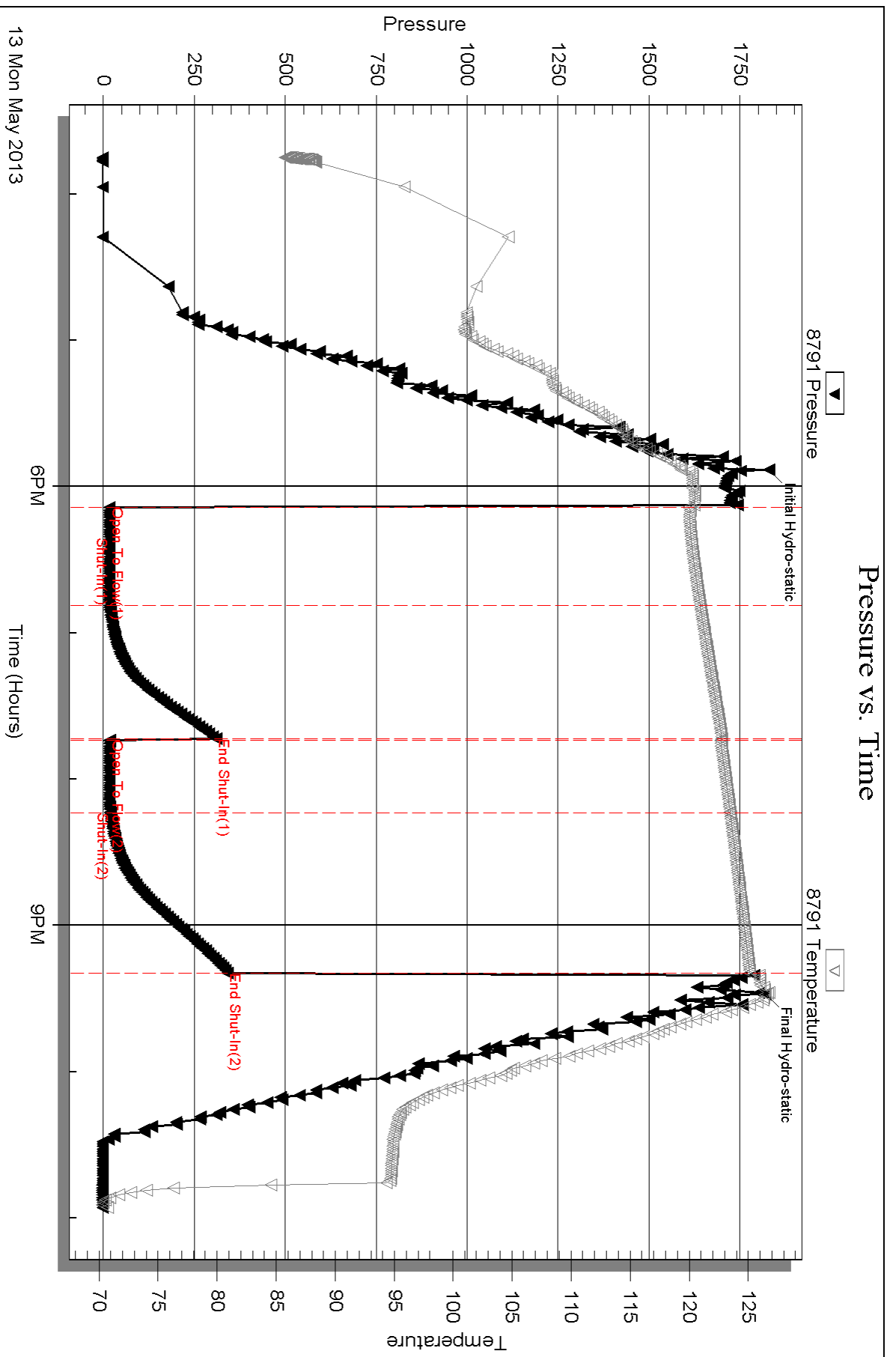
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	vsocm-25%o75%m	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



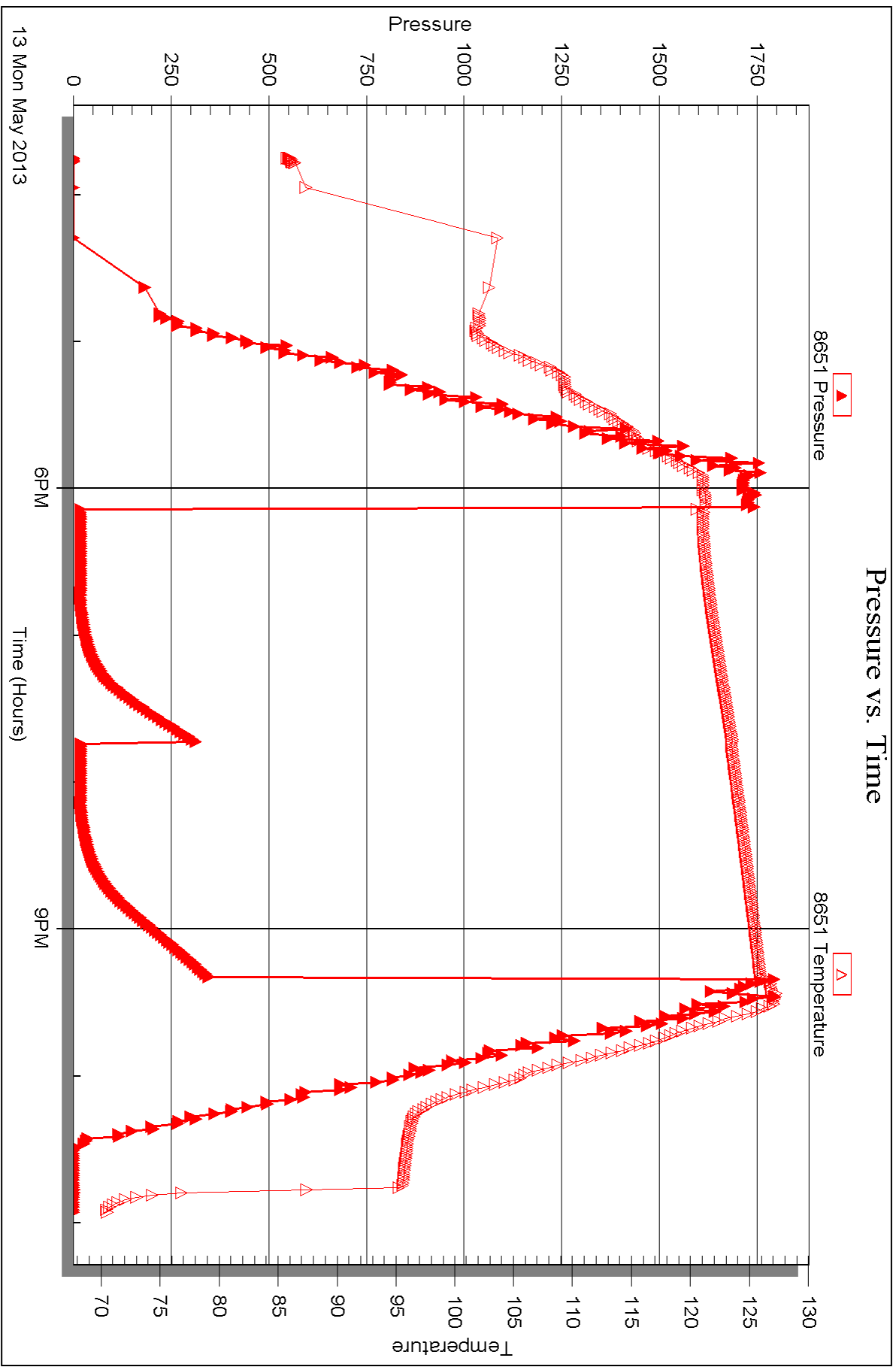
13 Mon May 2013

Serial #: 8651

Outside Murfin Drilling

Patti G#1-4

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 50672

Printed: 2013.05.24 @ 08:45:04



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.14 @ 22:50:00

End Date: 2013.05.15 @ 05:32:30

Job Ticket #: 50673 DST #: 2

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

Printed: 2013.05.24 @ 08:44:18

Murfin Drilling
4-1s-37w Cheyenne,KS
Patti G #1-4
DST # 2
Oread
2013.05.14



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50673

DST#: 2

Test Start: 2013.05.14 @ 22:50:00

GENERAL INFORMATION:

Formation: **Oread**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:49:30
 Time Test Ended: 05:32:30
 Interval: **3978.00 ft (KB) To 4040.00 ft (KB) (TVD)**
 Total Depth: 4040.00 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: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

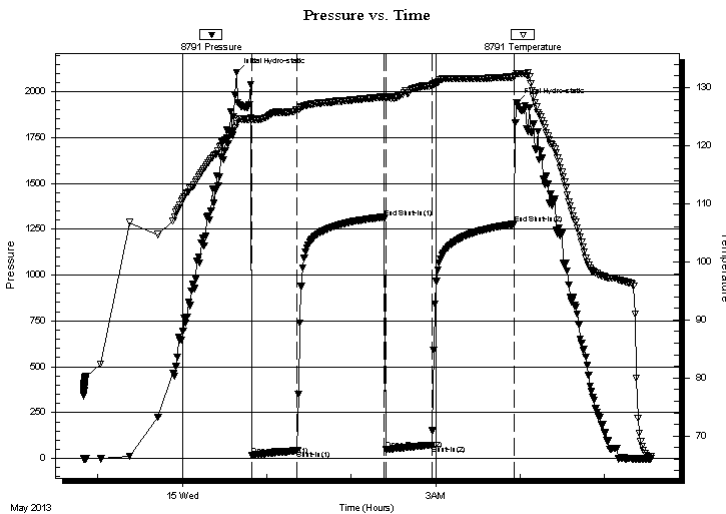
Serial #: 8791

Inside

Press @ Run Depth: 72.41 psig @ 3979.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.14 End Date: 2013.05.15 Last Calib.: 2013.05.15
 Start Time: 22:50:01 End Time: 05:32:30 Time On Btm: 2013.05.15 @ 00:38:30
 Time Off Btm: 2013.05.15 @ 03:57:30

TEST COMMENT: IF: Weak surface blow over 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	2105.25	123.79	Initial Hydro-static
11	17.82	124.46	Open To Flow (1)
43	44.06	126.14	Shut-In(1)
105	1309.99	128.42	End Shut-In(1)
106	47.73	128.12	Open To Flow (2)
139	72.41	130.40	Shut-In(2)
197	1278.21	131.86	End Shut-In(2)
199	1938.38	132.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	mud-100%	0.49

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
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50673 **DST#: 2**
Test Start: 2013.05.14 @ 22:50:00

Tool Information

Drill Pipe:	Length: 3426.00 ft	Diameter: 3.80 inches	Volume: 48.06 bbl	Tool Weight: 2500.00 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: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 50.68 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	3978.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	90.00 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			3955.00	
Hydraulic tool	5.00			3960.00	
Jars	5.00			3965.00	
Safety Joint	3.00			3968.00	
Packer	5.00			3973.00	28.00 Bottom Of Top Packer
Packer	5.00			3978.00	
Stubb	1.00			3979.00	
Recorder	0.00	8791	Inside	3979.00	
Recorder	0.00	8651	Outside	3979.00	
Perforations	2.00			3981.00	
change Over Sub	1.00			3982.00	
Drill Pipe	31.00			4013.00	
Change Over Sub	1.00			4014.00	
Perforations	23.00			4037.00	
Bullnose	3.00			4040.00	62.00 Bottom Packers & Anchor

Total Tool Length: 90.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50673 **DST#: 2**
Test Start: 2013.05.14 @ 22:50:00

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: 64.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.37 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	mud-100%	0.492

Total Length: 100.00 ft Total Volume: 0.492 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

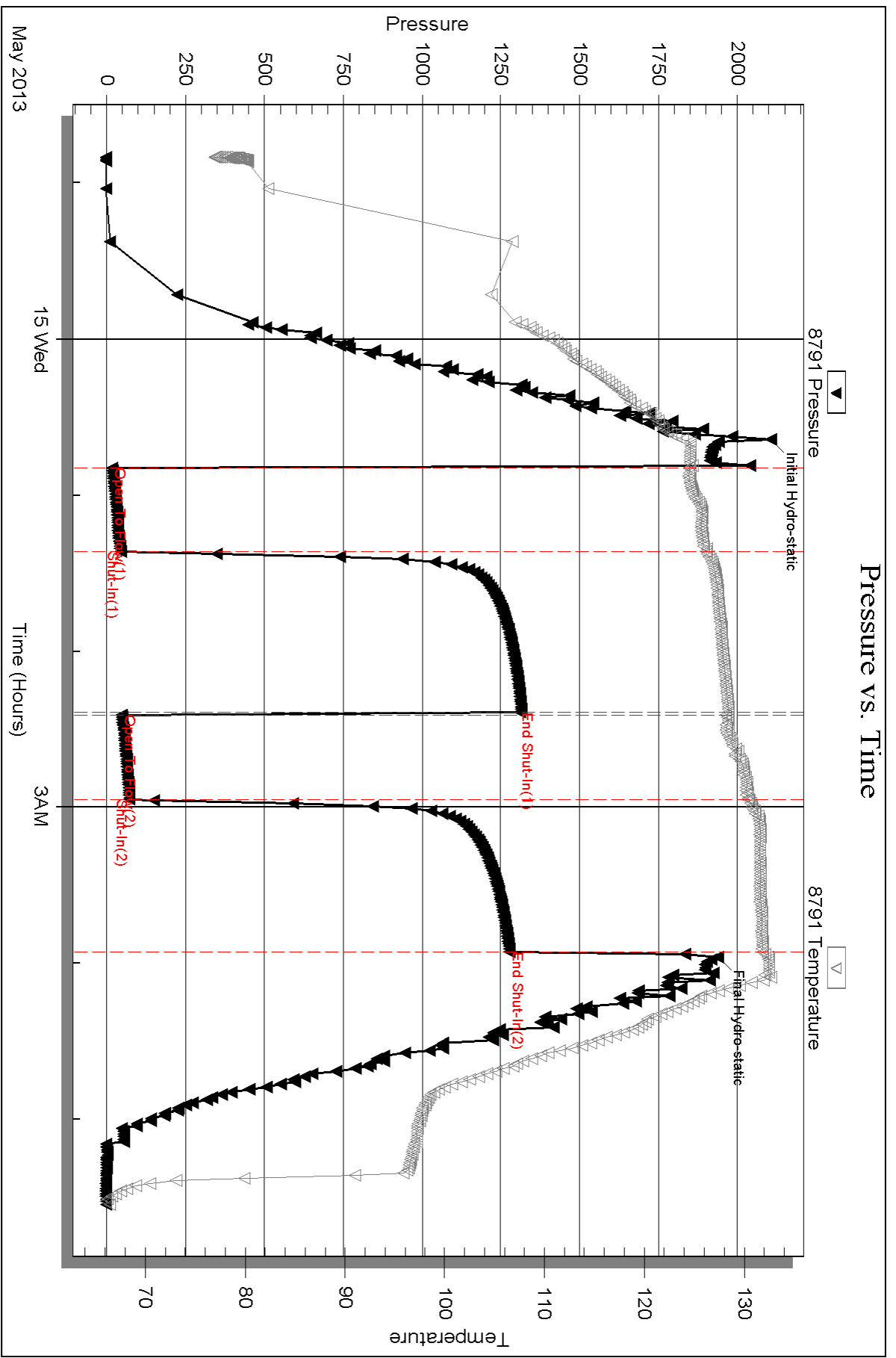
Serial #: 8791

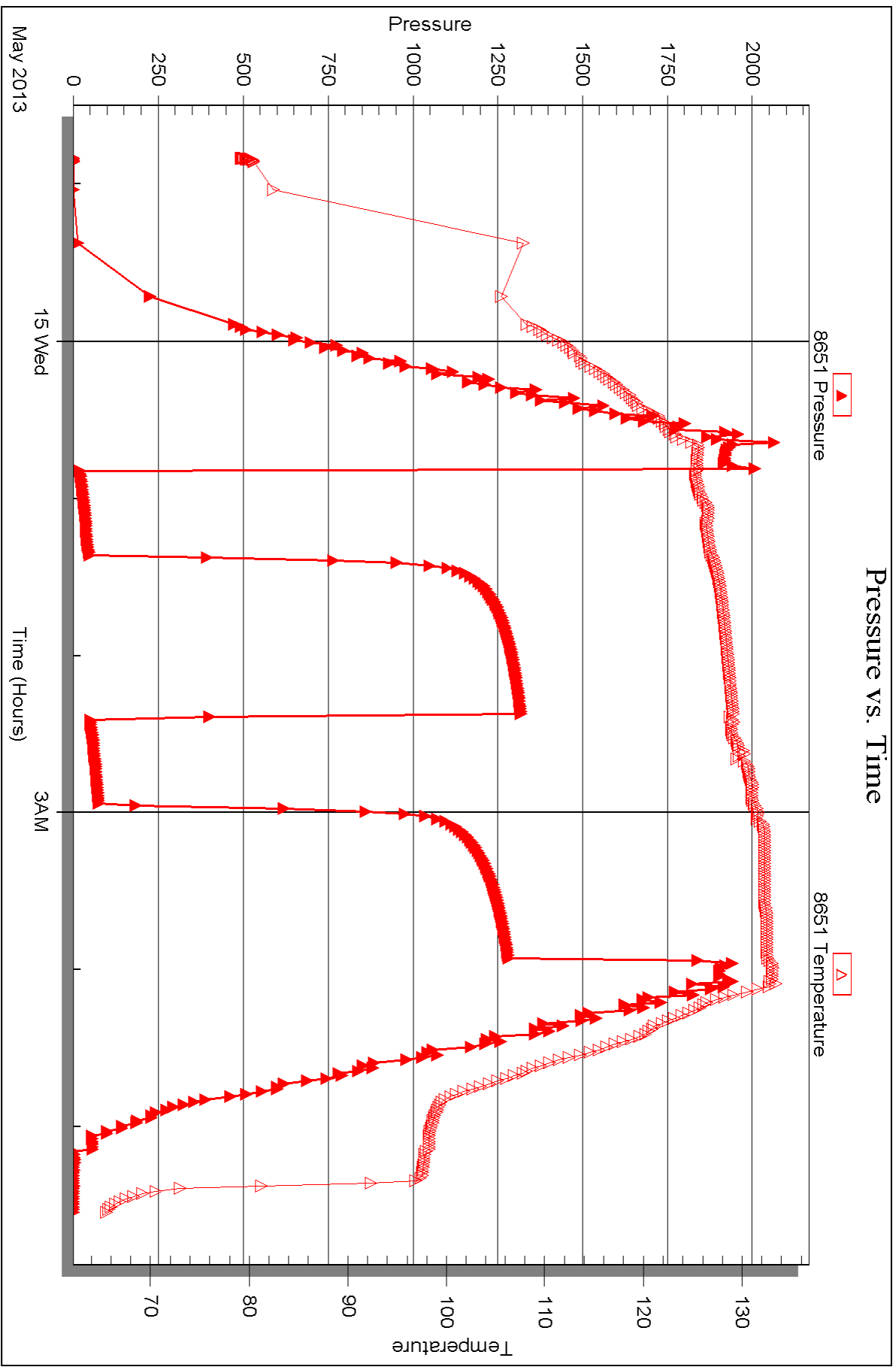
Inside

Murfin Drilling

Patti G#1-4

DST Test Number: 2







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.15 @ 16:00:00

End Date: 2013.05.15 @ 23:08:30

Job Ticket #: 50674 DST #: 3

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

Printed: 2013.05.24 @ 08:43:37

Murfin Drilling
4-1s-37w Cheyenne,KS
Patti G #1-4
DST # 3
LKC-A
2013.05.15



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50674

DST#: 3

Test Start: 2013.05.15 @ 16:00:00

GENERAL INFORMATION:

Formation: **LKC-A**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:08:30
 Time Test Ended: 23:08:30
 Interval: **4112.00 ft (KB) To 4132.00 ft (KB) (TVD)**
 Total Depth: 4132.00 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: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

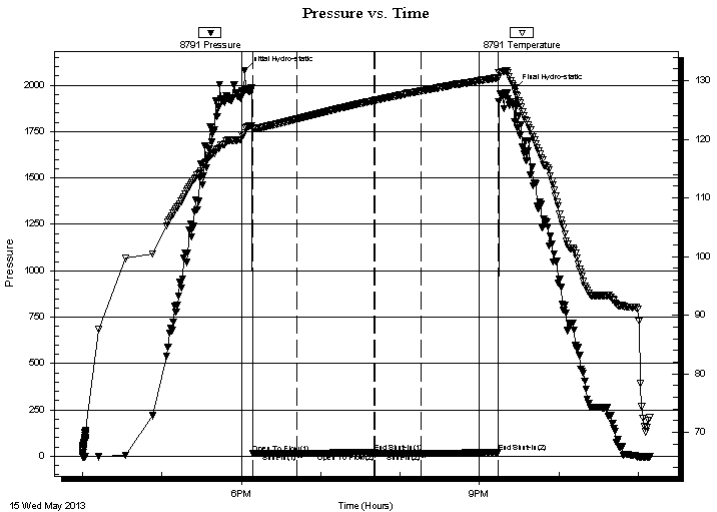
Serial #: 8791

Inside

Press @ Run Depth: 15.23 psig @ 4113.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.15 End Date: 2013.05.15 Last Calib.: 2013.05.15
 Start Time: 16:00:01 End Time: 23:08:30 Time On Btm: 2013.05.15 @ 18:02:30
 Time Off Btm: 2013.05.15 @ 21:27:00

TEST COMMENT: IF: Weak blow, Dead in 10 mins.
 IS: No blow back
 FF: No blow
 FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2079.70	121.11	Initial Hydro-static
6	14.61	121.69	Open To Flow (1)
40	14.74	123.45	Shut-In(1)
98	23.25	126.58	End Shut-In(1)
99	14.42	126.63	Open To Flow (2)
133	15.23	128.20	Shut-In(2)
192	21.12	130.42	End Shut-In(2)
205	1981.39	128.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud-100%m	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS

Patti G #1-4

Job Ticket: 50674

DST#: 3

Test Start: 2013.05.15 @ 16:00:00

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:08:30

Time Test Ended: 23:08:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreutzer Jr.

Unit No: 61

Interval: 4112.00 ft (KB) To 4132.00 ft (KB) (TVD)

Total Depth: 4132.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3147.00 ft (KB)

3137.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8651 Outside

Press @ Run Depth: psig @ 4113.00 ft (KB)

Start Date: 2013.05.15 End Date: 2013.05.15

Start Time: 16:00:01 End Time: 23:08:30

Capacity: 8000.00 psig

Last Calib.: 2013.05.15

Time On Btm:

Time Off Btm:

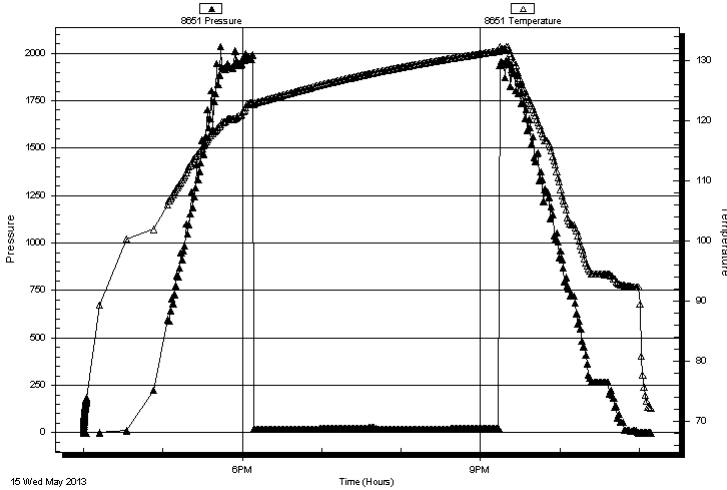
TEST COMMENT: IF: Weak blow, Dead in 10 mins.

IS: No blow back

FF: No blow

FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud-100%m	0.00

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
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50674 **DST#: 3**
Test Start: 2013.05.15 @ 16:00:00

Tool Information

Drill Pipe:	Length: 3583.00 ft	Diameter: 3.80 inches	Volume: 50.26 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 52.88 bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4112.00 ft			Final	72000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	20.00 ft				
Tool Length:	48.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

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

Shut In Tool	5.00			4089.00	
Hydraulic tool	5.00			4094.00	
Jars	5.00			4099.00	
Safety Joint	3.00			4102.00	
Packer	5.00			4107.00	28.00 Bottom Of Top Packer
Packer	5.00			4112.00	
Stubb	1.00			4113.00	
Recorder	0.00	8791	Inside	4113.00	
Recorder	0.00	8651	Outside	4113.00	
Perforations	16.00			4129.00	
Bullnose	3.00			4132.00	20.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50674 **DST#: 3**
Test Start: 2013.05.15 @ 16:00:00

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: 64.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud-100%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

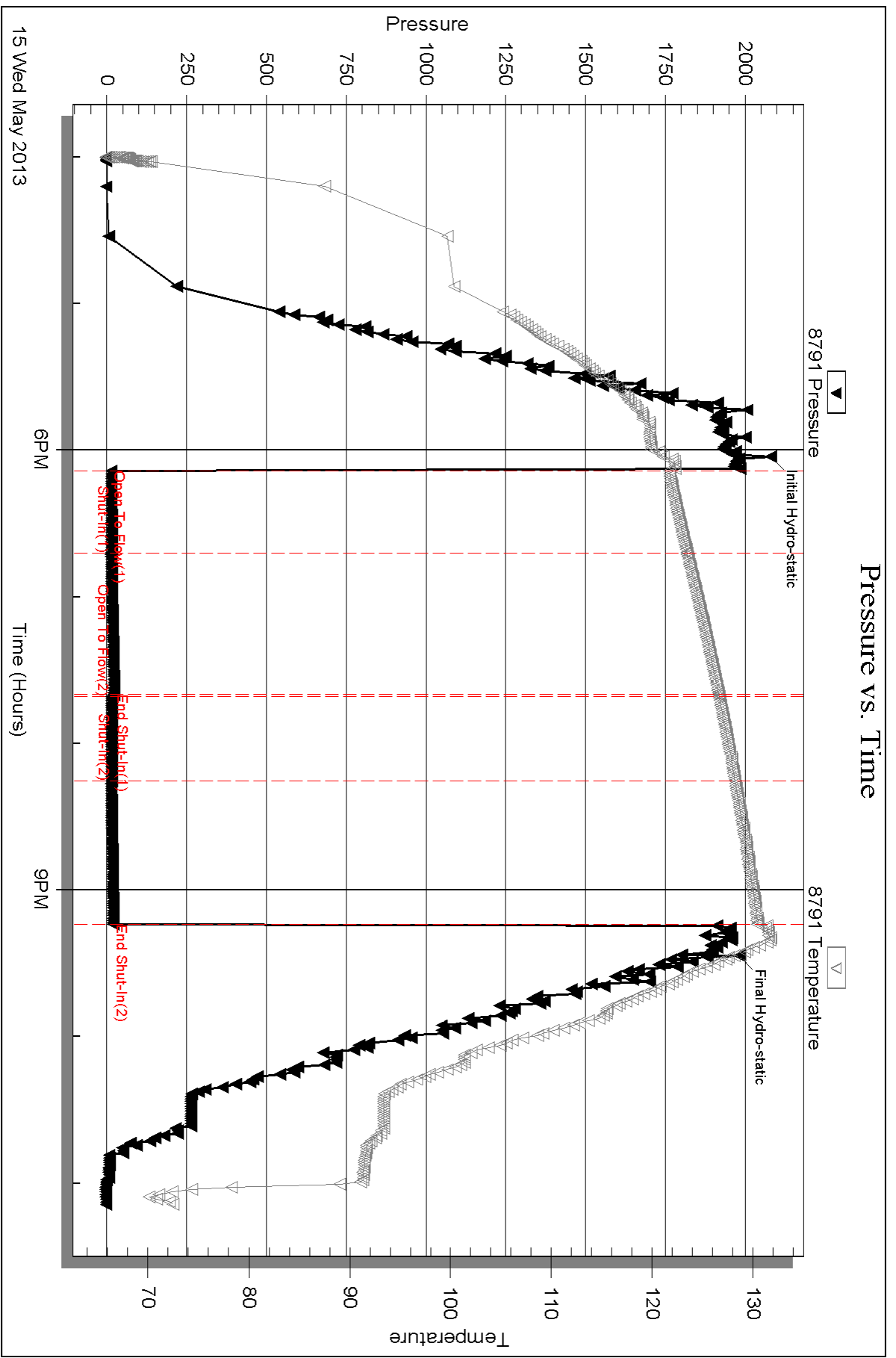
Serial #: 8791

Inside

Murfin Drilling

Patti G#1-4

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 50674

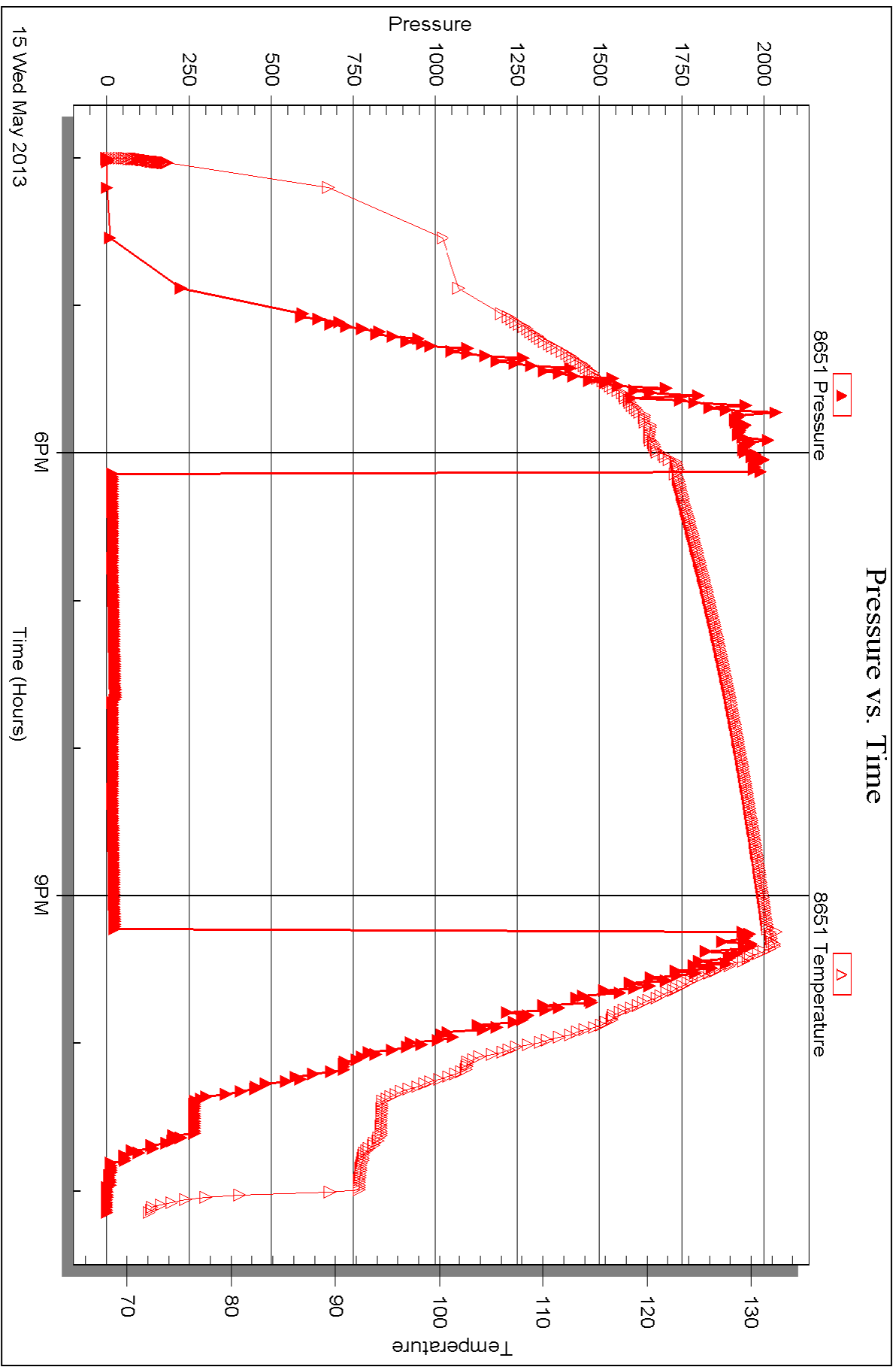
Printed: 2013.05.24 @ 08:43:39

Serial #: 8651

Outside Murfin Drilling

Patti G#1-4

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.16 @ 08:10:00

End Date: 2013.05.16 @ 15:53:30

Job Ticket #: 50675 DST #: 4

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

Printed: 2013.05.24 @ 08:42:58

Murfin Drilling
4-1s-37w Cheyenne,KS
Patti G #1-4
DST # 4
LKC-D
2013.05.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50675

DST#: 4

Test Start: 2013.05.16 @ 08:10:00

GENERAL INFORMATION:

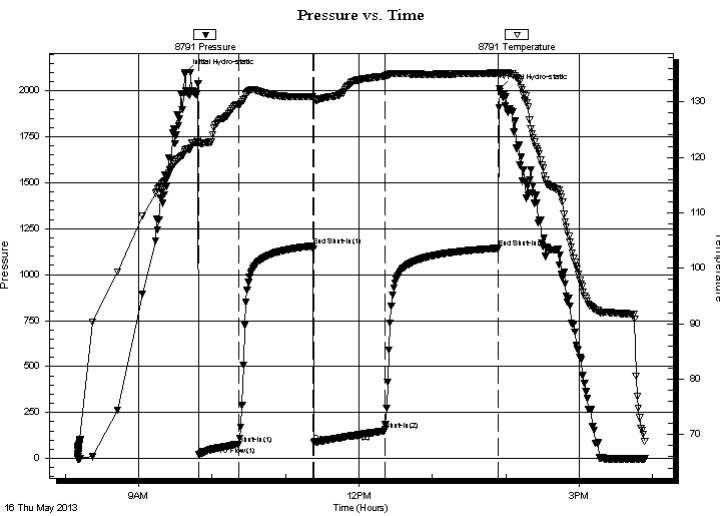
Formation: **LKC-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:49:00
 Time Test Ended: 15:53:30
 Interval: **4130.00 ft (KB) To 4180.00 ft (KB) (TVD)**
 Total Depth: 4180.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Kreuzer Jr.
 Unit No: 61
 Reference Elevations: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 155.66 psig @ 4131.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.16 End Date: 2013.05.16 Last Calib.: 2013.05.16
 Start Time: 08:10:01 End Time: 15:53:30 Time On Btm: 2013.05.16 @ 09:38:00
 Time Off Btm: 2013.05.16 @ 13:55:00

TEST COMMENT: IF: Fair blow, Built to 5 in. over 30 mins.
 IS: No blow back over 60 mins.
 FF: Fair blow, Built to B.O.B in 25 mins.
 FSI: Blow back after 5 mins. Built to 5 in. over 60 mins. Died to 2 in. over 90 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2096.36	121.30	Initial Hydro-static
11	19.63	122.67	Open To Flow (1)
44	78.94	129.46	Shut-In(1)
104	1155.69	130.98	End Shut-In(1)
105	86.31	130.48	Open To Flow (2)
163	155.66	134.58	Shut-In(2)
256	1143.51	135.21	End Shut-In(2)
257	2012.26	135.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	gocm-10%g30%o60%m	0.47
95.00	gmco-10%g25%m65%o	0.47
95.00	go-40%g60%o	0.47
45.00	go-10%g90%o	0.22
0.00	475ft 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

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS

Patti G #1-4

Job Ticket: 50675

DST#: 4

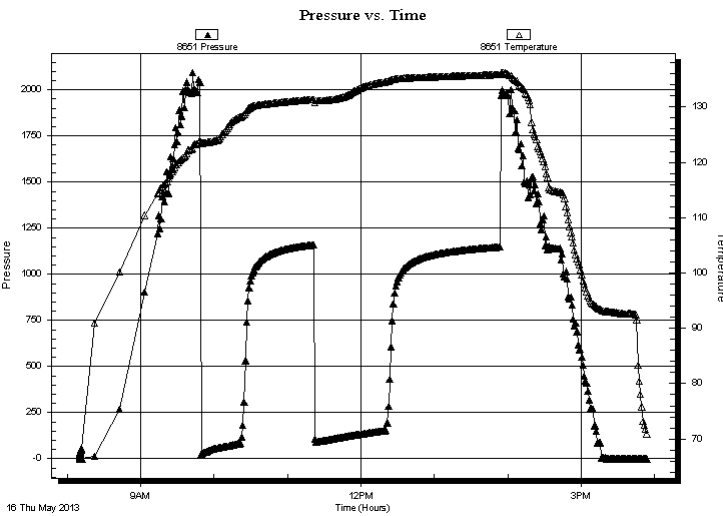
Test Start: 2013.05.16 @ 08:10:00

GENERAL INFORMATION:

Formation: **LKC-D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:49:00
Time Test Ended: 15:53:30
Interval: **4130.00 ft (KB) To 4180.00 ft (KB) (TVD)**
Total Depth: 4180.00 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: 3147.00 ft (KB)
3137.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8651 Outside
Press @ Run Depth: psig @ 4131.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.05.16 End Date: 2013.05.16 Last Calib.: 2013.05.16
Start Time: 08:10:01 End Time: 15:53:30 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Fair blow, Built to 5 in. over 30 mins.
IS: No blow back over 60 mins.
FF: Fair blow, Built to B.O.B in 25 mins.
FS: Blow back after 5 mins. Built to 5 in. over 60 mins. Died to 2 in. over 90 mins.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
95.00	gocm-10%g30%o60%m	0.47
95.00	gmco-10%g25%m65%o	0.47
95.00	go-40%g60%o	0.47
45.00	go-10%g90%o	0.22
0.00	475ft 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
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50675 **DST#: 4**
Test Start: 2013.05.16 @ 08:10:00

Tool Information

Drill Pipe:	Length: 3584.00 ft	Diameter: 3.80 inches	Volume: 50.27 bbl	Tool Weight: 2500.00 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: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 52.89 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4130.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	78.00 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			4107.00	
Hydraulic tool	5.00			4112.00	
Jars	5.00			4117.00	
Safety Joint	3.00			4120.00	
Packer	5.00			4125.00	28.00 Bottom Of Top Packer
Packer	5.00			4130.00	
Stubb	1.00			4131.00	
Recorder	0.00	8791	Inside	4131.00	
Recorder	0.00	8651	Outside	4131.00	
Perforations	1.00			4132.00	
change Over Sub	1.00			4133.00	
Drill Pipe	31.00			4164.00	
Change Over Sub	1.00			4165.00	
Perforations	12.00			4177.00	
Bullnose	3.00			4180.00	50.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50675 **DST#: 4**
Test Start: 2013.05.16 @ 08:10:00

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: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
95.00	gocm-10%g30%o60%m	0.467
95.00	gmco-10%g25%m65%o	0.467
95.00	go-40%g60%o	0.467
45.00	go-10%g90%o	0.221
0.00	475ft gas in pipe	0.000

Total Length: 330.00 ft Total Volume: 1.622 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

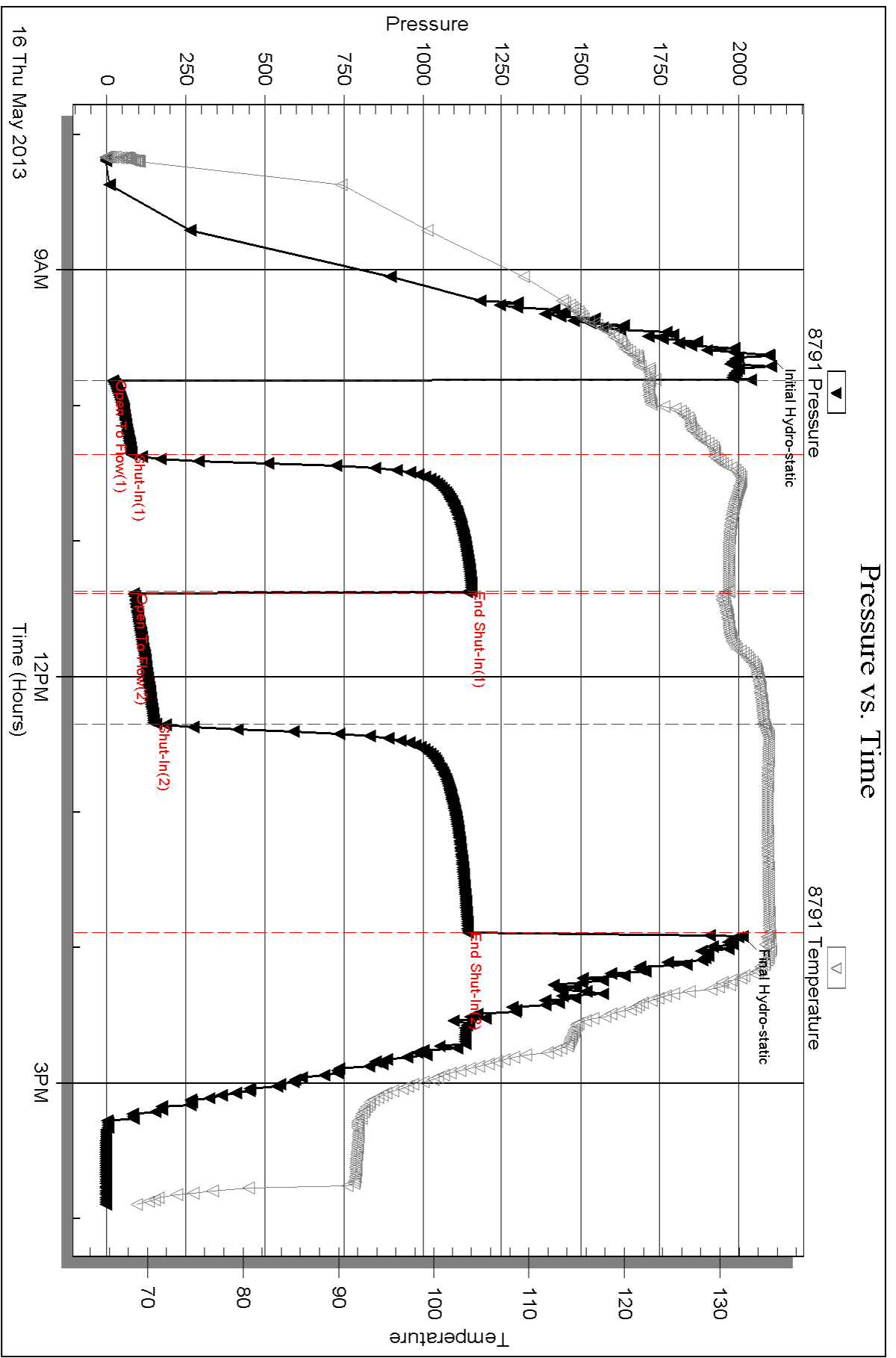
Serial #: 8791

Inside

Murfin Drilling

Patti G#1-4

DST Test Number: 4

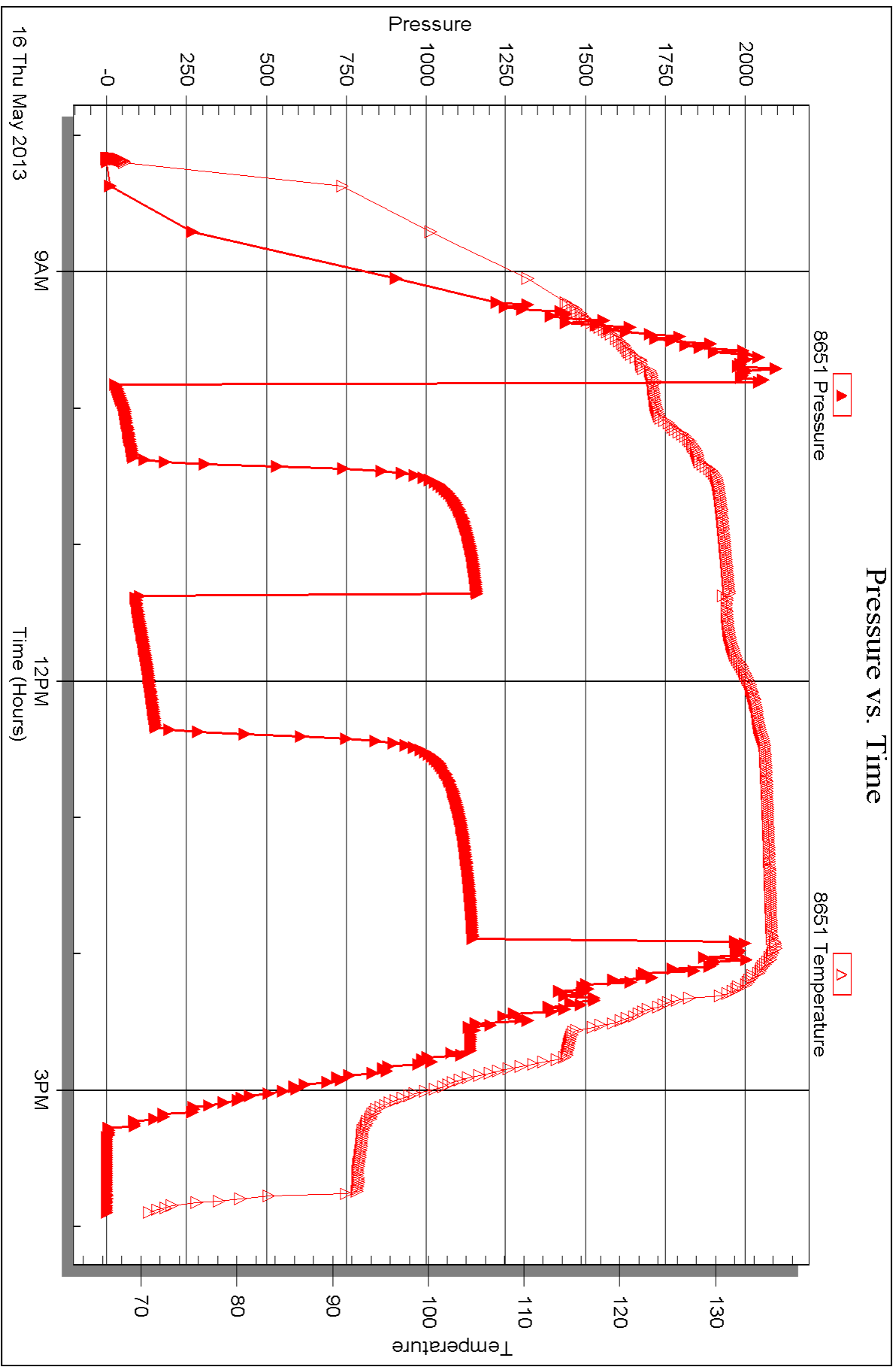


Serial #: 8651

Outside Murfin Drilling

Patti G#1-4

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.17 @ 02:30:00

End Date: 2013.05.17 @ 10:38:00

Job Ticket #: 51126 DST #: 5

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

Printed: 2013.05.24 @ 08:42:06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 51126

DST#: 5

Test Start: 2013.05.17 @ 02:30:00

GENERAL INFORMATION:

Formation: **LKC-G**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:00:30
 Time Test Ended: 10:38:00
 Interval: **4192.00 ft (KB) To 4240.00 ft (KB) (TVD)**
 Total Depth: 4240.00 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: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

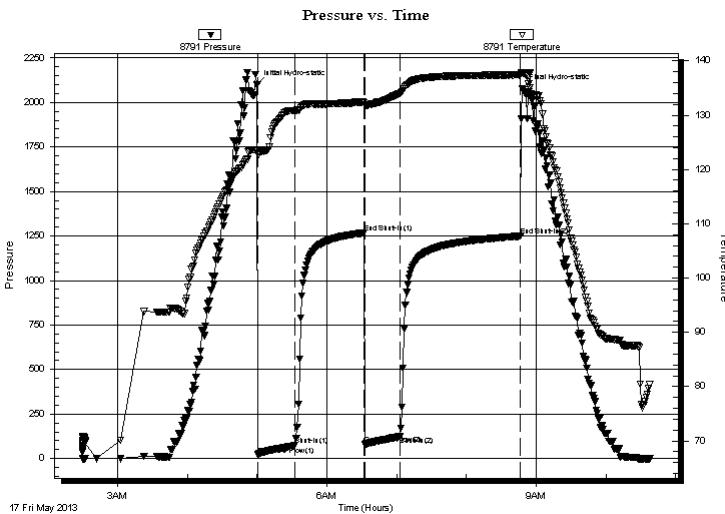
Serial #: 8791

Inside

Press @ Run Depth: 122.25 psig @ 4193.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.17 End Date: 2013.05.17 Last Calib.: 2013.05.17
 Start Time: 02:30:01 End Time: 10:38:00 Time On Btm: 2013.05.17 @ 05:00:00
 Time Off Btm: 2013.05.17 @ 08:48:00

TEST COMMENT: IF: Fair blow, Built to B.O.B in 10 mins.
 IS: Blow back after 1 min. Surface over 60 mins.
 FF: Fair blow, B.O.B in 7 mins.
 FS: Blow back. Weak surface died in 60 mins.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2099.28	123.52	Initial Hydro-static
1	19.97	122.88	Open To Flow (1)
32	72.96	130.85	Shut-In(1)
92	1267.12	132.35	End Shut-In(1)
93	79.53	131.95	Open To Flow (2)
123	122.25	133.98	Shut-In(2)
227	1249.42	137.43	End Shut-In(2)
228	2077.69	137.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	475 ft. gas in pipe	0.00
95.00	gocm-25%g25%o50%m	0.47
95.00	gmco-40%g10%m50%o	0.47
105.00	go-30%g70%o	0.52

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Jeff Christian

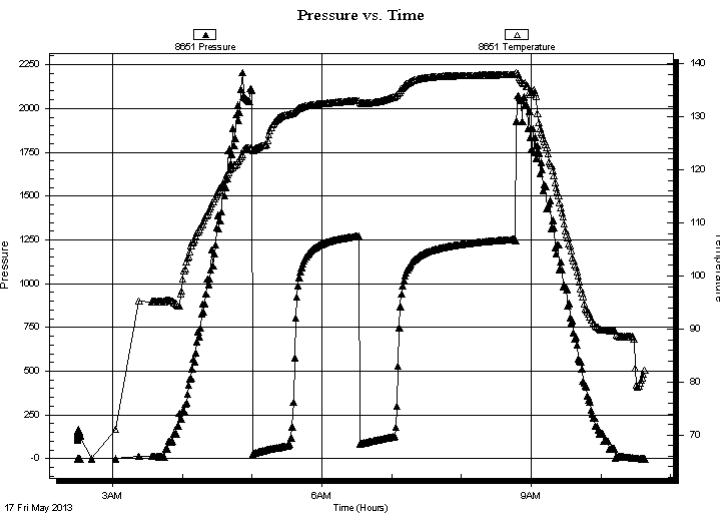
4-1s-37w Cheyenne,KS
Patti G #1-4
 Job Ticket: 51126 **DST#: 5**
 Test Start: 2013.05.17 @ 02:30:00

GENERAL INFORMATION:

Formation: **LKC-G**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 05:00:30 Tester: Chuck Kreutzer Jr.
 Time Test Ended: 10:38:00 Unit No: 61
 Interval: **4192.00 ft (KB) To 4240.00 ft (KB) (TVD)** Reference Elevations: 3147.00 ft (KB)
 Total Depth: 4240.00 ft (KB) (TVD) 3137.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 10.00 ft

Serial #: 8651 Outside
 Press @ RunDepth: psig @ 4193.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.17 End Date: 2013.05.17 Last Calib.: 2013.05.17
 Start Time: 02:30:01 End Time: 10:38:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Fair blow , Built to B.O.B in 10 mins.
 IS: Blow back after 1 min. Surface over 60 mins.
 FF: Fair blow , B.O.B in 7 mins.
 FS: Blow back. Weak surface died in 60 mins.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	475 ft. gas in pipe	0.00
95.00	gocm-25%g25%o50%m	0.47
95.00	gmco-40%g10%m50%o	0.47
105.00	go-30%g70%o	0.52

* 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
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 51126 **DST#: 5**
Test Start: 2013.05.17 @ 02:30:00

Tool Information

Drill Pipe:	Length: 3643.00 ft	Diameter: 3.80 inches	Volume: 51.10 bbl	Tool Weight: 2500.00 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: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 53.72 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4192.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	76.00 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			4169.00	
Hydraulic tool	5.00			4174.00	
Jars	5.00			4179.00	
Safety Joint	3.00			4182.00	
Packer	5.00			4187.00	28.00 Bottom Of Top Packer
Packer	5.00			4192.00	
Stubb	1.00			4193.00	
Recorder	0.00	8791	Inside	4193.00	
Recorder	0.00	8651	Outside	4193.00	
Perforations	1.00			4194.00	
change Over Sub	1.00			4195.00	
Drill Pipe	31.00			4226.00	
Change Over Sub	1.00			4227.00	
Perforations	10.00			4237.00	
Bullnose	3.00			4240.00	48.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 51126 **DST#: 5**
Test Start: 2013.05.17 @ 02:30:00

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: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	475 ft. gas in pipe	0.000
95.00	gocm-25%g25%o50%m	0.467
95.00	gmco-40%g10%m50%o	0.467
105.00	go-30%g70%o	0.516

Total Length: 295.00 ft Total Volume: 1.450 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

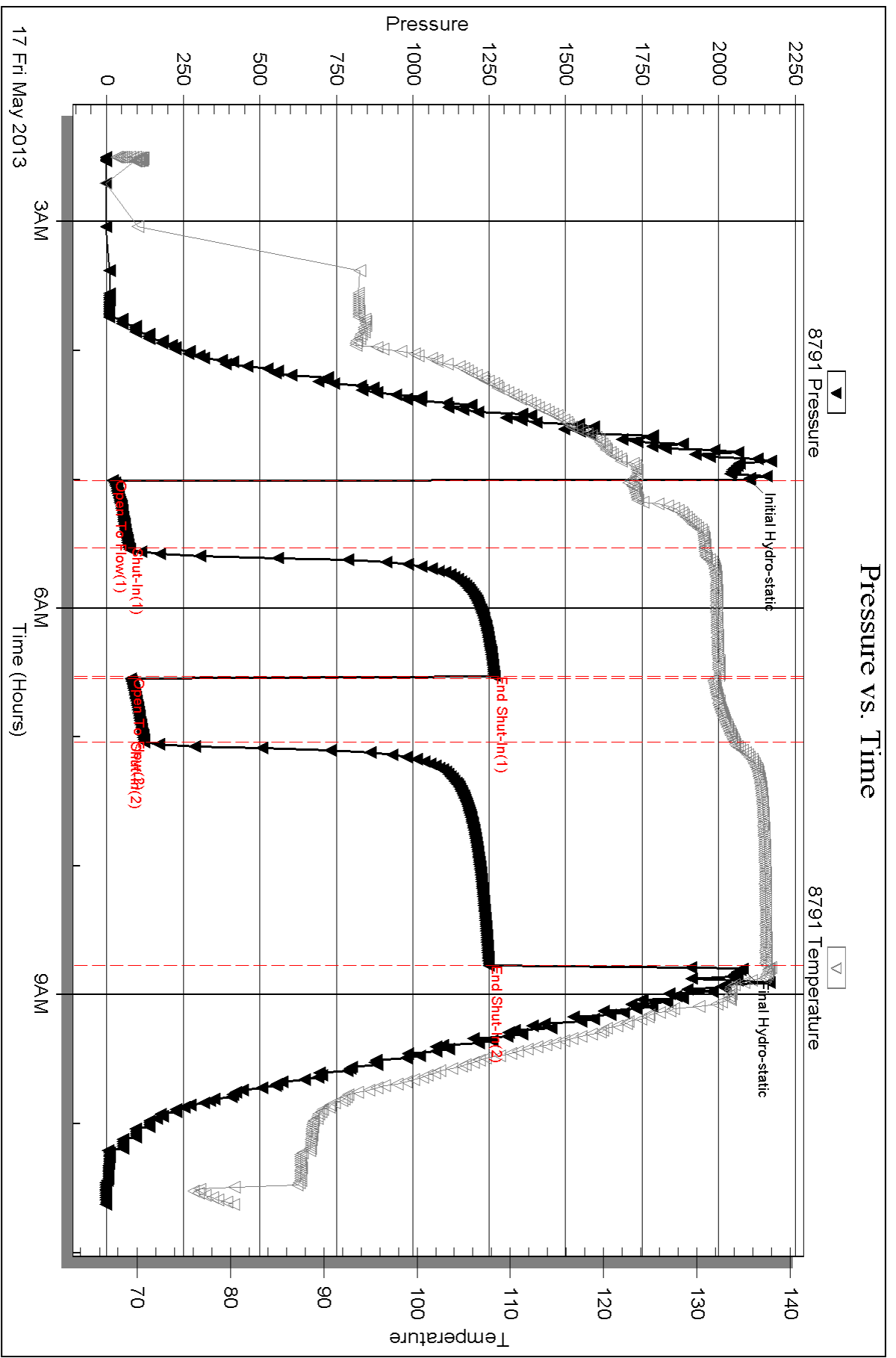
Serial #: 8791

Inside

Murfin Drilling

Patti G#1-4

DST Test Number: 5

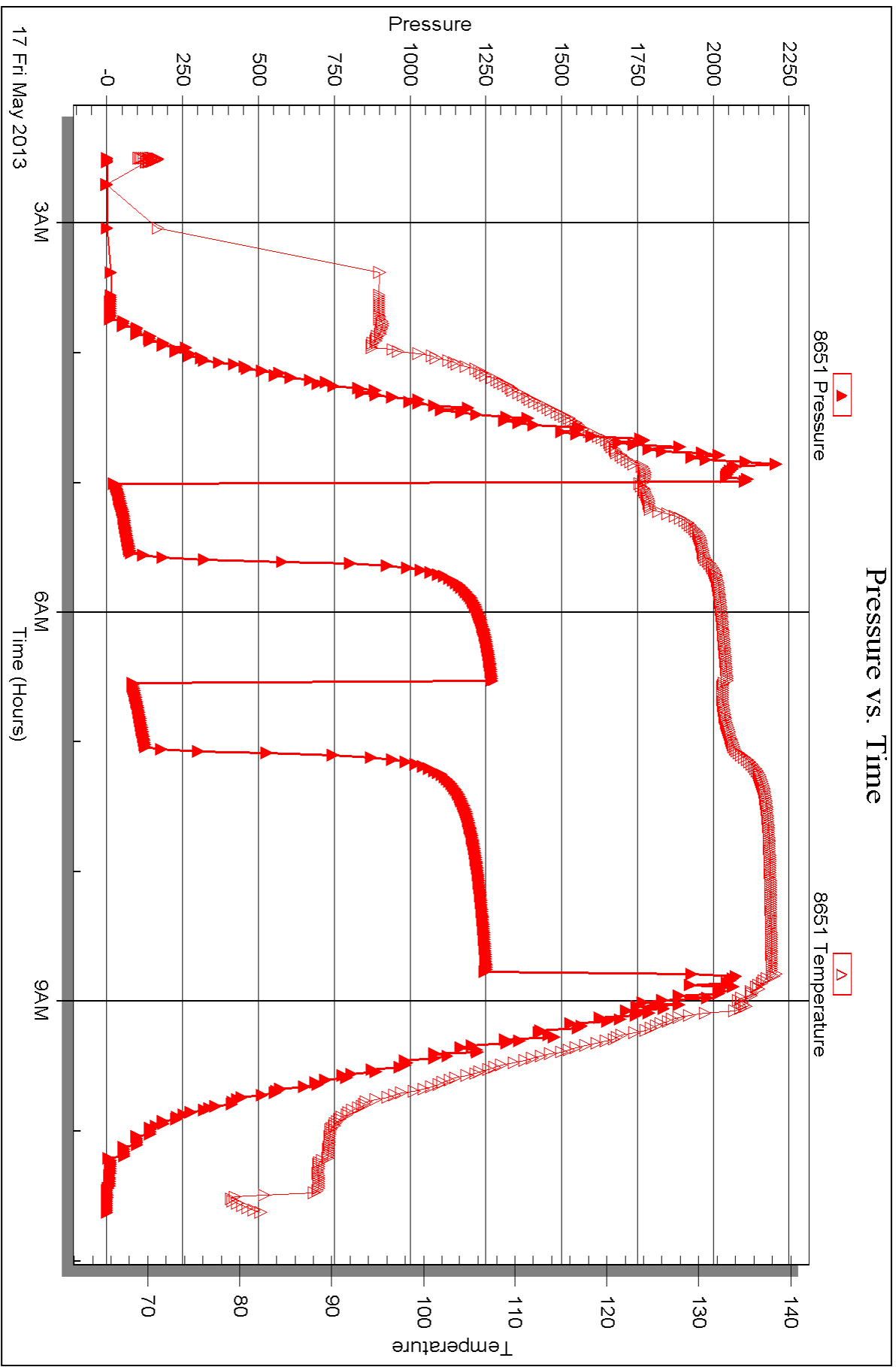


Serial #: 8651

Outside Murfin Drilling

Patti G#1-4

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.17 @ 21:11:00

End Date: 2013.05.18 @ 06:00:30

Job Ticket #: 50745 DST #: 6

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

Printed: 2013.05.24 @ 08:41:18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50745

DST#: 6

Test Start: 2013.05.17 @ 21:11:00

GENERAL INFORMATION:

Formation: **LKC " H - J "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:02:30
 Time Test Ended: 06:00:30
 Interval: **4237.00 ft (KB) To 4330.00 ft (KB) (TVD)**
 Total Depth: 4330.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Nichols
 Unit No: 61
 Reference Elevations: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

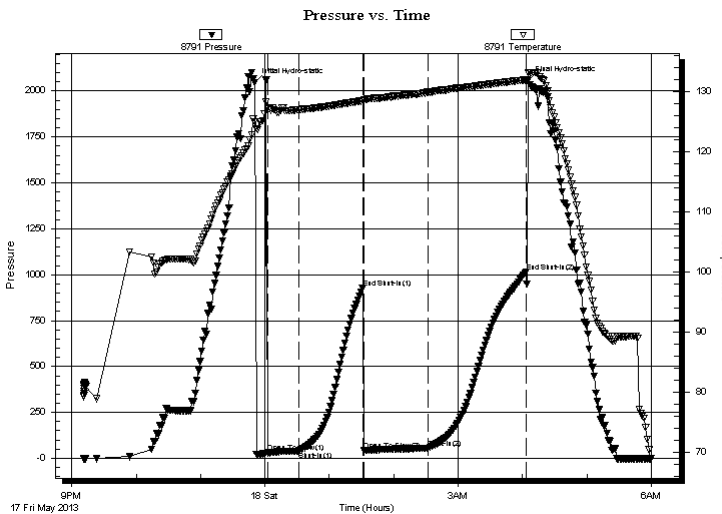
Serial #: 8791

Inside

Press @ Run Depth: 55.81 psig @ 4238.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.17 End Date: 2013.05.18 Last Calib.: 2013.05.18
 Start Time: 21:11:01 End Time: 06:00:30 Time On Btm: 2013.05.17 @ 23:50:30
 Time Off Btm: 2013.05.18 @ 04:05:30

TEST COMMENT: 30 IF - 1/4" blow built to 1"
 60 ISI - No return
 60 FF - Surface blow built to 3"
 90 FSI - No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2045.48	125.10	Initial Hydro-static
12	30.38	127.36	Open To Flow (1)
41	41.14	127.06	Shut-In(1)
101	925.88	128.53	End Shut-In(1)
102	42.24	128.68	Open To Flow (2)
162	55.81	129.90	Shut-In(2)
253	1016.25	132.01	End Shut-In(2)
255	2056.79	133.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
91.00	GOCM - 20%G - 30%o - 50%M	0.45
1.00	OCM - 10%o - 90%M	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50745 **DST#: 6**
Test Start: 2013.05.17 @ 21:11:00

GENERAL INFORMATION:

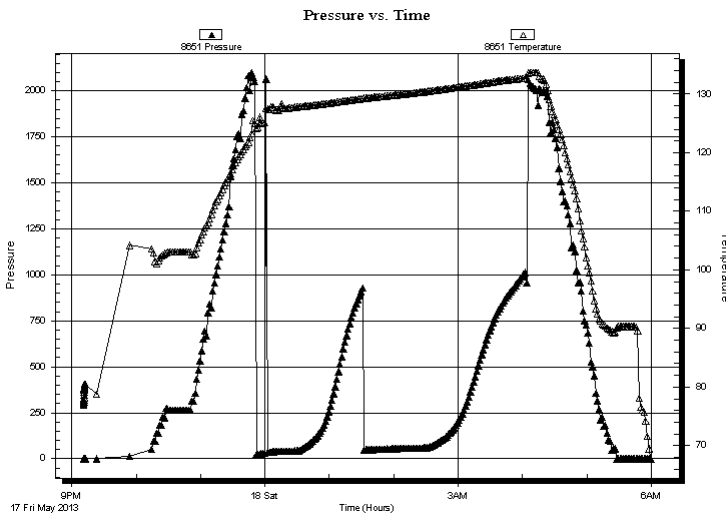
Formation: **LKC " H - J "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:02:30
 Time Test Ended: 06:00:30
 Interval: **4237.00 ft (KB) To 4330.00 ft (KB) (TVD)**
 Total Depth: 4330.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Nichols
 Unit No: 61
 Reference Elevations: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8651

Outside

Press @ RunDepth: psig @ 4238.00 ft (KB)
 Start Date: 2013.05.17 End Date: 2013.05.18
 Start Time: 21:11:01 End Time: 06:00:30
 Capacity: 8000.00 psig
 Last Calib.: 2013.05.18
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 IF - 1/4" blow built to 1"
 60 ISI - No return
 60 FF - Surface blow built to 3"
 90 FSI - No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
91.00	GOCM - 20%G - 30%o - 50%M	0.45
1.00	OCM - 10%o - 90%M	0.00

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
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50745 **DST#: 6**
Test Start: 2013.05.17 @ 21:11:00

Tool Information

Drill Pipe:	Length: 3710.00 ft	Diameter: 3.80 inches	Volume: 52.04 bbl	Tool Weight: 2500.00 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: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 54.66 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4237.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	93.00 ft			
Tool Length:	121.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4214.00	
Hydraulic tool	5.00			4219.00	
Jars	5.00			4224.00	
Safety Joint	3.00			4227.00	
Packer	5.00			4232.00	28.00 Bottom Of Top Packer
Packer	5.00			4237.00	
Stubb	1.00			4238.00	
Recorder	0.00	8791	Inside	4238.00	
Recorder	0.00	8651	Outside	4238.00	
Perforations	25.00			4263.00	
change Over Sub	1.00			4264.00	
Drill Pipe	62.00			4326.00	
Change Over Sub	1.00			4327.00	
Bullnose	3.00			4330.00	93.00 Bottom Packers & Anchor

Total Tool Length: 121.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50745 **DST#: 6**
Test Start: 2013.05.17 @ 21:11:00

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: 70.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
91.00	GOCM - 20%G - 30%o - 50%M	0.448
1.00	OCM - 10%o - 90%M	0.005

Total Length: 92.00 ft Total Volume: 0.453 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial #: 8791

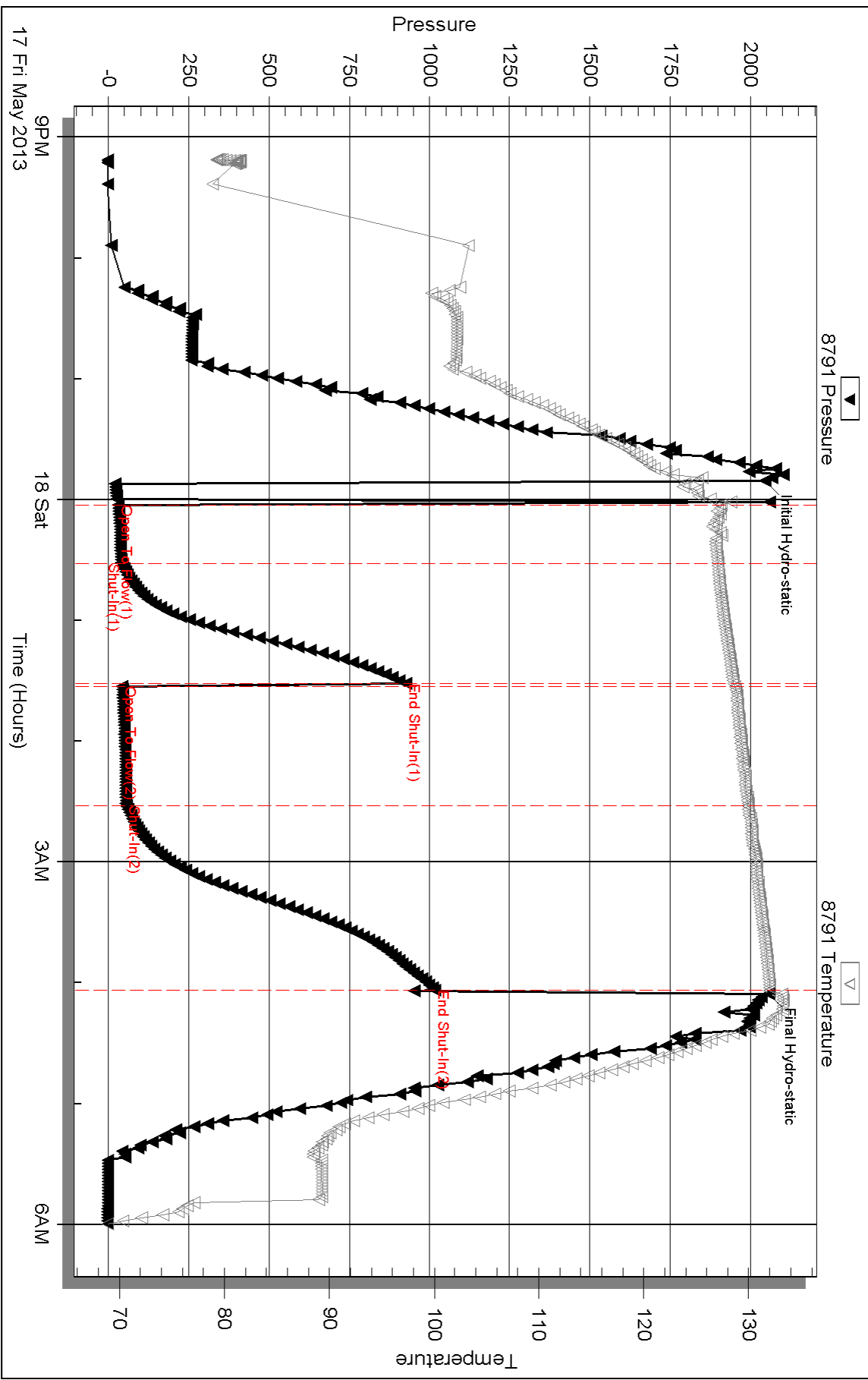
Inside

Murfin Drilling

Patti G#1-4

DST Test Number: 6

Pressure vs. Time

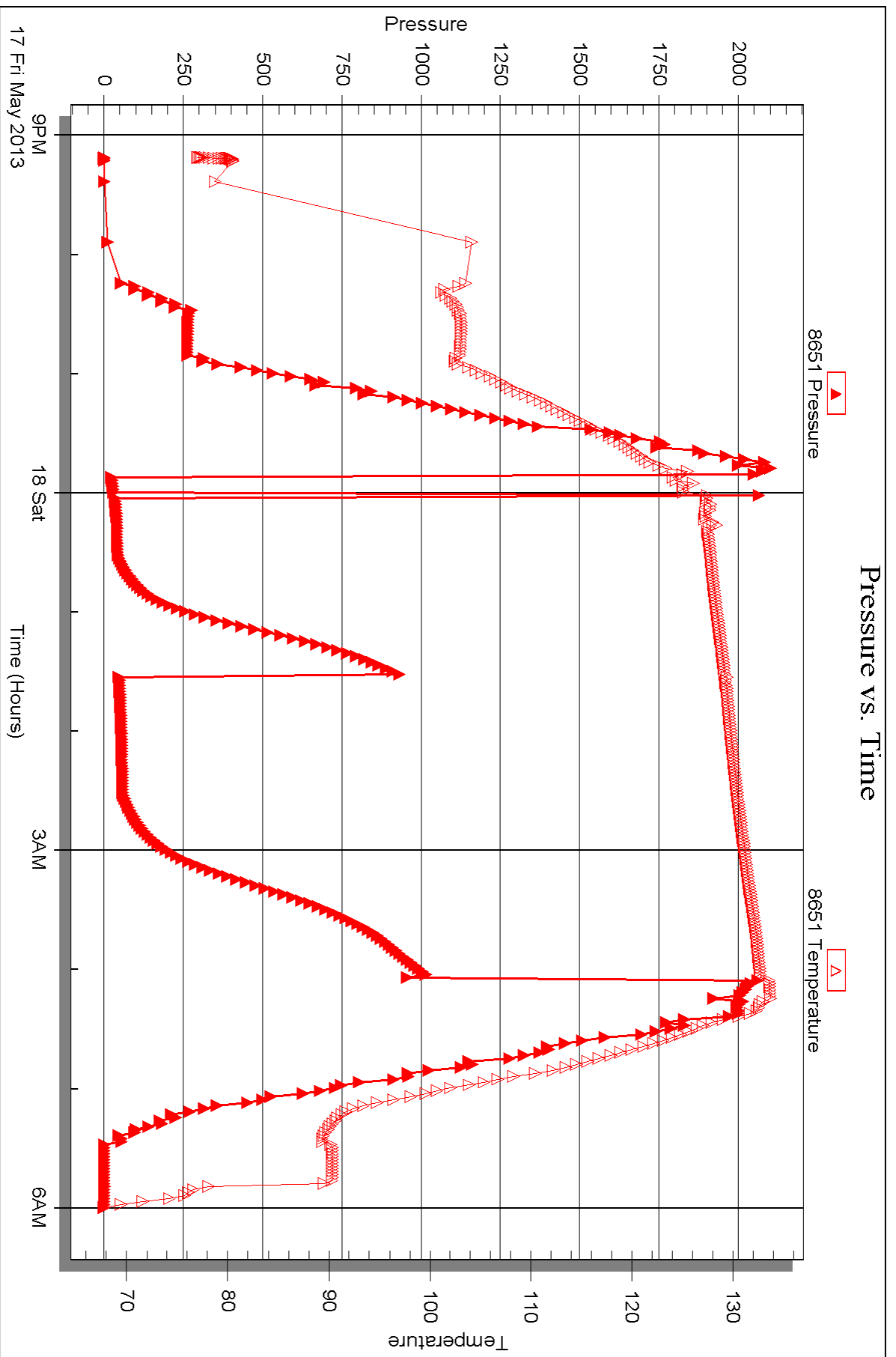


Serial #: 8651

Outside Murfin Drilling

Patti G#1-4

DST Test Number: 6





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Jeff Christian

Patti G #1-4

4-1s-37w Cheyenne,KS

Start Date: 2013.05.18 @ 22:50:00

End Date: 2013.05.19 @ 08:04:00

Job Ticket #: 50746 DST #: 7

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

Printed: 2013.05.24 @ 08:40:03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50746

DST#: 7

Test Start: 2013.05.18 @ 22:50:00

GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:58:00
 Time Test Ended: 08:04:00
 Interval: **4479.00 ft (KB) To 4522.00 ft (KB) (TVD)**
 Total Depth: 4522.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Nichols
 Unit No: 61
 Reference Elevations: 3147.00 ft (KB)
 3137.00 ft (CF)
 KB to GR/CF: 10.00 ft

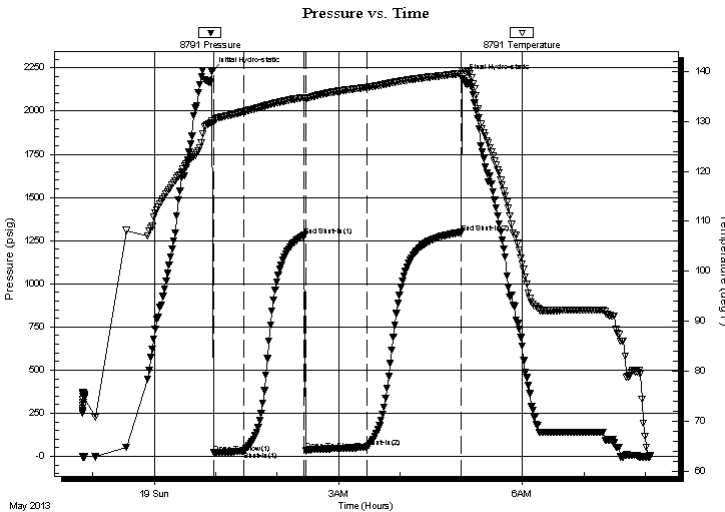
Serial #: 8791

Inside

Press @ Run Depth: 53.35 psig @ 4480.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.05.18 End Date: 2013.05.19 Last Calib.: 2013.05.19
 Start Time: 22:50:01 End Time: 08:04:00 Time On Btm: 2013.05.19 @ 00:56:30
 Time Off Btm: 2013.05.19 @ 05:01:00

TEST COMMENT: 30 IF - Surface blow built to 3 1/2"
 60 ISI - No return
 60 FF - Surface blow started @ 2 mins built to 5 1/4"
 90 FSI - No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2230.08	130.14	Initial Hydro-static
2	20.40	129.82	Open To Flow (1)
31	30.40	131.96	Shut-In(1)
90	1280.15	134.82	End Shut-In(1)
92	33.45	134.62	Open To Flow (2)
151	53.35	136.84	Shut-In(2)
243	1297.40	139.61	End Shut-In(2)
245	2187.14	140.23	Final Hydro-static

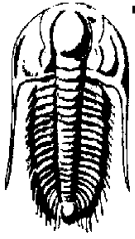
Recovery

Length (ft)	Description	Volume (bbl)
91.00	GOCM - 5%G - 40%M - 55%o	0.45
4.00	Oil - 100%o	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne, KS

Patti G #1-4

Job Ticket: 50746

DST#: 7

Test Start: 2013.05.18 @ 22:50:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:58:00

Time Test Ended: 08:04:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 61

Interval: **4479.00 ft (KB) To 4522.00 ft (KB) (TVD)**

Reference Elevations: 3147.00 ft (KB)

Total Depth: 4522.00 ft (KB) (TVD)

3137.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8651 Outside

Press @ Run Depth: psig @ 4480.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.05.18

End Date: 2013.05.19

Last Calib.: 2013.05.19

Start Time: 22:50:01

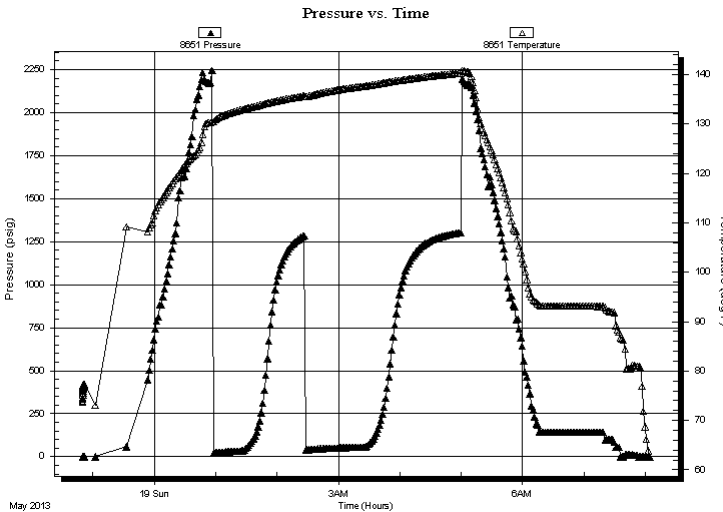
End Time: 08:04:00

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 IF - Surface blow built to 3 1/2"
60 ISI - No return
60 FF - Surface blow started @ 2 mins built to 5 1/4"
90 FSI - No return

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
91.00	GOCM - 5%G - 40%M - 55%o	0.45
4.00	Oil - 100%o	0.02

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
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50746 **DST#: 7**
Test Start: 2013.05.18 @ 22:50:00

Tool Information

Drill Pipe:	Length: 3934.00 ft	Diameter: 3.80 inches	Volume: 55.18 bbl	Tool Weight: 2500.00 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: 533.00 ft	Diameter: 2.25 inches	Volume: 2.62 bbl	Weight to Pull Loose: 84000.00 lb
			<u>Total Volume: 57.80 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4479.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	71.00 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			4456.00	
Hydraulic tool	5.00			4461.00	
Jars	5.00			4466.00	
Safety Joint	3.00			4469.00	
Packer	5.00			4474.00	28.00 Bottom Of Top Packer
Packer	5.00			4479.00	
Stubb	1.00			4480.00	
Recorder	0.00	8791	Inside	4480.00	
Recorder	0.00	8651	Outside	4480.00	
Perforations	6.00			4486.00	
change Over Sub	1.00			4487.00	
Drill Pipe	31.00			4518.00	
Change Over Sub	1.00			4519.00	
Bullnose	3.00			4522.00	43.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling
250 N. Water Ste. 300
Wichita KS 67202
ATTN: Jeff Christian

4-1s-37w Cheyenne,KS
Patti G #1-4
Job Ticket: 50746 **DST#: 7**
Test Start: 2013.05.18 @ 22:50:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 35 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 75.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.99 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 600.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
91.00	GOCM - 5%G - 40%M - 55%o	0.448
4.00	Oil - 100%o	0.020

Total Length: 95.00 ft Total Volume: 0.468 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Oil API = 36 @ 70 DEG F = 35 COR 60 DEG F

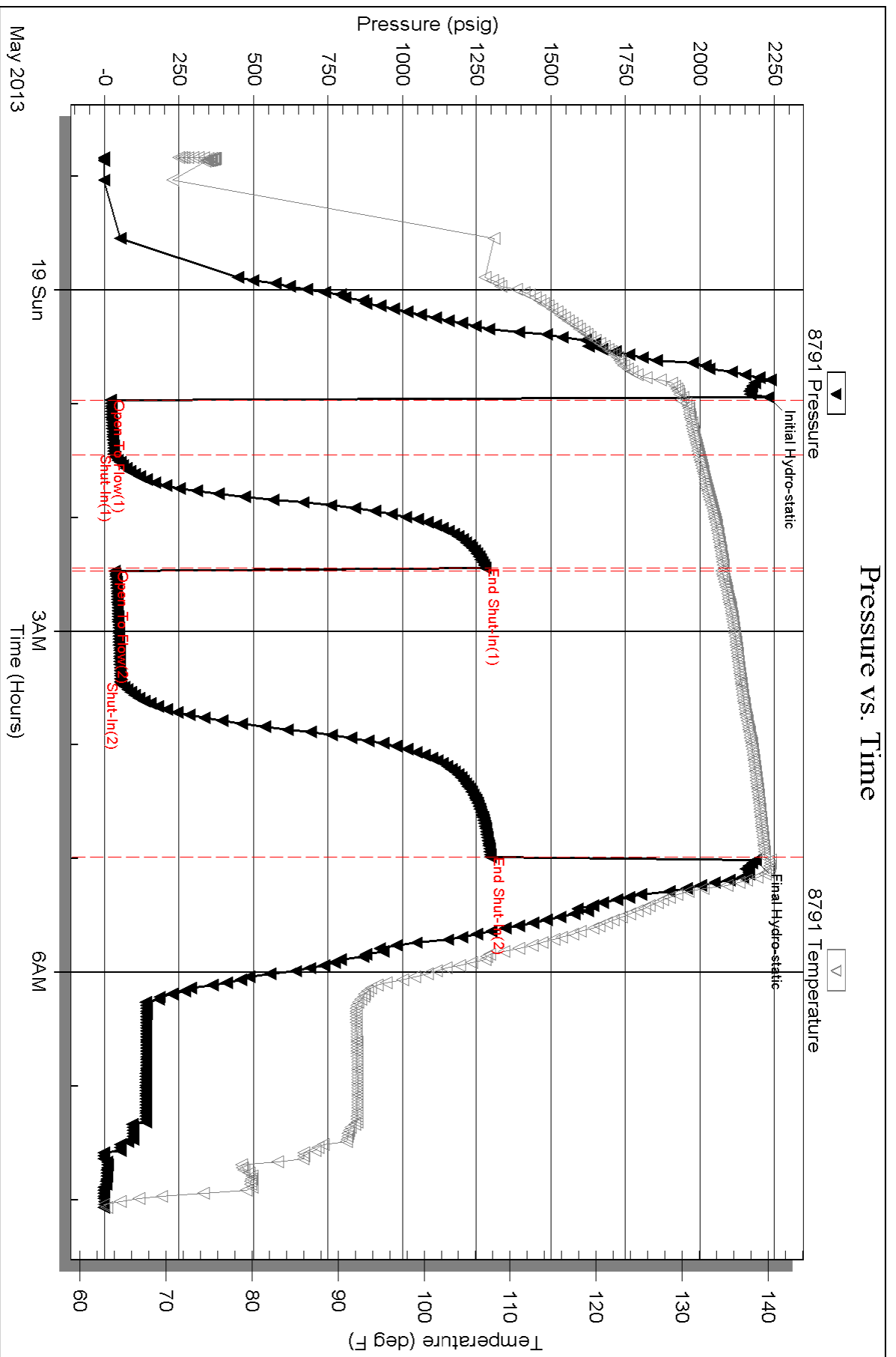
Serial #: 8791

Inside

Murfin Drilling

Patti G#1-4

DST Test Number: 7

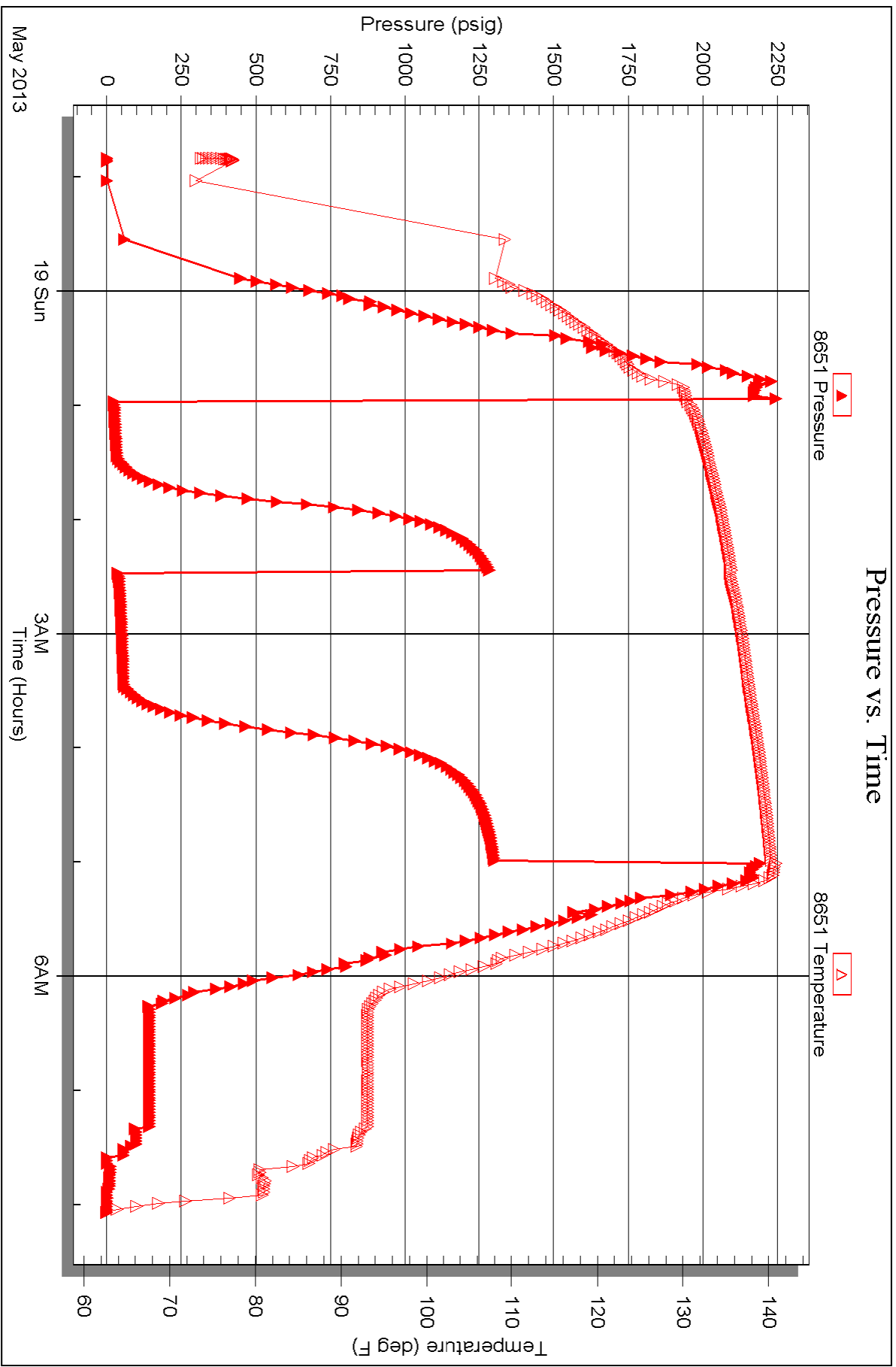


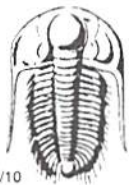
Serial #: 8651

Outside Murfin Drilling

Patti G#1-4

DST Test Number: 7





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50672

Well Name & No. Patti G #1-4 Test No. 1 Date 5-13-2013
 Company Murfin Drilling Co. Elevation 3147 KB 3137 GL
 Address 250 N. Water Ste. 300 Wichita Ks. 67202
 Co. Rep / Geo. JEFF Christian Rig Murfin # 14
 Location: Sec. 4 Twp. 1S Rge. 37W Co. Cheyenne State Ks

Interval Tested 3638 3690 Zone Tested Foraker
 Anchor Length 52 Drill Pipe Run 3109 Mud Wt. 9.0
 Top Packer Depth 3633 Drill Collars Run 533 Vis 70
 Bottom Packer Depth 3638 Wt. Pipe Run -0- WL 5.6
 Total Depth 3690 Chlorides 600 ppm System LCM 4#

Blow Description IF: Weak surface blow, died in 7 mins.

ISI: No blow Back

FF: No blow

FSI: No blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>vsocm</u>		<u>25</u>		<u>75</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 5 BHT 124 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

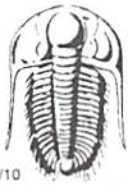
(A) Initial Hydrostatic 1829 Test 1150 T-On Location 13:30
 (B) First Initial Flow 17 Jars 250 T-Started 15:45
 (C) First Final Flow 17 Safety Joint 75 T-Open 18:08
 (D) Initial Shut-In 309 Circ Sub _____ T-Pulled 21:15
 (E) Second Initial Flow 18 Hourly Standby 1/2h 50 T-Out 22:55
 (F) Second Final Flow 20 Mileage 68x2 = 136 x 1.55 210.80
 (G) Final Shut-In 340 Sampler _____
 (H) Final Hydrostatic 1820 Straddle _____

Comments on location at 13:30 Rg
didn't start out until 14:00 when
Due to tight short trip start in Hole unit
tool at 15:45 collar in at 16:50
 Ruined Shale Packer
 Ruined Packer

Initial Open 30 Extra Packer _____
 Initial Shut-In 60 Extra Recorder _____
 Final Flow 30 Day Standby _____
 Final Shut-In 60 Accessibility _____
 Sub Total 1735.80

Approved By _____ Our Representative Chuck King

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50673

Well Name & No. Pathi G # 1-4 Test No. 2 Date 5-14-2013
 Company Murfin Drilling Co. Elevation 3147 KB 3137 GL
 Address 250 N. Water Ste. 300 Wichita
 Co. Rep / Geo. Jeff Christian Rig Murfin #14
 Location: Sec. 4 Twp. 15 Rge. 37w Co. Cheyenne State Ks

Interval Tested 3978 4040 Zone Tested Oread
 Anchor Length 62 Drill Pipe Run 3426 Mud Wt. 8.9
 Top Packer Depth 3973 Drill Collars Run 533 Vis 6.8
 Bottom Packer Depth 3978 Wt. Pipe Run - 0 - WL 5.4
 Total Depth 4040 Chlorides 700 ppm System LCM 0#

Blow Description IF: Weak blow, surface over 30 mins.
ISI: No blow back
FF: No blow
FSI: No blow back

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

Rec Total 100 BHT 130. Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2105</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>29:53</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>22:50</u>
(C) First Final Flow <u>44</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>00:50</u>
(D) Initial Shut-In <u>1310</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>3:50</u>
(E) Second Initial Flow <u>48</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>5:32</u>
(F) Second Final Flow <u>72</u>	<input checked="" type="checkbox"/> Mileage <u>68x2 = 136x1.55</u> 210.80	Comments _____
(G) Final Shut-In <u>1278</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1938</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<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>30</u>	<input checked="" type="checkbox"/> Day Standby _____	Total <u>1785.80</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1785.80</u>	

Approved By _____ Our Representative Chuck Knight

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **50674**

Well Name & No. Patti G #1-4 Test No. 3 Date 5-15-2013
 Company MurFin Drilling Co. Elevation 3147 KB 3137 GL
 Address 250 N. Water 300 Wichita KS.
 Co. Rep / Geo. Jeff Christian Rig MurFin #14
 Location: Sec. 4 Twp. 15 Rge. 37W Co. cheyenne State KS

Interval Tested 4112 4132 Zone Tested LRC-A
 Anchor Length 20 Drill Pipe Run 3583 Mud Wt. 8.9
 Top Packer Depth 4107 Drill Collars Run 533 Vis 64
 Bottom Packer Depth 4112 Wt. Pipe Run -0- WL 6.4
 Total Depth 4132 Chlorides 700 ppm System LCM 6#

Blow Description IF: Weak blow, died in 10 mins.
ISI: No blow back
FP: No blow

ESI: No blow back

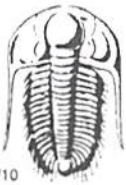
Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1 BHT 128 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2080</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>15:00</u>
(B) First Initial Flow <u>15</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>16:00</u>
(C) First Final Flow <u>15</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>18:08</u>
(D) Initial Shut-In <u>23</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>21:20</u>
(E) Second Initial Flow <u>14</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>23:08</u>
(F) Second Final Flow <u>15</u>	<input checked="" type="checkbox"/> Mileage <u>68x2=136x1.55</u> 210.80	Comments _____
(G) Final Shut-In <u>21</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1981</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<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>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1785.80</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1785.80</u>	

Approved By _____ Our Representative Chuck Kozup

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **50675**

4/10

Well Name & No. Patti G #1-4 Test No. 4 Date 5-16-13
 Company Murfin Drilling Co. Elevation 3147 KB 3137 GL
 Address 250 N. Water 300 Wichita
 Co. Rep / Geo. Jeff Christian Rig Murfin #14
 Location: Sec. 4 Twp. 1S Rge. 37W Co. cheyenne State Ks

Interval Tested 4130 4180 Zone Tested LKC-D
 Anchor Length 50 Drill Pipe Run 3584 Mud Wt. 899.0
 Top Packer Depth 4125 Drill Collars Run 533 Vis 659
 Bottom Packer Depth 4130 Wt. Pipe Run 0- WL 6.0
 Total Depth 4180 Chlorides 800 ppm System LCM 6#

Blow Description IF: ~~Weak~~ Fair blow, Built to B.O.B in 25 mins. over 30 mins
ISI: No blow back

FF: Fair blow, Built to B.O.B in 25 mins.
FSD: Blow back after 5 mins. Built to ~~2100~~ ^{5 in over 60 mins. Died to 2 in over 90 mins.}

Rec	Feet of	%gas	%oil	%water	%mud
95	go	10%	90%		
95	go	40%	60%		
95	gmo	10%	65%		25%
95	gocm	10%	30%		60%
0	Feet of <u>475 ft of gas in pipe</u>	%gas	%oil	%water	%mud

Rec Total 330 BHT 135 Gravity 26 API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2096 Test 1250 T-On Location 6:45
 (B) First Initial Flow 20 Jars 250 T-Started 8:10
 (C) First Final Flow 79 Safety Joint 75 T-Open 9:49
 (D) Initial Shut-In 1156 Circ Sub _____ T-Pulled 150
 (E) Second Initial Flow 86 Hourly Standby _____ T-Out 1553
 (F) Second Final Flow 156 Mileage 68K2 = 136X1.55 210.80 Comments _____
 (G) Final Shut-In 1144 Sampler _____
 (H) Final Hydrostatic 2012 Straddle _____

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 30 Extra Packer _____
 Initial Shut-In 60 Extra Recorder _____
 Final Flow 60 Day Standby _____
 Final Shut-In 90 Accessibility _____
 Sub Total 1785.80 MP/DST Disc't _____

Approved By _____ Our Representative Chuck Kasper

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51126

Well Name & No. Patti G #1-4 Test No. 5 Date 5-17-2013
 Company Murfin Drilling Co. Elevation 3147 KB 3137 GL
 Address 250 N. Water Ste 300 White Rte.
 Co. Rep / Geo. Jeff Christian Rig Murfin #14
 Location: Sec. 4 Twp. 15 Rge. 37w Co. Cheyenne State KS

Interval Tested 4192 4240 Zone Tested LKL-G
 Anchor Length 48 Drill Pipe Run 3643 Mud Wt. 9.0
 Top Packer Depth 4187 Drill Collars Run 533 Vis 59
 Bottom Packer Depth 4192 Wt. Pipe Run -0- WL 6.0
 Total Depth 4240 Chlorides 800 ppm System LCM 6#

Blow Description IF: Fair blow, Built to B.O.B in 10 mins.
ISI: Blow back after 1 min. Surface over 60 mins.

FF: Fair blow, B.O.B in 7 mins.

FST: Blow back. Weak surface ^{Dial in} ~~over~~ 60 mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>105</u>	<u>90</u>	<u>30</u>	<u>70</u>		
<u>95</u>	<u>90 gmc</u>	<u>40</u>	<u>50</u>		<u>10</u>
<u>95</u>	<u>90 gmc</u>	<u>25</u>	<u>25</u>		<u>50</u>
<u>0</u>	<u>475 ft gas in P.P.</u>				

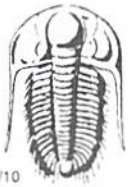
Rec Total 295 BHT 132 Gravity 27 API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2099 Test 1250 T-On Location 1:30
 (B) First Initial Flow 20 Jars 250 T-Started 2:30
 (C) First Final Flow 73 Safety Joint 75 T-Open 5:00
 (D) Initial Shut-In 1267 Circ Sub T-Pulled 8:45
 (E) Second Initial Flow 80 Hourly Standby T-Out 10:38
 (F) Second Final Flow 122 Mileage 210.80 Comments _____
 (G) Final Shut-In 1249 Sampler _____
 (H) Final Hydrostatic 2078 Straddle _____
 Shale Packer _____
 Ruined Shale Packer _____
 Extra Packer _____
 Ruined Packer _____
 Extra Copies _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 90
 Sub Total 1785.80
 Total 1785.80
 MP/DST Disc't _____

Approved By _____ Our Representative Chris [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50745

Well Name & No. Patt's 'G' #1-4 Test No. 6 Date 5/17/13
 Company Martin Drilling Co. Elevation 3147 KB 3137 GL
 Address 250 N. Water STE 300 Wichita, KS
 Co. Rep / Geo. Jeff Christian Rig Martin #14
 Location: Sec. 4 Twp. 1S Rge. 37W Co. Cheyenne State KS

Interval Tested 4237-4330 Zone Tested LKC @ "H-J"
 Anchor Length 93' Drill Pipe Run 3710' Mud Wt. 9.4
 Top Packer Depth 4232 Drill Collars Run 533 Vis 70
 Bottom Packer Depth 4237 Wt. Pipe Run 0' WL 6.0
 Total Depth 4330 Chlorides 800 ppm System LCM 26
 Blow Description IF - 1/4" blow built to 1"
ISI - No return
FF - Surface blow built to 3"
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>1'</u>	<u>OCM</u>	<u>10</u>		<u>90</u>	
<u>91'</u>	<u>GOCM</u>	<u>20</u>	<u>30</u>	<u>50</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 92' BHT — Gravity 132° API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic <u>2045</u>	<input type="checkbox"/> Test 1250	T-On Location <u>20:35</u>
(B) First Initial Flow <u>30</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>21:11</u>
(C) First Final Flow <u>41</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>00:02</u>
(D) Initial Shut-In <u>926</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>04:02</u>
(E) Second Initial Flow <u>42</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>06:00</u>
(F) Second Final Flow <u>56</u>	<input checked="" type="checkbox"/> Mileage <u>130 RT</u> 210.80	Comments _____
(G) Final Shut-In <u>1016</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2057</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 <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total <u>1785.80</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1785.80</u>	

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50746

Well Name & No. Martin Drilling Co Test No. 7 Date 5/18/13
 Company Patti G #1-4 Elevation 3147 KB 3137 GL
 Address 250 N. Water STE 300 Wichita, KS
 Co. Rep / Geo. Jeff Christian Rig Martin #14
 Location: Sec. 4 Twp. 15 Rge. 37W Co. Cheyenne State KS

Interval Tested 4479-4522 Zone Tested Pawnee
 Anchor Length 43' Drill Pipe Run 3934' Mud Wt. 9.1
 Top Packer Depth 4474 Drill Collars Run 533' Vis 75
 Bottom Packer Depth 4479 Wt. Pipe Run 0' WL 6
 Total Depth 4522 Chlorides 600 ppm System LCM 6

Blow Description IF - Surface blow built to 3 1/2"
ISI - No return
FF - Surface blow started @ 2 mins built to 5 1/4"
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>4</u>	<u>oil</u>	<u>5</u>	<u>95</u>		
<u>91</u>	<u>OCM</u>	<u>5</u>	<u>55</u>		<u>40</u>

Rec Total 95' BHT 140° Gravity 35 API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>2230</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>22:15</u>
(B) First Initial Flow <u>30</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>22:50</u>
(C) First Final Flow <u>30</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>00:58</u>
(D) Initial Shut-In <u>1280</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>04:58</u>
(E) Second Initial Flow <u>33</u>	<input type="checkbox"/> Hourly Standby	T-Out
(F) Second Final Flow <u>53</u>	<input checked="" type="checkbox"/> Mileage <u>130 RT</u> 210.80	Comments
(G) Final Shut-In <u>1297</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2187</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<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>60</u>	<input type="checkbox"/> Day Standby	Total <u>1785.80</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't

Sub Total 1785.80
 Approved By _____ Our Representative [Signature]

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



PO Box 93999
Southlake, TX 76092

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

INVOICE

acct. Prod - Lth

Invoice Number: 136156
Invoice Date: May 9, 2013
Page: 1

Now Includes:



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

Customer ID	Field Ticket #	Payment Terms	
Murfin	60172	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	May 9, 2013	6/8/13

Quantity	Item	Description	Unit Price	Amount
190.00	MAT	Patti G #1-4	17.90	3,401.00
7.00	MAT	Class A Common Chloride	64.00	448.00
199.50	SER	Cubic Feet	2.48	494.76
919.80	SER	Ton Mileage	2.60	2,391.48
1.00	SER	Surface	1,512.25	1,512.25
100.00	SER	Pump Truck Mileage	7.70	770.00
1.00	SER	Manifold Rental	275.00	275.00
100.00	SER	Light Vehicle Mileage	4.40	440.00
1.00	CEMENTER	Alan Ryan		
1.00	EQUIP OPER	Wayne McGhghy		
1.00	OPER ASSIST	Kevin Ryan		

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF *35%*

\$ 3,406.37 *ok*

ONLY IF PAID ON OR BEFORE Jun 3, 2013

Subtotal	9,732.49
Sales Tax	319.47
Total Invoice Amount	10,051.96
Payment/Credit Applied	
TOTAL	10,051.96

0130

- 3406.37

6645.59

ALLIED OIL & GAS SERVICES, LLC 060172

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Daklog K1

DATE <u>5/9/13</u>	SEC. <u>4</u>	TWP. <u>1</u>	RANGE <u>37</u>	CALLED OUT	ON LOCATION	JOB START <u>12:00</u>	JOB FINISH <u>12:30</u>
LEASE <u>Path G</u>	WELL # <u>1-4</u>	LOCATION <u>Burkhead 570 State Cir 3E</u>			COUNTY <u>Chester</u>	STATE <u>KY</u>	
OLD OR (NEW) (Circle one)		<u>2 1/2 S R into</u>					

CONTRACTOR Martin 14 OWNER Same

TYPE OF JOB Surface
 HOLE SIZE 12 1/4 T.D. 227
 CASING SIZE 8 5/8 DEPTH 227'
 TUBING SIZE DEPTH
 DRILL PIPE 4 1/2 DEPTH
 TOOL DEPTH

PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. 15'
 PERFS.
 DISPLACEMENT 13.5044

EQUIPMENT

PUMP TRUCK	CEMENTER <u>Alan Ryan</u>	
# <u>422</u>	HELPER <u>Wayne McLaughlin</u>	
BULK TRUCK		
# <u>340</u>	DRIVER <u>Kevin Ryan</u>	
BULK TRUCK		
#	DRIVER	

CEMENT
 AMOUNT ORDERED 190 SK, CONA 370 CC

COMMON	<u>190</u>	@ <u>17.90</u>	<u>3401.00</u>
POZMIX		@	
GEL		@	
CHLORIDE	<u>7</u>	@ <u>64.00</u>	<u>448.00</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>199.5 CF</u>	@ <u>2.48</u>	<u>494.91</u>
MILEAGE	<u>2.227 mi/mile</u>	@ <u>9.198</u>	<u>20.51</u>
			<u>391.42</u>
TOTAL			<u>6675.33</u>

REMARKS:
An Co Circulate Mix Cement, Displace
227' Shut in.

Cement did Circulate
Franklin
Alan, Wayne, Kevin

CHARGE TO: Martin Drilling
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>227'</u>	
PUMP TRUCK CHARGE		<u>1512.25</u>
EXTRA FOOTAGE	@	<u>16</u>
MILEAGE	<u>100 miles</u>	@ <u>2.20</u>
MANIFOLD	@	<u>225.00</u>
Vehicle	<u>100 miles</u>	@ <u>340</u>
	@	
TOTAL <u>2997.25</u>		

PLUG & FLOAT EQUIPMENT

_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
TOTAL _____		

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

PRINTED NAME Craig Chrusch
 SIGNATURE Craig Chrusch

SALES TAX (if Any) _____
 TOTAL CHARGES 9,672.64
 DISCOUNT 3,385.42 IF PAID IN 30 DAYS
6,287.21



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

Acctg -

cc: WF
cc: Liz
cc: L-1

Invoice

DATE	INVOICE #
5/20/2013	24276

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	#1-4	Patti G	Cheyenne	Company Tools R...	Oil	Development	LongString	Nick
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				150	Miles	6.00	900.00
578D-L	Pump Charge - Long String - 4670 Feet				1	Job	1,500.00	1,500.00
221	Liquid KCL (Clayfix)				4	Gallon(s)	25.00	100.00T
281	Mud Flush				500	Gallon(s)	1.25	625.00T
290	D-Air				5	Gallon(s)	42.00	210.00T
403-5	5 1/2" Cement Basket				3	Each	285.00	855.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	275.00	275.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	375.00	375.00T
409-5	5 1/2" Turbolizer				15	Each	90.00	1,350.00T
413-5	5 1/2" Roto Wall Scratcher				2	Each	40.00	80.00T
419-5	5 1/2" Rotating Head Rental				1	Each	200.00	200.00T
325	Standard Cement				200	Sacks	14.00	2,800.00T
330	Swift Multi-Density Standard (MIDCON II)				300	Sacks	17.00	5,100.00T
276	Flocele				125	Lb(s)	2.00	250.00T
283	Salt				1,000	Lb(s)	0.20	200.00T
284	Calseal				9	Sack(s)	35.00	315.00T
285	CFR-1				150	Lb(s)	4.00	600.00T
581D	Service Charge Cement				500	Sacks	2.00	1,000.00
583D	Drayage				3,773	Ton Miles	1.00	3,773.00
	Subtotal							20,508.00
	Sales Tax Cheyenne County						8.30%	1,106.81
	USED FOR <u>AC103</u>							
	APPROVED <u>JL</u>							

We Appreciate Your Business! **Total** \$21,614.81



CHARGE TO: Marlin Drly Co, Inc.
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET No 24276

PAGE 1 OF 2

SERVICE LOCATIONS: 1. Hays, Ks. WELL PROJECT NO. #1-4 LEASE Path "G" COUNTY/PARISH Cheyenne STATE Ks CITY Location DATE 5-20-13 OWNER same

2. Ness City, Ks. CONTRACTOR Ce Tools Rigs #14 RIG NAME/NO. #14 RIG NAME/NO. #14 SHIPPED VIA CF DELIVERED TO Location ORDER NO. 5-20-13

3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE hoagstring WELL PERMIT NO. WELL LOCATION

4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF		QTY.	UM	QTY.		
575					MILEAGE #110	150	mi		6.00	900.00
578					Pump Charge (hoagstring)	104	4670'		15.00	1560.00
221					5-L	4	gal		25.00	100.00
281					Mud Flush	500	gal		1.25	625.00
290					D-Air	5	gal		42.00	210.00
403					Baskets	3	ea		285.00	855.00
406					10 Ply & Baffle	1	ea		275.00	275.00
407					Tosart Flat Shoe w/ Bell	1	ea		375.00	375.00
409					Turbolizers	15	ea		90.00	1350.00
413					Rotowall Scratchers	2	ea		40.00	80.00
419					Rotating Head	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 5-20-13 TIME SIGNED 1745 AM PM

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	AMOUNT
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				1	6470.00
WE UNDERSTOOD AND MET YOUR NEEDS?				2	140381.00
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				Subtotal	20,508.00
WE OPERATED THE EQUIPMENT AND PERFORMED JOB SATISFACTORILY?				Cheyenne TAX 07	1106.81
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO		TOTAL	21,614.81

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 SWIFT OPERATOR: Alia P. [Signature] APPROVAL

Thank You!



Swanton, Inc.

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

TICKET CONTINUATION

TICKET No. 24226

CUSTOMER: *Marta Dly Co. Inc.* WEL: *Part 6" 4-4* DATE: *5-20-13* PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE PART NUMBER	ACQUANTING LOC ACCT	TIME	DESCRIPTION	WEL		DATE	INIT PRICE	AMOUNT
					QTY	UNIT			
325				Standard Cement	200	SKS		14.00	2800.00
330				SMD Cement	300	SKS		17.00	5100.00
276				Flocele	125	#		2.00	250.00
283				Salt	1000	#		2.00	2000.00
284				Cal Seal	45	SKS		35.00	1575.00
285				CEB-1	150	#		4.00	600.00
581								2.00	1000.00
583								1.00	3773.00

50303

CONTINUATION TOTAL ~~14,038~~ 14,038

14,038

JOB LOG

SWIFT Services, Inc.

DATE 5-20-13 PAGE NO. 1

CUSTOMER *Murkin Drilling Co Inc*

WELL NO. *#1-4*

LEASE *Patti "G"*

JOB TYPE *Longstring*

TICKET NO. *24276*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1130							on loc w/ FE.
								RTD 4670'
								5 1/2" x 15.5" x 4684' x 21'
								Turbo 1-13, 34, 44
								Back. 10, 35, 45
	1300							Start FE
	1400							56jts circ
	1515							Bttm Break Circ
	1615	5	0					Start Mud Flush
	1617	5	12/0					start KCL Flush
	1621	5	20/0					start 255sks SMD cement
	1650	5	14/10					start 200sks EA-2 Cement
	1700		48					End Cement
								wash Pth
								Drop L.D. Plug
	1709	6	0			250		start Displacement KCL in 1st 20 bbl
	1715	5	35			300		Catch Cement
	1730		110			1400 1600		Land Plug
								Release Pressure
								Float Hold
	1740	2.5	7/4					Plug RH+MH 30/15sks SMD
								circ 50 sks to pit
								Thank you
								Nick, David E., Isaac & John J