



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1232110
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: _____

1232110

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. <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	David 1-9
Doc ID	1232110

All Electric Logs Run

DIL
DUCP
MEL
BHCS



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita KS 67202-1216

ATTN: Chuck Schmaltz

David #1-9

9-23s-12w Stafford,KS

Start Date: 2014.07.29 @ 19:35:21

End Date: 2014.07.30 @ 02:09:45

Job Ticket #: 58835 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.05 @ 13:42:27



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmaltz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 58835

DST#: 1

Test Start: 2014.07.29 @ 19:35:21

GENERAL INFORMATION:

Formation: **LKC B-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:26:16
 Time Test Ended: 02:09:45
 Interval: **3324.00 ft (KB) To 3424.00 ft (KB) (TVD)**
 Total Depth: 3424.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 70
 Reference Elevations: 1856.00 ft (KB)
 1845.00 ft (CF)
 KB to GR/CF: 11.00 ft

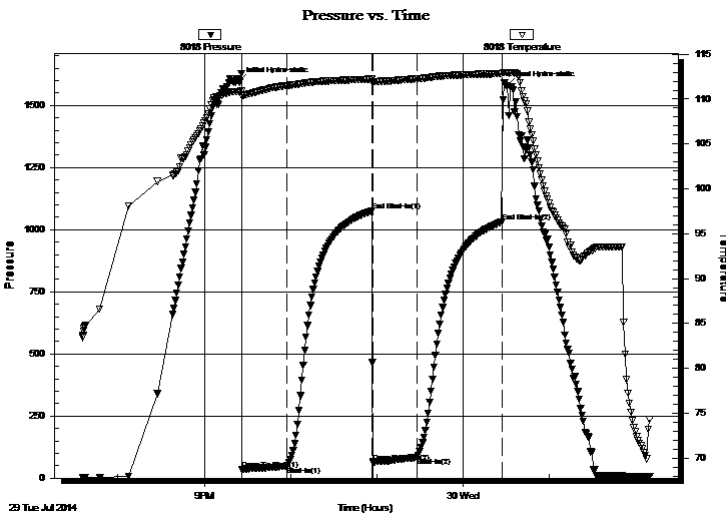
Serial #: 8018

Inside

Press@RunDepth: 84.07 psig @ 3327.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.29 End Date: 2014.07.30 Last Calib.: 2014.07.30
 Start Time: 19:35:21 End Time: 02:09:45 Time On Btm: 2014.07.29 @ 21:24:16
 Time Off Btm: 2014.07.30 @ 00:30:45

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 1/2" bl
 60-ISIP-no bl
 60-FFP-no bl
 90-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1596.02	110.85	Initial Hydro-static
2	34.62	110.39	Open To Flow (1)
33	48.34	111.51	Shut-In(1)
92	1075.08	112.23	End Shut-In(1)
93	64.22	111.97	Open To Flow (2)
124	84.07	112.27	Shut-In(2)
183	1031.50	112.83	End Shut-In(2)
187	1578.63	112.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Mud	0.59

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 67202-1216
ATTN: Chuck Schmaltz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 58835

DST#: 1

Test Start: 2014.07.29 @ 19:35:21

GENERAL INFORMATION:

Formation: **LKC B-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:26:16

Time Test Ended: 02:09:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Interval: **3324.00 ft (KB) To 3424.00 ft (KB) (TVD)**

Reference Elevations: 1856.00 ft (KB)

Total Depth: 3424.00 ft (KB) (TVD)

1845.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: **8700** Outside

Press@RunDepth: psig @ 3327.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.29

End Date:

2014.07.30

Last Calib.:

2014.07.30

Start Time: 19:35:05

End Time:

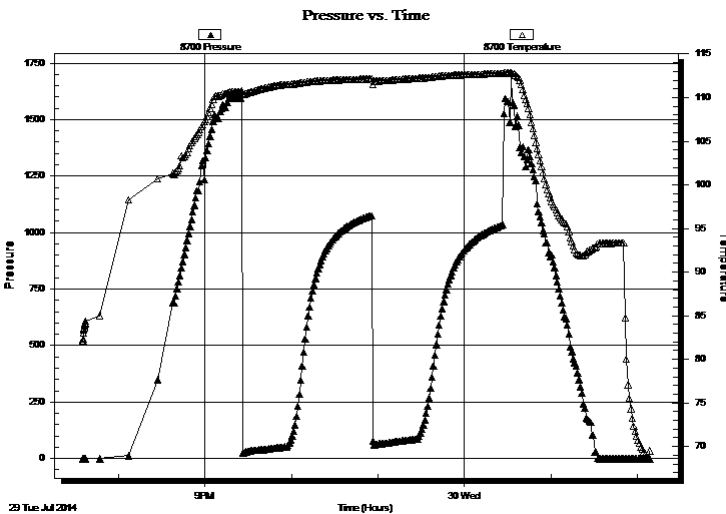
02:08:59

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 1/2" bl
60-ISIP-no bl
60-FFP-no bl
90-FSIP-no bl

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Mud	0.59

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 58835

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.07.29 @ 19:35:21

Tool Information

Drill Pipe:	Length: 3050.00 ft	Diameter: 3.80 inches	Volume: 42.78 bbl	Tool Weight: 2200.00 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: 270.00 ft	Diameter: 2.25 inches	Volume: 1.33 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 44.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3324.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3296.00	
Shut In Tool	5.00			3301.00	
Hydraulic tool	5.00			3306.00	
Jars	5.00			3311.00	
Safety Joint	3.00			3314.00	
Packer	5.00			3319.00	29.00 Bottom Of Top Packer
Packer	5.00			3324.00	
Stubb	1.00			3325.00	
Perforations	2.00			3327.00	
Recorder	0.00	8018	Inside	3327.00	
Recorder	0.00	8700	Outside	3327.00	
Blank Spacing	65.00			3392.00	
Perforations	29.00			3421.00	
Bullnose	3.00			3424.00	100.00 Bottom Packers & Anchor

Total Tool Length: 129.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 58835

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.07.29 @ 19:35:21

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Mud	0.590

Total Length: 120.00 ft

Total Volume: 0.590 bbl

Num Fluid Samples: 0

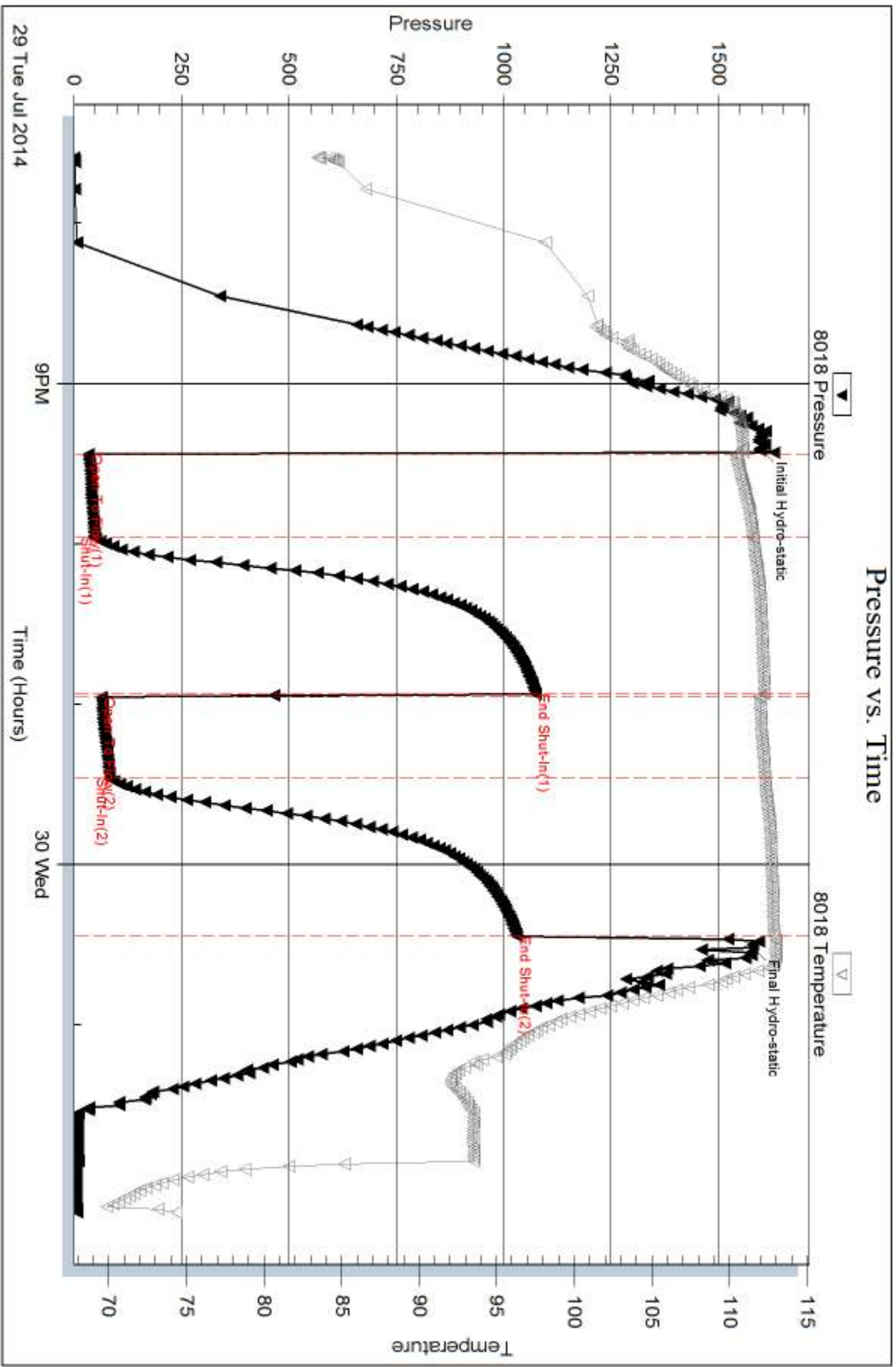
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



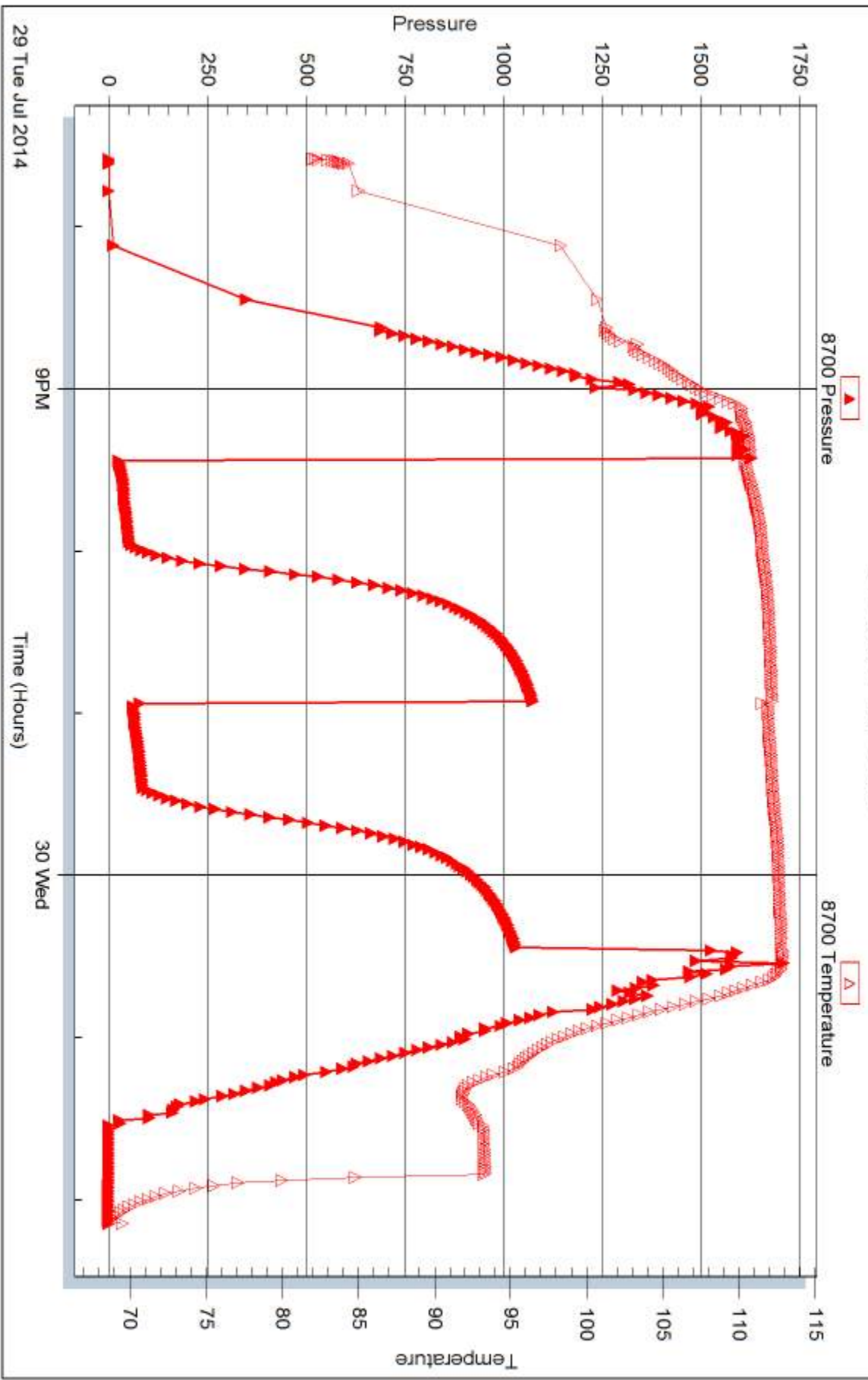
Serial #: 8700

Outside Murfin Drilling Co Inc

David #1-9

DST Test Number: 1

Pressure vs. Time



Triobrite Testing, Inc

Ref. No: 58835

Printed: 2014.08.05 @ 13:42:29



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita KS 67202-1216

ATTN: Chuck Schmaltz

David #1-9

9-23s-12w Stafford,KS

Start Date: 2014.07.30 @ 13:25:40

End Date: 2014.07.30 @ 20:54:40

Job Ticket #: 58836 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.05 @ 13:42:05



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmalz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 58836

DST#: 2

Test Start: 2014.07.30 @ 13:25:40

GENERAL INFORMATION:

Formation: **LKC H-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:58:10
 Time Test Ended: 20:54:40
 Interval: **3463.00 ft (KB) To 3565.00 ft (KB) (TVD)**
 Total Depth: 3565.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 70
 Reference Elevations: 1856.00 ft (KB)
 1845.00 ft (CF)
 KB to GR/CF: 11.00 ft

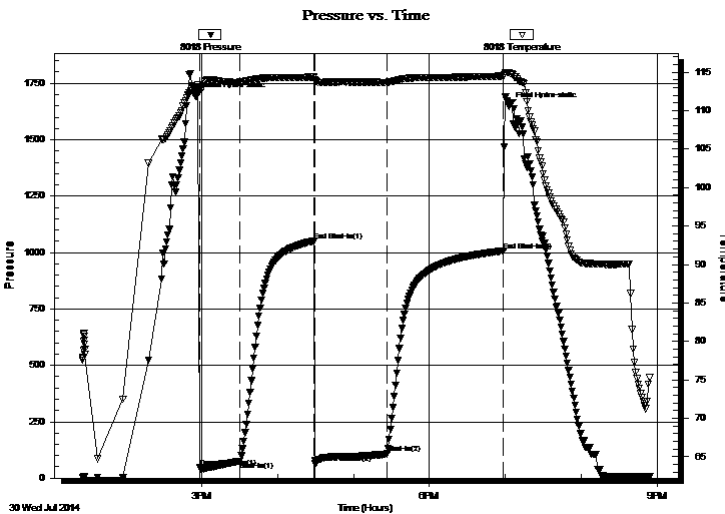
Serial #: 8018

Inside

Press@RunDepth: 109.38 psig @ 3466.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.30 End Date: 2014.07.30 Last Calib.: 2014.07.31
 Start Time: 13:25:45 End Time: 20:54:39 Time On Btm: 2014.07.30 @ 14:55:40
 Time Off Btm: 2014.07.30 @ 19:03:10

TEST COMMENT: 30-IFP-strg bl in 1 min
 60-ISIP-no bl
 60-FFP-strg bl GTS in 24 min, to weak to gauge
 90-FSIP-6"bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.99	113.08	Initial Hydro-static
3	47.41	112.94	Open To Flow (1)
35	74.96	113.69	Shut-In(1)
93	1049.71	114.36	End Shut-In(1)
94	65.26	113.91	Open To Flow (2)
151	109.38	113.68	Shut-In(2)
243	1007.39	114.48	End Shut-In(2)
248	1647.64	114.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	GTS	0.00
80.00	MGO 30%G30%M40%O	0.39
180.00	CO	0.89

* Recovery from multiple tests

Gas Rates

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



DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmalz

9-23s-12w Stafford, KS
David #1-9
 Job Ticket: 58836 **DST#: 2**
 Test Start: 2014.07.30 @ 13:25:40

GENERAL INFORMATION:

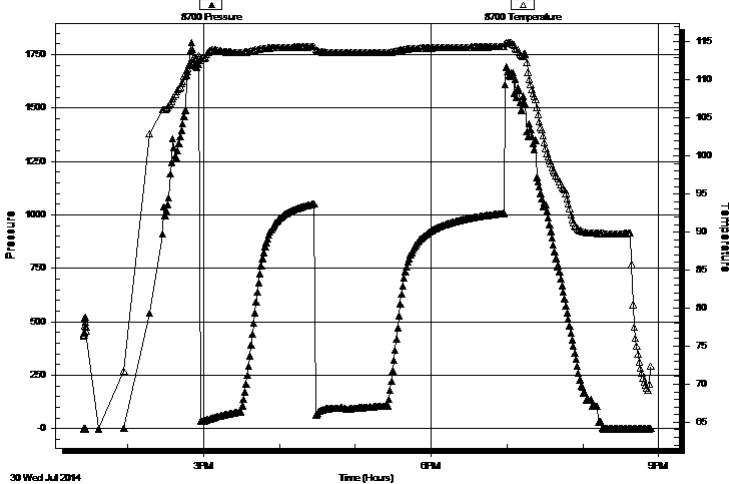
Formation: **LKC H-K**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 14:58:10 Tester: Ray Schwager
 Time Test Ended: 20:54:40 Unit No: 70
Interval: 3463.00 ft (KB) To 3565.00 ft (KB) (TVD)
 Total Depth: 3565.00 ft (KB) (TVD) Reference Elevations: 1856.00 ft (KB)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 1845.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8700 Outside

Press@RunDepth: psig @ 3466.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.30 End Date: 2014.07.30 Last Calib.: 2014.07.31
 Start Time: 13:25:09 End Time: 20:54:03 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP-strg bl in 1 min
 60-ISIP-no bl
 60-FFP-strg bl GTS in 24 min, to weak to gauge
 90-FSIP-6"bl bk

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	GTS	0.00
80.00	MGO 30%G30%M40%O	0.39
180.00	CO	0.89

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 58836

DST#: 2

ATTN: Chuck Schmaltz

Test Start: 2014.07.30 @ 13:25:40

Tool Information

Drill Pipe:	Length: 3175.00 ft	Diameter: 3.80 inches	Volume: 44.54 bbl	Tool Weight: 2200.00 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: 270.00 ft	Diameter: 2.25 inches	Volume: 1.33 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 45.87 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3463.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	102.00 ft			
Tool Length:	131.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3435.00	
Shut In Tool	5.00			3440.00	
Hydraulic tool	5.00			3445.00	
Jars	5.00			3450.00	
Safety Joint	3.00			3453.00	
Packer	5.00			3458.00	29.00 Bottom Of Top Packer
Packer	5.00			3463.00	
Stubb	1.00			3464.00	
Perforations	2.00			3466.00	
Recorder	0.00	8018	Inside	3466.00	
Recorder	0.00	8700	Outside	3466.00	
Blank Spacing	65.00			3531.00	
Perforations	31.00			3562.00	
Bullnose	3.00			3565.00	102.00 Bottom Packers & Anchor

Total Tool Length: 131.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 58836

DST#: 2

ATTN: Chuck Schmaltz

Test Start: 2014.07.30 @ 13:25:40

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GTS	0.000
80.00	MGO 30%G30%M40%O	0.393
180.00	CO	0.885

Total Length: 260.00 ft Total Volume: 1.278 bbl

Num Fluid Samples: 0

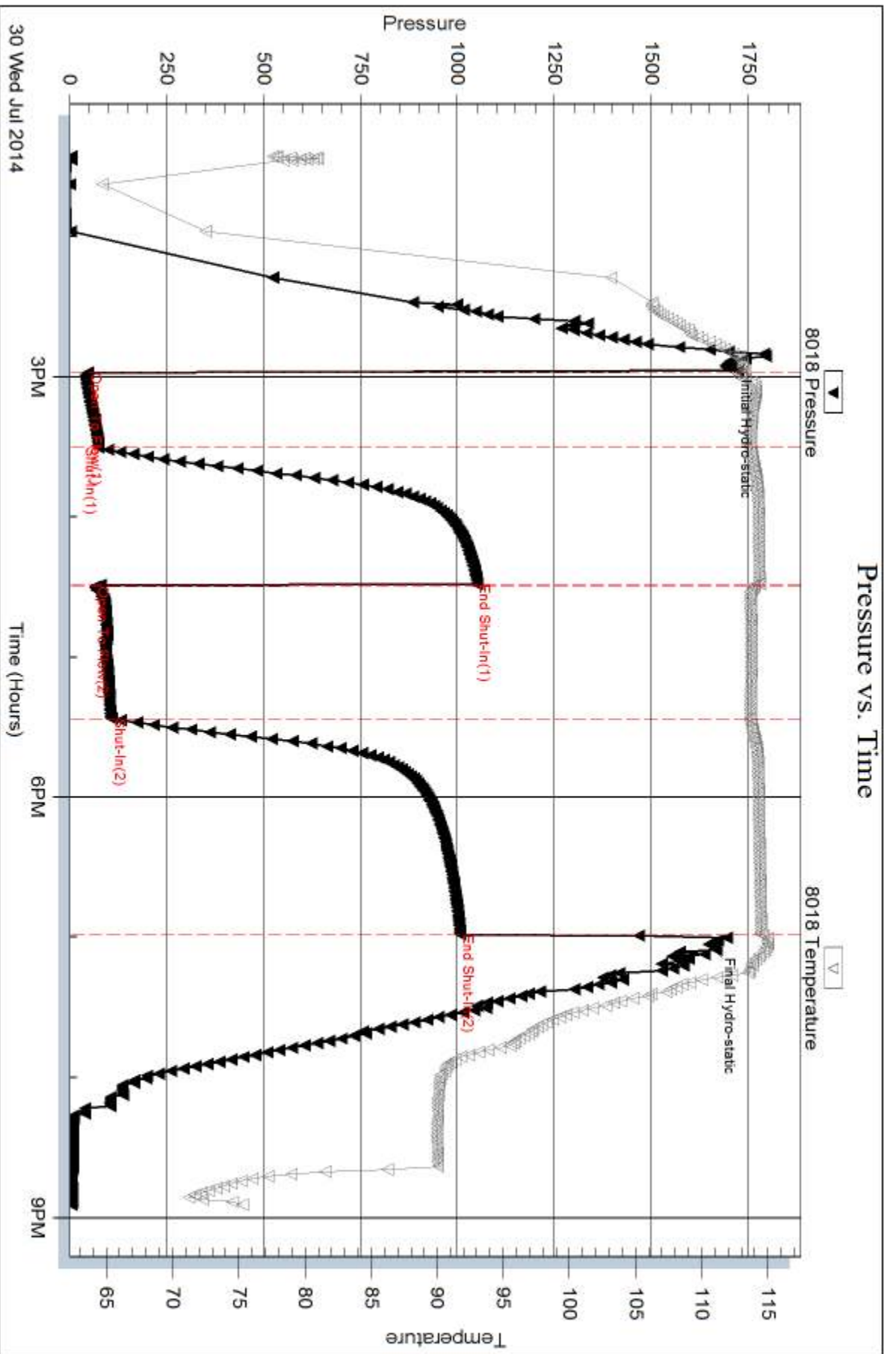
Num Gas Bombs: 0

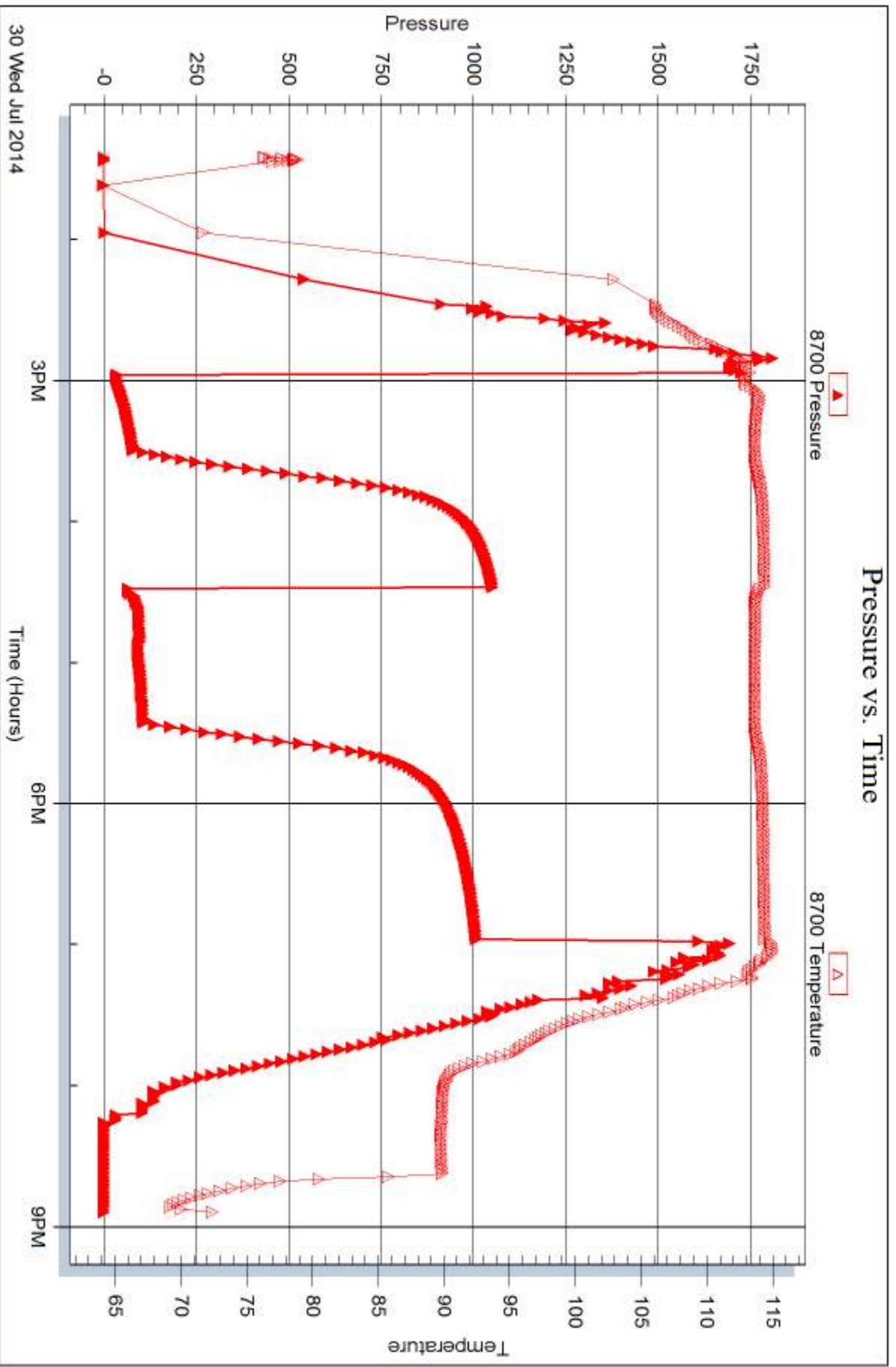
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita KS 67202-1216

ATTN: Chuck Schmaltz

David #1-9

9-23s-12w Stafford,KS

Start Date: 2014.07.31 @ 06:57:51

End Date: 2014.07.31 @ 14:02:06

Job Ticket #: 54163 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.05 @ 13:41:28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmalz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 54163

DST#: 3

Test Start: 2014.07.31 @ 06:57:51

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 08:22:21 Tester: Ryan Reynolds
 Time Test Ended: 14:02:06 Unit No: 68
 Interval: **3617.00 ft (KB) To 3670.00 ft (KB) (TVD)** Reference Elevations: 1856.00 ft (KB)
 Total Depth: 3670.00 ft (KB) (TVD) 1845.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

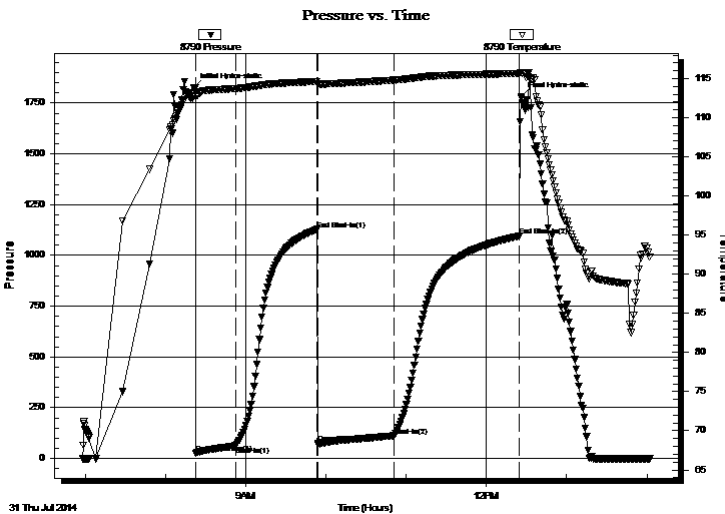
Serial #: 8790

Inside

Press@RunDepth: 111.26 psig @ 3624.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.31 End Date: 2014.07.31 Last Calib.: 2014.07.31
 Start Time: 06:57:56 End Time: 14:02:05 Time On Btm: 2014.07.31 @ 08:21:06
 Time Off Btm: 2014.07.31 @ 12:25:51

TEST COMMENT: 30 IF: Strong blow . BOB @ 14 min.
 60 IS: No blow
 60 FF: Fair blow . surf. - 4"
 90 FSI: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1826.65	113.16	Initial Hydro-static
2	26.79	112.60	Open To Flow (1)
32	62.13	113.72	Shut-In(1)
92	1127.98	114.63	End Shut-In(1)
93	72.98	114.34	Open To Flow (2)
150	111.26	114.79	Shut-In(2)
244	1094.88	115.64	End Shut-In(2)
245	1781.48	115.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	WOGM 2%w, 10%o, 15%m, 73%g	0.74
60.00	OCM 10%o, 90%m	0.30
0.00	600' GIP	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 Co Inc
250 N. Water STE 300
Wichita KS 67202-1216
ATTN: Chuck Schmaltz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 54163

DST#: 3

Test Start: 2014.07.31 @ 06:57:51

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:22:21

Time Test Ended: 14:02:06

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Reynolds

Unit No: 68

Interval: 3617.00 ft (KB) To 3670.00 ft (KB) (TVD)

Reference Elevations: 1856.00 ft (KB)

Total Depth: 3670.00 ft (KB) (TVD)

1845.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8792 Outside

Press@RunDepth: psig @ 3624.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.31

End Date:

2014.07.31

Last Calib.:

2014.07.31

Start Time: 06:53:57

End Time:

14:04:06

Time On Btm:

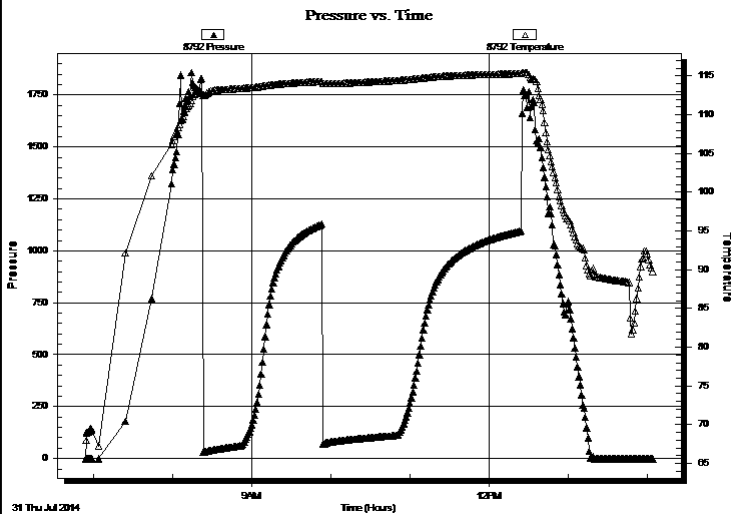
Time Off Btm:

TEST COMMENT: 30 IF: Strong blow . BOB @ 14 min.

60 IS: No blow

60 FF: Fair blow . surf. - 4"

90 FSI: No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
150.00	WOGM 2%w, 10%o, 15%m, 73%g	0.74
60.00	OCM 10%o, 90%m	0.30
0.00	600' GIP	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 Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54163

DST#: 3

ATTN: Chuck Schmaltz

Test Start: 2014.07.31 @ 06:57:51

Tool Information

Drill Pipe:	Length: 3328.00 ft	Diameter: 3.80 inches	Volume: 46.68 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 277.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 48.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3617.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3591.00	
Shut In Tool	5.00			3596.00	
Hydraulic tool	5.00			3601.00	
Jars	5.00			3606.00	
Safety Joint	2.00			3608.00	
Packer	5.00			3613.00	27.00 Bottom Of Top Packer
Packer	4.00			3617.00	
Stubb	1.00			3618.00	
Perforations	5.00			3623.00	
Change Over Sub	1.00			3624.00	
Recorder	0.00	8790	Inside	3624.00	
Recorder	0.00	8792	Outside	3624.00	
Drill Pipe	32.00			3656.00	
Change Over Sub	1.00			3657.00	
Perforations	10.00			3667.00	
Bullnose	3.00			3670.00	53.00 Bottom Packers & Anchor
Total Tool Length:	80.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54163

DST#: 3

ATTN: Chuck Schmaltz

Test Start: 2014.07.31 @ 06:57:51

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:

46000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5200.00 ppm

Filter Cake: 0.08 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
150.00	WOGM 2%w , 10%o, 15%m, 73%g	0.738
60.00	OCM 10%o, 90%m	0.295
0.00	600' GIP	0.000

Total Length: 210.00 ft

Total Volume: 1.033 bbl

Num Fluid Samples: 0

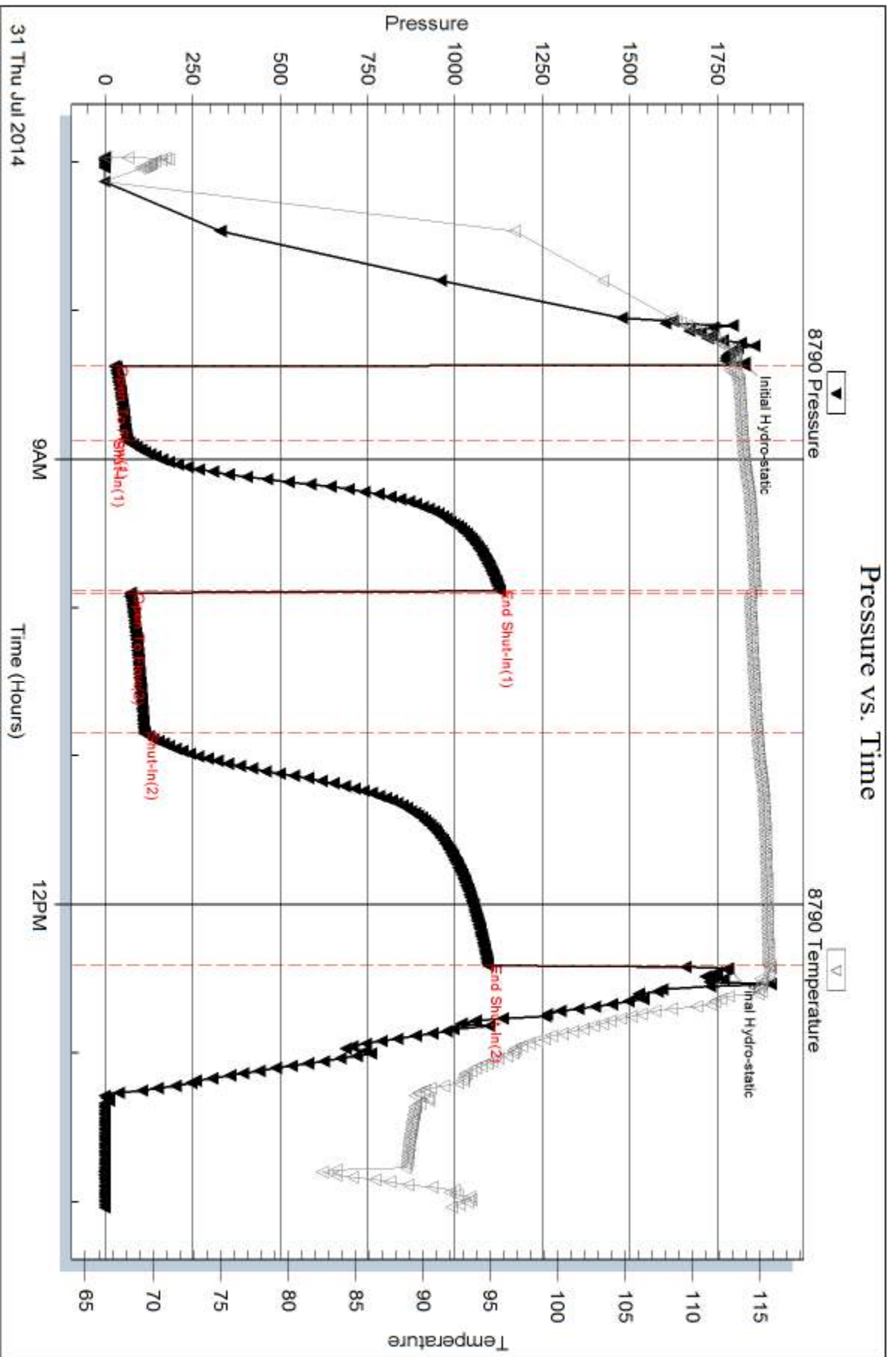
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:



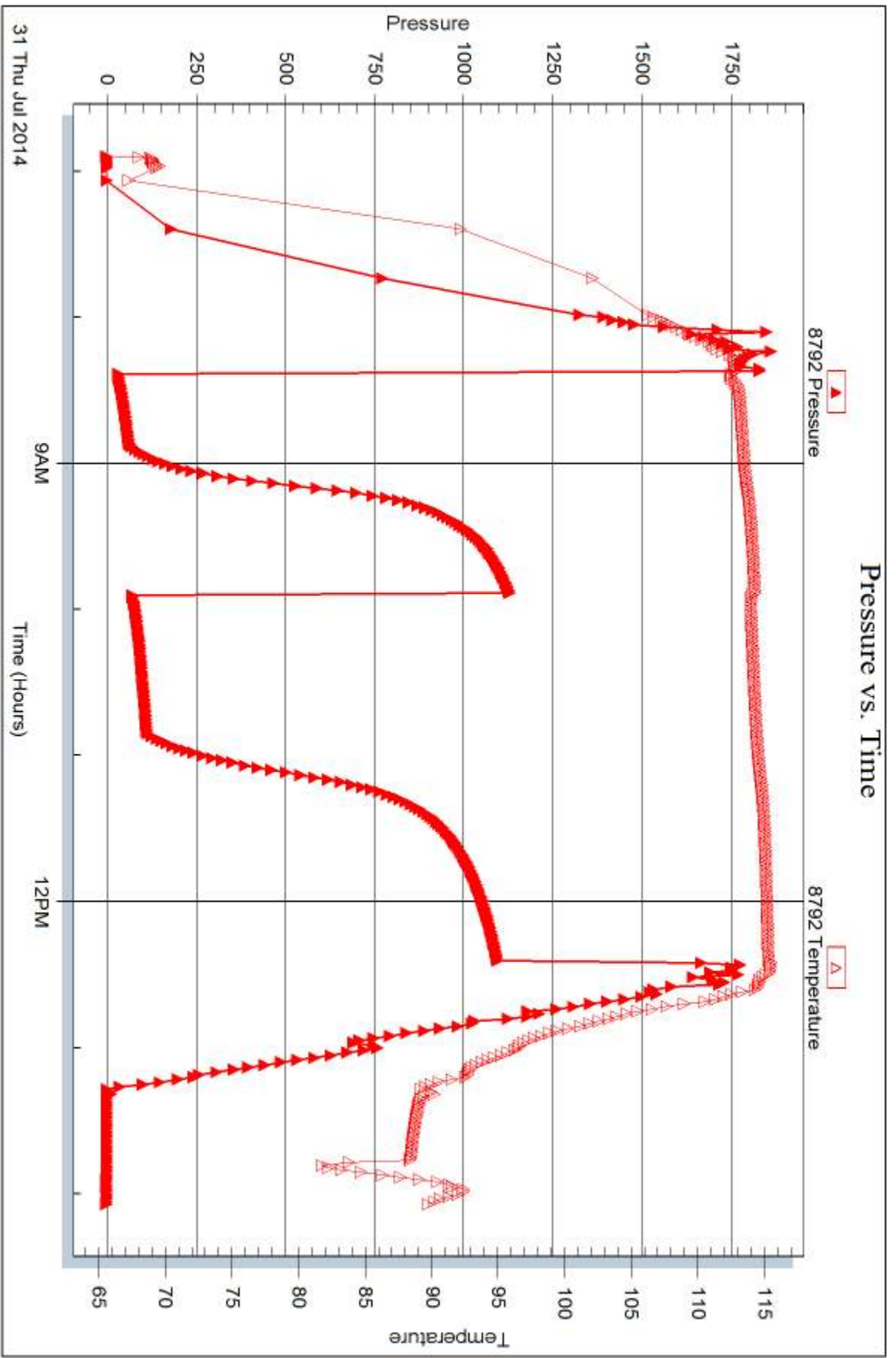
31 Thu Jul 2014

Serial #: 8792

Outside Murfin Drilling Co Inc

David #1-9

DST Test Number: 3



31 Thu Jul 2014

9AM

Time (Hours)

12PM

Trilobite Testing, Inc

Ref. No: 54163

Printed: 2014.08.05 @ 13:41:30



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita KS 67202-1216

ATTN: Chuck Schmaltz

David #1-9

9-23s-12w Stafford,KS

Start Date: 2014.07.31 @ 21:05:24

End Date: 2014.08.01 @ 04:56:24

Job Ticket #: 54164 DST #: 4

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.05 @ 13:40:53



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N. Water STE 300
Wichita KS 67202-1216
ATTN: Chuck Schmaltz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 54164

DST#: 4

Test Start: 2014.07.31 @ 21:05:24

GENERAL INFORMATION:

Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:39:54
 Time Test Ended: 04:56:24
 Interval: **3677.00 ft (KB) To 3710.00 ft (KB) (TVD)**
 Total Depth: 3710.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1856.00 ft (KB)
 1845.00 ft (CF)
 KB to GR/CF: 11.00 ft

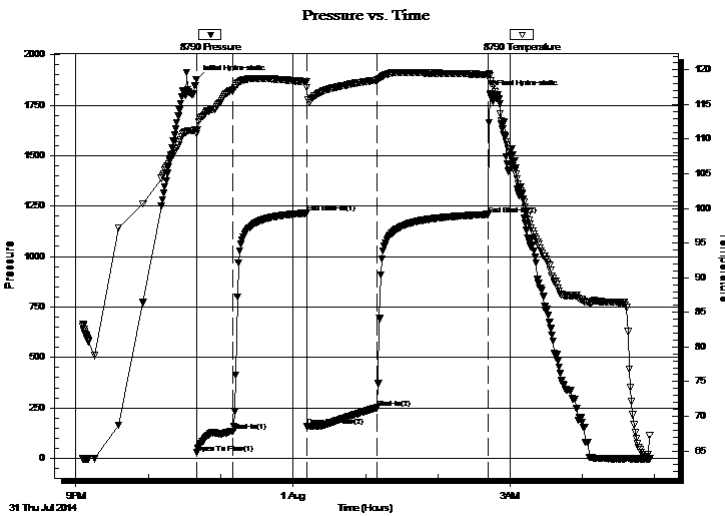
Serial #: 8790

Inside

Press@RunDepth: 250.37 psig @ 3682.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.31 End Date: 2014.08.01 Last Calib.: 2014.08.01
 Start Time: 21:05:29 End Time: 04:56:23 Time On Btm: 2014.07.31 @ 22:39:39
 Time Off Btm: 2014.08.01 @ 02:43:09

TEST COMMENT: 30 IF: Strong blow . BOB @ 7min.
 60 IS: Good blow . surf. - 8"
 60 FF: Strong blow . BOB @ 8min.
 90 FSI: Good blow . surf. - 6"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1877.85	111.37	Initial Hydro-static
1	27.37	110.78	Open To Flow (1)
31	135.87	117.09	Shut-In(1)
92	1215.60	118.28	End Shut-In(1)
92	160.50	117.46	Open To Flow (2)
151	250.37	118.51	Shut-In(2)
243	1208.65	119.29	End Shut-In(2)
244	1802.49	119.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
705.00	Clean Gassy Oil 25%g, 75%o	7.37
0.00	2210' GIP	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 Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmaltz

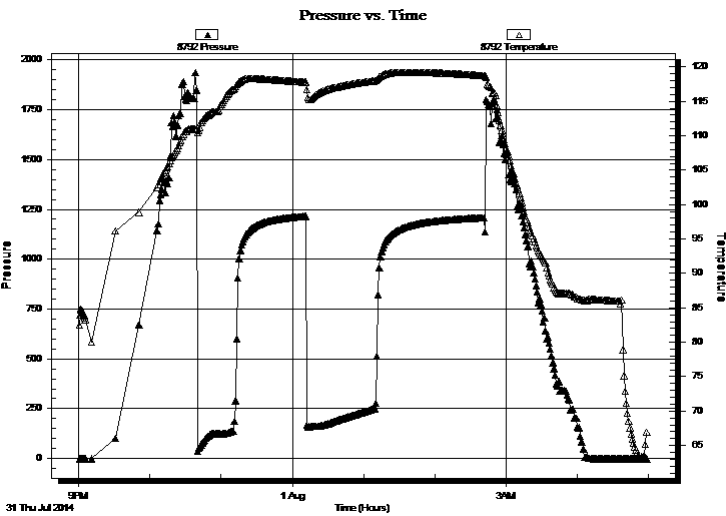
9-23s-12w Stafford,KS
David #1-9
 Job Ticket: 54164 **DST#: 4**
 Test Start: 2014.07.31 @ 21:05:24

GENERAL INFORMATION:

Formation: Simpson		
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 22:39:54		Tester: Ryan Reynolds
Time Test Ended: 04:56:24		Unit No: 68
Interval: 3677.00 ft (KB) To 3710.00 ft (KB) (TVD)		Reference Elevations: 1856.00 ft (KB)
Total Depth: 3710.00 ft (KB) (TVD)		1845.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 11.00 ft

Serial #: 8792	Outside			
Press@RunDepth: psig @ 3682.00 ft (KB)		Capacity: 8000.00 psig		
Start Date: 2014.07.31	End Date: 2014.08.01	Last Calib.: 2014.08.01		
Start Time: 21:00:56	End Time: 04:58:05	Time On Btm:		
		Time Off Btm:		

TEST COMMENT: 30 IF: Strong blow . BOB @ 7min.
 60 IS: Good blow . surf. - 8"
 60 FF: Strong blow . BOB @ 8min.
 90 FS: Good blow . surf. - 6"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
705.00	Clean Gassy Oil 25%g, 75%o	7.37
0.00	2210' GIP	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 Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54164

DST#: 4

ATTN: Chuck Schmaltz

Test Start: 2014.07.31 @ 21:05:24

Tool Information

Drill Pipe:	Length: 3391.00 ft	Diameter: 3.80 inches	Volume: 47.57 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 277.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 48.93 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	61000.00 lb
Depth to Top Packer:	3677.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	37.00 ft				
Tool Length:	60.00 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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Change Over Sub	1.00			3655.00	
Shut In Tool	5.00			3660.00	
Hydraulic tool	5.00			3665.00	
Jars	5.00			3670.00	
Safety Joint	2.00			3672.00	
Packer	5.00			3677.00	23.00 Bottom Of Top Packer
Packer - Shale	4.00			3681.00	
Stubb	1.00			3682.00	
Recorder	0.00	8790	Inside	3682.00	
Recorder	0.00	8792	Outside	3682.00	
Perforations	29.00			3711.00	
Bullnose	3.00			3714.00	37.00 Anchor Tool

Total Tool Length: 60.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54164

DST#: 4

ATTN: Chuck Schmaltz

Test Start: 2014.07.31 @ 21:05:24

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:

5800 ppm

Viscosity: 68.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 ppm

Filter Cake: 0.08 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
705.00	Clean Gassy Oil 25%g, 75%o	7.366
0.00	2210' GIP	0.000

Total Length: 705.00 ft Total Volume: 7.366 bbl

Num Fluid Samples: 0

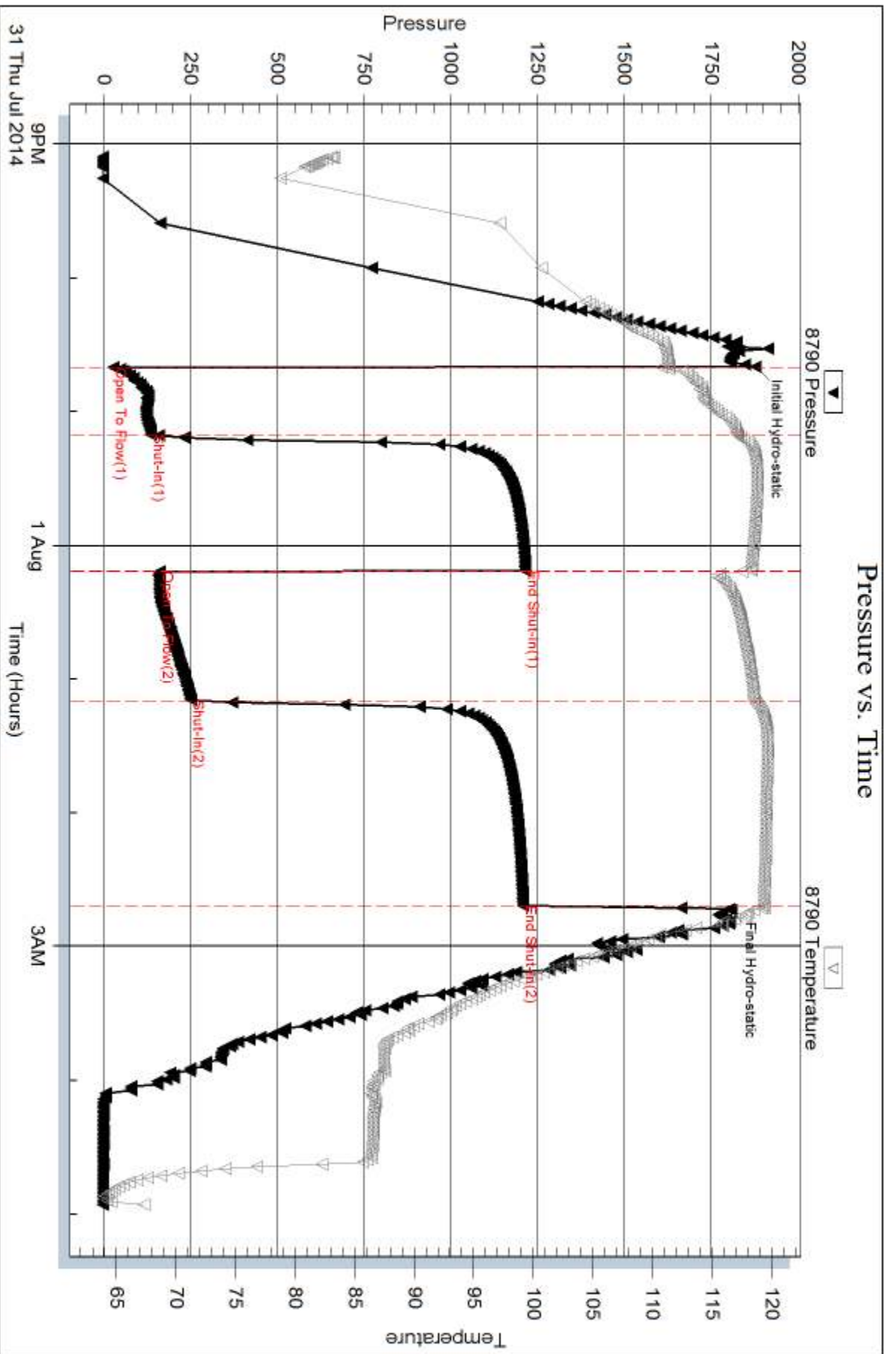
Num Gas Bombs: 0

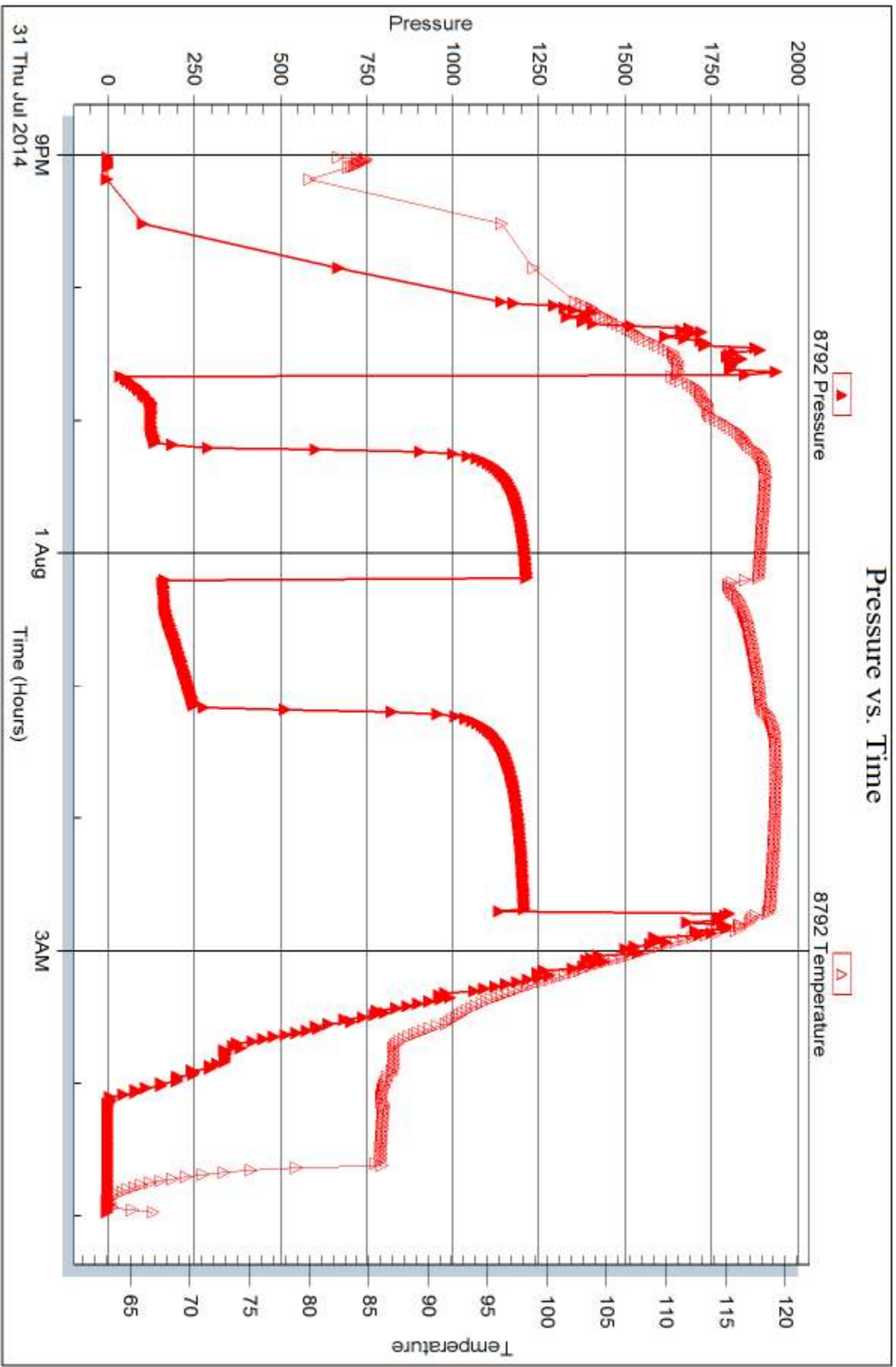
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita KS 67202-1216

ATTN: Chuck Schmaltz

David #1-9

9-23s-12w Stafford,KS

Start Date: 2014.08.01 @ 13:14:50

End Date: 2014.08.01 @ 21:33:35

Job Ticket #: 54165 DST #: 5

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.05 @ 13:40:03



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmalz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 54165

DST#: 5

Test Start: 2014.08.01 @ 13:14:50

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:51:50
 Time Test Ended: 21:33:35
 Interval: **3735.00 ft (KB) To 3745.00 ft (KB) (TVD)**
 Total Depth: 3745.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1856.00 ft (KB)
 1845.00 ft (CF)
 KB to GR/CF: 11.00 ft

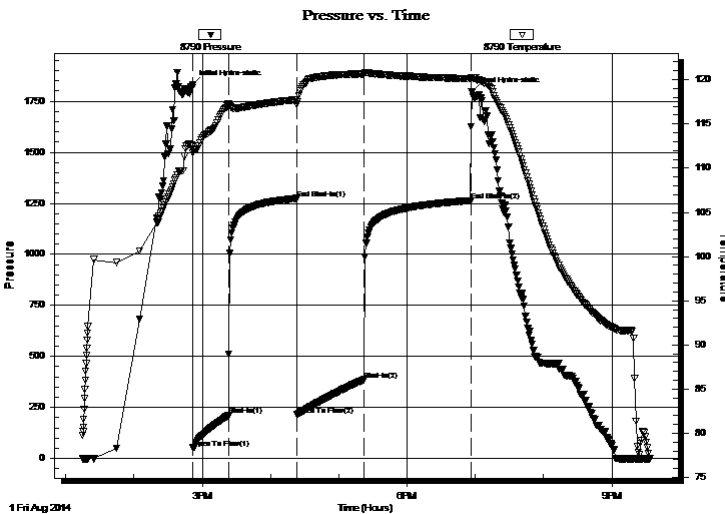
Serial #: 8790

Inside

Press@RunDepth: 386.26 psig @ 3740.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.01 End Date: 2014.08.01 Last Calib.: 2014.08.01
 Start Time: 13:14:55 End Time: 21:33:34 Time On Btm: 2014.08.01 @ 14:51:35
 Time Off Btm: 2014.08.01 @ 18:56:50

TEST COMMENT: 30 IF: Strong blow . BOB @ 5 min.
 60 IS: Weak blow . surf. - 2"
 60 FF: Strong blow . BOB @ 14 min died to 7"
 90 FSI: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1829.86	112.51	Initial Hydro-static
1	51.45	111.75	Open To Flow (1)
32	209.80	117.09	Shut-In(1)
92	1274.23	117.73	End Shut-In(1)
92	214.30	117.46	Open To Flow (2)
151	386.26	120.66	Shut-In(2)
245	1263.41	120.11	End Shut-In(2)
246	1799.05	120.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MGOCW 5%m, 5%g, 10%o, 80%w	0.59
120.00	MGWCO 5%m, 5%g, 20%w, 70%o	0.59
845.00	Clean Gassy Oil 15%g, 85%o	11.52
0.00	850' GIP	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 Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmalz

9-23s-12w Stafford,KS
David #1-9
 Job Ticket: 54165 **DST#: 5**
 Test Start: 2014.08.01 @ 13:14:50

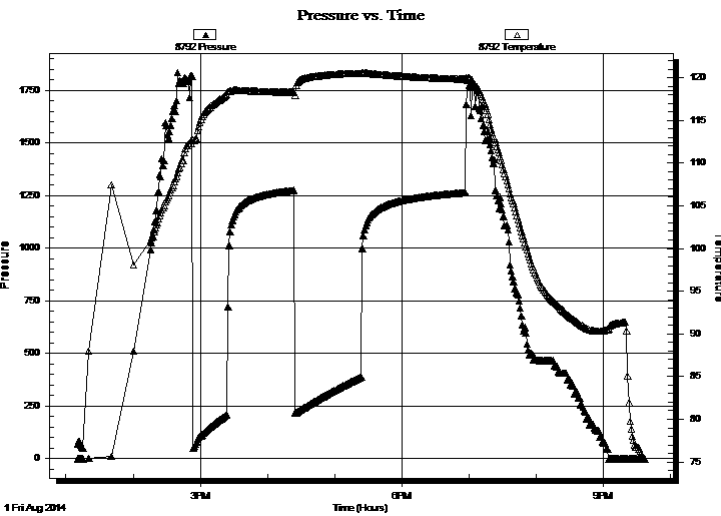
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:51:50
 Time Test Ended: 21:33:35
 Interval: **3735.00 ft (KB) To 3745.00 ft (KB) (TVD)**
 Total Depth: 3745.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ryan Reynolds
 Unit No: 68
 Reference Elevations: 1856.00 ft (KB)
 1845.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8792 Outside

Press@RunDepth: psig @ 3740.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.01 End Date: 2014.08.01 Last Calib.: 2014.08.01
 Start Time: 13:10:22 End Time: 21:37:16 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 IF: Strong blow . BOB @ 5 min.
 60 IS: Weak blow . surf. - 2"
 60 FF: Strong blow . BOB @ 14 min died to 7"
 90 FSI: No blow .



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MGOCW 5%m, 5%g, 10%o, 80%w	0.59
120.00	MGWCO 5%m, 5%g, 20%w, 70%o	0.59
845.00	Clean Gassy Oil 15%g, 85%o	11.52
0.00	850' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54165

DST#: 5

ATTN: Chuck Schmaltz

Test Start: 2014.08.01 @ 13:14:50

Tool Information

Drill Pipe:	Length: 3454.00 ft	Diameter: 3.80 inches	Volume: 48.45 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 277.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 49.81 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3735.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	14.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Change Over Sub	1.00			3713.00	
Shut In Tool	5.00			3718.00	
Hydraulic tool	5.00			3723.00	
Jars	5.00			3728.00	
Safety Joint	2.00			3730.00	
Packer	5.00			3735.00	23.00 Bottom Of Top Packer
Packer - Shale	4.00			3739.00	
Stubb	1.00			3740.00	
Recorder	0.00	8790	Inside	3740.00	
Recorder	0.00	8792	Outside	3740.00	
Perforations	6.00			3746.00	
Bullnose	3.00			3749.00	14.00 Anchor Tool

Total Tool Length: 37.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54165

DST#: 5

ATTN: Chuck Schmaltz

Test Start: 2014.08.01 @ 13:14:50

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:

26000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6200.00 ppm

Filter Cake: 0.08 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
120.00	MGOCW 5%m, 5%g, 10%o, 80%w	0.590
120.00	MGWCO 5%m, 5%g, 20%w, 70%o	0.590
845.00	Clean Gassy Oil 15%g, 85%o	11.516
0.00	850' GIP	0.000

Total Length: 1085.00 ft

Total Volume: 12.696 bbf

Num Fluid Samples: 0

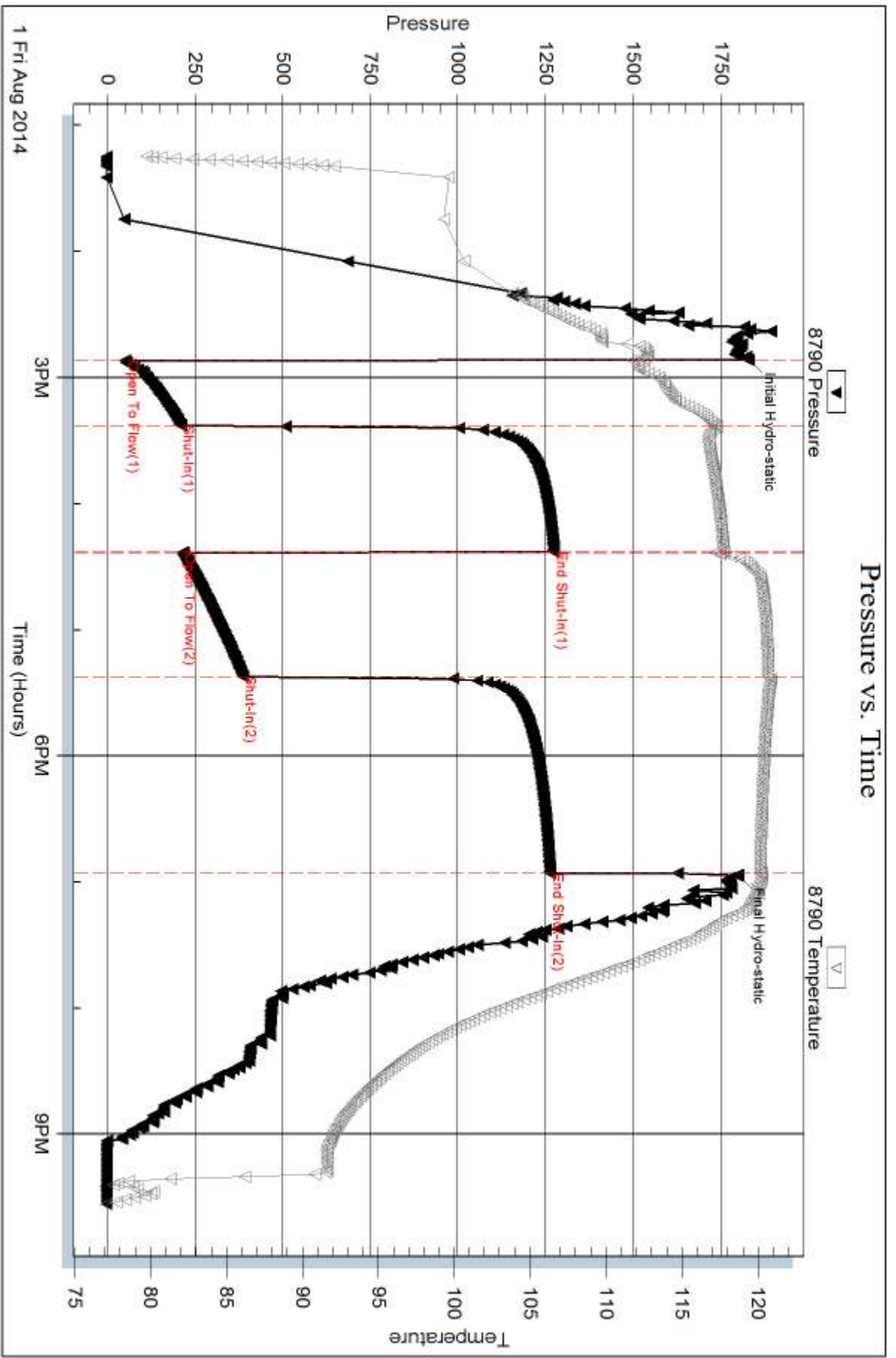
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

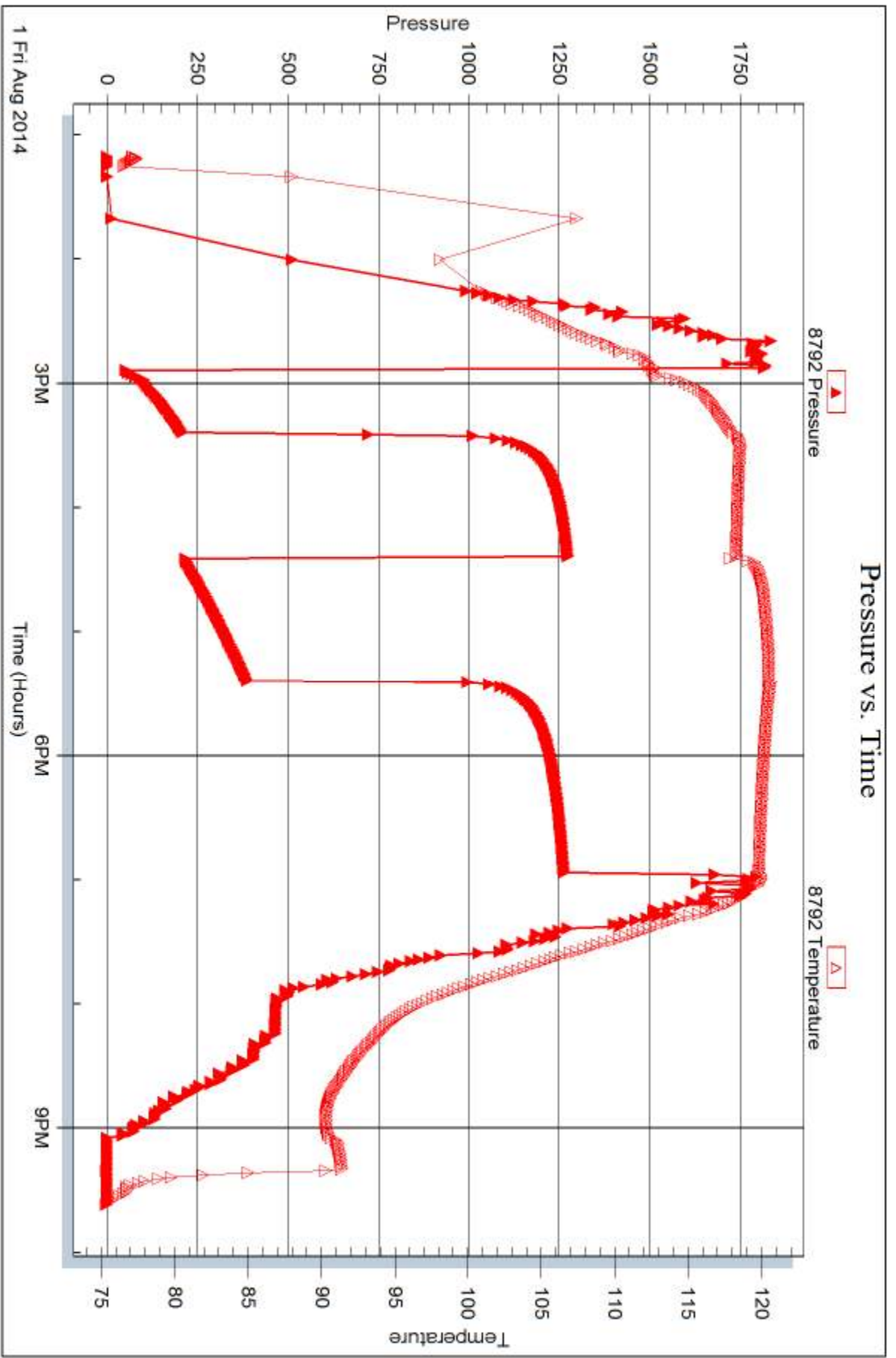


Serial #: 8792

Outside Murfin Drilling Co Inc

David #1-9

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 54165

Printed: 2014.08.05 @ 13:40:05



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water STE 300
Wichita KS 67202-1216

ATTN: Chuck Schmaltz

David #1-9

9-23s-12w Stafford,KS

Start Date: 2014.08.02 @ 02:33:27

End Date: 2014.08.02 @ 10:22:27

Job Ticket #: 54166 DST #: 6

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.05 @ 13:39:30



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N. Water STE 300
 Wichita KS 67202-1216
 ATTN: Chuck Schmalz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 54166

DST#: 6

Test Start: 2014.08.02 @ 02:33:27

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 04:27:42
 Tester: Ryan Reynolds
 Time Test Ended: 10:22:27
 Unit No: 68
 Interval: **3745.00 ft (KB) To 3755.00 ft (KB) (TVD)**
 Reference Elevations: 1856.00 ft (KB)
 Total Depth: 3755.00 ft (KB) (TVD)
 1845.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 11.00 ft

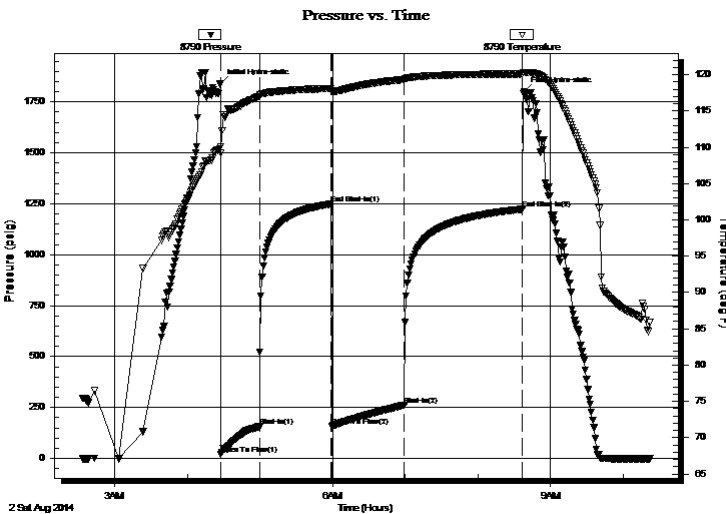
Serial #: 8790

Inside

Press@RunDepth: 262.00 psig @ 3746.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.02 End Date: 2014.08.02 Last Calib.: 2014.08.02
 Start Time: 02:33:32 End Time: 10:22:26 Time On Btm: 2014.08.02 @ 04:27:27
 Time Off Btm: 2014.08.02 @ 08:37:57

TEST COMMENT: IF: Good blow . surf. - 8"
 IS: No blow
 FF: Good blow . surf. - 8"
 FS: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.73	110.04	Initial Hydro-static
1	22.02	109.17	Open To Flow (1)
32	155.89	117.02	Shut-In(1)
92	1249.34	118.11	End Shut-In(1)
92	158.40	117.71	Open To Flow (2)
152	262.00	119.33	Shut-In(2)
250	1223.73	120.11	End Shut-In(2)
251	1798.56	120.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
565.00	GMCW 5%g, 5%m, 90%w	5.40

* Recovery from multiple tests

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 67202-1216
ATTN: Chuck Schmalz

9-23s-12w Stafford,KS

David #1-9

Job Ticket: 54166

DST#: 6

Test Start: 2014.08.02 @ 02:33:27

GENERAL INFORMATION:

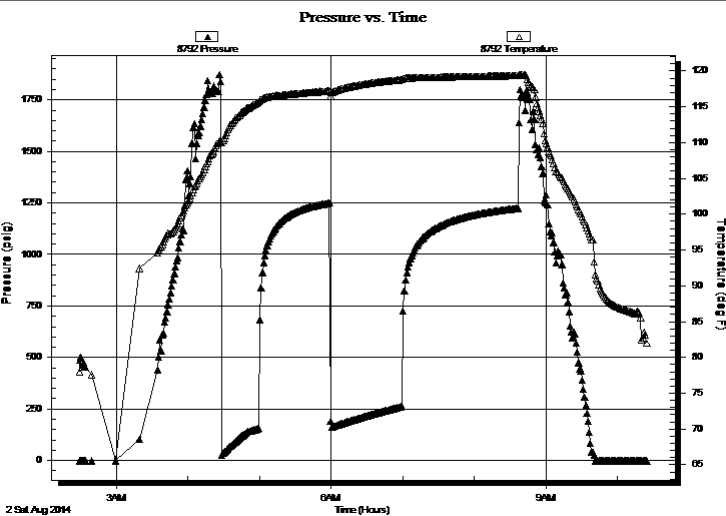
Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 04:27:42
Tester: Ryan Reynolds
Time Test Ended: 10:22:27
Unit No: 68
Interval: **3745.00 ft (KB) To 3755.00 ft (KB) (TVD)**
Reference Elevations: 1856.00 ft (KB)
Total Depth: 3755.00 ft (KB) (TVD)
1845.00 ft (CF)
Hole Diameter: 7.88 inches
Hole Condition: Fair
KB to GR/CF: 11.00 ft

Serial #: 8792

Outside

Press@RunDepth: psig @ 3746.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.08.02 End Date: 2014.08.02 Last Calib.: 2014.08.02
Start Time: 02:29:06 End Time: 10:24:45 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Good blow . surf. - 8"
IS: No blow
FF: Good blow . surf. - 8"
FS: No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
565.00	GMCW 5%g, 5%m, 90%w	5.40

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54166

DST#: 6

ATTN: Chuck Schmaltz

Test Start: 2014.08.02 @ 02:33:27

Tool Information

Drill Pipe:	Length: 3454.00 ft	Diameter: 3.80 inches	Volume: 48.45 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 277.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 49.81 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3745.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	37.00 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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Change Over Sub	1.00			3719.00	
Shut In Tool	5.00			3724.00	
Hydraulic tool	5.00			3729.00	
Jars	5.00			3734.00	
Safety Joint	2.00			3736.00	
Packer	5.00			3741.00	27.00 Bottom Of Top Packer
Packer	4.00			3745.00	
Stubb	1.00			3746.00	
Recorder	0.00	8790	Inside	3746.00	
Recorder	0.00	8792	Outside	3746.00	
Perforations	6.00			3752.00	
Bullnose	3.00			3755.00	10.00 Bottom Packers & Anchor

Total Tool Length: 37.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

9-23s-12w Stafford,KS

250 N. Water STE 300
Wichita KS 67202-1216

David #1-9

Job Ticket: 54166

DST#: 6

ATTN: Chuck Schmaltz

Test Start: 2014.08.02 @ 02:33:27

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:

24000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6200.00 ppm

Filter Cake: 0.08 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
565.00	GMCW 5%g, 5%m, 90%w	5.402

Total Length: 565.00 ft

Total Volume: 5.402 bbl

Num Fluid Samples: 0

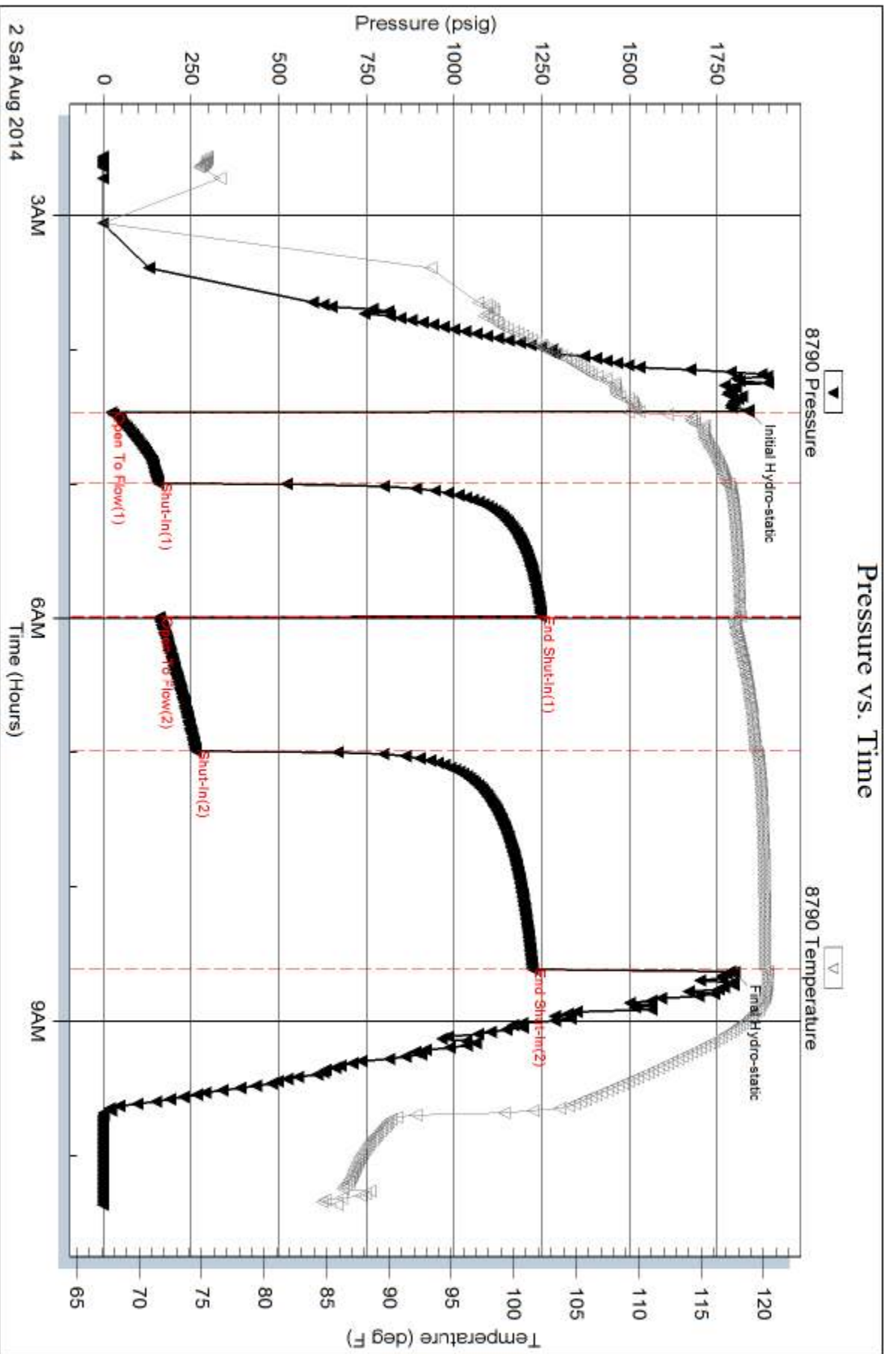
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

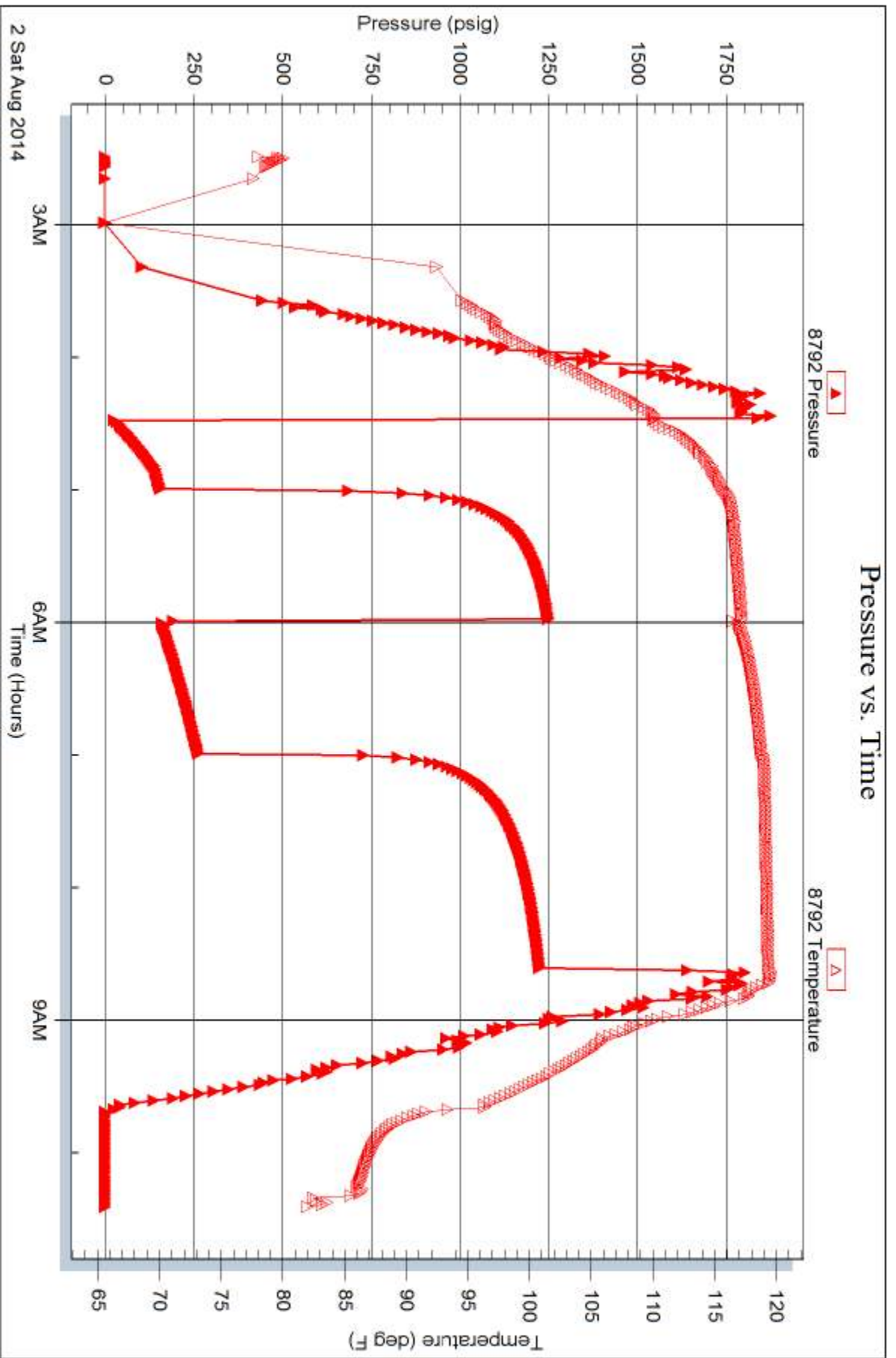


Serial #: 8792

Outside Murfin Drilling Co Inc

David #1-9

DST Test Number: 6



Trilobite Testing, Inc

Ref. No: 54166

Printed: 2014.08.05 @ 13:39:31



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58835

Well Name & No. DAVID #1-9 Test No. 1 Date 7-29-14
 Company MURFIN DRILLING Co. INC Elevation 1856 KB 1845 GL
 Address 250 N. WATER, STE 300 WICHITA, Ks 67202-1216
 Co. Rep / Geo. Chuck Schmalz Rig MURFIN r1921
 Location: Sec. 9 Twp. 23^s Rge. 12^w Co. STAFFORD State Ks

Interval Tested 3324-3424 Zone Tested LKC B-F
 Anchor Length 100 Drill Pipe Run 3050 Mud Wt. 9.2
 Top Packer Depth 3319 Drill Collars Run 270 Vis 50
 Bottom Packer Depth 3324 Wt. Pipe Run - WL 6.4
 Total Depth 3424 Chlorides 3800 ppm System LCM TR
 Blow Description TFP - WEAK Blow Thru-out 1/2" To 1 1/2" Blow
ISTP - NO Blow
FFP - NO Blow
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>mud</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 120 BHT 112 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1596</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1810</u>
(B) First Initial Flow <u>34</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1935</u>
(C) First Final Flow <u>48</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2125</u>
(D) Initial Shut-In <u>1075</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0025</u>
(E) Second Initial Flow <u>64</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0209</u>
(F) Second Final Flow <u>84</u>	<input checked="" type="checkbox"/> Mileage <u>180RT</u> 102.30	Comments
(G) Final Shut-In <u>1031</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>1578</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>1827.30</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1827.30</u>	

Approved By _____

Our Representative Ray Schwager

Thank you

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. 58836

Well Name & No. David #1-9 Test No. 2 Date 7-30-14
 Company Murfin Drilling Co, Inc Elevation 1856 KB 1845 GL
 Address 250 N. WATER, STE 300 WICHITA, Ks 67202-1216
 Co. Rep / Geo. Chuck Schmalte Rig Murfin rig 21
 Location: Sec. 9 Twp. 23^s Rge. 12^w Co. Stafford State Ks

Interval Tested 3463-3565 Zone Tested LKC H-K
 Anchor Length 102 Drill Pipe Run 3175 Mud Wt. 9.3
 Top Packer Depth 3458 Drill Collars Run 270 Vis 52
 Bottom Packer Depth 3463 Wt. Pipe Run — WL 6.4
 Total Depth 3565 Chlorides 5200 ppm System LCM 1#

Blow Description IFP - STRONG BLOW IN 1 MIN
ISIP - NO BLOW
FFP - STRONG BLOW, GTS IN 24 MIN, TO WEAK TO GAUGE
FSIP - 6" BLOW BACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>MGO</u>	<u>30</u>	<u>40</u>	<u>30</u>	
<u>180</u>	<u>CO</u>				

Rec Total 260 BHT 114 Gravity 38 API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>1689</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1235</u>
(B) First Initial Flow <u>47</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1325</u>
(C) First Final Flow <u>74</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1455</u>
(D) Initial Shut-In <u>1049</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1855</u>
(E) Second Initial Flow <u>65</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2054</u>
(F) Second Final Flow <u>109</u>	<input checked="" type="checkbox"/> Mileage <u>102.30</u>	Comments
(G) Final Shut-In <u>1007</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1647</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

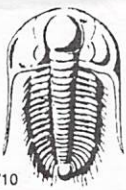
Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Sub Total 1827.30

Approved By _____ Our Representative RAY SCHWAGER Thank you

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. 54163

Well Name & No. David 1-9 Test No. 3 Date 7-31-14
 Company Murfin Drilling Co., Inc. Elevation 1856 KB 1845 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Ken Dean / Chuck Schmaltz Rig Murfin 21
 Location: Sec. 9 Twp. 23s Rge. 12w Co. Stafford State KS

Interval Tested 3617 - 3670 Zone Tested Viola
 Anchor Length 53 Drill Pipe Run 3328 Mud Wt. 9.3
 Top Packer Depth 3612 Drill Collars Run 277 Vis 55
 Bottom Packer Depth 3617 Wt. Pipe Run ∅ WL 6.4
 Total Depth 3670 Chlorides 5200 ppm System LCM 1 #
 Blow Description IF: Strong blow. BOB @ 14 min. IST: No blow
FF: Fair blow. Surf. - 4" FST: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>600</u>	<u>GIP</u>				
<u>60</u>	<u>OGM</u>		<u>10</u>		<u>90</u>
<u>150</u>	<u>WOGM</u>	<u>73</u>	<u>10</u>	<u>2</u>	<u>15</u>

Rec Total 210 BHT 115 Gravity N/C API RW .13 @ 85 °F Chlorides 46000 ppm

(A) Initial Hydrostatic <u>1827</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0600</u>
(B) First Initial Flow <u>27</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0658</u>
(C) First Final Flow <u>62</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0822</u>
(D) Initial Shut-In <u>1128</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1232</u>
(E) Second Initial Flow <u>73</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1402</u>
(F) Second Final Flow <u>111</u>	<input checked="" type="checkbox"/> Mileage <u>66</u> <u>102.30</u>	Comments
(G) Final Shut-In <u>1095</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1781</u>	<input type="checkbox"/> Straddle	

Initial Open 30
 Initial Shut-In 60
 Final Flow 40
 Final Shut-In 90

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1577.30
 MP/DST Disc't

Approved By [Signature] Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged or 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. 54164

Well Name & No. David 1-9 Test No. 4 Date 7-31-14
 Company Murfin Drlg. Co., Inc. Elevation 1856 KB 1845 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Ken Dean / Chuck Schmalz Rig Murfin 21
 Location: Sec. 9 Twp. 23s. Rge. 12w Co. Stafford State KS

Interval Tested 3677-3710 Zone Tested Simpson
 Anchor Length 33 Drill Pipe Run 3391 Mud Wt. 9.3
 Top Packer Depth 3672 Drill Collars Run 277 Vis 68
 Bottom Packer Depth 3677 Wt. Pipe Run Ø WL 7.2
 Total Depth 3710 Chlorides 5800 ppm System LCM trc

Blow Description IF: Strong blow. BOB @ 7min. Surf. - 8" ISI: Good blow.
FF: Strong blow. BOB @ 8min. Surf. - 6" FST: Good blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>2210</u>	<u>GIP</u>				
<u>705</u>	<u>Clean Gassy Oil</u>	<u>25</u>	<u>75</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 705 BHT 119 Gravity 35 API RW N/C @ W/C °F Chlorides 5800 ppm

(A) Initial Hydrostatic <u>1878</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>2045</u>
(B) First Initial Flow <u>27</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2105</u>
(C) First Final Flow <u>136</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2240</u>
(D) Initial Shut-In <u>1216</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0240</u>
(E) Second Initial Flow <u>160</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0456</u>
(F) Second Final Flow <u>250</u>	<input checked="" type="checkbox"/> Mileage <u>66</u> <u>102.30</u>	Comments
(G) Final Shut-In <u>1209</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1802</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open 30 Shale Packer 250 Ruined Packer
 Initial Shut-In 60 Extra Packer Extra Copies
 Final Flow 60 Extra Recorder Sub Total 0
 Final Shut-In 90 Day Standby Total 1827.30
 Accessibility MP/DST Disc't

Approved By [Signature] Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged or 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. 54165

Well Name & No. David 1-9 Test No. 5 Date 8-1-14
 Company Murfin Drilling Co., Inc. Elevation 1856 KB 1845 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Ken Dean / Chuck Schmalz Rig Murfin 21
 Location: Sec. 9 Twp. 23s. Rge. 12w Co. Stafford State KS

Interval Tested 3735 - 3745 Zone Tested Arbuckle
 Anchor Length 10' Drill Pipe Run 3454 Mud Wt. 9.3
 Top Packer Depth 3730 Drill Collars Run 277 Vis 58
 Bottom Packer Depth 3735 Wt. Pipe Run Ø WL 8.0
 Total Depth 3745 Chlorides 6200 ppm System LCM 1/2 #

Blow Description IF: Strong blow. BoB @ 5min. ISI: Weak blow. surf. 2".
FF: Strong blow. BoB @ 14min. - 7"
FST: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>850</u>	<u>GIF</u>				
<u>845</u>	<u>Clean gassy oil</u>				
<u>120</u>	<u>MGWCD</u>	<u>5</u>	<u>70</u>	<u>20</u>	<u>5</u>
<u>120</u>	<u>MGOGW</u>	<u>5</u>	<u>10</u>	<u>80</u>	<u>5</u>

Rec Total 1085 BHT 120 Gravity 40 API RW 22 @ 85° F Chlorides 26 ppm
 (A) Initial Hydrostatic 1830 Test 1150 T-On Location 1300
 (B) First Initial Flow 51 Jars 250 T-Started 1315
 (C) First Final Flow 210 Safety Joint 75 T-Open 1452
 (D) Initial Shut-In 1274 Circ Sub _____ T-Pulled 1853
 (E) Second Initial Flow 214 Hourly Standby _____ T-Out 2134
 (F) Second Final Flow 386 Mileage 66 102.30
 (G) Final Shut-In 1263 Sampler _____
 (H) Final Hydrostatic 1799 Straddle _____
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90
 Sub Total 1827.30
 Total 1827.30
 MP/DST Disc't _____

Approved By [Signature] Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged or 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. 54166

Well Name & No. David 1-9 Test No. 6 Date 8-2-14
 Company Murfin Drilg. Co., Inc. Elevation 1856 KB 1845 GL
 Address 250 N. Water Ste. 300 Wichita, KS 67202-1216
 Co. Rep / Geo. Ken Dean/Chuck Schmalz Rig Murfin 21
 Location: Sec. 9 Twp. 23s Rge. 12w Co. Stafford State KS

Interval Tested 3745-3755 Zone Tested Arbuckle
 Anchor Length 10 Drill Pipe Run 3454 Mud Wt. 9.3
 Top Packer Depth 3740 Drill Collars Run 277 Vis 58
 Bottom Packer Depth 3745 Wt. Pipe Run Ø WL 8.0
 Total Depth 3755 Chlorides 6200 ppm System LCM 1/2#
 Blow Description IF: Good blow. surf. - 8" ISI: No blow
FF: Good blow. surf. - 8" FSTI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>565</u>	<u>GMCW</u>	<u>5</u>	<u>90</u>	<u>5</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 565 BHT 120 Gravity N/C API RW 25@80 °F Chlorides 2400 ppm
 (A) Initial Hydrostatic 1841 Test 1150 T-On Location 0230
 (B) First Initial Flow 22 Jars 250 T-Started 0233
 (C) First Final Flow 156 Safety Joint 75 T-Open 0428
 (D) Initial Shut-In 1249 Circ Sub _____ T-Pulled 0830
 (E) Second Initial Flow 158 Hourly Standby _____ T-Out 1022
 (F) Second Final Flow 262 Mileage 66 102.30 Comments _____
 (G) Final Shut-In 1224 Sampler _____
 (H) Final Hydrostatic 1799 Straddle _____
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Initial Open 30 Day Standby _____ Sub Total 0
 Initial Shut-In 60 Accessibility _____ Total 1827.30
 Final Flow 60 MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1827.30

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.

MURFIN DRILLING CO. DAVID # 1-9

WILDCAT 1320' EFL

STAFFORD KANSAS

APIE 15-185-23890

MURFIN DRILLING CO. 2 MARUST 2014

2859 3851

Table with columns: FORMATION, STRIKE, DIP, ELEVATION, etc. Includes ANHYDRITE-TOP, ANHYDRITE-BASE, OREAD, HEEBNER, TORONTO, DOUGLAS, LANSING, STARK, BKC, VIOLA, ARBUCKLE, TORRAL DEPTH.

Table with columns: No., Interval, Formation, Depth, etc. Lists intervals 1 through 6 with corresponding formation names and depths.

Table with columns: NO, SIZE, WAVE, TYPE, DEPTH, FEET, HOURS, etc. Lists well intervals and their characteristics.

LEGEND

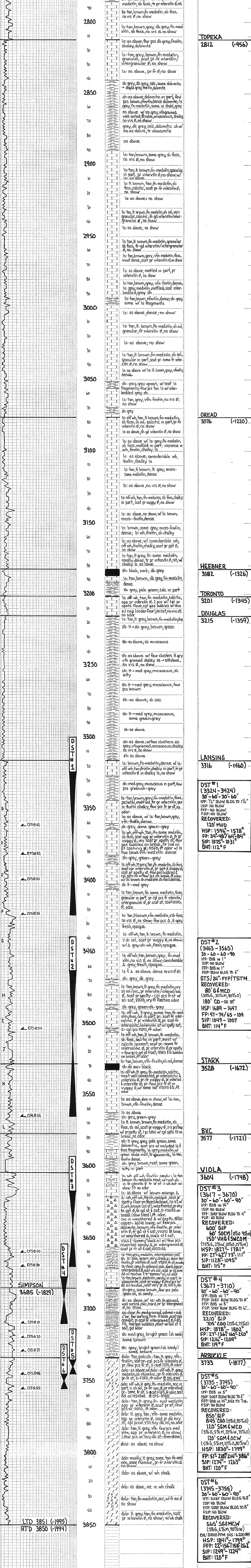
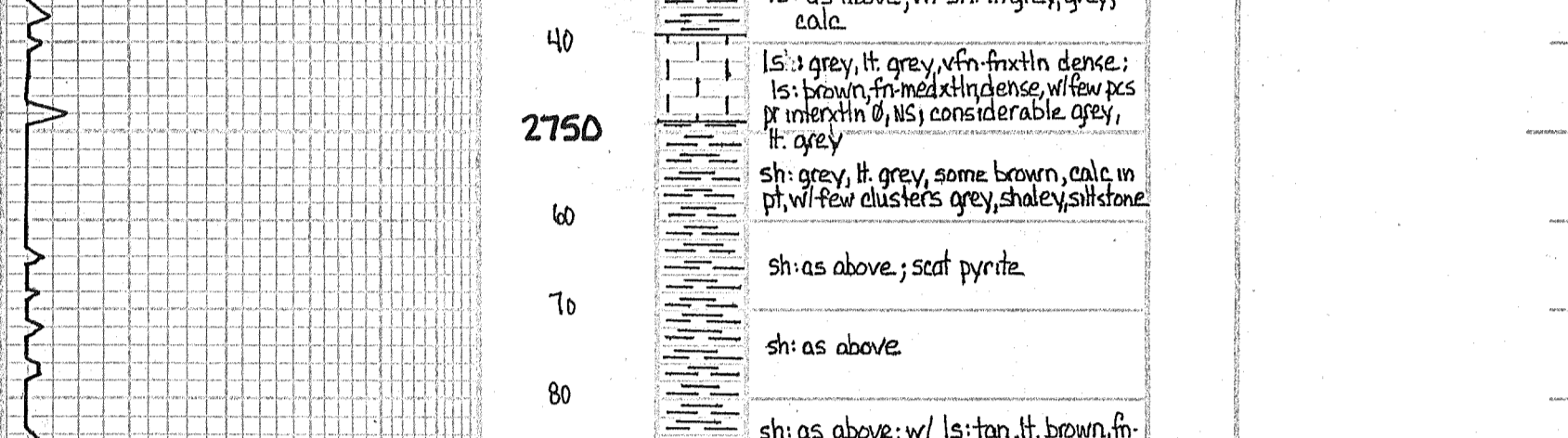


Table with columns: DRILLING TIME Minutes/Foot, DEPTH, LITHOLOGY, SAMPLE DESCRIPTIONS, OIL SHOWS, REMARKS. Includes DST #1-6 and various well identifiers.



OPERATOR PAY MDC of 1
 LEASE: *Bm*

PAGE	CUST NO	YARD #	INVOICE DATE
	1002852	1718	07/30/2014
INVOICE NUMBER			
91555252			

Pratt (620) 672-1201
 B MURFIN DRILLING
 I PO Box: 288
 L RUSSELL
 L KS US 67665
 T
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME David 1-9
 O B LOCATION
 B COUNTY Stafford
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40748908	19905		Net - 30 days	08/29/2014

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 07/27/2014 to 07/27/2014</i>				
0040748908				
<i>USED FOR</i>				
<i>APPROVED</i>				
171811031A Cement-New Well Casing/Pi 07/27/2014				
Cement 8 5/8 Surface				
A-Con Blend Common	175.00	EA	13.50	2,362.27
Common Cement	175.00	EA	12.00	2,099.80
Celloflake	88.00	EA	2.77	244.18
Calcium Chloride	825.00	EA	0.79	649.63
"Top Rubber Cmt Plug, 8 5/8""	1.00	EA	168.73	168.73
"Baffle Plate Alum., 8 5/8" (Blue)"	1.00	EA	127.49	127.49
"Centralizer, 8 5/8" (Blue)"	2.00	EA	67.50	134.99
"Unit Mileage Chg (PU, cars one way)"	35.00	MI	3.19	111.55
Heavy Equipment Mileage	70.00	MI	5.25	367.47
"Proppant & Bulk Del. Chgs., per ton mil	578.00	EA	1.65	953.61
Depth Charge; 501'-1000'	1.00	EA	899.92	899.92
Blending & Mixing Service Charge	350.00	BAG	1.05	367.47
Plug Container Util. Chg.	1.00	EA	187.48	187.48
"Service Supervisor, first 8 hrs on loc.	1.00	EA	131.24	131.24
<i>#D2033 1842.000</i>			<i>9188.78</i>	<i>Cement S. Co</i>
				<i>#1-9</i>

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	8,805.83
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	382.95
PO. BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	9,188.78
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		

Customer <i>Murfin Drilling</i>	Lease No.	Date <i>6-27-14</i>
Lease <i>David</i>	Well # <i>1-9</i>	
Field Order # <i>11031</i>	Station <i>Pratt</i>	Casing <i>8 5/8</i>
		Depth <i>631</i>
Type Job <i>CNW</i>	Formation <i>Surface</i>	Legal Description <i>9-23-12</i>
		County <i>Stafford</i>
		State <i>KS</i>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid		RATE	PRESS	ISIP
<i>8 5/8</i>				Pre Pad		Max		5 Min.
Depth <i>631</i>	Depth	From	To	Pad		Min		10' Min.
Volume <i>39</i>	Volume	From	To	Frac		Avg		15 Min.
Max Press	Max Press	From	To			HHP Used		Annulus Pressure
Well Connection	Annulus Vol.	From	To	Flush		Gas Volume		Total Load
Plug Depth <i>615</i>	Packer Depth	From	To					

Customer Representative <i>Juan</i>	Station Manager <i>Kevin</i>	Treater <i>Joe</i>
-------------------------------------	------------------------------	--------------------

Service Units	<i>77686</i>	<i>19405</i>	<i>19960</i>	<i>21010</i>	<i>28443</i>				
Driver Names	<i>Mike</i>	<i>Colt</i>			<i>Joe</i>				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>1130</i>					<i>ONLOC / safety meeting</i>
					<i>Run 15 JTB of 8 5/8 csg 23#</i>
					<i>Centralizer on 1-14</i>
<i>130</i>					<i>Start Running csg</i>
<i>340</i>					<i>Csg on Bottom Breakcirc with Rig</i>
<i>345</i>					<i>Hook up to Pump TRK Start Job</i>
	<i>0</i>		<i>5</i>	<i>5</i>	<i>H2O spacer</i>
			<i>77</i>	<i>5</i>	<i>mix 175 SK A-con @ 12#</i>
	<i>200</i>		<i>58</i>	<i>5</i>	<i>mix 175 SK common @ 15.6#</i>
			<i>0</i>	<i>0</i>	<i>Shut Down Release Plug</i>
<i>410</i>			<i>0</i>	<i>5</i>	<i>Start H2O Disp</i>
			<i>15</i>	<i>5</i>	<i>cemment to surface</i>
<i>430</i>	<i>500</i>		<i>38</i>	<i>0</i>	<i>Plug Down</i>
					<i>23 BBL cement to Pit</i>
					<i>JOB complete</i>
					<i>Thank you</i>
					<i>JOE</i>



BASIC
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET
1718 11031 A

DATE _____ TICKET NO. _____

DATE OF JOB 7-27-14 DISTRICT Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:					
CUSTOMER Murfin Drilling Co. Inc		LEASE David 1-9 WELL NO.---					
ADDRESS		COUNTY Stafford STATE KS					
CITY STATE		SERVICE CREW Mike Cole Joe					
AUTHORIZED BY		JOB TYPE: CNW Surface					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	7-26-14 AM 7:30
77606-14905	45 min					ARRIVED AT JOB	7-26-14 AM 2:30
14940-21010	45 min					START OPERATION	7-27-14 AM 3:45
28443						FINISH OPERATION	7-27-14 AM 4:30
						RELEASED	7-27-14 AM 5:36
						MILES FROM STATION TO WELL	35

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: [Signature]
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 101	A-con Blend Cement	SK	175		3,150 00
CP 100C	Common Cement	SK	175		2,800 00
CC 102	Cetoflake	lb	88		325 60
CC 109	Calcium Chloride	lb	825		866 25
CF 105	TOP Rubber Plug	eq	1		225 00
CF 752	Baffle Plate	eq	1		170 00
CF 1753	centralizer	eq	2		180 00
E 100	Pickup mileage	mi	35		148 75
E 101	Heavy mileage	mi	70		490 00
F 113	Bulk Delivery	Tm	578		1,270 80
CE 201	DEPTH Charge	4hr	1		12 00 00
CE 240	Mixing Charge	SK	350		490 00
CE 504	Plug Container	JOB	1		250 00
S 003	Supervisor	eq	1		175 00

SUB TOTAL 110 8,805 83

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

CHEMICAL / ACID DATA:			

SERVICE REPRESENTATIVE [Signature] THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [Signature]
(WELL OWNER, OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1002852	1718	08/06/2014
INVOICE NUMBER			
91561452			

Pratt (620) 672-1201
 B MURFIN DRILLING
 I PO Box: 288
 L RUSSELL
 L KS US 67665
 T
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME David 1-9
 O LOCATION
 B COUNTY Stafford
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T
 E JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE	
40751719	19905		Net - 30 days	09/05/2014	
		QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 08/03/2014 to 08/03/2014</i>					
0040751719					
171811033A Cement-New Well Casing/Pi 08/03/2014					
Cement 5 1/2" Longstring					
AA2 Cement		175.00	EA	12.92	2,261.00
60/40 POZ		50.00	EA	9.12	456.00
C-41P		42.00	EA	3.04	127.68
Salt		869.00	EA	0.38	330.22
Cement Friction Reducer		50.00	EA	4.56	228.00
C-44		165.00	EA	3.91	645.81
FLA-322		83.00	EA	5.70	473.10
Gilsonite		875.00	EA	0.51	445.55
Mud Flush		500.00	EA	1.14	570.00
Claymax KCL Substitute		5.00	EA	26.60	133.00
"Latch Down Plug & Baffle, 5 1/2" (Blu		1.00	EA	304.00	304.00
"Auto Fill Float Shoe 4 1/2" (Blue)"		1.00	EA	273.60	273.60
"Turbolizer, 5 1/2" (Blue)"		10.00	EA	83.60	836.00
Cement Scratchers Rotating Type		25.00	EA	38.00	950.00
"Unit Mileage Chg (PU, cars one way)"		35.00	MI	3.23	113.05
Heavy Equipment Mileage		70.00	MI	5.32	372.40
"Proppant & Bulk Del. Chgs., per ton mil		364.00	EA	1.67	608.61
Depth Charge; 3001-4000'		1.00	EA	1,641.60	1,641.60
Blending & Mixing Service Charge		225.00	BAG	1.06	239.40
Casing Swivel Rental		1.00	EA	152.00	152.00
Plug Container Util. Chg.		1.00	EA	190.00	190.00
"Service Supervisor, first 8 hrs on loc.		1.00	EA	133.00	133.00
IC103 2 1842.0001.1		11,889.45	Cement Prod Coy #1-9		
PLEASE REMIT TO:		SEND OTHER CORRESPONDENCE TO:		SUB TOTAL	11,484.02
BASIC ENERGY SERVICES, LP		BASIC ENERGY SERVICES, LP		TAX	405.43
PO BOX 841903		801 CHERRY ST, STE 2100		INVOICE TOTAL	11,889.45
DALLAS, TX 75284-1903		FORT WORTH, TX 76102			



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ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

9-23-11

LL417-1714
FIELD SERVICE TICKET
1718 11033 A

DATE _____ TICKET NO. _____

DATE OF JOB 8-3-14		DISTRICT Pratt		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:	
CUSTOMER Mursin Drilling CO. Inc				LEASE David		1-9		WELL NO.	
ADDRESS				COUNTY Stafford		STATE KS			
CITY				STATE		SERVICE CREW HUSTION Aaron JOE			
AUTHORIZED BY				JOB TYPE: CNW Longstring					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
77686-1990	30	19903-19860	30			8-2-14	8-3-14	AM	1130
28443								PM	315
						ARRIVED AT JOB		AM	800
						START OPERATION		PM	530
						FINISH OPERATION		AM	930
						RELEASED		PM	930
						MILES FROM STATION TO WELL			35

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED *Mark Kelly*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 105	AA2 CEMENT	SK	175		2,975.00
CP 103	60/40 P02	SK	50		600.00
CL 105	C-41 P	lb	42		168.00
CL 111	SALT	lb	869		434.50
CL 112	Cement friction Reducer	lb	50		300.00
CL 115	C-44	lb	165		849.75
CL 129	FLA-322	lb	83		622.50
CL 201	GILSONITE	lb	875		586.25
CF 607	Latch Down Plug	eq	1		400.00
CF 1251	Auto Fill shoe	eq	1		360.00
CF 1651	Turbolizers	eq	10		1,100.00
CF 2002	Cement Scratchers	eq	25		1,250.00
CP 151	Mud Flush	gal	500		750.00
C 704	KCL sub.	gal	5		175.00

CHEMICAL / ACID DATA:			

SUB TOTAL		K6
SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

SERVICE REPRESENTATIVE *[Signature]* THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: *Mark Kelly*
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

~~1718-11034~~ A

Cent

DATE: _____ TICKET NO. 1718 11033A

DATE OF JOB <u>8-3-14</u>	DISTRICT <u>Pratt</u>	NEW WELL <input checked="" type="checkbox"/>	OLD WELL <input type="checkbox"/>	PROD <input type="checkbox"/>	INJ <input type="checkbox"/>	WDW <input type="checkbox"/>	CUSTOMER ORDER NO. _____
CUSTOMER <u>Murfin Drilling</u>	LEASE <u>David</u>				<u>1-9</u>	WELL NO.	
ADDRESS _____		COUNTY <u>Stafford</u>			STATE <u>KS</u>		
CITY _____ STATE _____		SERVICE CREW _____					
AUTHORIZED BY _____		JOB TYPE: _____					

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME
						ARRIVED AT JOB			AM	PM
						START OPERATION			AM	PM
						FINISH OPERATION			AM	PM
						RELEASED			AM	PM
						MILES FROM STATION TO WELL				

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *Mont Kolbe*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	
E 100	Pickup mileage	mi	35		148	75
F 101	Heavy mileage	mi	70		490	00
E 113	Bulk delivery	Tm	364		800	80
CE 204	DEPTH charge	4hr	1		2,160	00
CE 240	Mixing charge	SK	225		315	00
CE 501	Casing Swivel	eq	1		200	00
CE 504	PLUG CONTAINER	JOB	1		250	00
S 003	SUPERVISOR	eq	1		175	00

CHEMICAL / ACID DATA:			

SUB TOTAL	<u>11,484</u>	<u>22</u>
SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

SERVICE REPRESENTATIVE <u><i>[Signature]</i></u>	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <u><i>[Signature]</i></u> (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
--	--

FIELD SERVICE ORDER NO. _____

BASIC

energy services, L.P.

TREATMENT REPORT

Customer Murfin Drilling	Lease No.	Date 8-3-14	
Lease David	Well # 1-9		
Field Order # 11033	Station Pratt	Casing 5/2	Depth
Type Job CNW Longstring	Formation	County Stafford	State KS
		Legal Description 9-23-11	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
5 7/8							
Depth 3849	Depth	From	To	Pre Pad	Max		5 Min.
Volume 38	Volume	From	To	Pad	Miq		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 3830	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative **Mark** Station Manager **Kevin** Treater **Joe**

Service Units 7677656	19905	19903	19860	28443					
Driver Names	HUSTON	AXON		JOE					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
0315					onloc / safety meeting
					Run JTS of 5 1/2 csg @ 17# PIPE
					cen 1-3-5-7-9-10-12-14-16-18
0530					Start Running csg
0700					csg on bottom / circ with Big
0800					Hookup to Pump TRK start JOB
	0		5	5	H2O spacer
			12	3	mud flush
			5	5	H2O spacer
	400		44	5	mix 175 sk of AA2 cement @ 15#
			0	0	shut down clear pump lines
820	0		0	6.5	Release Plug start H2O disp with 5CL
	400		78	4	Lift PSF
830	1500		88	0	slow rate
					Plug Down
					plug BH & MH
					JOB COMPLETE
					Thank you
					JOE

David #1-9
 Daily Drilling Reports
 Page Three

8/4/14 RTD: 3850'. CT: 5 ¾ hrs.. Ran 88jts of 5 ½" prod. csg, set @ 3849'. B-E cmt w/175sxs, A-Conn. PD @ 8:45AM 8/3. 30sxs RH, 20sxs MH. RR @ 12:45PM 8/3. FINAL REPORT

MDCI David #1-9 330' FNL 1320' FWL Sec. 9-23S-12W 1856' KB						B & R Drlg Co Dale #1 SW SW SE Sec. 4-T23S-R12W 1844' KB		
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	641	+1215	+1	647	+1209	-5	630	+1214
B/Anhydrite	667	+1189	-5	668	+1188	-6	650	+1194
Stotler								
Topeka	2812	-956	-10	2807	-951	-5	2790	-946
Heebner	3182	-1326	-8	3180	-1324	-6	3162	-1318
Lansing	3316	-1460	-6	3316	-1460	-6	3298	-1454
Stark	3528	-1672	-6	3528	-1672	-6	3510	-1666
BKC	3577	-1721	-2	3580	-1724	-5	3563	-1719
Viola	3604	-1748	+2	3602	-1746	+4	3594	-1750
Simpson				3684	-1828	+2	3674	-1830
Arbuckle	3733	-1877	+3	3732	-1876	+4	3724	-1880
RTD	3850	-1994					3772	
LTD				3851	-1995			