



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1166358
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1166358

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 31, 2013

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

Re: ACO1
API 15-153-20935-00-00
CWA 'D' 1-32
SW/4 Sec.32-02S-36W
Rawlins County, Kansas

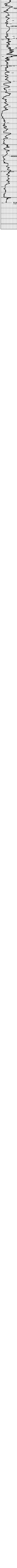
Dear Production Department:

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 CWA 'D' #1-32 440' FSL 2170'FWL Sec. 32-2S-36W 3364' KB					MDCI CWA 'B' #1-5 330' FNL 2310'FWL Sec. 5-3S-36W 3369' KB		
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum	
Anhydrite	3226	+138	-3	3227	+139	-2	3228	+141	
B/Anhydrite	3260	+104	-3	3260	+104	-3	3262	+107	
Neva	3730	-366	-7	3727	-363	-4	3728	-359	
Foraker	3846	-482	-3	3847	-483	-4	3848	-479	
Topeka	4090	-726	-5	4088	-724	-3	4090	-721	
Oread	4208	-844	-2	4209	-845	-3	4211	-842	
Lansing	4294	-930	-1	4292	-932	-3	4298	-929	
Stark	4520	-1156	-4	4522	-1158	-6	4521	-1152	
BKC	4568	-1204	-5	4569	-1205	-6	4568	-1199	
Pawnee	4692	-1328	-1	4694	-1330	-3	4696	-1327	
Cherokee				4766	-1402	-4	4767	-1398	
Mississippi	4985	-1621	-32	4972	-1608	-19	4958	-1589	
RTD	5060						5100		
LTD				5061			5102		



Sh black carb
 Sh red-grm, calc in pt

----- 4692 (-1328)
 Ls wh-cr, silt, pr sh, por, soft, gr, some interest & thin, some in pt, packed, loose & not pt.
 [No Show] R: Dst. Flux: low %; pcc with patchy goethite brn-ck brn sh, mix of sil-fr show of oily film-NV oil & FOJ
 Ls wh-cr, silt, to cherty loss

Sh black carb

----- 4726 (-1362)
 Ls wh-cr, wh-fr sh, packed out in pt (mostly red-conv) some purple, pt to wash
 [No Show]
 Ls cr, sh, drs, foss

Sh black carb

----- 4749 (-1385)
 Ls wh-cr, wh-fr sh, drs, fossiliferous
 [No Show]

----- 4767 (-1403)
 Sh black carb
 Ls cr-gy, wh-ol, drs, foss, some cherty pos
 Ls wh-cr, wh-fr sh, drs, foss in pt, sil coal pt, subcherty in pt, some calcite filled pores
 [No Show]
 Ls cr-gy, wh-ol, sh, drs, foss in pt, some sil red in pt with green glauc patches & spots

Sh red-brn-gy, silty to silty in pt, subwey in pt

Sh wh-gr, fr-red gm with silt crs grains, pr-sort, wh-red, silty, subangular to sub-cubic in pt, pr-sil, [No Show]

80% Shales red-gy-gm, wavy to silty to silty. 30% Ls wh-cr-gy fr sh, drs. 20% Sh red-gy fr-red gm, argil-sand, glauc in pt, pr-sil, some red-cr calcite sd

70% Shales red-gy-gm, wavy to silty to silty. 20% Ls wh-gy wh-fr sh, drs. 00% sil as above

80% Shales red-purple-gy-ck-gy-gm, silty, silty, earthy, subwey. 10% Ls cr-gy, sh, drs, foss; fr sd

Sh red-cr, quartz frags & grains, sub-angular, well-packed, v friable, pr sort
 [No Show]

80% Shales red-gy-gm-brn-purple, silty in pt, silty in pt, wavy in pt, earthy in pt

80% Shales red-gy-gm-pur-pur, silty in pt, earthy in pt, calc in pt, foss in pt. 20% Ls wh-cr, drs, drs; fr sd

80% Shales red-gy-gm-pur-pur, silty in pt, earthy in pt, calc in pt, foss in pt

80% Shales red-gy-gm-pur-pur, silty in pt, earthy in pt, calc in pt, subcherty in pt

----- 4972 (-1608)
 80% Shales, vt silty above. 80% Sil fr-red gm, rusting, wh-red, pr-sil, soft, ggl, com in pt, silt glauc; trace of weathered wh chert, gray red, crumbly
 WOT red: Ls wh-cr, wh-fr sh, drs, all from in pt & Dst cr-tan, fr sil, success, test, fr sil por, fr-gel crush; Dolom LA, foss
 [No Show]
 Ls (dolom in pt) fr-red sh, some re-com La fragments, mostly drs with some sil por, foss about base
 Dst cr-gy in sh, subangular to sub-cubic, pr-fr drs por, chert; wh-cr sh, some wavy, some sub-angular, fresh to gray, fossiliferous in pt, sub-Dolom chert
 [No Show]
 Ls cr, wh-ol, drs, foss, cherty

DST #5: 4670-476 (Paw, L. Paw)
 Times: 30-30-30
 Initial Oper: Wk, built to 1" in bucket
 Final Oper: None
 Rec: 25.8 Total Fluid
 1 FO
 25 SOCM: 8700 8700
 88: 2589 FFP: 2316
 FFP: 1626 FFP: 3036
 CSP: 520 FFP: 100
 BHF: 137 F

7:00 AM, August 30, 2013

Mud Check, O.S. 0.527 @ 4767:
 25 10 100 LCM PV 10
 75 52 52 5 20 25
 25 140 241 540
 1300 10 115 64

7:00 AM, August 31, 2013

Mud Check, Only @ 4967:
 25 10 100 LCM PV 10
 75 52 52 5 20 20
 25 140 241 540
 1300 10 115 57

RTD 2066 FT
 LWR WH-FR
 8/31/2003 10:45 AM
 August 31, 2013



DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Brad Rine

CWA 'D' #1-32

32-2s-36w Rawlins,KS

Start Date: 2013.08.26 @ 22:30:00

End Date: 2013.08.27 @ 07:40:30

Job Ticket #: 53365 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.04 @ 13:18:27



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

32-2s-36w Rawlins, KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53365

DST#: 1

ATTN: Brad Rine

Test Start: 2013.08.26 @ 22:30:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:58:00

Time Test Ended: 07:40:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 66

Interval: 4307.00 ft (KB) To 4375.00 ft (KB) (TVD)

Reference Elevations: 3364.00 ft (KB)

Total Depth: 4375.00 ft (KB) (TVD)

3359.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8874

Inside

Press @ Run Depth: 1269.48 psig @ 4308.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.26

End Date:

2013.08.27

Last Calib.:

2013.08.27

Start Time: 22:31:00

End Time:

07:40:30

Time On Btm:

2013.08.27 @ 00:57:30

Time Off Btm:

2013.08.27 @ 05:03:30

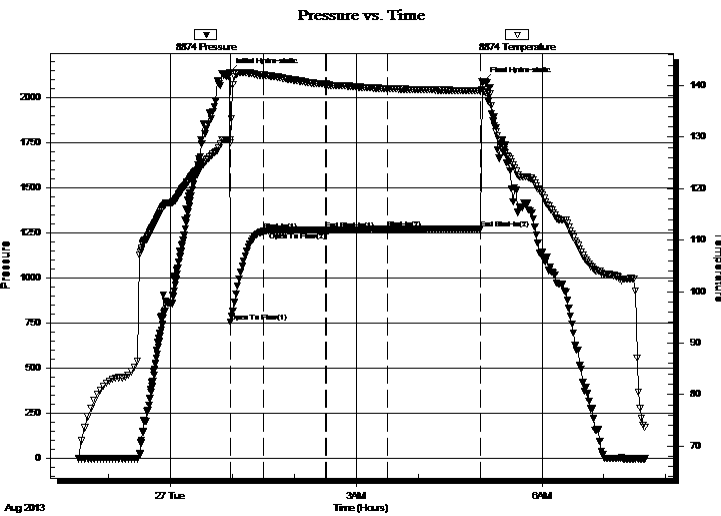
TEST COMMENT:

30 - IF- BoB in 30 sec

60 - IS- No Return

60 - FF- Weak Surface Blow built to 4"

90 - FS- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.44	129.50	Initial Hydro-static
1	755.78	128.93	Open To Flow (1)
33	1258.92	142.06	Shut-In(1)
93	1267.13	140.32	End Shut-In(1)
94	1257.54	140.29	Open To Flow (2)
153	1269.48	139.43	Shut-In(2)
243	1270.96	139.04	End Shut-In(2)
246	2088.09	138.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
2046.00	MW 5M 95W	24.15
252.00	MW 20M 80W	3.53
310.00	WM 80M 20W	4.35
216.00	MUD 100M	3.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

32-2s-36w Rawlins, KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53365

DST#: 1

ATTN: Brad Rine

Test Start: 2013.08.26 @ 22:30:00

Tool Information

Drill Pipe:	Length: 3800.00 ft	Diameter: 3.80 inches	Volume: 53.30 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: 505.00 ft	Diameter: 2.25 inches	Volume: 2.48 bbl	Weight to Pull Loose: 94000.00 lb
			<u>Total Volume: 55.78 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4307.00 ft			Final 90000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	95.00 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			4285.00	
Hydraulic tool	5.00			4290.00	
Jars	5.00			4295.00	
Safety Joint	3.00			4298.00	
Packer	5.00			4303.00	27.00 Bottom Of Top Packer
Packer	4.00			4307.00	
Stubb	1.00			4308.00	
Recorder	0.00	8653	Outside	4308.00	
Recorder	0.00	8874	Inside	4308.00	
Perforations	28.00			4336.00	
Change Over Sub	1.00			4337.00	
Drill Pipe	32.00			4369.00	
Change Over Sub	1.00			4370.00	
Bullnose	5.00			4375.00	68.00 Bottom Packers & Anchor

Total Tool Length: 95.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53365

DST#: 1

ATTN: Brad Rine

Test Start: 2013.08.26 @ 22:30:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: 0.00 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	Mud (Heavy) 100M	0.025
2046.00	MW 5M 95W	24.145
252.00	MW 20M 80W	3.535
310.00	WM 80M 20W	4.348
216.00	MJD 100M	3.030

Total Length: 2829.00 ft Total Volume: 35.083 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

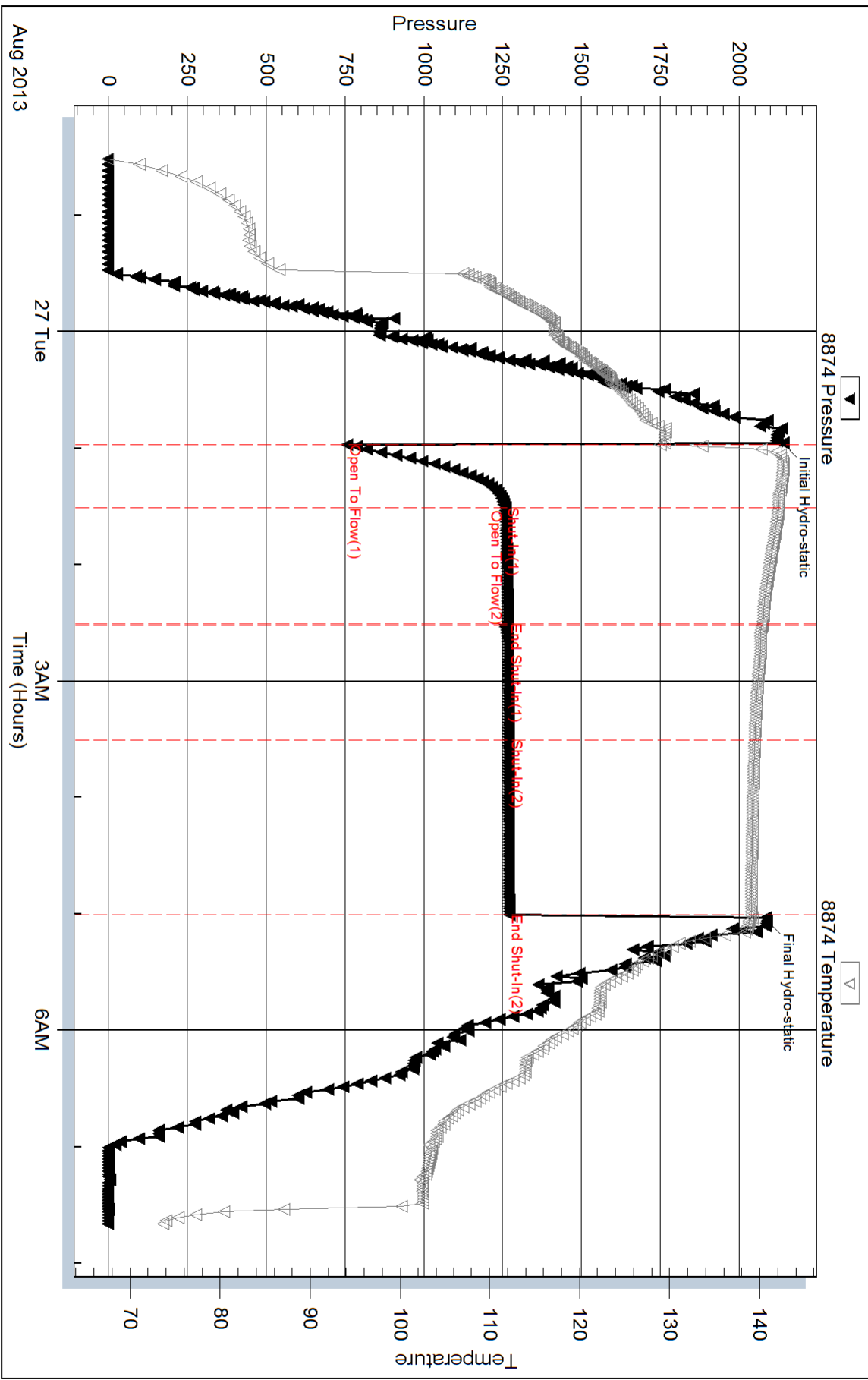
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .275 @ 77 DEG.=23,000PPM

Pressure vs. Time

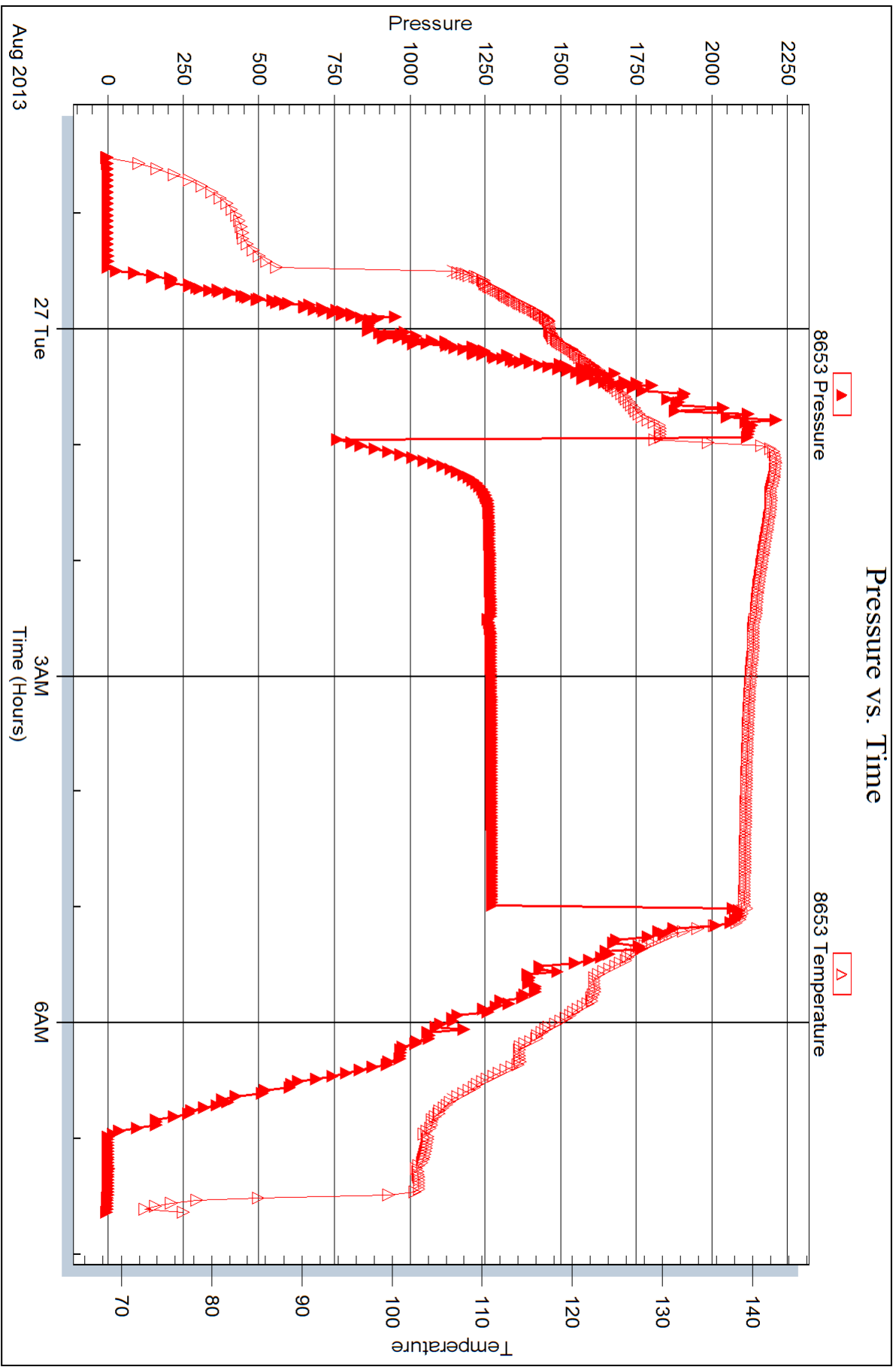


Serial #: 8653

Outside Murfin Drilling Co., Inc.

CWA ID#1-32

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 53365

Printed: 2013.09.04 @ 13:18:28



DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Brad Rine

CWA 'D' #1-32

32-2s-36w Rawlins,KS

Start Date: 2013.08.27 @ 16:05:00

End Date: 2013.08.27 @ 21:55:30

Job Ticket #: 53366 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.04 @ 13:17:47

Murfin Drilling Co., Inc. 32-2s-36w Rawlins,KS CWA 'D' #1-32 DST # 2 LKC "G" 2013.08.27



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
250 N Water STE #300
Wichita, KS 67202
ATTN: Brad Rine

32-2s-36w Rawlins, KS

CWA 'D' #1-32

Job Ticket: 53366

DST#: 2

Test Start: 2013.08.27 @ 16:05:00

GENERAL INFORMATION:

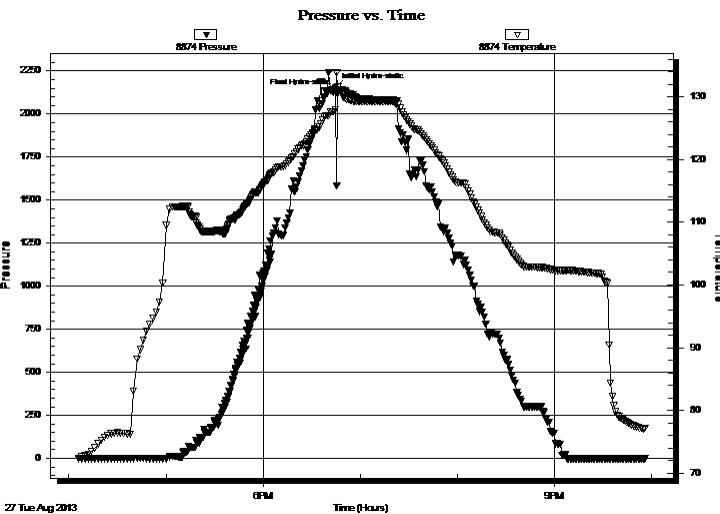
Formation: **LKC "G"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened:
 Tester: Kevin Mack
 Time Test Ended: 21:55:30
 Unit No: 66
 Interval: **4413.00 ft (KB) To 4430.00 ft (KB) (TVD)**
 Reference Elevations: 3364.00 ft (KB)
 Total Depth: 4430.00 ft (KB) (TVD)
 3359.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 5.00 ft

Serial #: 8874

Inside

Press @ Run Depth: psig @ 4414.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.27 End Date: 2013.08.27 Last Calib.: 2013.08.27
 Start Time: 16:06:00 End Time: 21:55:30 Time On Btm: 2013.08.27 @ 18:44:30
 Time Off Btm: 2013.08.27 @ 18:46:00

TEST COMMENT: Packer Failure... Pulled tools to reset anchor.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2154.03	127.98	Initial Hydro-static
2	2118.60	131.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
565.00	Mud 100M	3.33

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53366

DST#: 2

ATTN: Brad Rine

Test Start: 2013.08.27 @ 16:05:00

Tool Information

Drill Pipe:	Length: 3891.00 ft	Diameter: 3.80 inches	Volume: 54.58 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: 505.00 ft	Diameter: 2.25 inches	Volume: 2.48 bbl	Weight to Pull Loose: 88000.00 lb
			<u>Total Volume: 57.06 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 85000.00 lb
Depth to Top Packer:	4413.00 ft			Final 87000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	44.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4391.00	
Hydraulic tool	5.00			4396.00	
Jars	5.00			4401.00	
Safety Joint	3.00			4404.00	
Packer	5.00			4409.00	27.00 Bottom Of Top Packer
Packer	4.00			4413.00	
Stubb	1.00			4414.00	
Recorder	0.00	8653	Outside	4414.00	
Recorder	0.00	8874	Inside	4414.00	
Perforations	11.00			4425.00	
Bullnose	5.00			4430.00	17.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53366

DST#: 2

ATTN: Brad Rine

Test Start: 2013.08.27 @ 16:05:00

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: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
565.00	Mud 100M	3.325

Total Length: 565.00 ft Total Volume: 3.325 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

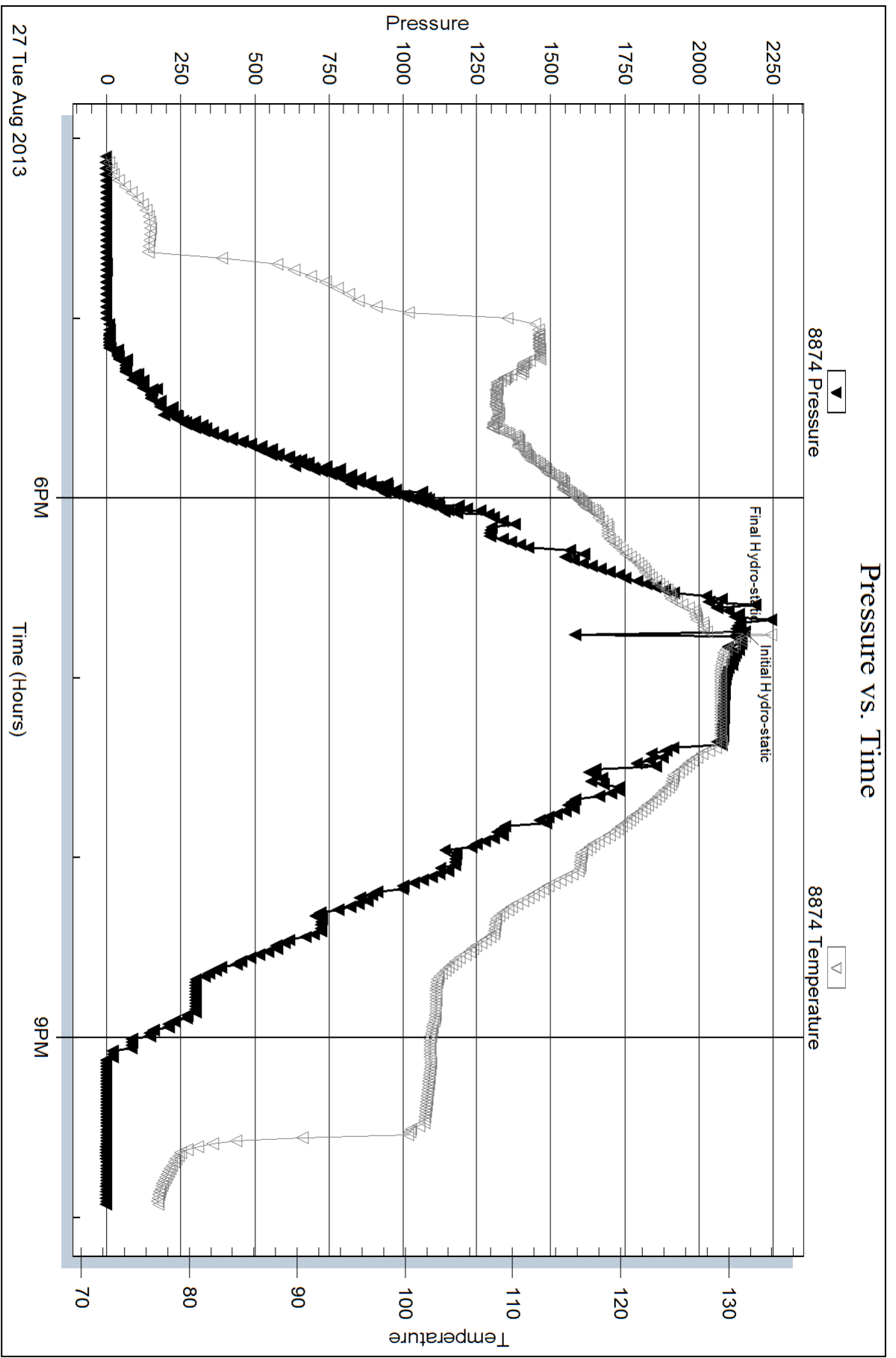
Serial #: 8874

Inside

Murfin Drilling Co., Inc.

CWA ID#1-32

DST Test Number: 2

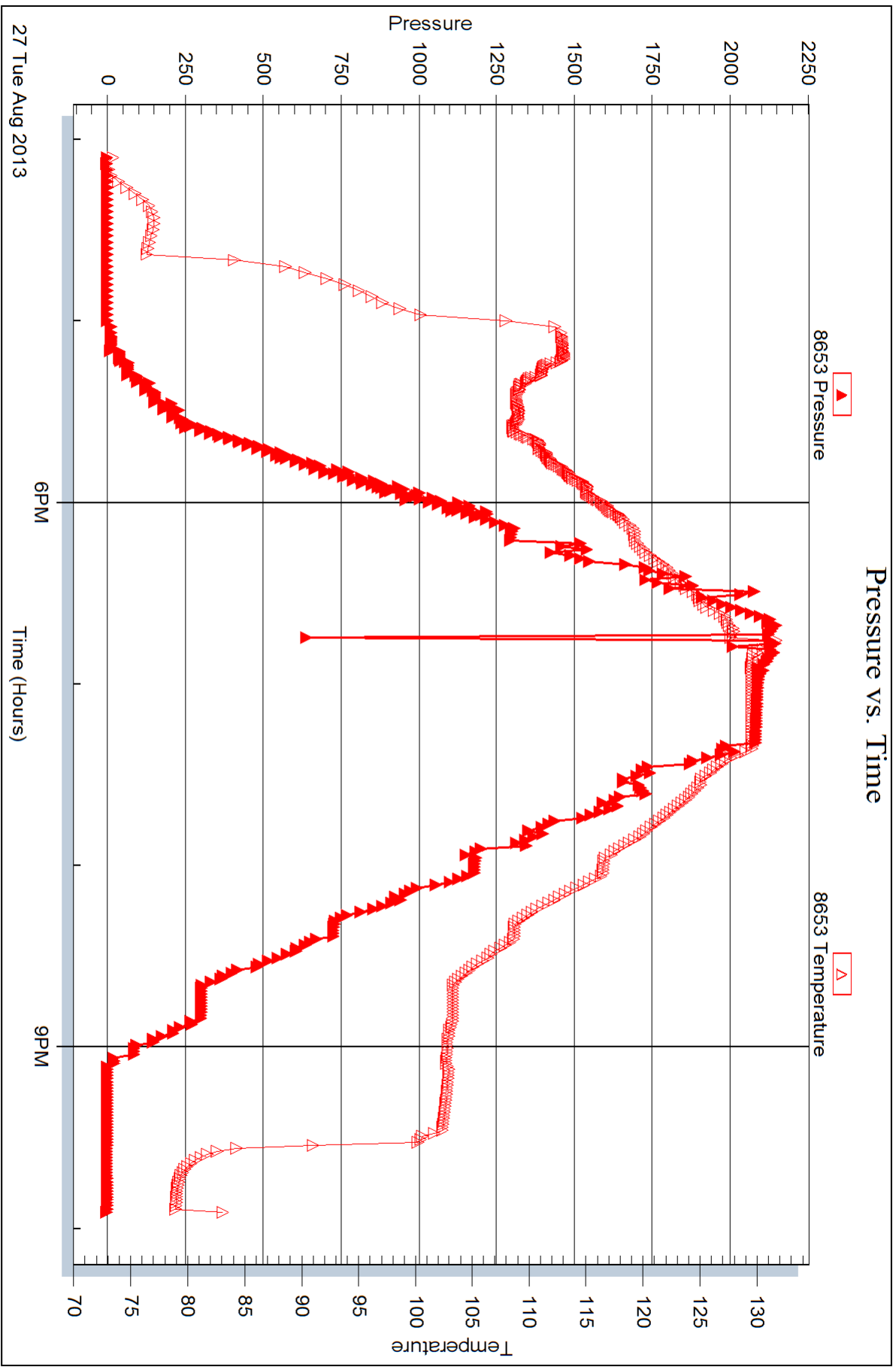


Serial #: 8653

Outside Murfin Drilling Co., Inc.

CWA ID#1-32

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 53366

Printed: 2013.09.04 @ 13:17:48



DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Brad Rine

CWA 'D' #1-32

32-2s-36w Rawlins,KS

Start Date: 2013.08.27 @ 22:10:00

End Date: 2013.08.28 @ 06:08:00

Job Ticket #: 53367 DST #: 3

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

Printed: 2013.09.04 @ 13:00:58

Murfin Drilling Co., Inc. 32-2s-36w Rawlins,KS CWA 'D' #1-32 DST # 3 LKC "G" 2013.08.27



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

32-2s-36w Rawlins, KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53367

DST#: 3

ATTN: Brad Rine

Test Start: 2013.08.27 @ 22:10:00

GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:34:00

Time Test Ended: 06:08:00

Test Type: (Initial)

Tester: Kevin Mack

Unit No: 66

Interval: 4382.00 ft (KB) To 4430.00 ft (KB) (TVD)

Reference Elevations: 3364.00 ft (KB)

Total Depth: 4430.00 ft (KB) (TVD)

3359.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8874

Inside

Press @ Run Depth: 1310.24 psig @ 4383.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.27

End Date:

2013.08.28

Last Calib.:

2013.08.28

Start Time: 22:11:00

End Time:

06:08:00

Time On Btm:

2013.08.28 @ 00:33:30

Time Off Btm:

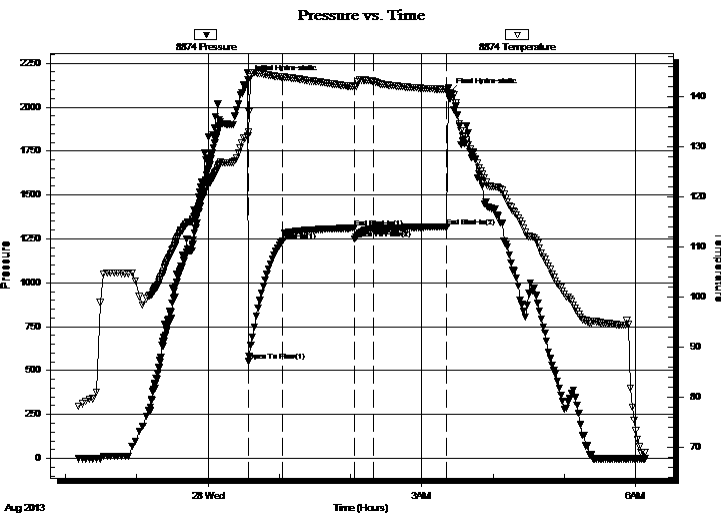
2013.08.28 @ 03:23:00

TEST COMMENT: 30 - IF- BoB in 30 sec.

60 - IS- No Return

15 - FF- Weak Surface Blow built to 2 1/2"

60 - FS- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2158.24	132.17	Initial Hydro-static
1	551.53	132.86	Open To Flow (1)
30	1239.14	143.87	Shut-In(1)
90	1311.35	141.96	End Shut-In(1)
90	1250.90	141.96	Open To Flow (2)
106	1310.24	142.98	Shut-In(2)
168	1317.26	141.36	End Shut-In(2)
170	2084.29	139.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100M	0.02
2046.00	MW 95W 5M	24.15
310.00	MW 80W 20M	4.35
186.00	MW 60W 40M	2.61
373.00	Mud 100M	5.23

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
 250 N Water STE #300
 Wichita, KS 67202
 ATTN: Brad Rine

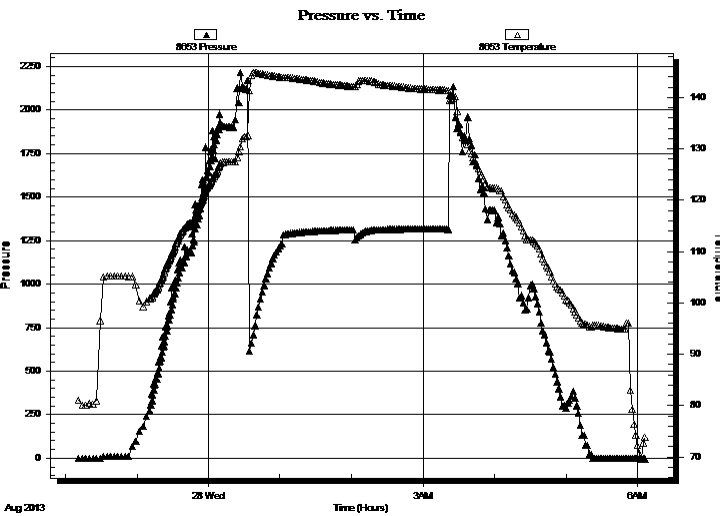
32-2s-36w Rawlins,KS
CWA 'D' #1-32
 Job Ticket: 53367 **DST#: 3**
 Test Start: 2013.08.27 @ 22:10:00

GENERAL INFORMATION:

Formation: **LKC "G"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:34:00
 Time Test Ended: 06:08:00
 Interval: **4382.00 ft (KB) To 4430.00 ft (KB) (TVD)**
 Total Depth: 4430.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: (Initial)
 Tester: Kevin Mack
 Unit No: 66
 Reference Elevations: 3364.00 ft (KB)
 3359.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8653 Outside
 Press @ Run Depth: psig @ 4383.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.27 End Date: 2013.08.28 Last Calib.: 2013.08.28
 Start Time: 22:11:00 End Time: 06:06:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF- BoB in 30 sec.
 60 - IS- No Return
 15 - FF- Weak Surface Blow built to 2 1/2"
 60 - FS- No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100M	0.02
2046.00	MW 95W 5M	24.15
310.00	MW 80W 20M	4.35
186.00	MW 60W 40M	2.61
373.00	Mud 100M	5.23

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53367

DST#: 3

ATTN: Brad Rine

Test Start: 2013.08.27 @ 22:10:00

Tool Information

Drill Pipe:	Length: 3865.00 ft	Diameter: 3.80 inches	Volume: 54.22 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: 505.00 ft	Diameter: 2.25 inches	Volume: 2.48 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 56.70 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4382.00 ft			Final 94000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	75.00 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			4360.00	
Hydraulic tool	5.00			4365.00	
Jars	5.00			4370.00	
Safety Joint	3.00			4373.00	
Packer	5.00			4378.00	27.00 Bottom Of Top Packer
Packer	4.00			4382.00	
Packer - Shale	0.00			4382.00	
Stubb	1.00			4383.00	
Recorder	0.00	8653	Outside	4383.00	
Recorder	0.00	8874	Inside	4383.00	
Perforations	9.00			4392.00	
Change Over Sub	1.00			4393.00	
Drill Pipe	31.00			4424.00	
Change Over Sub	1.00			4425.00	
Bullnose	5.00			4430.00	48.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53367

DST#: 3

ATTN: Brad Rine

Test Start: 2013.08.27 @ 22:10:00

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:

28000 ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Mud 100M	0.025
2046.00	MW 95W 5M	24.145
310.00	MW 80W 20M	4.348
186.00	MW 60W 40M	2.609
373.00	Mud 100M	5.232

Total Length: 2920.00 ft Total Volume: 36.359 bbl

Num Fluid Samples: 0

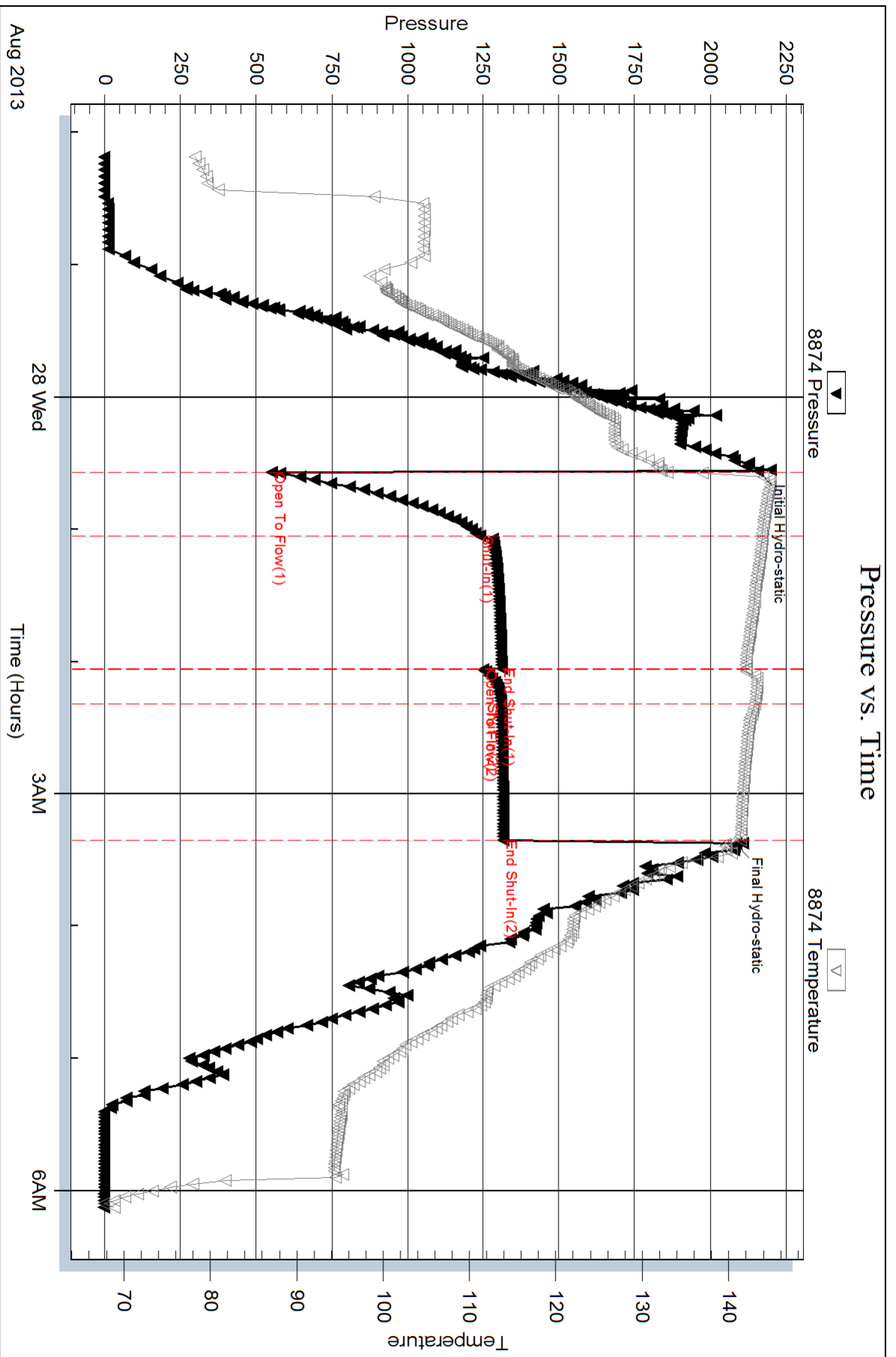
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .228 @ 75 deg.= 28000ppm

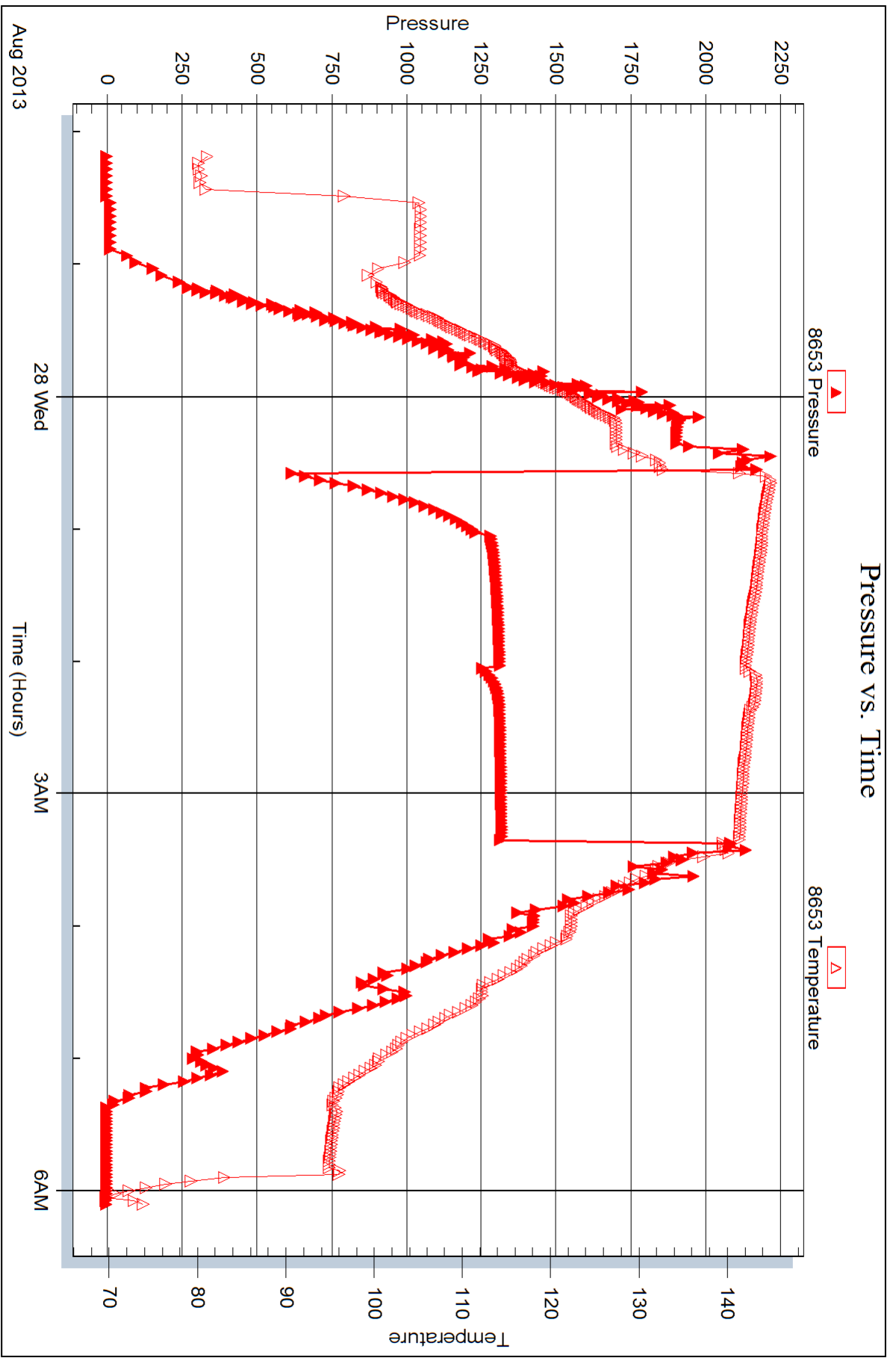


Serial #: 8653

Outside Murfin Drilling Co., Inc.

CWA ID#1-32

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 53367

Printed: 2013.09.04 @ 13:01:00



DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Brad Rine

CWA 'D' #1-32

32-2s-36w Rawlins,KS

Start Date: 2013.08.28 @ 21:04:00

End Date: 2013.08.29 @ 04:02:00

Job Ticket #: 53368 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.09.04 @ 13:00:27

Murfin Drilling Co., Inc.
32-2s-36w Rawlins,KS
CWA 'D' #1-32
DST # 4
LKC "I-J"
2013.08.28



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

32-2s-36w Rawlins, KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53368

DST#: 4

ATTN: Brad Rine

Test Start: 2013.08.28 @ 21:04:00

GENERAL INFORMATION:

Formation: **LKC "I-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:54:20

Time Test Ended: 04:02:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 66

Interval: 4474.00 ft (KB) To 4525.00 ft (KB) (TVD)

Reference Elevations: 3364.00 ft (KB)

Total Depth: 4525.00 ft (KB) (TVD)

3359.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8874

Inside

Press @ Run Depth: 22.73 psig @ 4475.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.28

End Date:

2013.08.29

Last Calib.:

2013.08.29

Start Time: 21:05:00

End Time:

04:02:00

Time On Btm:

2013.08.28 @ 22:54:10

Time Off Btm:

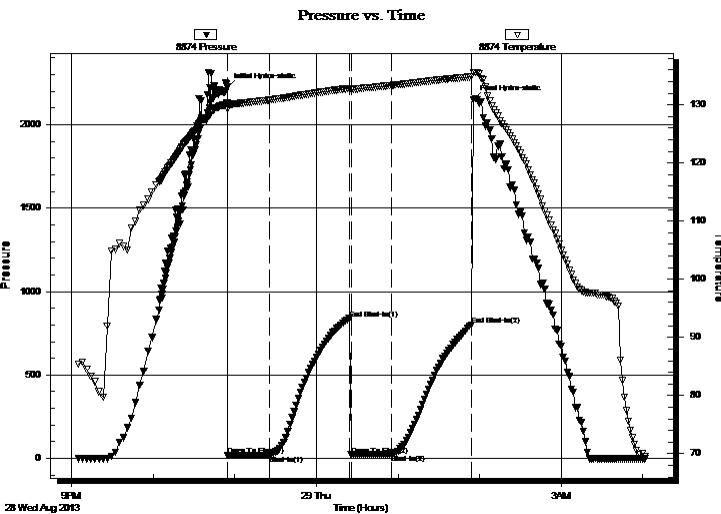
2013.08.29 @ 01:55:30

TEST COMMENT: 30 - IF- Weak Surface Blow built to 1/8", then died at 20 min.

60 - IS- No Return

30 - FF- No Blow

60 - FS- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2225.28	130.40	Initial Hydro-static
1	17.08	129.25	Open To Flow (1)
31	20.21	130.79	Shut-In(1)
90	837.80	132.80	End Shut-In(1)
92	21.79	132.62	Open To Flow (2)
121	22.73	133.33	Shut-In(2)
180	800.89	134.82	End Shut-In(2)
182	2150.30	135.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100M	0.02

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
 250 N Water STE #300
 Wichita, KS 67202
 ATTN: Brad Rine

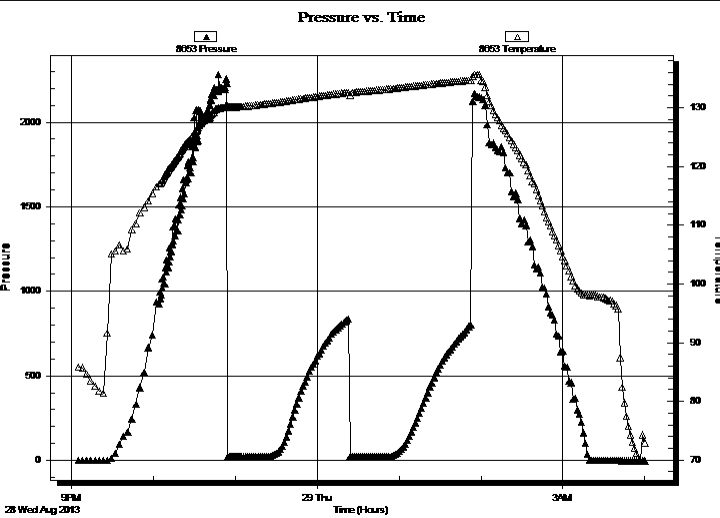
32-2s-36w Rawlins, KS
CWA 'D' #1-32
 Job Ticket: 53368 **DST#: 4**
 Test Start: 2013.08.28 @ 21:04:00

GENERAL INFORMATION:

Formation: **LKC "I-J"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 22:54:20 Tester: Kevin Mack
 Time Test Ended: 04:02:00 Unit No: 66
 Interval: **4474.00 ft (KB) To 4525.00 ft (KB) (TVD)** Reference Elevations: 3364.00 ft (KB)
 Total Depth: 4525.00 ft (KB) (TVD) 3359.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8653 Outside
 Press @ Run Depth: psig @ 4475.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.08.28 End Date: 2013.08.29 Last Calib.: 2013.08.29
 Start Time: 21:05:00 End Time: 04:01:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF- Weak Surface Blow built to 1/8", then died at 20 min.
 60 - IS- No Return
 30 - FF- No Blow
 60 - FS- No Return



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

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	Mud 100M	0.02

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53368

DST#: 4

ATTN: Brad Rine

Test Start: 2013.08.28 @ 21:04:00

Tool Information

Drill Pipe:	Length: 3957.00 ft	Diameter: 3.80 inches	Volume: 55.51 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: 505.00 ft	Diameter: 2.25 inches	Volume: 2.48 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 57.99 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4474.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 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			4452.00	
Hydraulic tool	5.00			4457.00	
Jars	5.00			4462.00	
Safety Joint	3.00			4465.00	
Packer	5.00			4470.00	27.00 Bottom Of Top Packer
Packer	4.00			4474.00	
Packer - Shale	0.00			4474.00	
Stubb	1.00			4475.00	
Recorder	0.00	8653	Outside	4475.00	
Recorder	0.00	8874	Inside	4475.00	
Perforations	11.00			4486.00	
Change Over Sub	1.00			4487.00	
Drill Pipe	32.00			4519.00	
Change Over Sub	1.00			4520.00	
Bullnose	5.00			4525.00	51.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53368

DST#: 4

ATTN: Brad Rine

Test Start: 2013.08.28 @ 21:04:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Mud 100M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

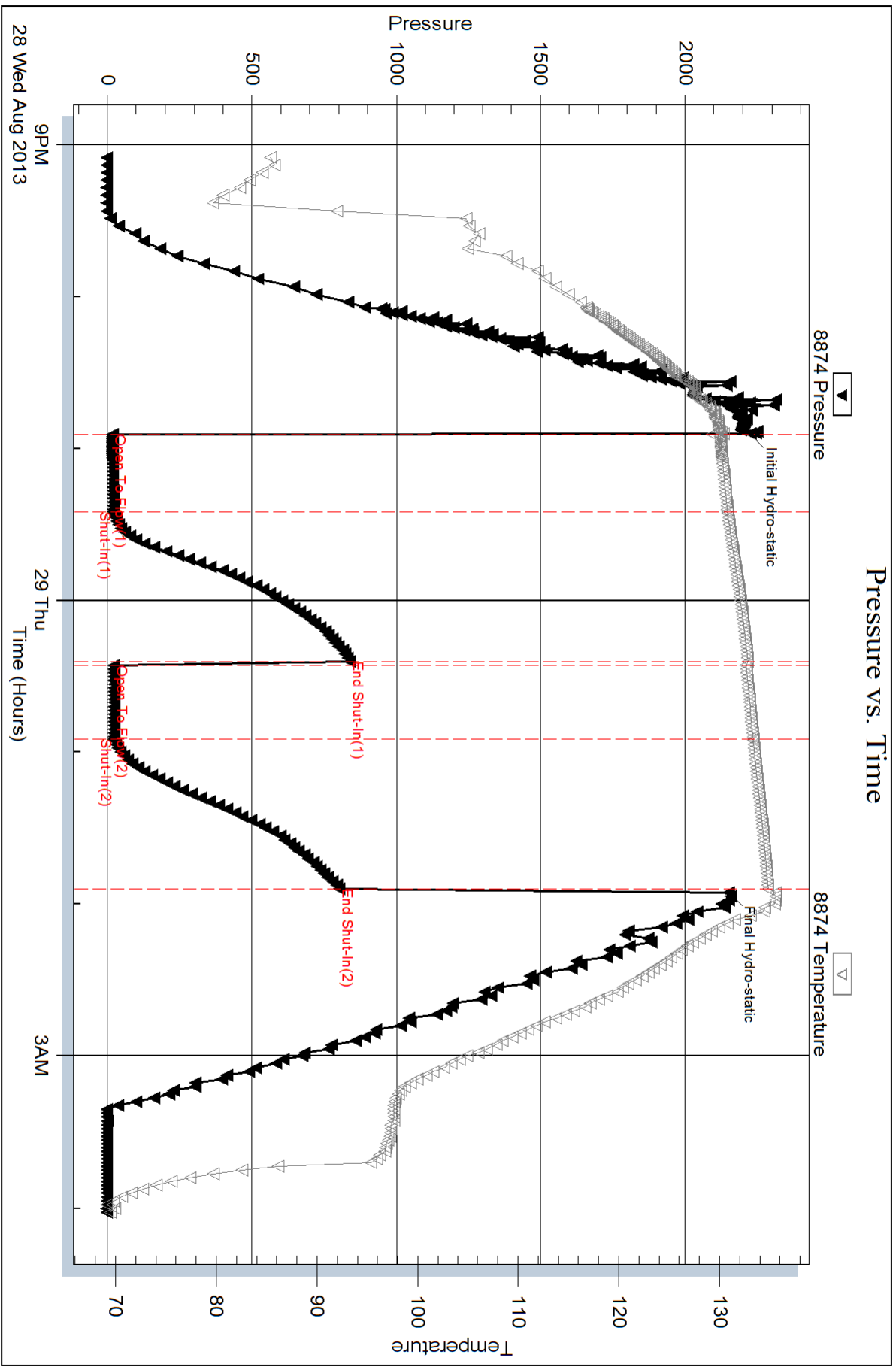
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

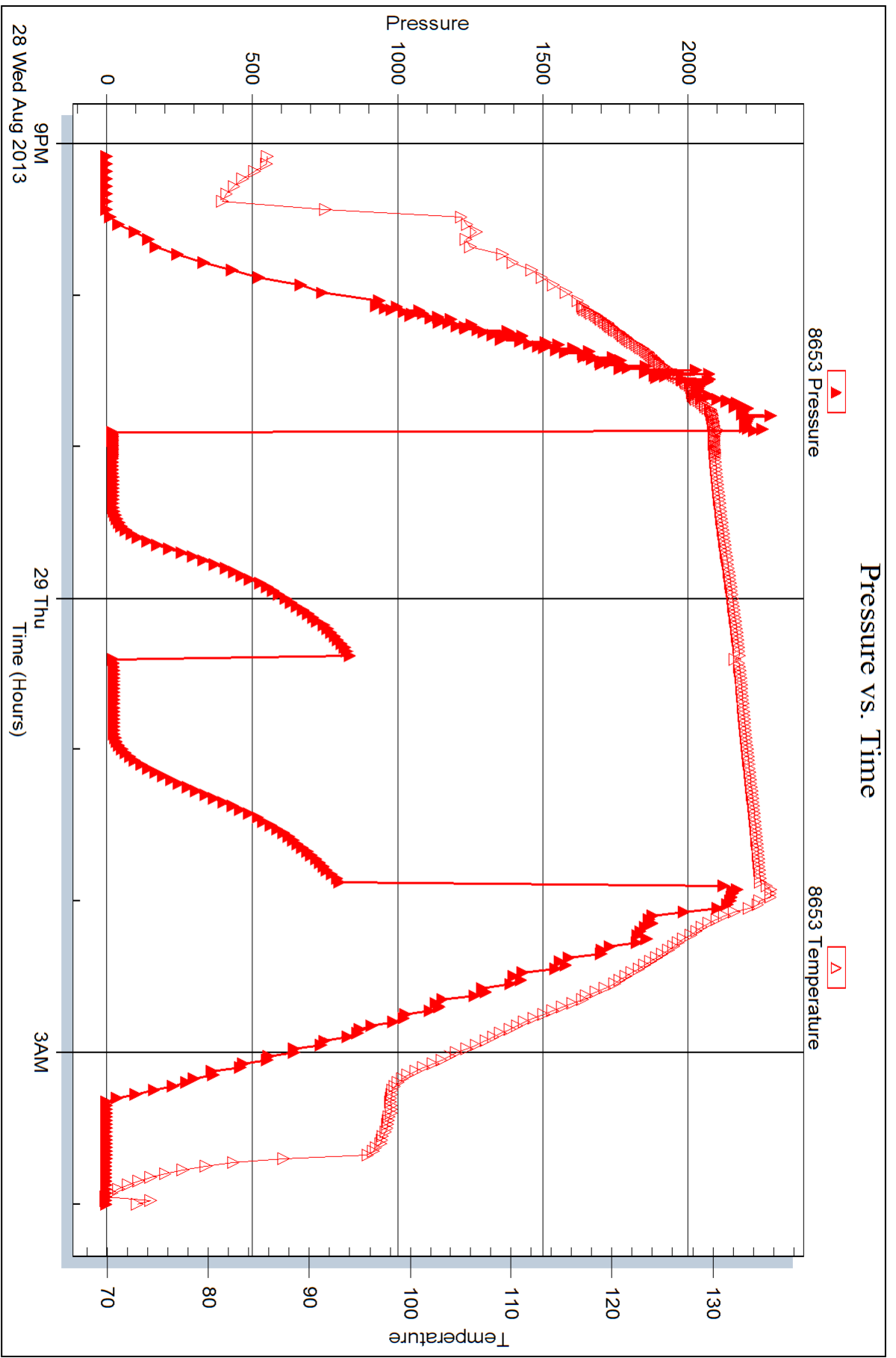


Serial #: 8653

Outside Murfin Drilling Co., Inc.

CWA ID#1-32

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 53368

Printed: 2013.09.04 @ 13:00:28



DRILL STEM TEST REPORT

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

250 N Water STE #300
Wichita, KS 67202

ATTN: Brad Rine

CWA 'D' #1-32

32-2s-36w Rawlins,KS

Start Date: 2013.08.30 @ 06:35:00

End Date: 2013.08.30 @ 14:06:00

Job Ticket #: 53369 DST #: 5

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

Printed: 2013.09.04 @ 12:58:24



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
 250 N Water STE #300
 Wichita, KS 67202
 ATTN: Brad Rine

32-2s-36w Rawlins, KS

CWA 'D' #1-32

Job Ticket: 53369

DST#: 5

Test Start: 2013.08.30 @ 06:35:00

GENERAL INFORMATION:

Formation: **Pawnee - Lower Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:41:30

Time Test Ended: 14:06:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 66

Interval: **4670.00 ft (KB) To 4745.00 ft (KB) (TVD)**

Total Depth: 4745.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3364.00 ft (KB)

3359.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8874

Inside

Press @ Run Depth: 35.87 psig @ 4671.00 ft (KB)

Start Date: 2013.08.30

End Date:

2013.08.30

Start Time: 06:36:00

End Time:

14:06:00

Capacity: 8000.00 psig

Last Calib.: 2013.08.30

Time On Btm: 2013.08.30 @ 08:41:00

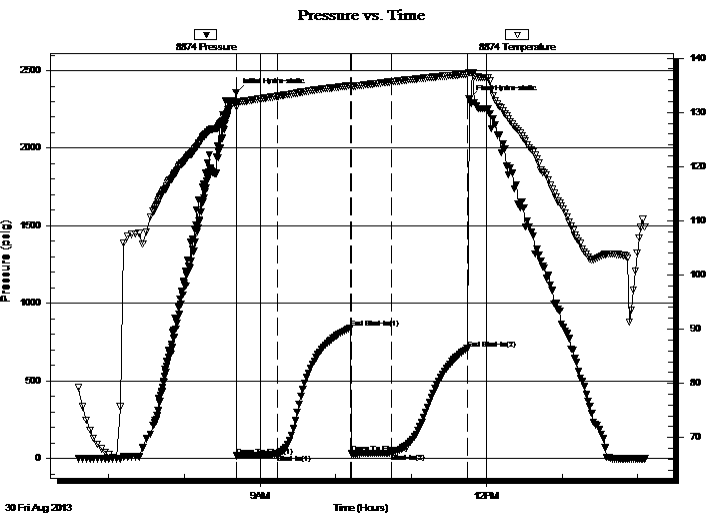
Time Off Btm: 2013.08.30 @ 11:46:00

TEST COMMENT: 30 - IF- 1/4" Blow built to 1"

60 - IS- No Return

30 - FF- No Blow

60 - IS- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2359.65	131.63	Initial Hydro-static
1	16.64	130.97	Open To Flow (1)
33	26.87	132.99	Shut-In(1)
91	839.23	134.91	End Shut-In(1)
92	30.02	134.80	Open To Flow (2)
124	35.87	135.66	Shut-In(2)
184	708.16	137.04	End Shut-In(2)
185	2316.16	137.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	OCM 5o 95M	0.12
1.00	Free Oil 100o	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53369

DST#: 5

ATTN: Brad Rine

Test Start: 2013.08.30 @ 06:35:00

Tool Information

Drill Pipe:	Length: 4143.00 ft	Diameter: 3.80 inches	Volume: 58.12 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: 505.00 ft	Diameter: 2.25 inches	Volume: 2.48 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 60.60 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4670.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	102.00 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			4648.00	
Hydraulic tool	5.00			4653.00	
Jars	5.00			4658.00	
Safety Joint	3.00			4661.00	
Packer	5.00			4666.00	27.00 Bottom Of Top Packer
Packer	4.00			4670.00	
Stubb	1.00			4671.00	
Recorder	0.00	8653	Outside	4671.00	
Recorder	0.00	8874	Inside	4671.00	
Perforations	5.00			4676.00	
Change Over Sub	1.00			4677.00	
Drill Pipe	62.00			4739.00	
Change Over Sub	1.00			4740.00	
Bullnose	5.00			4745.00	75.00 Bottom Packers & Anchor

Total Tool Length: 102.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

32-2s-36w Rawlins,KS

250 N Water STE #300
Wichita, KS 67202

CWA 'D' #1-32

Job Ticket: 53369

DST#: 5

ATTN: Brad Rine

Test Start: 2013.08.30 @ 06:35:00

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: 5.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	OCM 5o 95M	0.123
1.00	Free Oil 100o	0.005

Total Length: 26.00 ft Total Volume: 0.128 bbl

Num Fluid Samples: 0

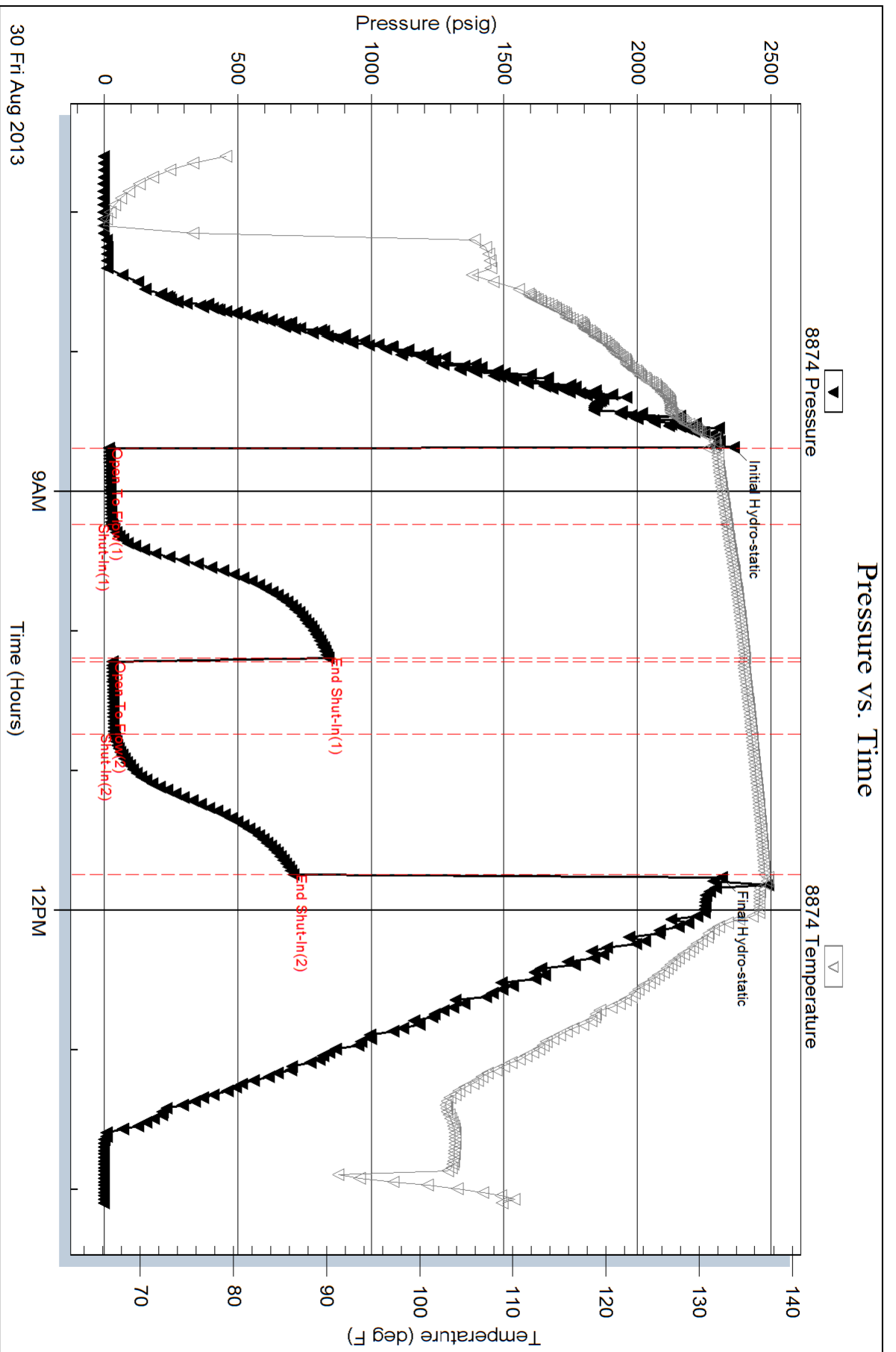
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

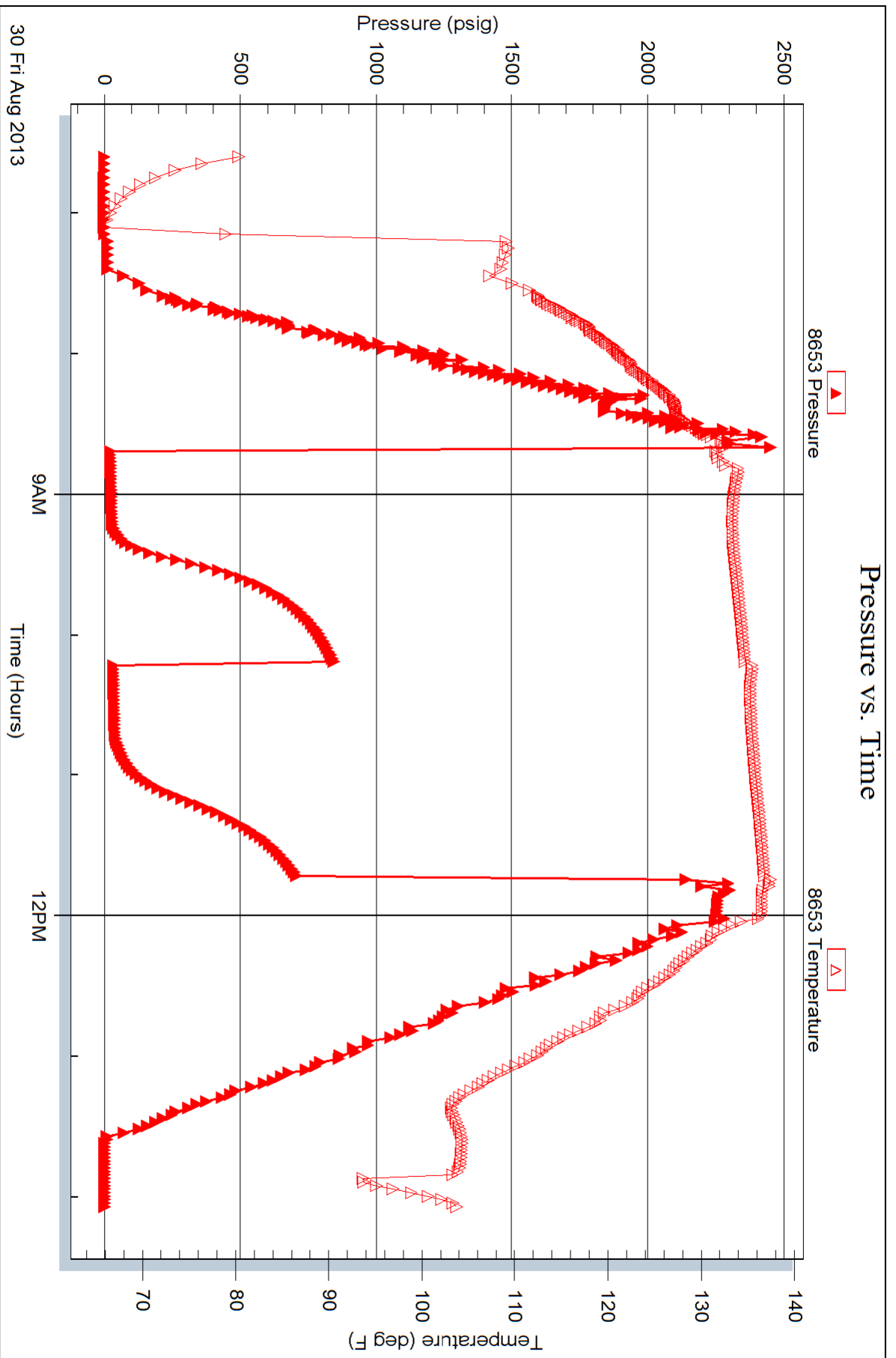


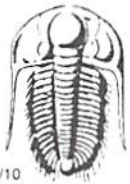
Serial #: 8653

Outside Murfin Drilling Co., Inc.

CWA ID#1-32

DST Test Number: 5





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53365

4/10

Well Name & No. CWA 'D' #1-32 Test No. 1 Date 8-26-13
 Company Murfin Drilling Co., Inc. Elevation 3364 KB 3359 GL
 Address 250 N Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Broad Rine Rig Murfin #3
 Location: Sec. 32 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4307-4375 Zone Tested LKC "A, B, D"
 Anchor Length 68' Drill Pipe Run 3800' Mud Wt. 9.1
 Top Packer Depth 4303 Drill Collars Run 505' Vis 52
 Bottom Packer Depth 4307 Wt. Pipe Run Ø WL 6.0
 Total Depth 4375 Chlorides 6000 ppm System LCM 1#

Blow Description IF - BoB in 30 Sec.
ISI - NO Return
FF - Weak Surface Blow built to 4"
FSI - NO Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>216</u>	<u>Mud</u>			<u>1000</u>	
<u>310</u>	<u>GM</u>		<u>20</u>	<u>80</u>	
<u>252</u>	<u>MW</u>		<u>80</u>	<u>20</u>	
<u>2046</u>	<u>MW</u>		<u>95</u>	<u>5</u>	
<u>5</u>	<u>Mud (heavy)</u>			<u>1000</u>	

Rec Total 2829 BHT 139 Gravity - API RW 275 @ 77 °F Chlorides 23,000 ppm

(A) Initial Hydrostatic <u>2139</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>8:30 PM</u>
(B) First Initial Flow <u>755</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>10:30 PM</u>
(C) First Final Flow <u>1258</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1:00 AM</u>
(D) Initial Shut-In <u>1267</u>	<input checked="" type="checkbox"/> Circ Sub <u>50</u>	T-Pulled <u>5:00 AM</u>
(E) Second Initial Flow <u>1257</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>7:55 PM</u>
(F) Second Final Flow <u>1269</u>	<input checked="" type="checkbox"/> Mileage <u>110 RT</u> 170.50	Comments
(G) Final Shut-In <u>1270</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2088</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

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

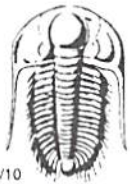
Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Sub Total 1795.50

Sub Total 1795.50

Approved By _____ Our Representative

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. 53366

Well Name & No. CWA '05' #1-32 Test No. 2 Date 8-27-13
 Company Murfin Drilling Co. Elevation 3364 KB 3359 GL
 Address 2508 N Water STE #3000 Wichita, KS 67202
 Co. Rep / Geo. Broad Rine Rig Murfin #3
 Location: Sec. 32 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4413-4430x Zone Tested LKC "G"
 Anchor Length 17 Drill Pipe Run 3891 Mud Wt. 9.2
 Top Packer Depth 4489 Drill Collars Run 5055 Vis 69
 Bottom Packer Depth 4413 Wt. Pipe Run Ø WL 6.0
 Total Depth 4430x Chlorides 1,200 ppm System LCM 1#

Blow Description IF- Packer Failure
ISI- Tripped out of hole to Reset anchor
FF- and run a re-test
FSI-

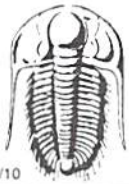
Rec	Feet of	%gas	%oil	%water	%mud
<u>565</u>	<u>Mud</u>			<u>100</u>	

Rec Total 565 BHT 1300 Gravity - API RW - @ - ° F Chlorides - ppm
 (A) Initial Hydrostatic 2154 Test 1050 T-On Location 3:40 PM
 (B) First Initial Flow _____ Jars 250 T-Started 4:05 PM
 (C) First Final Flow _____ Safety Joint 75 T-Open 6:45 PM
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 6:50 PM
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 10:00 PM
 (F) Second Final Flow _____ Mileage 110 RT 170.50 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 2118 Straddle _____

Initial Open N/A Ruined Shale Packer _____
 Initial Shut-In N/A Ruined Packer X1 320
 Final Flow N/A Extra Copies _____
 Final Shut-In N/A Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1865.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1545.50

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53367

Well Name & No. CWA 'D' # 1-32 Test No. 3 Date 8-27-13
 Company Muffin Drilling Co., Inc. Elevation 3864 KB 3359 GL
 Address 250 N Water STE # 3005 Wichita, KS 67202
 Co. Rep / Geo. Brad Rine Rig Muffin #3
 Location: Sec. 32 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4382-4430 Zone Tested LKC "G"
 Anchor Length 48 Drill Pipe Run 3865' Mud Wt. 9.2
 Top Packer Depth 4378 Drill Collars Run 505 Vis 69
 Bottom Packer Depth 4382 Wt. Pipe Run 0 WL 6.0
 Total Depth 4430 Chlorides 1,200 ppm System LCM 1#
 Blow Description IF- BOB in 30' Sec.
ISI- No Return
FF- Weak Surface Blow built to 2 1/2"
FSL- NO Return

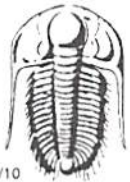
Rec	Feet of	%gas	%oil	%water	%mud
373	mud			100	
186	mud MW		60	40	
310	MW		80	20	
2046	MW		95	5	
5	Mud (heavy)			100	

Rec Total 2920' BHT 141° Gravity — API RW .228 @ 75° F Chlorides 28,000 ppm

(A) Initial Hydrostatic <u>2158</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>3:40 PM</u>
(B) First Initial Flow <u>551</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>10:10 PM</u>
(C) First Final Flow <u>1239</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>12:35 AM</u>
(D) Initial Shut-In <u>1311</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>3:20 AM</u>
(E) Second Initial Flow <u>1250</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>6:15 AM</u>
(F) Second Final Flow <u>1310</u>	<input checked="" type="checkbox"/> Mileage	Comments
(G) Final Shut-In <u>1317</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2084</u>	<input type="checkbox"/> Straddle	<input checked="" type="checkbox"/> Ruined Shale Packer <u>350</u>
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>15</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>2175</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1825</u>	

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53368

Well Name & No. CWA 'D' #1-32 Test No. 4 Date _____
 Company Murfin Drilling Co., Inc. Elevation 3364 KB 3359 GL _____
 Address 250 N Water STE # 300 Wichita, KS 67202
 Co. Rep / Geo. Brad Rine Rig Murfin #3
 Location: Sec. 32 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4474-4525 Zone Tested LKC "I-J"
 Anchor Length 51' Drill Pipe Run 3957 Mud Wt. 9.1
 Top Packer Depth 4470 Drill Collars Run 505' Vis 56
 Bottom Packer Depth 4474 Wt. Pipe Run Ø WL 5.2
 Total Depth 4525 Chlorides 1,200 ppm System LCM 1#

Blow Description IF - Weak Surface Blow built to 1/8", then died at 20 min.
ISI - No Return
FF -
FSL - No Return

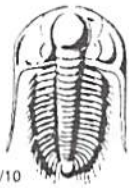
Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Ø SM</u>	<u>SPOTS</u>		<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

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

(A) Initial Hydrostatic <u>2225</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>9:00 PM</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>9:04 PM</u>
(C) First Final Flow <u>20</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:55 PM</u>
(D) Initial Shut-In <u>837</u>	<input checked="" type="checkbox"/> Circ Sub _____	T-Pulled <u>1:55 AM</u>
(E) Second Initial Flow <u>21</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>4:10 AM</u>
(F) Second Final Flow <u>22</u>	<input checked="" type="checkbox"/> Mileage <u>110 RT</u> 170.50	Comments <u>I wasn't called out for test until Rig was already out of the hole.</u>
(G) Final Shut-In <u>800</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2150</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<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>1995.50</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc' _____
	Sub Total <u>1995.50</u>	

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53369

Well Name & No. CWA 'D' #1-32 Test No. 5 Date 8-30-13
 Company Murfin Drilling Co., Inc. Elevation 3364 KB 3359 GL
 Address 250 N Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Broad Rine Rig Murfin #3
 Location: Sec. 32 Twp. 2S Rge. 36W Co. Rawlins State KS

Interval Tested 4670 - 4745 Zone Tested Pawnee - Lower Pawnee
 Anchor Length 75' Drill Pipe Run 4143 Mud Wt. 9.1
 Top Packer Depth 4666 Drill Collars Run 505 Vis 54
 Bottom Packer Depth 4670 Wt. Pipe Run 0 WL 5.6
 Total Depth 4745 Chlorides 1200 ppm System LCM 1#
 Blow Description IF - 1/4" Blow built to 1"
ISI - No Return
FF - No Blow
FSL - No Return

Rec	Feet of	%gas	%oil	%water	%mud
1	Free Oil	100			
25	OCM	5		95	

Rec Total 26' BHT 137' Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>2359</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>5:45 AM</u>
(B) First Initial Flow <u>16</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>6:35 AM</u>
(C) First Final Flow <u>26</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>8:42 AM</u>
(D) Initial Shut-In <u>839</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>11:42 AM</u>
(E) Second Initial Flow <u>30</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2:10 PM</u>
(F) Second Final Flow <u>35</u>	<input checked="" type="checkbox"/> Mileage 341 <u>110 RT X2</u>	Comments <u>Lowest levels</u>
(G) Final Shut-In <u>708</u>	<input type="checkbox"/> Sampler	<u>3:30 AM 9-1-13</u>
(H) Final Hydrostatic <u>2316</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>800</u>
Final Flow <u>30</u>	<input checked="" type="checkbox"/> Day Standby 1d 13.5h	Total <u>2716</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1916</u>	

Approved By _____ Our Representative

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creat.
Prod - LH

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 138427

Invoice Date: Sep 1, 2013

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

Page: 1

Bill To:

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

Now Includes:



Customer ID	Field Ticket #	Payment Terms	
Murfin	60743	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Sep 1, 2013	10/1/13

Quantity	Item	Description	Unit Price	Amount
		CWA D #1-32		
132.00	CEMENT MATERIALS	Class A Common	17.90	2,362.80
88.00	CEMENT MATERIALS	Pozmix	9.35	822.80
8.00	CEMENT MATERIALS	Gel	23.40	187.20
55.00	CEMENT MATERIALS	Flo Seal	2.97	163.35
236.28	CEMENT SERVICE	Cubic Feet	2.48	585.97
740.25	CEMENT SERVICE	Ton Mileage	2.60	1,924.65
1.00	CEMENT SERVICE	Plug to Abandon	1,250.00	1,250.00
75.00	CEMENT SERVICE	Pump Truck Mileage	7.70	577.50
75.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	330.00
1.00	EQUIPMENT SALES	8-5/8 Wooden Plug	107.64	107.64
1.00	CEMENT SUPERVISOR	Kelly Gabel		
1.00	EQUIPMENT OPERATOR	Tyler Flipse		
1.00	OPERATOR ASSISTANT	David Scariano		

Subtotal	8,311.91
Sales Tax	656.64
Total Invoice Amount	8,968.55
Payment/Credit Applied	
TOTAL	8,968.55

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

\$ 2,909.16

ONLY IF PAID ON OR BEFORE
Sep 26, 2013

ALLIED OIL & GAS SERVICES, LLC 060743

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Oakley, KS

DATE <u>9-1-13</u>	SEC. <u>32</u>	TWP. <u>2nd</u>	RANGE <u>36th</u>	CALLED OUT <u>2:00 AM</u>	ON LOCATION <u>4:30 AM</u>	JOB START <u>9:00 AM</u>	JOB FINISH <u>10:30 AM</u>
LEASE <u>CHAD</u>			WELL # <u>1-32</u>	LOCATION <u>McDonald 3A 1/2 N 10</u>	COUNTY <u>Rawlins</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)							

CONTRACTOR Murfin 3
 TYPE OF JOB PTA
 HOLE SIZE 7 1/8 ID. 506.0
 CASING SIZE _____ DEPTH _____
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. _____
 PERFS. _____
 DISPLACEMENT _____

OWNER Same
 CEMENT
 AMOUNT ORDERED 220 SKS 60/40
870 gal 1/4 # Flare seal

EQUIPMENT

PUMP TRUCK CEMENTER Kelly Gabel
 # 120 HELPER Tyler Eclipse
 BULK TRUCK
 # 600 DRIVER David Sceriano
 BULK TRUCK
 # _____ DRIVER _____

COMMON 137 SKS @ 17.90 2362.50
 POZMIX 88 SKS @ 9.35 822.80
 GEL 8 SKS @ 23.40 187.20
 CHLORIDE _____ @ _____
 ASC _____ @ _____
Flare seal 55 # @ 2.97 163.35
 @ _____
 @ _____
 @ _____
 @ _____
 @ _____
 @ _____
 HANDLING 236 SKS @ 2.45 578.20
 MILEAGE 9.871 mi x 75¢ 740.25
 TOTAL 6046.75

REMARKS:

Rigged up, mixed cement plugs
& displaced down
25 @ 3250
100 @ 2520
40 @ 425
10 @ 40
30 RH
15 M
Thank you Kelly & crew

SERVICE

DEPTH OF JOB 3251'
 PUMP TRUCK CHARGE _____ 1250.00
 EXTRA FOOTAGE _____ @ _____
 MILEAGE 12.5 mi @ 7.20 90.00
 MANIFOLD _____ @ _____
MILL 25m @ 4.40 110.00
 @ _____
 TOTAL 2157.50

CHARGE TO: Murfin
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

1-8 3/4 wooden plug @ 107.69
 @ _____
 @ _____
 @ _____
 @ _____
 TOTAL 107.69

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 Charlie Van Pelt
 SIGNATURE Charlie Van Pelt

SALES TAX (if Any) _____
 TOTAL CHARGES 8,311.91
 DISCOUNT 2,909.16 IF PAID IN 30 DAYS
5,402.74 Net.



asst.
Prod-LH

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 138131

Invoice Date: Aug 21, 2013

Voice: (817) 546-7282

Page: 1

Fax: (817) 246-3361

Bill To:

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

Now Includes:



Customer ID	Field Ticket #	Payment Terms	
Murfin	61250	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Aug 21, 2013	9/20/13

Quantity	Item	Description	Unit Price	Amount
350.00	CEMENT MATERIALS	CWA D #1-32		
		Class A Common	17.90	6,265.00
12.00	CEMENT MATERIALS	Chloride	64.00	768.00
367.50	CEMENT SERVICE	Cubic Feet	2.48	911.40
1,270.80	CEMENT SERVICE	Ton Mileage	2.60	3,304.08
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
75.00	CEMENT SERVICE	Pump Truck Mileage	7.70	577.50
1.00	CEMENT SERVICE	Manifold Head Rental	275.00	275.00
75.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	330.00
1.00	EQUIPMENT SALES	8-5/8 Wooden Plug	107.64	107.64
1.00	CEMENT SUPERVISOR	Alan Ryan		
1.00	EQUIPMENT OPERATOR	Wayne McGhghy		
1.00	OPERATOR ASSISTANT	David Scariano		

AKAD

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

\$ 4,917.80

ONLY IF PAID ON OR BEFORE

Sep 15, 2013

Subtotal	14,050.87
Sales Tax	564.11
Total Invoice Amount	14,614.98
Payment/Credit Applied	
TOTAL	14,614.98

ALLIED OIL & GAS SERVICES, LLC 061250

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Dartley, KS

DATE <u>8/21/13</u>	SEC <u>32</u>	TWP. <u>2</u>	RANGE <u>36</u>	CALLED OUT	ON LOCATION	JOB START <u>8:30p</u>	JOB FINISH <u>9:00p</u>
LEASE <u>CWA "0"</u>		WELL# <u>1-32</u>	LOCATION <u>McDonald 3 1/2 W 1/2 W</u>		COUNTY <u>Harold</u>	STATE <u>Ks</u>	
OLD OR NEW (Circle one) <u>NEW</u>			N into				

CONTRACTOR MacFIN 3

TYPE OF JOB Sur Face

HOLE SIZE 12 1/4 T.D. 388

CASING SIZE 8 5/8 DEPTH 388

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 23.76el 88L 1/2

OWNER Same

CEMENT AMOUNT ORDERED 350 Cam 390CC

COMMON	<u>350</u>	@ <u>17.90</u>	<u>6265.00</u>
POZMIX		@	
GEL		@	
CHLORIDE	<u>12</u>	@ <u>64.00</u>	<u>768.00</u>
ASC		@	
HANDLING	<u>367.5 CF</u>	@ <u>2.48</u>	<u>911.40</u>
MILEAGE	<u>2.75</u>	@ <u>70/mile 16.944700</u>	<u>3304.00</u>
TOTAL			<u>11248.40</u>

EQUIPMENT

PUMP TRUCK CEMENTER Alan Ryan

422 HELPER Wayne McShay

BULK TRUCK

373 DRIVER David Scariano

BULK TRUCK DRIVER

REMARKS:

Run log, Circulate, Mix Cement, Displace

Cement. Shut in

Cement Dis. Circulate

Thank You Alan, Wayne David

CHARGE TO: MacFIN Drilling

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>388'</u>	
PUMP TRUCK CHARGE	<u>1512.25</u>	
EXTRA FOOTAGE	@	
MILEAGE	@ <u>75</u>	<u>577.50</u>
MANIFOLD <u>2 Head</u>	@	<u>275.00</u>
<u>1st & 2nd</u>	@ <u>75</u>	<u>330.00</u>
TOTAL		<u>2694.75</u>

PLUG & FLOAT EQUIPMENT

<u>8 5/8 Wooden Plug</u>	@	<u>107.64</u>
	@	
	@	
	@	
TOTAL		<u>107.64</u>

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.

SALES TAX (If Any) _____

TOTAL CHARGES 14,050.87

DISCOUNT 4,917.80 IF PAID IN 30 DAYS

9,133.06 Net.

PRINTED NAME _____

SIGNATURE Keith VanPelt