



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1229093
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: _____

1229093

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	Claypool 1-14
Doc ID	1229093

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

ATTN: Chuck Schmaltz

Claypool #1-14

14-23s-12w Stafford,KS

Start Date: 2014.09.01 @ 09:07:42

End Date: 2014.09.01 @ 16:32:12

Job Ticket #: 54249 DST #: 1

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

Printed: 2014.09.05 @ 10:42:16

Murfin Drilling. Co. Inc. 14-23s-12w Stafford,KS Claypool #1-14 DST # 1 LKC B-F 2014.09.01



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54249

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.09.01 @ 09:07:42

GENERAL INFORMATION:

Formation: **LKC B-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:47:57

Time Test Ended: 16:32:12

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 3367.00 ft (KB) To 3445.00 ft (KB) (TVD)

Reference Elevations: 1845.00 ft (KB)

Total Depth: 3445.00 ft (KB) (TVD)

1834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8352 Outside

Press@RunDepth: 105.59 psig @ 3368.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.09.01

End Date: 2014.09.01

Last Calib.: 2014.09.01

Start Time: 09:07:47

End Time: 16:32:11

Time On Btm: 2014.09.01 @ 10:46:42

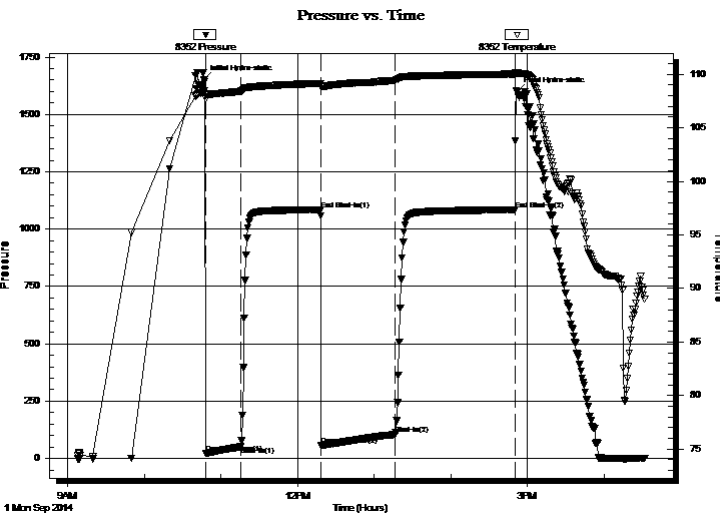
Time Off Btm: 2014.09.01 @ 14:51:42

TEST COMMENT: IF:Weak blow . 1/2 - 2 1/2".

IS:No blow .

FF:Weak blow . 0 - 2".

FS:No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.05	108.42	Initial Hydro-static
2	21.61	107.68	Open To Flow (1)
29	51.38	108.39	Shut-In(1)
92	1084.30	109.16	End Shut-In(1)
92	56.16	108.82	Open To Flow (2)
150	105.59	109.43	Shut-In(2)
244	1083.78	110.02	End Shut-In(2)
245	1600.25	110.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
145.00	SGCM/w trace of oil 2%g 98% m	0.71

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54249

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.09.01 @ 09:07:42

Tool Information

Drill Pipe:	Length: 3106.00 ft	Diameter: 3.80 inches	Volume: 43.57 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 44.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3367.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	78.00 ft			
Tool Length:	106.00 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			3340.00	
Shut In Tool	5.00			3345.00	
Hydraulic tool	5.00			3350.00	
Jars	5.00			3355.00	
Safety Joint	3.00			3358.00	
Packer	4.00			3362.00	28.00 Bottom Of Top Packer
Packer	5.00			3367.00	
Stubb	1.00			3368.00	
Recorder	0.00	8352	Outside	3368.00	
Recorder	0.00	8370	Inside	3368.00	
Perforations	8.00			3376.00	
Blank Spacing	64.00			3440.00	
Bullnose	5.00			3445.00	78.00 Bottom Packers & Anchor

Total Tool Length: 106.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54249

DST#: 1

ATTN: Chuck Schmaltz

Test Start: 2014.09.01 @ 09:07:42

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: 7200 ppm

Viscosity: 57.00 sec/qt

Cushion Volume: bbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 7200.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
145.00	SGCMw trace of oil 2%g 98%m	0.713

Total Length: 145.00 ft Total Volume: 0.713 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

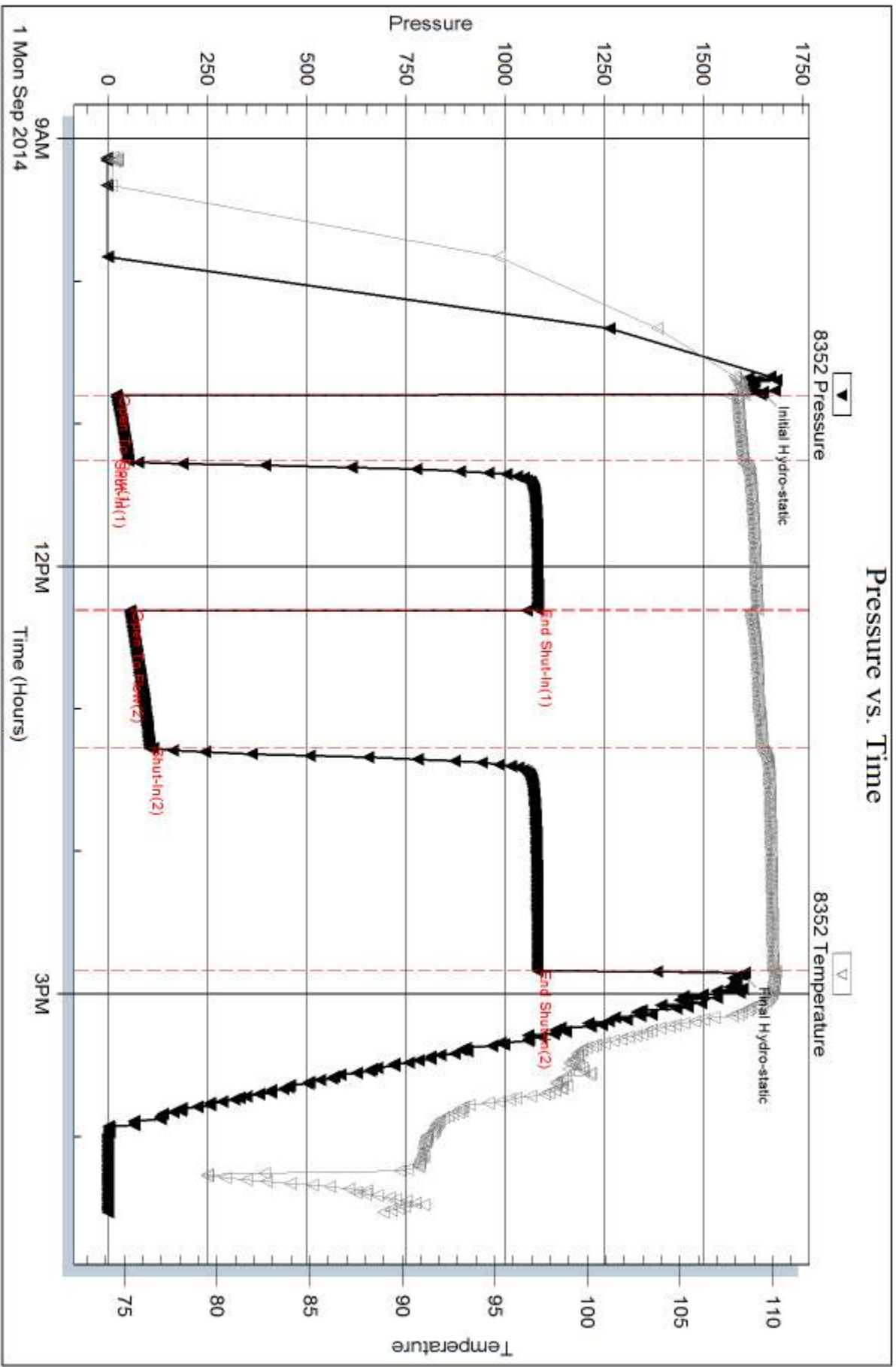
Recovery Comments:

Serial #: 8352

Outside Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 54249

Printed: 2014.09.05 @ 10:42:17

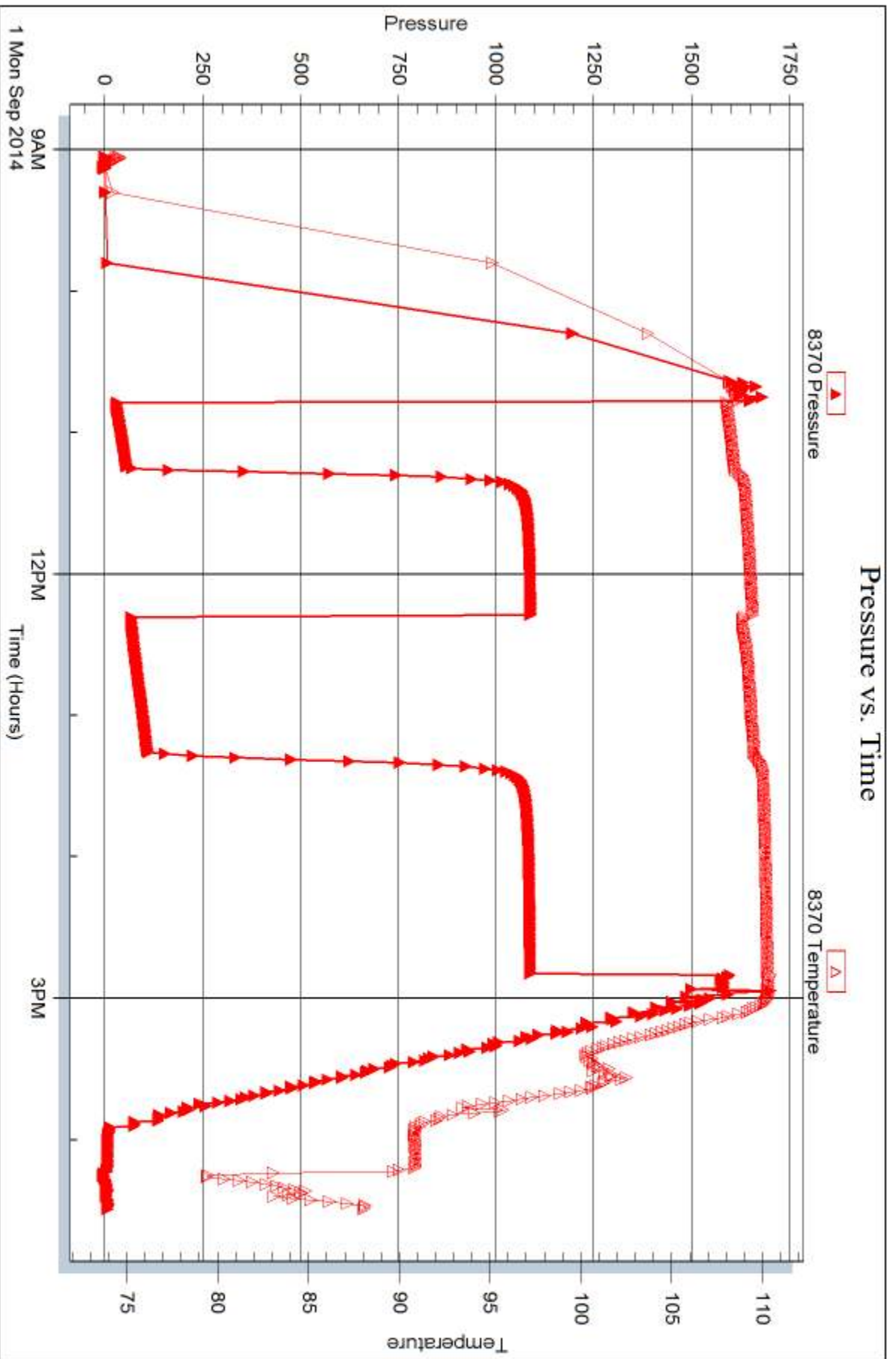
Serial #: 8370

Inside

Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 54249

Printed: 2014.09.05 @ 10:42:17



DRILL STEM TEST REPORT

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

250 N. Water, Ste. 300
Wichita KS .67202

ATTN: Chuck Schmaltz

Claypool #1-14

14-23s-12w Stafford,KS

Start Date: 2014.09.02 @ 04:58:30

End Date: 2014.09.02 @ 12:51:45

Job Ticket #: 54250 DST #: 2

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

Printed: 2014.09.05 @ 10:41:45



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54250

DST#: 2

ATTN: Chuck Schmalz

Test Start: 2014.09.02 @ 04:58:30

GENERAL INFORMATION:

Formation: **LKC G-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:37:15

Time Test Ended: 12:51:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 3475.00 ft (KB) To 3610.00 ft (KB) (TVD)

Reference Elevations: 1845.00 ft (KB)

Total Depth: 3610.00 ft (KB) (TVD)

1834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8352 Outside

Press@RunDepth: 289.25 psig @ 3476.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.09.02

End Date:

2014.09.02

Last Calib.:

2014.09.02

Start Time:

04:58:35

End Time:

12:51:44

Time On Btm:

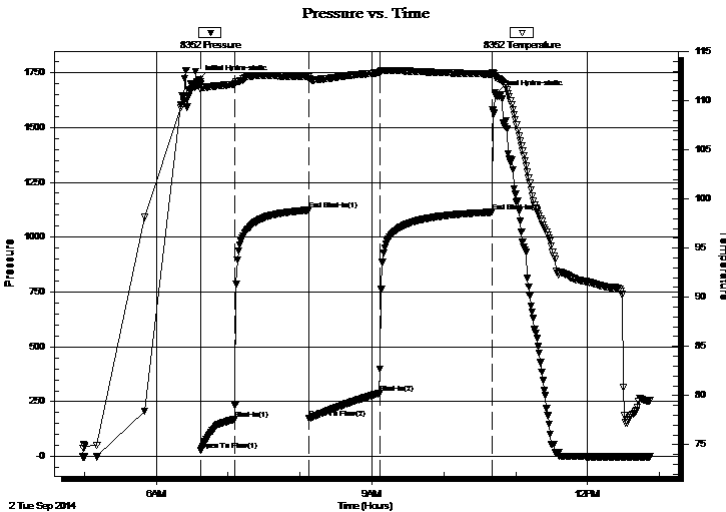
2014.09.02 @ 06:35:45

Time Off Btm:

2014.09.02 @ 10:43:00

TEST COMMENT: IF:Fair to strong blow . B.O.B. in 24 mins.
IS:No blow .
FF:Fair to strong blow . B.O.B. in 35 mins.
FS:No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1718.02	111.64	Initial Hydro-static
2	29.21	111.14	Open To Flow (1)
30	170.93	111.68	Shut-In(1)
92	1123.40	112.47	End Shut-In(1)
92	174.50	112.19	Open To Flow (2)
151	289.25	112.84	Shut-In(2)
245	1114.15	112.71	End Shut-In(2)
248	1648.31	112.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	MW /w few o specs 3% m 97% w	2.16
125.00	SOCMW 2% o 16% m 82% w	1.75
150.00	SOCWM 3% o 47% w 50% m	2.10
0.00	150 ft. of 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.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54250

DST#: 2

ATTN: Chuck Schmaltz

Test Start: 2014.09.02 @ 04:58:30

Tool Information

Drill Pipe:	Length: 3203.00 ft	Diameter: 3.80 inches	Volume: 44.93 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 86000.00 lb
			<u>Total Volume: 46.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3475.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	135.00 ft			
Tool Length:	163.00 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			3448.00	
Shut In Tool	5.00			3453.00	
Hydraulic tool	5.00			3458.00	
Jars	5.00			3463.00	
Safety Joint	3.00			3466.00	
Packer	4.00			3470.00	28.00 Bottom Of Top Packer
Packer	5.00			3475.00	
Stubb	1.00			3476.00	
Recorder	0.00	8352	Outside	3476.00	
Recorder	0.00	8370	Inside	3476.00	
Perforations	5.00			3481.00	
Blank Spacing	124.00			3605.00	
Bullnose	5.00			3610.00	135.00 Bottom Packers & Anchor

Total Tool Length: 163.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling. Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54250

DST#: 2

ATTN: Chuck Schmaltz

Test Start: 2014.09.02 @ 04:58:30

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:

91000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7200.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
315.00	MW /w few o specs 3% m 97% w	2.159
125.00	SOCMW 2% o 16% m 82% w	1.753
150.00	SOCWM 3% o 47% w 50% m	2.104
0.00	150 ft. of GIP	0.000

Total Length: 590.00 ft

Total Volume: 6.016 bbl

Num Fluid Samples: 0

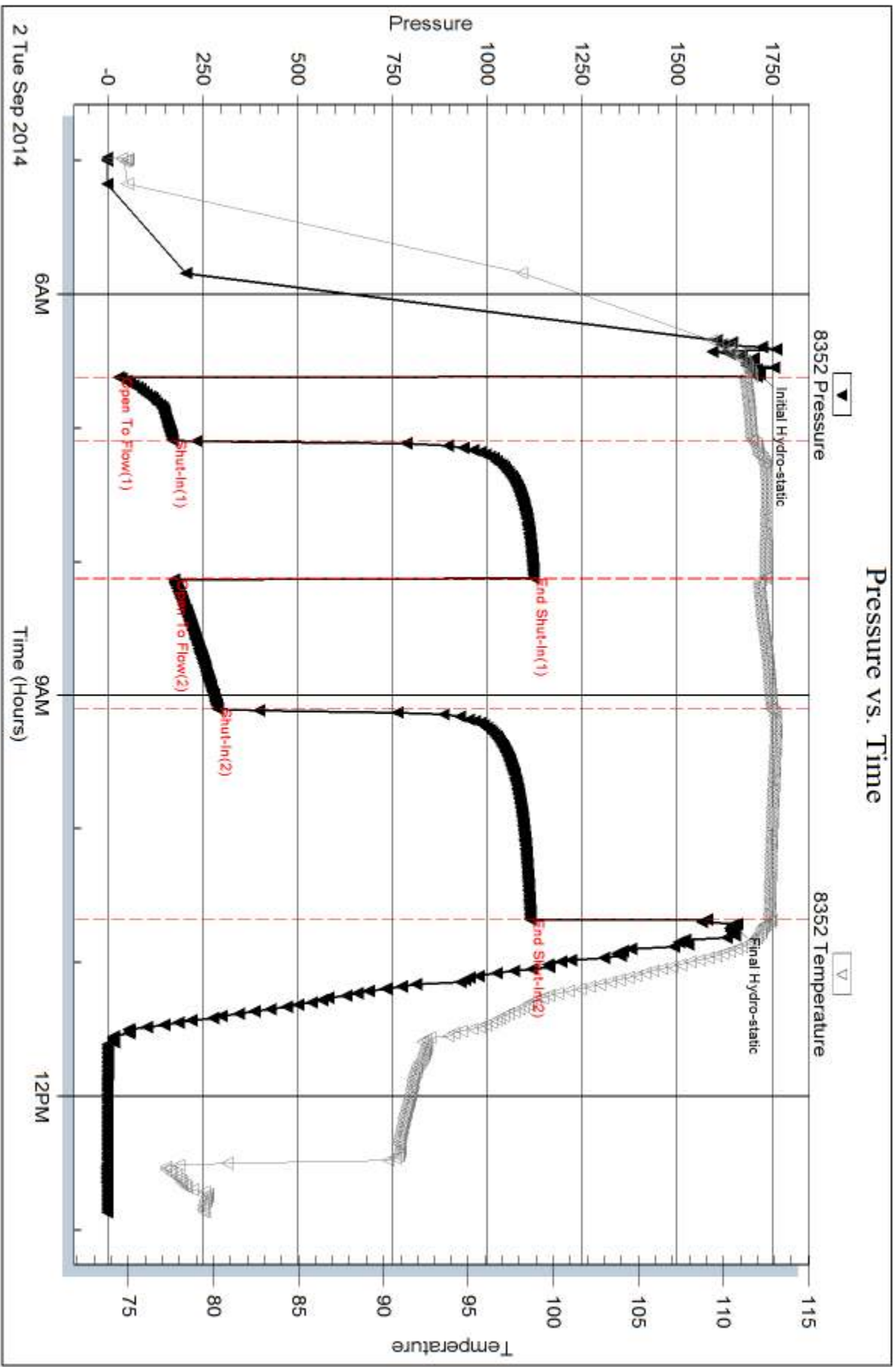
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .07 ohms@86deg.



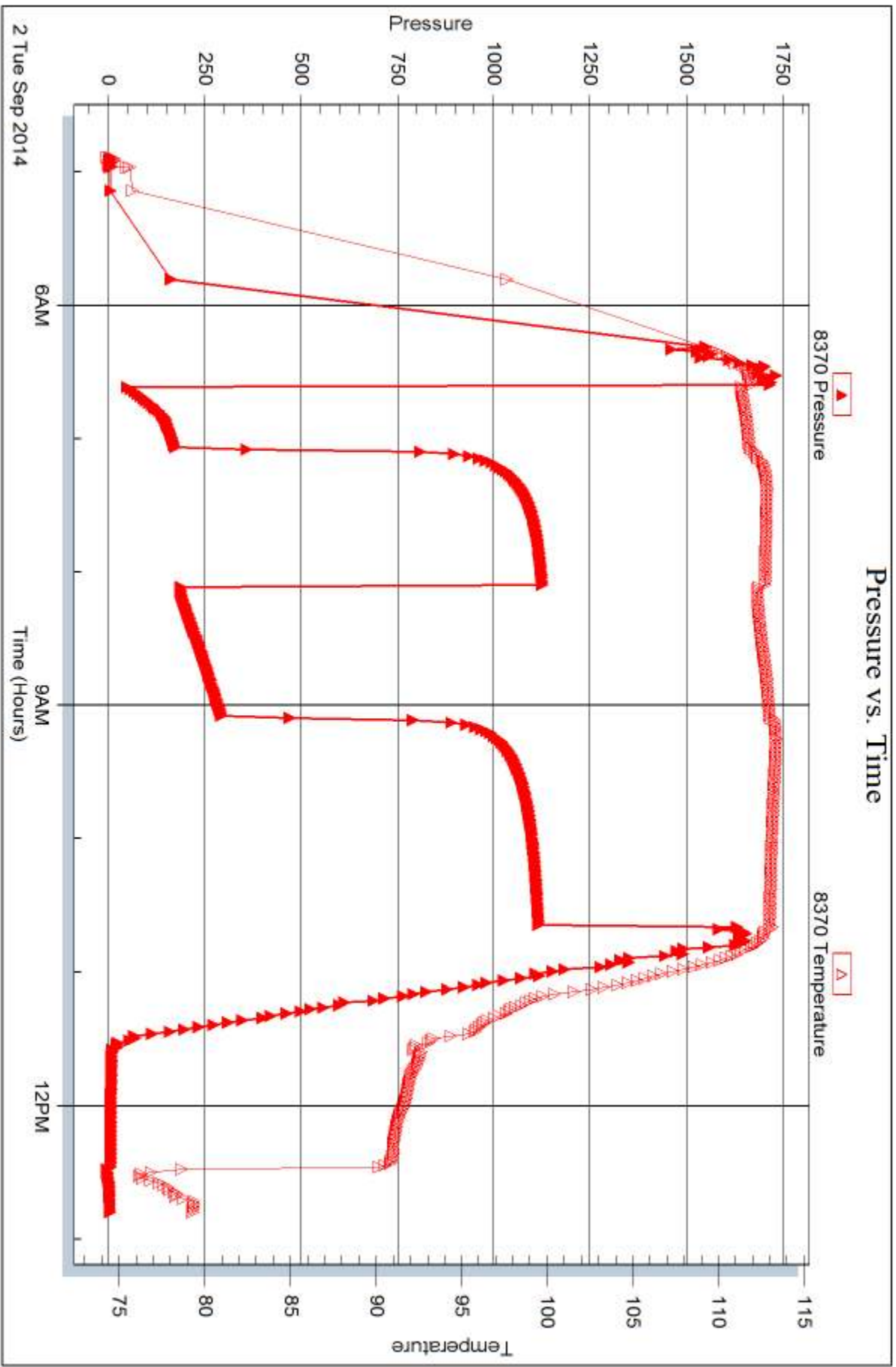
Serial #: 8370

Inside

Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 2





DRILL STEM TEST REPORT

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

250 N. Water, Ste. 300
Wichita KS .67202

ATTN: Chuck Schmaltz

Claypool #1-14

14-23s-12w Stafford,KS

Start Date: 2014.09.02 @ 20:30:55

End Date: 2014.09.03 @ 03:19:25

Job Ticket #: 57851 DST #: 3

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

Printed: 2014.09.05 @ 10:41:23



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 57851

DST#: 3

ATTN: Chuck Schmalz

Test Start: 2014.09.02 @ 20:30:55

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:22:55

Time Test Ended: 03:19:25

Test Type: Conventional Bottom Hole (Reset)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 3582.00 ft (KB) To 3666.00 ft (KB) (TVD)

Reference Elevations: 1845.00 ft (KB)

Total Depth: 3666.00 ft (KB) (TVD)

1834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8352 Outside

Press@RunDepth: 34.29 psig @ 3583.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.09.02

End Date:

2014.09.03

Last Calib.: 2014.09.03

Start Time: 20:31:00

End Time:

03:19:24

Time On Btm: 2014.09.02 @ 22:21:55

Time Off Btm: 2014.09.03 @ 01:32:55

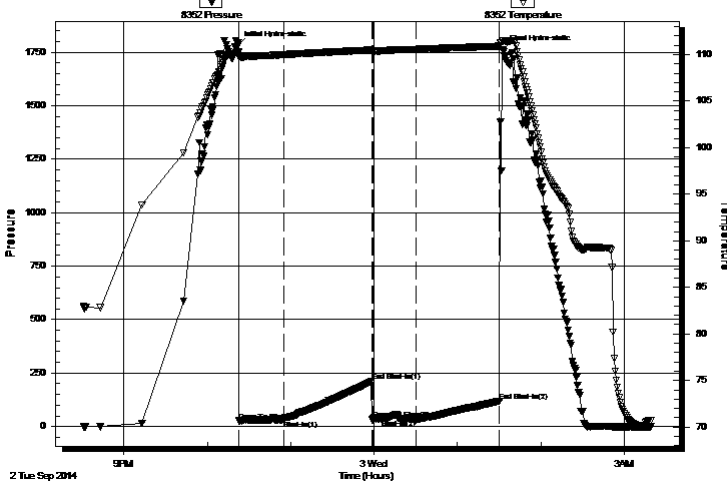
TEST COMMENT: IF:Weak blow . 1/2".

IS:No blow .

FF:No blow .

FS:No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1779.36	110.24	Initial Hydro-static
1	25.92	109.74	Open To Flow (1)
33	31.33	109.99	Shut-In(1)
97	211.55	110.50	End Shut-In(1)
98	33.96	110.32	Open To Flow (2)
129	34.29	110.56	Shut-In(2)
189	118.91	110.91	End Shut-In(2)
191	1763.30	111.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	Drig.mud	0.12

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.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 57851

DST#: 3

ATTN: Chuck Schmaltz

Test Start: 2014.09.02 @ 20:30:55

Tool Information

Drill Pipe:	Length: 3326.00 ft	Diameter: 3.80 inches	Volume: 46.66 bbl	Tool Weight:	2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	97000.00 lb
			<u>Total Volume: 47.88 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	66000.00 lb
Depth to Top Packer:	3582.00 ft			Final	66000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	84.00 ft				
Tool Length:	112.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3555.00	
Shut In Tool	5.00			3560.00	
Hydraulic tool	5.00			3565.00	
Jars	5.00			3570.00	
Safety Joint	3.00			3573.00	
Packer	4.00			3577.00	28.00 Bottom Of Top Packer
Packer	5.00			3582.00	
Stubb	1.00			3583.00	
Recorder	0.00	8352	Outside	3583.00	
Recorder	0.00	8370	Inside	3583.00	
Perforations	6.00			3589.00	
Blank Spacing	63.00			3652.00	
Perforations	9.00			3661.00	
Bullnose	5.00			3666.00	84.00 Bottom Packers & Anchor

Total Tool Length: 112.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 57851

DST#: 3

ATTN: Chuck Schmaltz

Test Start: 2014.09.02 @ 20:30:55

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:

8000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	Drig.mud	0.123

Total Length: 25.00 ft Total Volume: 0.123 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

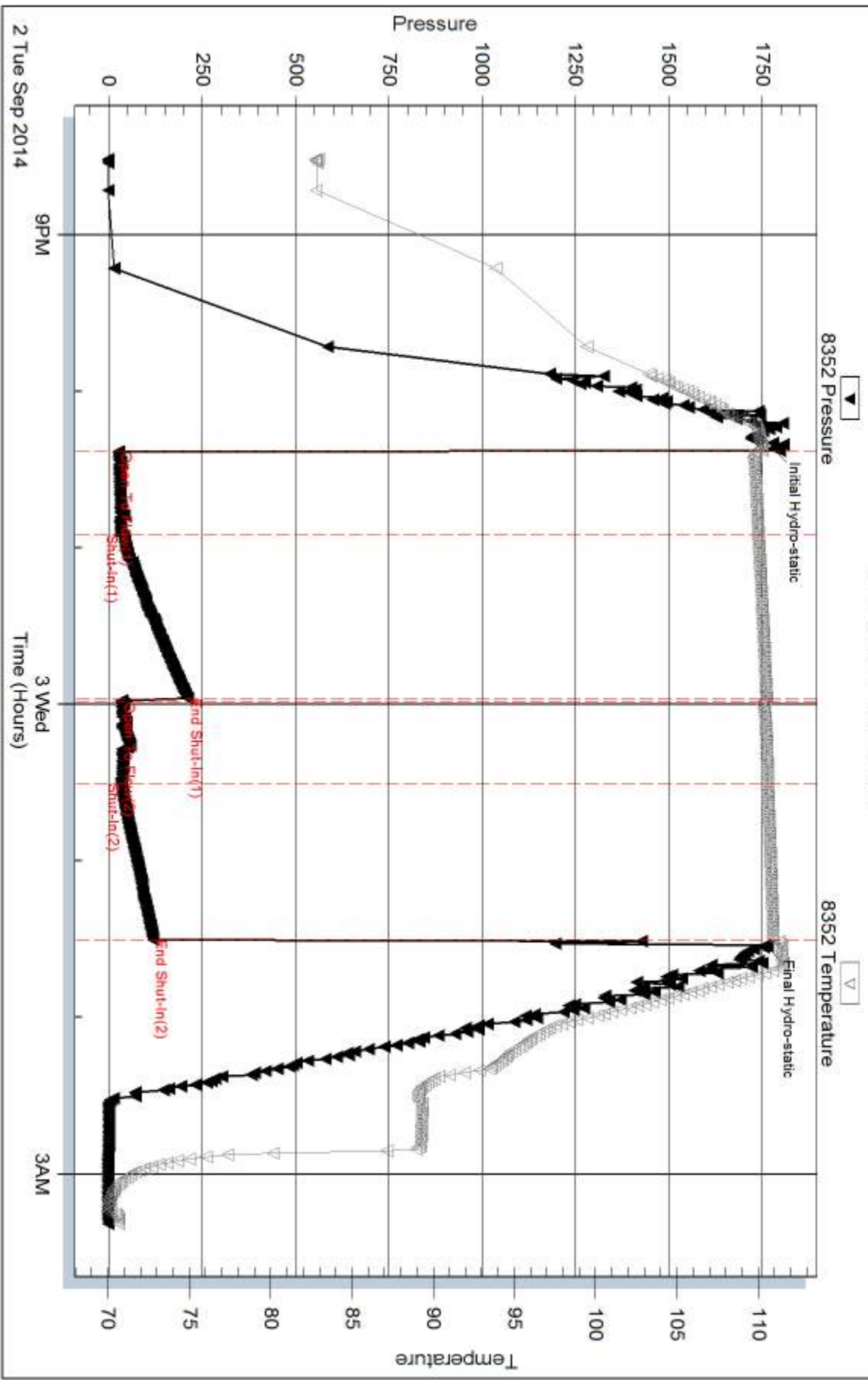
Serial #: 8352

Outside Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 3

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 57851

Printed: 2014.09.05 @ 10:41:24

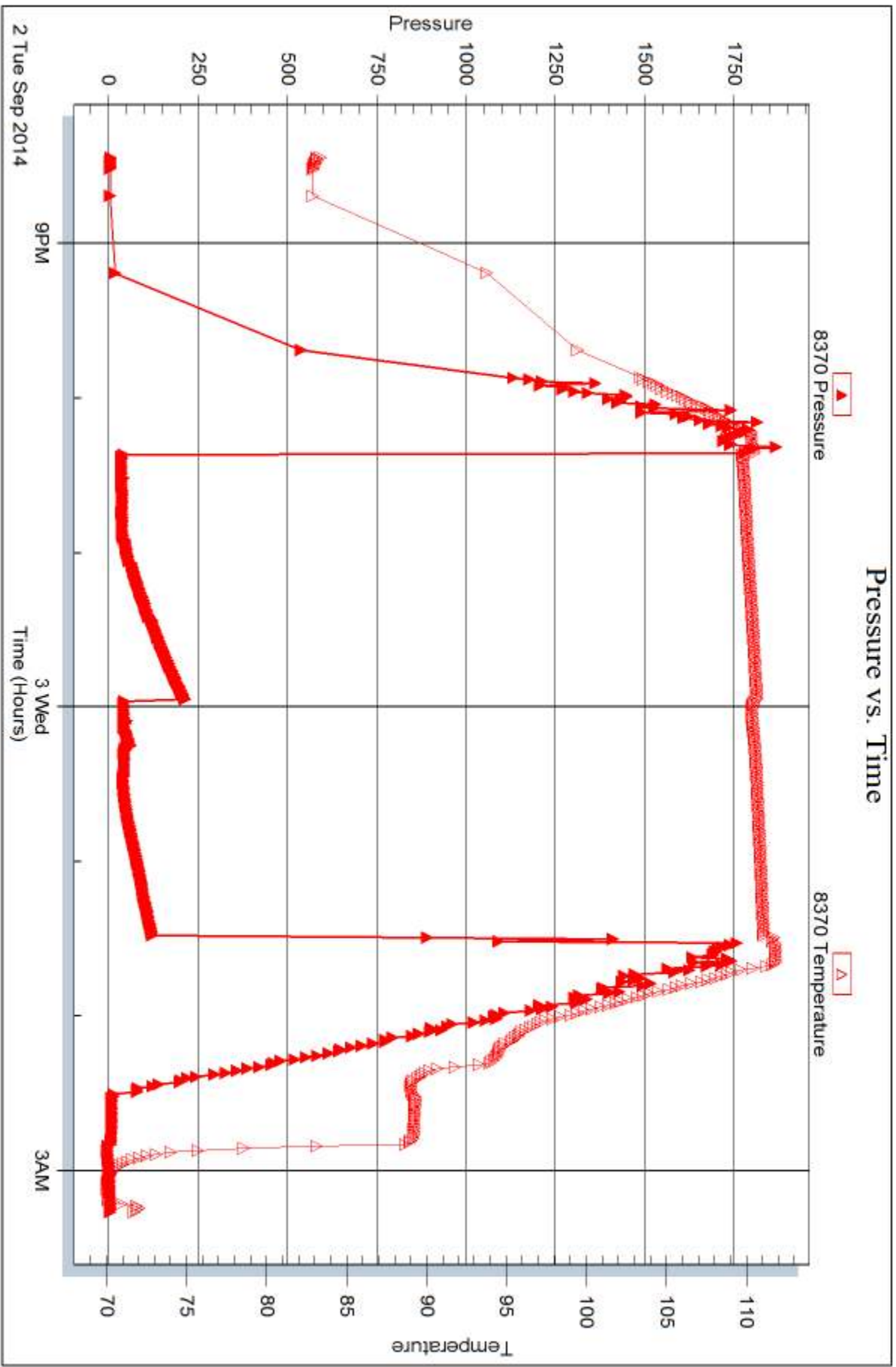
Serial #: 8370

Inside

Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 57851

Printed: 2014.09.05 @ 10:41:24



DRILL STEM TEST REPORT

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

250 N. Water, Ste. 300
Wichita KS .67202

ATTN: Chuck Schmaltz

Claypool #1-14

14-23s-12w Stafford,KS

Start Date: 2014.09.03 @ 09:26:08

End Date: 2014.09.03 @ 17:19:38

Job Ticket #: 54139 DST #: 4

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

Printed: 2014.09.05 @ 10:41:00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54139

DST#: 4

ATTN: Chuck Schmalz

Test Start: 2014.09.03 @ 09:26:08

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:24:08

Time Test Ended: 17:19:38

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 53

Interval: 3648.00 ft (KB) To 3737.00 ft (KB) (TVD)

Reference Elevations: 1845.00 ft (KB)

Total Depth: 3737.00 ft (KB) (TVD)

1834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6773 Outside

Press@RunDepth: 88.82 psig @ 3649.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.09.03

End Date:

2014.09.03

Last Calib.:

2014.09.03

Start Time:

09:26:13

End Time:

17:19:37

Time On Btm:

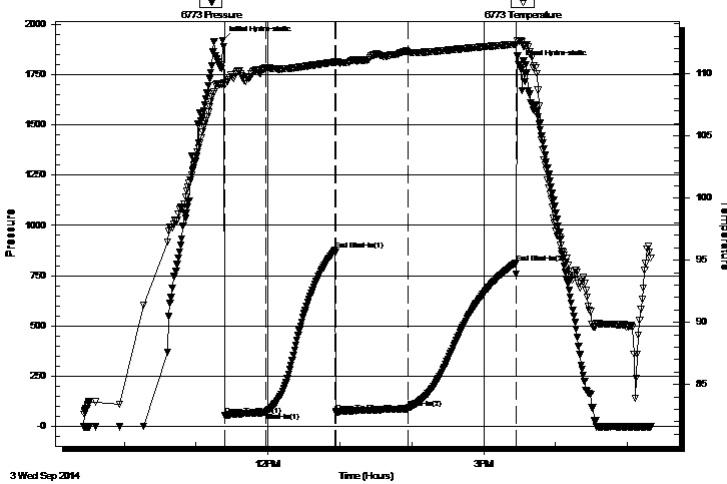
2014.09.03 @ 11:22:08

Time Off Btm:

2014.09.03 @ 15:29:08

TEST COMMENT: IF: Weak blow . Surf., - 1 1/2".
IS: No blow .
FF: Weak blow . Surf., - 1/4".
FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1919.70	109.22	Initial Hydro-static
2	53.67	109.12	Open To Flow (1)
36	68.84	110.46	Shut-In(1)
94	877.57	110.93	End Shut-In(1)
95	72.64	110.91	Open To Flow (2)
155	88.82	111.75	Shut-In(2)
245	814.49	112.37	End Shut-In(2)
247	1796.99	112.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Drig Mud w / slt trc oil 100%m	0.30

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.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54139

DST#: 4

ATTN: Chuck Schmaltz

Test Start: 2014.09.03 @ 09:26:08

Tool Information

Drill Pipe:	Length: 3387.00 ft	Diameter: 3.80 inches	Volume: 47.51 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 48.73 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3648.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.00 ft			
Tool Length:	117.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3621.00	
Shut In Tool	5.00			3626.00	
Hydraulic tool	5.00			3631.00	
Jars	5.00			3636.00	
Safety Joint	3.00			3639.00	
Packer	4.00			3643.00	28.00 Bottom Of Top Packer
Packer	5.00			3648.00	
Stubb	1.00			3649.00	
Recorder	0.00	6773	Outside	3649.00	
Recorder	0.00	6719	Inside	3649.00	
Perforations	2.00			3651.00	
Change Over Sub	1.00			3652.00	
Blank Spacing	64.00			3716.00	
Change Over Sub	1.00			3717.00	
Perforations	17.00			3734.00	
Bullnose	3.00			3737.00	89.00 Bottom Packers & Anchor
Total Tool Length:	117.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54139

DST#: 4

ATTN: Chuck Schmaltz

Test Start: 2014.09.03 @ 09:26:08

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

8500 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8500.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Drig Mud w / slt trc oil 100%m	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

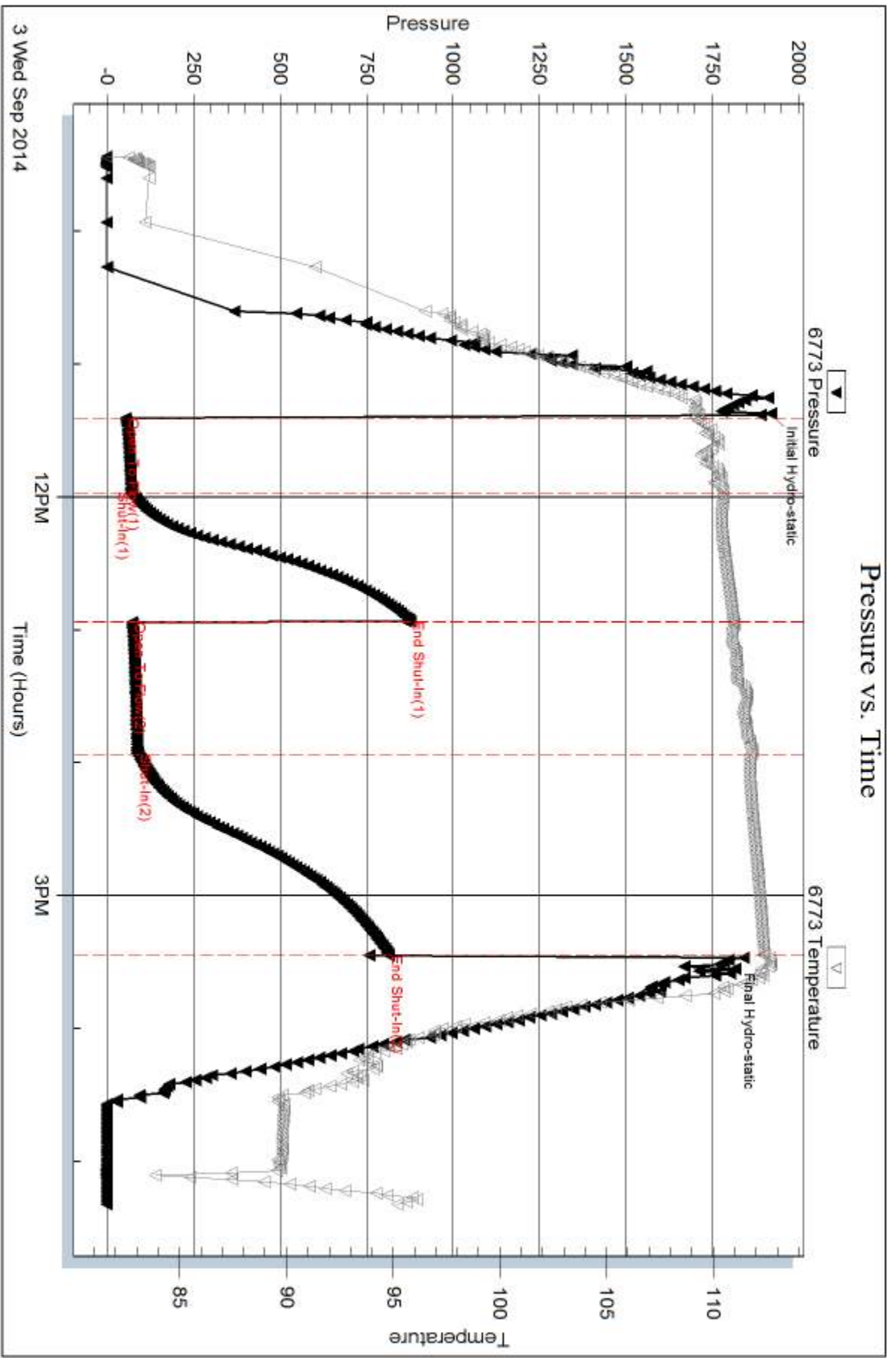
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:



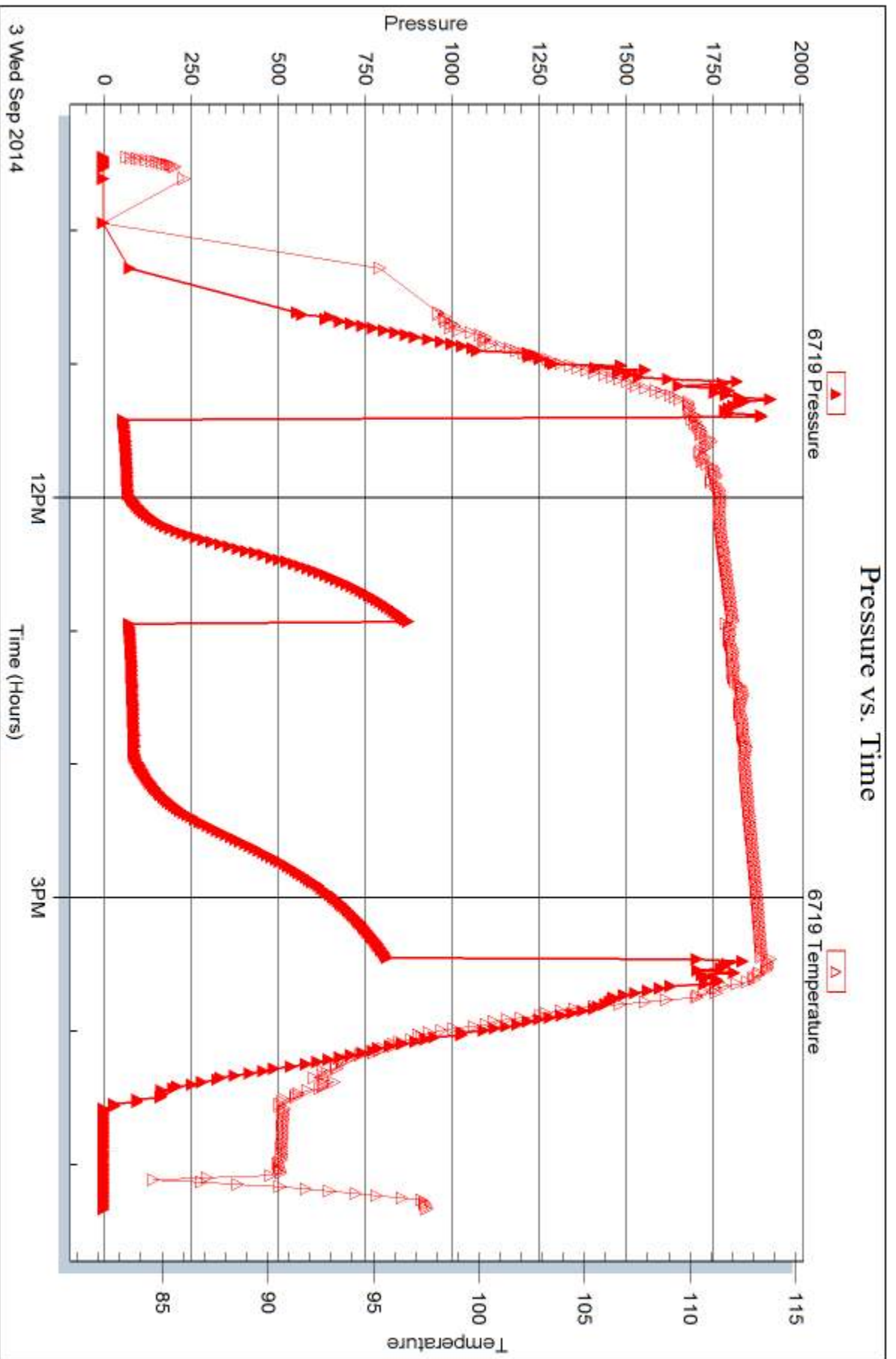
Serial #: 6719

Inside

Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 54139

Printed: 2014.09.05 @ 10:41:01



DRILL STEM TEST REPORT

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

250 N. Water, Ste. 300
Wichita KS .67202

ATTN: Chuck Schmaltz

Claypool #1-14

14-23s-12w Stafford,KS

Start Date: 2014.09.04 @ 01:24:47

End Date: 2014.09.04 @ 10:19:47

Job Ticket #: 54140 DST #: 5

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

Printed: 2014.09.05 @ 10:40:23



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water, Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54140

DST#: 5

ATTN: Chuck Schmalz

Test Start: 2014.09.04 @ 01:24:47

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:26:47
 Time Test Ended: 10:19:47
 Interval: **3712.00 ft (KB) To 3797.00 ft (KB) (TVD)**
 Total Depth: 3797.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Matt Smith
 Unit No: 53
 Reference Elevations: 1845.00 ft (KB)
 1834.00 ft (CF)
 KB to GR/CF: 11.00 ft

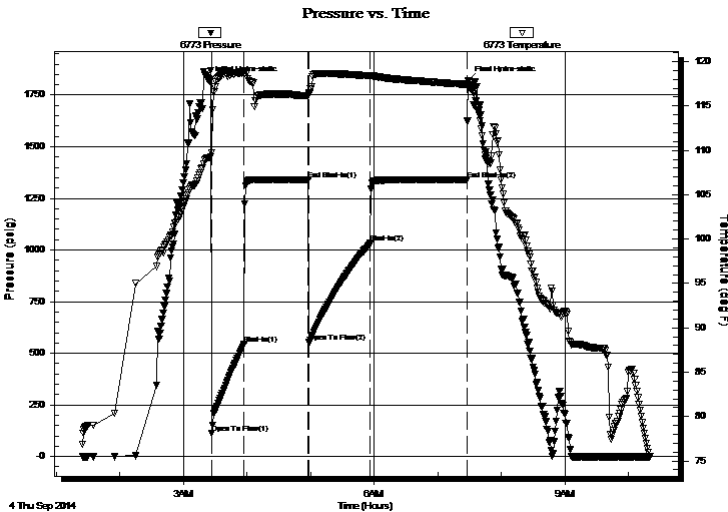
Serial #: 6773

Outside

Press@RunDepth: 1032.52 psig @ 3713.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.09.04 End Date: 2014.09.04 Last Calib.: 2014.09.04
 Start Time: 01:24:52 End Time: 10:19:47 Time On Btm: 2014.09.04 @ 03:23:47
 Time Off Btm: 2014.09.04 @ 07:28:47

TEST COMMENT: IF: Strong blow . B.O.B. in 2 1/2 mins.
 IS: No blow .
 FF: Strong blow . B.O.B. in 3 mins.
 FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1819.42	109.15	Initial Hydro-static
3	111.00	109.73	Open To Flow (1)
34	545.66	118.81	Shut-In(1)
94	1341.33	116.13	End Shut-In(1)
95	552.27	116.38	Open To Flow (2)
153	1032.52	118.41	Shut-In(2)
244	1340.97	117.42	End Shut-In(2)
245	1819.43	117.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	GWCM 2%g 18%w 80%m	0.30
62.00	SOMCW 4%M 96%W	0.30
124.00	GOMCW 1%o 2%g 25%m 72%w	0.61
576.00	MCW 2%m 98%w	8.08
1172.00	MCW 30%m 70%w	16.44

* 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.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54140

DST#: 5

ATTN: Chuck Schmaltz

Test Start: 2014.09.04 @ 01:24:47

Tool Information

Drill Pipe:	Length: 3449.00 ft	Diameter: 3.80 inches	Volume: 48.38 bbl	Tool Weight:	2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 49.60 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	68000.00 lb
Depth to Top Packer:	3712.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	85.00 ft				
Tool Length:	113.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments: Shale packer has been requested and in place of bottom packer on heavy tool. Sure the weight indicator was not correct.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3685.00	
Shut In Tool	5.00			3690.00	
Hydraulic tool	5.00			3695.00	
Jars	5.00			3700.00	
Safety Joint	3.00			3703.00	
Packer	4.00			3707.00	28.00 Bottom Of Top Packer
Packer	5.00			3712.00	
Stubb	1.00			3713.00	
Recorder	0.00	6773	Outside	3713.00	
Recorder	0.00	6719	Inside	3713.00	
Perforations	2.00			3715.00	
Change Over Sub	1.00			3716.00	
Drill Pipe	64.00			3780.00	
Change Over Sub	1.00			3781.00	
Perforations	13.00			3794.00	
Bullnose	3.00			3797.00	85.00 Bottom Packers & Anchor
Total Tool Length:	113.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co. Inc.

14-23s-12w Stafford,KS

250 N.Water,Ste.300
Wichita KS .67202

Claypool #1-14

Job Ticket: 54140

DST#: 5

ATTN: Chuck Schmaltz

Test Start: 2014.09.04 @ 01:24:47

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

48.5 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

19000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8500.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	GWCM 2%g 18%w 80%m	0.305
62.00	SOMCW 4%M 96%W	0.305
124.00	GOMCW 1%o 2%g 25%m 72%w	0.610
576.00	MCW 2%m 98%w	8.080
1172.00	MCW 30%m 70%w	16.440

Total Length: 1996.00 ft Total Volume: 25.740 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

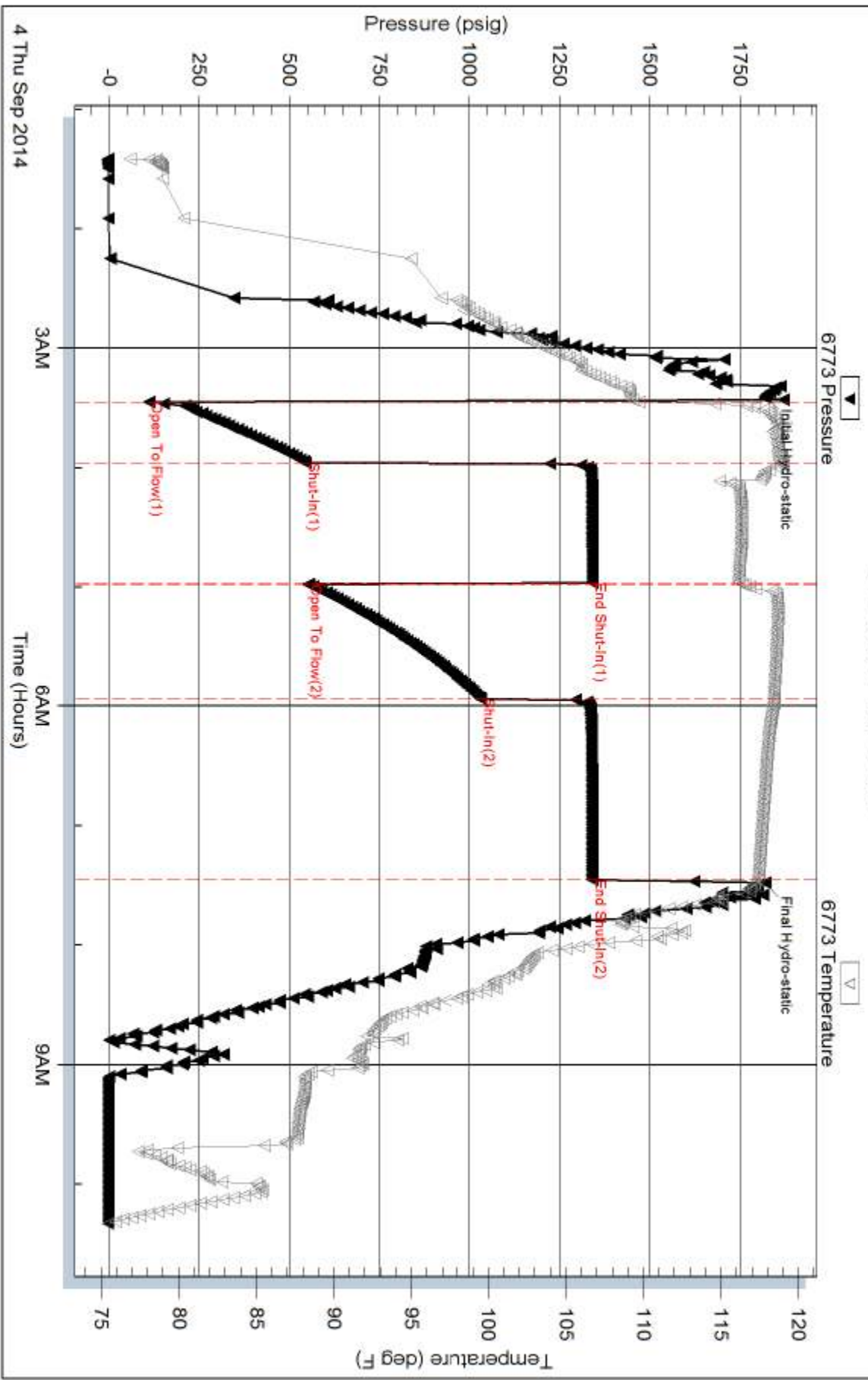
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .35 @ 75 degrees = 19,000 chlorides

Pressure vs. Time



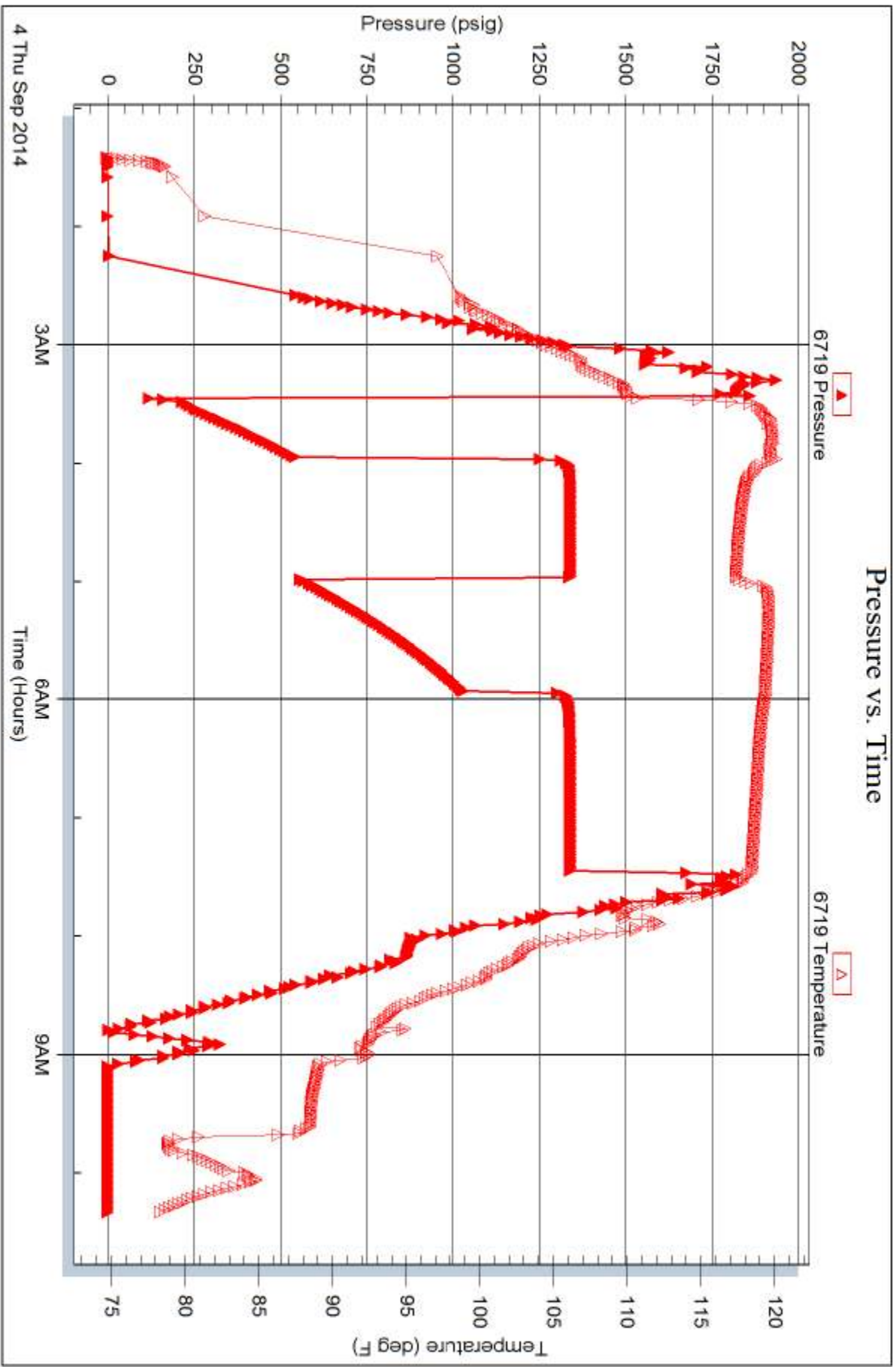
Serial #: 6719

Inside

Murfin Drilling Co. Inc.

Claypod #1-14

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 54140

Printed: 2014.09.05 @ 10:40:24



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54249

Well Name & No. CLAYPOOL # 1-14 Test No. 1 Date 9-1-14
 Company MURFEE DRUG CO. INC. Elevation 1845 KB 1834 GL
 Address 250 N. WATER, STE. 300, WICHITA KS. 67202
 Co. Rep / Geo. CHUCK SCHMALTZ Rig MURFEE DRUG #21
 Location: Sec. 14 Twp. 23S Rge. 12W Co. STAFFORD State Ks.

Interval Tested 3367 - 3445' Zone Tested LANS. B - F
 Anchor Length 78' Drill Pipe Run 3106' Mud Wt. 9.3
 Top Packer Depth 3362' Drill Collars Run 248' Vis 57
 Bottom Packer Depth 3367' Wt. Pipe Run 0 WL 7.2 cc
 Total Depth 3445' Chlorides 7200 ppm System LCM 1#
 Blow Description IF: Weak blow. 12 - 2 1/2". ISI: No blow.

FF: Weak blow. 0 - 2". FSI: No blow.

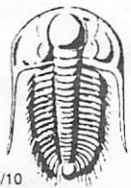
Rec	Feet of	%gas	%oil	%water	%mud
<u>145</u>	<u>SGCM/w trace of oil</u>	<u>2</u>		<u>98</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 145 BHT 110° Gravity N/A API RW NC. @ — °F Chlorides 7200 ppm

(A) Initial Hydrostatic <u>1650</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0728</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0907</u>
(C) First Final Flow <u>51</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1047</u>
(D) Initial Shut-In <u>1084</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1450</u>
(E) Second Initial Flow <u>56</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1632</u>
(F) Second Final Flow <u>106</u>	<input checked="" type="checkbox"/> Mileage <u>72</u> <u>111.60</u>	Comments
(G) Final Shut-In <u>1084</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1600</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1586.60</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1586.60</u>	

Approved By [Signature] Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54250

Well Name & No. CLAYPOOL #1-14 Test No. 2 Date 9-2-14
 Company MURFIN DRILG. Co. INC. Elevation 1845 KB 1834 GL
 Address 250 N. WATER, STE. 300, WICHITA KS 67202
 Co. Rep / Geo. CHUCK SCHMALTZ Rig MURFIN DRILG. #2
 Location: Sec. 14 Twp. 23S Rge. 12W Co. STAFFORD State Ks

Interval Tested 3475-3610' Zone Tested LANS. G-L
 Anchor Length 135' Drill Pipe Run 3203' Mud Wt. 9.3
 Top Packer Depth 3470' Drill Collars Run 248' Vis 54
 Bottom Packer Depth 3475' Wt. Pipe Run 0 WL 8.2 cc
 Total Depth 3610' Chlorides 7200 ppm System LCM 1#

Blow Description IF: Fair to strong blow. B.O.B. in 24 mins.
ISI: No blow.
FF: ~~Strong blow~~ Fair to strong blow. B.O.B. in 35 mins.
FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>Gas in pipe</u>				
<u>150</u>	<u>SOCWM</u>	<u>3</u>	<u>47</u>	<u>50</u>	
<u>125</u>	<u>SOCMW</u>	<u>2</u>	<u>82</u>	<u>16</u>	
<u>315</u>	<u>MW/w few spurs</u>		<u>97</u>	<u>3</u>	

Rec Total 590 Fluid BHT 112° Gravity N/A API RW .07 @ 86° F Chlorides 91,000 ppm
 (A) Initial Hydrostatic 1718 Test 1150 T-On Location 0438
 (B) First Initial Flow 29 Jars 250 T-Started 0458
 (C) First Final Flow 171 Safety Joint 75 T-Open 0637
 (D) Initial Shut-In 1123 Circ Sub _____ T-Pulled 1039
 (E) Second Initial Flow 175 Hourly Standby _____ T-Out 1251
 (F) Second Final Flow 289 Mileage 72 111.60 Comments _____
 (G) Final Shut-In 1114 Sampler _____
 (H) Final Hydrostatic 1648 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90
 Sub Total 0
 Total 1586.60
 MP/DST Disc't _____
 Sub Total 1586.60

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **57851**

4/10

Well Name & No. CLAYPOOL #1-14 Test No. 3 Date 9-2-14
 Company MURFIN DRUG CO. INC. Elevation 1845 KB 1834 GL
 Address 250 N. WATER, STE. 300, WICHITA KS. 67202
 Co. Rep / Geo. CHUCK SCHMALTZ Rig MURFIN DRUG #21
 Location: Sec. 14 Twp. 23S Rge. 12W Co. STAFFORD State KS

Interval Tested 3582 ~ 3666' Zone Tested PAWNEE
 Anchor Length 84' Drill Pipe Run 3326' Mud Wt. 9.4
 Top Packer Depth 3577' Drill Collars Run 248' Vis 62
 Bottom Packer Depth 3582' Wt. Pipe Run 0 WL 8.0cc
 Total Depth 3666' Chlorides 8,000 ppm System LCM 1#
 Blow Description IF: Work blow. 1/2". ISI: No blow.

FF: No blow. FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>Drly 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 25 BHT 111° Gravity N/A API RW N.C. @ 2 °F Chlorides 8,000 ppm

(A) Initial Hydrostatic <u>1779</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1957</u>
(B) First Initial Flow <u>26</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2030</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2222</u>
(D) Initial Shut-In <u>212</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0129</u>
(E) Second Initial Flow <u>34</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0319</u>
(F) Second Final Flow <u>34</u>	<input checked="" type="checkbox"/> Mileage <u>72</u> <u>111.60</u>	Comments
(G) Final Shut-In <u>119</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1763</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1586.60</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1586.60</u>	

Approved By [Signature] Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54139

Well Name & No. Clay Pool # 1-14 Test No. 4 Date 9/3/14
 Company Murfin Drilling Co. Inc. Elevation 1845 KB 1834 GL
 Address 250 N. Water, STE 300 Wichita, KS. 67202
 Co. Rep / Geo. Chuck Schmaltz Rig Murfin Rig # 21
 Location: Sec. 14 Twp. 23s Rge. 12w Co. Stallord State Ks.

Interval Tested 3648 - 3737 Zone Tested Ocala
 Anchor Length 89' Drill Pipe Run 3377 Mud Wt. 9.5
 Top Packer Depth 3643 Drill Collars Run 248 Vis 62
 Bottom Packer Depth 3648 Wt. Pipe Run 8 WL 9.2
 Total Depth 3737 Chlorides 8,500 ppm System LCM 1/2

Blow Description IF: Weak blow. Surf. - 1 1/2".
ISI: No blow.
FF: Weak blow. Surf. - 1/4".
FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>Drilg Mud w/slt for oil</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 60' BHT 112° Gravity N.A. API RW N.C. @ — ° F Chlorides 8,500 ppm

(A) Initial Hydrostatic	<u>1920</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>0912</u>
(B) First Initial Flow	<u>54</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>0926</u>
(C) First Final Flow	<u>69</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>1124</u>
(D) Initial Shut-In	<u>878</u>	<input type="checkbox"/> Circ Sub		T-Pulled	<u>1529</u>
(E) Second Initial Flow	<u>73</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>1719</u>
(F) Second Final Flow	<u>89</u>	<input checked="" type="checkbox"/> Mileage	<u>629</u> 1111.6011 C. 60		
(G) Final Shut-In	<u>815</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1770</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 1586.60

Total 1586.60
 MP/DST Disc't _____

Approved By _____ Our Representative Matthew A. Smith
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54140

Well Name & No. Clay Pool # 1-14 Test No. 5 Date 9/4/14
 Company Murson Drilling Co. Inc. Elevation 1845 KB 1834 GL
 Address 250 N. Water, STE 300 Wichita, KS, 67202
 Co. Rep / Geo. Chuck Schmaltz Rig Murson Rig # 21
 Location: Sec. 14 Twp. 23S Rge. 12W Co. STAFFORD State KS.

Interval Tested 3712 - 3797 Zone Tested Arbuckle
 Anchor Length 85' Drill Pipe Run 3,449' Mud Wt. 9.5
 Top Packer Depth 3707 Drill Collars Run 248 Vis 62
 Bottom Packer Depth 3712 Wt. Pipe Run 2 WL 9.2
 Total Depth 3797 Chlorides 8,500 ppm System LCM 1/2#

Blow Description IF: Strong blow. B.O.B. in 2 1/2 mins.
ISI: No blows.
FF: Strong blow. B.O.B. in 3 mins.
FSI: No blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>1172</u>	<u>MCW</u>			<u>70</u>	<u>30</u>
<u>576</u>	<u>MCW</u>			<u>98</u>	<u>2</u>
<u>124</u>	<u>GOMCW</u>	<u>2</u>	<u>1</u>	<u>72</u>	<u>25</u>
<u>62</u>	<u>SOMCW</u>			<u>96</u>	<u>4</u>
<u>62</u>	<u>GWCM</u>	<u>2</u>		<u>18</u>	<u>80</u>

Rec Total 1996' BHT 117° Gravity N.A. API RW .35 @ 79 ° F Chlorides 19,000 ppm

(A) Initial Hydrostatic 1819 Test 1150 T-On Location 0119
 (B) First Initial Flow 111 Jars 250 T-Started 0124
 (C) First Final Flow 546 Safety Joint 75 T-Open 0326
 (D) Initial Shut-In 1341 Circ Sub _____ T-Pulled 0728
 (E) Second Initial Flow 552 Hourly Standby _____ T-Out 1019
 (F) Second Final Flow 1033 Mileage 629 111.60 Comments _____
 (G) Final Shut-In 1341 Sampler _____
 (H) Final Hydrostatic 1819 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 1836.60
 Final Flow 60 Sub Total 1836.60 MP/DST Disc't _____
 Final Shut-In 90

Approved By [Signature] Our Representative Matthew A. Smith

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QUALITY WELL SERVICE, INC.

Federal Tax I.D. # 481187368

6206

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410

Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	09 05 14	Sec.	14	Twp.	23S	Range	12W	County	Stafford	State	KS	On Location	3:30 PM	Finish	7:15 PM
Lease	Claypool	Well No.	1-14			Location: Stafford KS 7N, 1/2 W S 1/4									
Contractor	Murfin #21					Owner: Murfin									
Type Job	Rotary Plug T/A					To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.									
Hole Size	7 7/8		T.D. 3900			Charge To: Murfin									
Csg.	8 5/8		Depth 644'			Street									
Tbg. Size	Drill Pipe 4 1/2		Depth 3779			City									
Tool			Depth			State									
Cement Left in Csg.			Shoe Joint			The above was done to satisfaction and supervision of owner agent or contractor.									
Meas Line			Displace			Cement Amount Ordered: 210sx 60:40:4% gel + 1/4 #FS									
EQUIPMENT															
Pumptrk	8	No.	Mike B			Common 130									
Bulktrk	10	No.	David B			Poz. Mix 80									
Bulktrk		No.				Gel. 7									
Pickup		No.	David F			Calcium									
JOB SERVICES & REMARKS															
Rat Hole	30sx					Hulls									
Mouse Hole	20sx					Salt									
Centralizers						Flowseal 52.50									
Baskets						Kol-Seal									
D/V or Port Collar						Mud CLR 48									
Drill Pipe	at 3779', load hole, Pump 8'					CFL-117 or CD110 CAF 38									
Bbls Fresh H ₂ O Spacer	Mix 50sx 60:40 cement					Sand									
Disp. w/ 3 Bbls Fresh & 42 Bbls Mud	Drill Pipe cut to 60', Pump Spacer Mix 50sx, Disp w/ 6 Bbls					Handling 217									
Pipe at 220', load hole, Pump Spacer Mix	40sx Disp. w/ 1/2 Bbls Plug 60' to surf. w/ 20sx cement Dil. Conc.					Mileage 35									
Plug Cat & Mouse Holes w/ 50sx						FLOAT EQUIPMENT									
						Guide Shoe									
						Centralizer									
						Baskets									
						AFU Inserts									
						Float Shoe									
						Latch Down									
						LMV 35									
						Service Supervisor									
						Pumptrk Charge Rotary Plug									
						Mileage 35 x 2									
														Tax	
														Discount	
														Total Charge	
X Signature <i>Quinn Ennis</i>															

Claypool #1-14
 Daily Drilling Report
 Page Three

MDCI Claypool #1-14 330' FSL 2310' FWL Sec. 14-23S-12W 1845' KB							L.D. Drilling Inc. Marilyn #1-14 S2 NE SE Sec. 14-T23S-R12W 1847' KB	
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	615	+1230	-5	613	+1232	-3	612	+1235
B/Anhydrite	632	+1213	-2	628	+1217	+2	632	+1215
Stotler				2561	-716	-3	2560	-713
Topeka	2807	-962	-5	2799	-954	+3	2804	-957
Heebner	3184	-1329	+8	3178	-1323	+14	3184	-1337
Lansing	3328	-1483	Flat	3323	-1478	+5	3330	-1483
Stark	3445	-1700	+1	3542	-1697	+4	3548	-1701
BKC	3604	-1759	+2	3599	-1754	+7	3608	-1761
Viola	3681	-1836	+3	3677	-1832	+7	3686	-1839
Simpson				3726	-1881	+27	3755	-1908
Arbuckle	3787	-1942	+3	3778	-1933	+12	3792	-1945
RTD	3900						3882	
LTD				3986				