



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1202603
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1202603

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

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

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
----------------	-------	---------	------------	---

Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____						
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity		

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Nancy 1-4
Doc ID	1202603

All Electric Logs Run

Dual Induction
Dual Compensated
Microresistivity
Borehole Compensated

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Nancy 1-4
Doc ID	1202603

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4371-4378 Lenapah	1350 gal 15%	
4	4463-4475 Pawnee	600 gal 15%	
4	4505-4511 Lwr Paw	600 gal 15%	
4	4520-4523 Ft Scott	600 gal 15%	
4	4531-4534 Ft Scott	600 gal 15%	
4	4591-4597 Johnson Zn	1100 gal 15%	
4	4654-4660 Morrow Sd	600 gal 15%	



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.13 @ 15:34:00

End Date: 2014.01.14 @ 00:43:45

Job Ticket #: 55684 DST #: 1

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

Printed: 2014.01.23 @ 14:56:22



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan, KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55684

DST#: 1

ATTN: Saman Sharifaie

Test Start: 2014.01.13 @ 15:34:00

GENERAL INFORMATION:

Formation: **LKC - A & B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:42:30

Time Test Ended: 00:43:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

Interval: 4020.00 ft (KB) To 4070.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4070.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8522 Outside

Press@RunDepth: 415.83 psig @ 4021.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.13

End Date:

2014.01.14

Last Calib.: 2014.01.14

Start Time: 15:34:05

End Time:

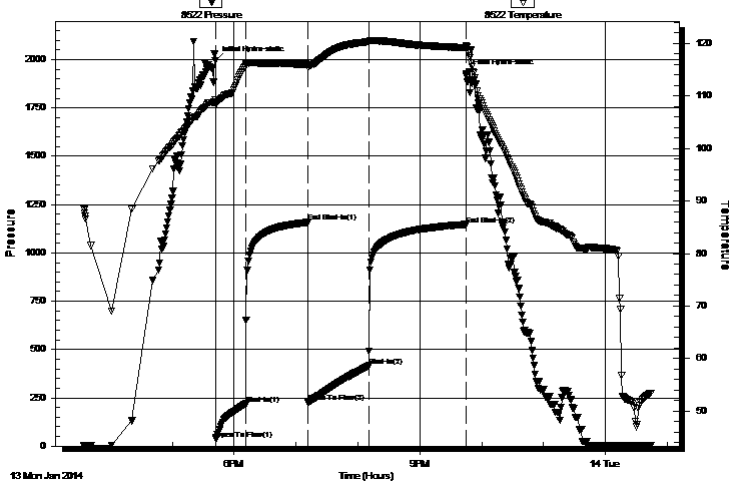
00:43:45

Time On Btm: 2014.01.13 @ 17:42:15

Time Off Btm: 2014.01.13 @ 21:45:00

TEST COMMENT: IF: BOB @ 8 min.
IS: 1" return.
FF: BOB @ 9 min.
FSI 1" return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1995.65	109.26	Initial Hydro-static
1	37.81	108.41	Open To Flow (1)
30	219.00	115.84	Shut-In(1)
90	1158.36	116.00	End Shut-In(1)
90	226.91	115.49	Open To Flow (2)
149	415.83	120.31	Shut-In(2)
243	1147.31	119.18	End Shut-In(2)
243	1927.40	119.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
490.00	smcw 5m 95w (oil scum)	4.71
180.00	ow cm 20o 30w 50m	2.52
180.00	go 40g 60o	2.52
0.00	210 GIP	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55684

DST#: 1

ATTN: Saman Sharifaie

Test Start: 2014.01.13 @ 15:34:00

GENERAL INFORMATION:

Formation: **LKC - A & B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:42:30

Time Test Ended: 00:43:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

Interval: **4020.00 ft (KB) To 4070.00 ft (KB) (TVD)**

Total Depth: 4070.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3046.00 ft (KB)

3035.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8678** Inside

Press@RunDepth: psig @ 4021.00 ft (KB)

Start Date: 2014.01.13

End Date:

Start Time: 15:34:05

End Time:

2014.01.14

00:42:15

Capacity: 8000.00 psig

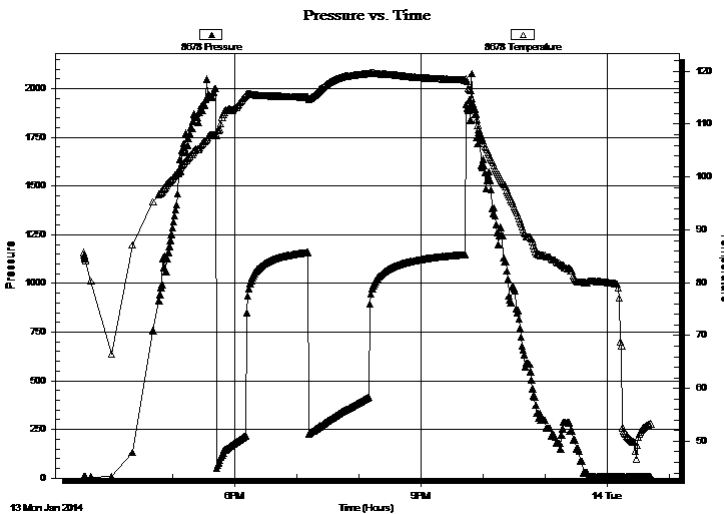
Last Calib.: 2014.01.14

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: BOB @ 8 min.
IS: 1" return.
FF: BOB @ 9 min.
FSI 1" return.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
490.00	smcw 5m 95w (oil scum)	4.71
180.00	ow cm 20o 30w 50m	2.52
180.00	go 40g 60o	2.52
0.00	210 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55684

DST#: 1

ATTN: Saman Sharifaie

Test Start: 2014.01.13 @ 15:34:00

Tool Information

Drill Pipe:	Length: 3781.00 ft	Diameter: 3.80 inches	Volume: 53.04 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose:	85000.00 lb
			<u>Total Volume: 54.21 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4020.00 ft			Final	73000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	50.00 ft				
Tool Length:	77.00 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			3994.00	
Shut In Tool	5.00			3999.00	
Hydraulic tool	5.00			4004.00	
Jars	5.00			4009.00	
Safety Joint	2.00			4011.00	
Packer	5.00			4016.00	27.00 Bottom Of Top Packer
Packer	4.00			4020.00	
Stubb	1.00			4021.00	
Recorder	0.00	8678	Inside	4021.00	
Recorder	0.00	8522	Outside	4021.00	
Perforations	13.00			4034.00	
Change Over Sub	1.00			4035.00	
Drill Pipe	31.00			4066.00	
Change Over Sub	1.00			4067.00	
Bullnose	3.00			4070.00	50.00 Bottom Packers & Anchor

Total Tool Length: 77.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55684

DST#: 1

ATTN: Saman Sharifaie

Test Start: 2014.01.13 @ 15:34:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

84000 ppm

Viscosity: 71.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.93 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
490.00	smcw 5m 95w (oil scum)	4.705
180.00	ow cm 20o 30w 50m	2.525
180.00	go 40g 60o	2.525
0.00	210 GIP	0.000

Total Length: 850.00 ft Total Volume: 9.755 bbl

Num Fluid Samples: 0

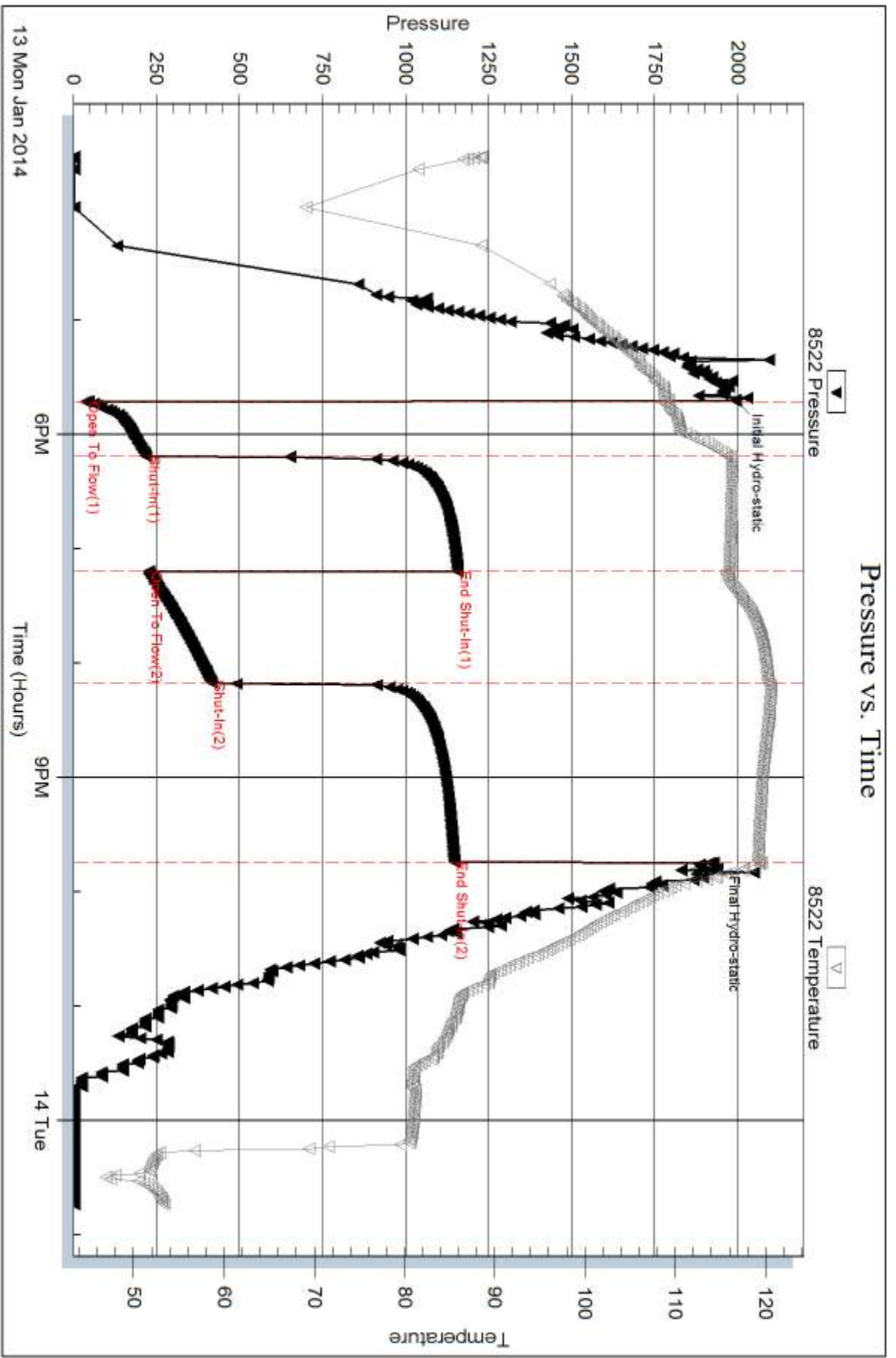
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .145 @ 45F = 84000ppm



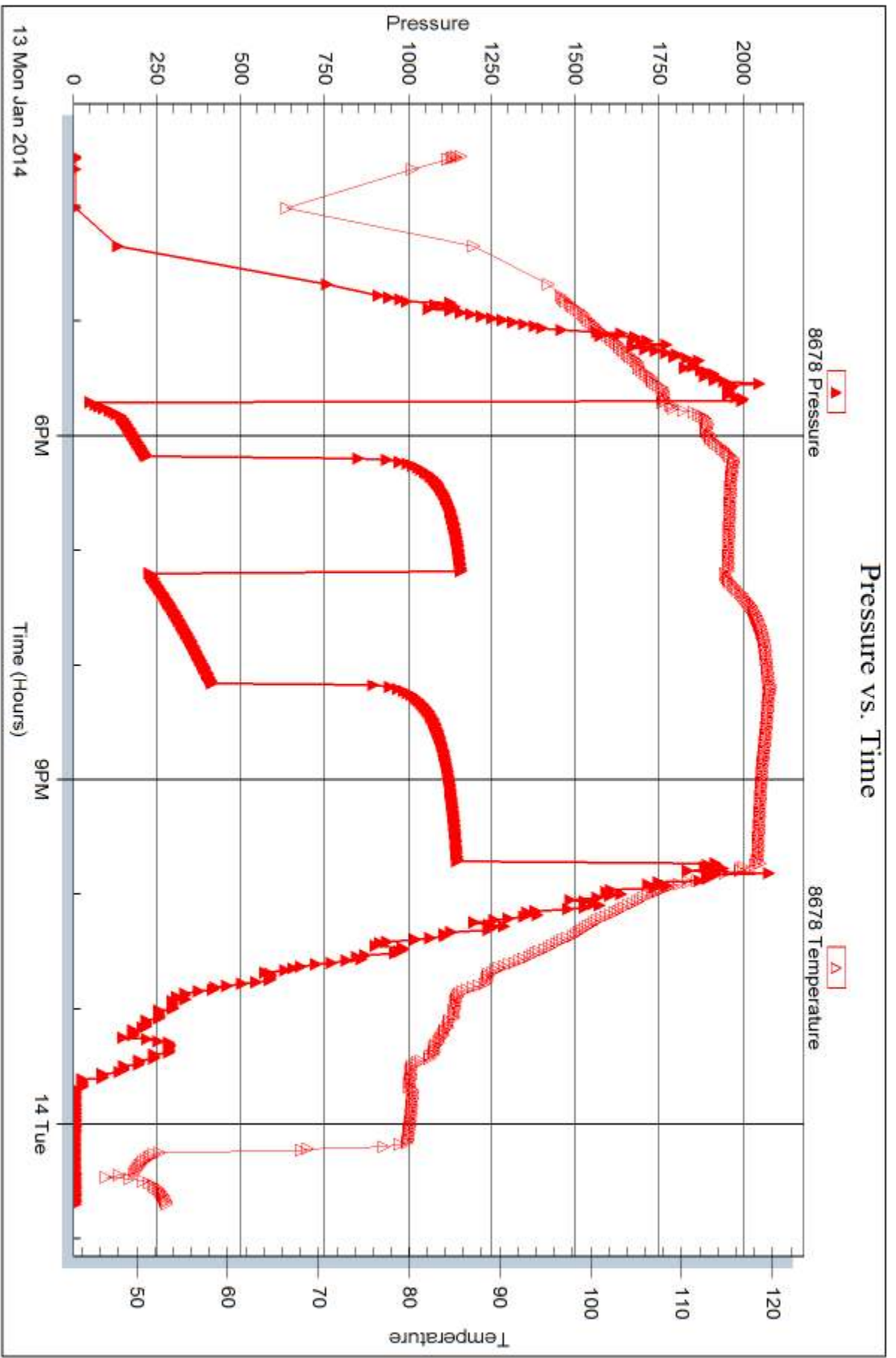
Serial #: 8678

Inside

Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 55684

Printed: 2014.01.23 @ 14:56:25



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.14 @ 14:41:00

End Date: 2014.01.14 @ 23:24:15

Job Ticket #: 55685 DST #: 2

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

Printed: 2014.01.23 @ 14:55:50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55685

DST#: 2

ATTN: Saman Sharifaie

Test Start: 2014.01.14 @ 14:41:00

GENERAL INFORMATION:

Formation: **LKC D-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:36:00

Time Test Ended: 23:24:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4076.00 ft (KB) To 4134.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4134.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8522 Outside

Press@RunDepth: 343.54 psig @ 4077.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.14

End Date:

2014.01.14

Last Calib.:

2014.01.14

Start Time: 14:41:05

End Time:

23:24:15

Time On Btm:

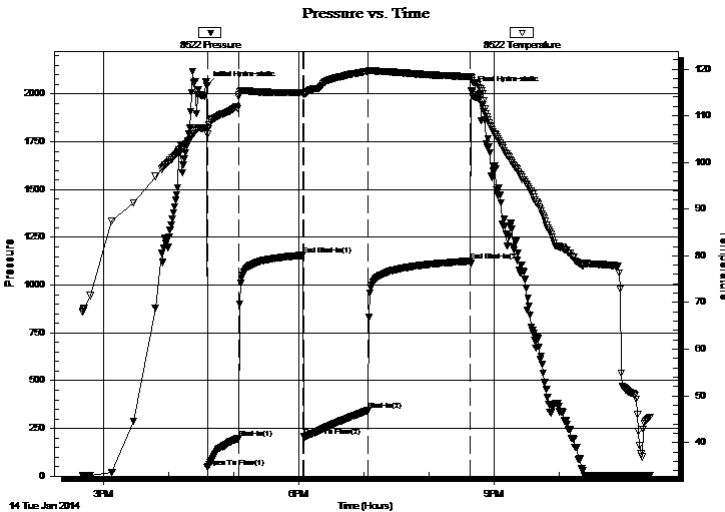
2014.01.14 @ 16:35:45

Time Off Btm:

2014.01.14 @ 20:39:30

TEST COMMENT: IF: BOB @ 10 min.
IS: Surface return.
FF: BOB @ 15 min.
FS: 2" return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2045.38	107.31	Initial Hydro-static
1	44.44	106.08	Open To Flow (1)
30	198.80	114.40	Shut-In(1)
89	1156.04	115.02	End Shut-In(1)
89	205.95	114.61	Open To Flow (2)
149	343.54	119.51	Shut-In(2)
243	1125.29	118.36	End Shut-In(2)
244	2018.18	118.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
400.00	mcw 10m 90w (oil spots)	3.44
240.00	gomcw 20g 20o 20m 40w	3.37
90.00	go 35g 65o	1.26
0.00	200' 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
ATTN: Saman Sharifaie

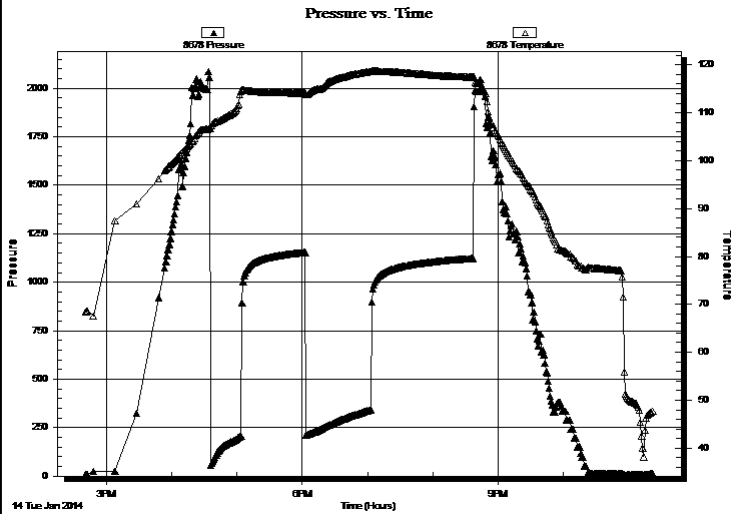
4 13s 32w Logan, KS
Nancy #1-4
Job Ticket: 55685 **DST#: 2**
Test Start: 2014.01.14 @ 14:41:00

GENERAL INFORMATION:

Formation: **LKC D-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:36:00
Time Test Ended: 23:24:15
Interval: **4076.00 ft (KB) To 4134.00 ft (KB) (TVD)**
Total Depth: 4134.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 3046.00 ft (KB)
3035.00 ft (CF)
KB to GR/CF: 11.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 69

Serial #: 8678 Inside
Press@RunDepth: psig @ 4077.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.01.14 End Date: 2014.01.14 Last Calib.: 2014.01.14
Start Time: 14:41:05 End Time: 23:22:30 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: BOB @ 10 min.
IS: Surface return.
FF: BOB @ 15 min.
FS: 2" return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
400.00	mcw 10m 90w (oil spots)	3.44
240.00	gomcw 20g 20o 20m 40w	3.37
90.00	go 35g 65o	1.26
0.00	200' 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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55685

DST#: 2

ATTN: Saman Sharifaie

Test Start: 2014.01.14 @ 14:41:00

Tool Information

Drill Pipe:	Length: 3825.00 ft	Diameter: 3.80 inches	Volume: 53.65 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 54.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4076.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	85.00 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			4050.00	
Shut In Tool	5.00			4055.00	
Hydraulic tool	5.00			4060.00	
Jars	5.00			4065.00	
Safety Joint	2.00			4067.00	
Packer	5.00			4072.00	27.00 Bottom Of Top Packer
Packer	4.00			4076.00	
Stubb	1.00			4077.00	
Recorder	0.00	8678	Inside	4077.00	
Recorder	0.00	8522	Outside	4077.00	
Perforations	21.00			4098.00	
Change Over Sub	1.00			4099.00	
Drill Pipe	31.00			4130.00	
Change Over Sub	1.00			4131.00	
Bullnose	3.00			4134.00	58.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55685

DST#: 2

ATTN: Saman Sharifaie

Test Start: 2014.01.14 @ 14:41:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

70000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.12 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
400.00	mcw 10m 90w (oil spots)	3.443
240.00	gomcw 20g 20o 20m 40w	3.367
90.00	go 35g 65o	1.262
0.00	200' GIP	0.000

Total Length: 730.00 ft Total Volume: 8.072 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

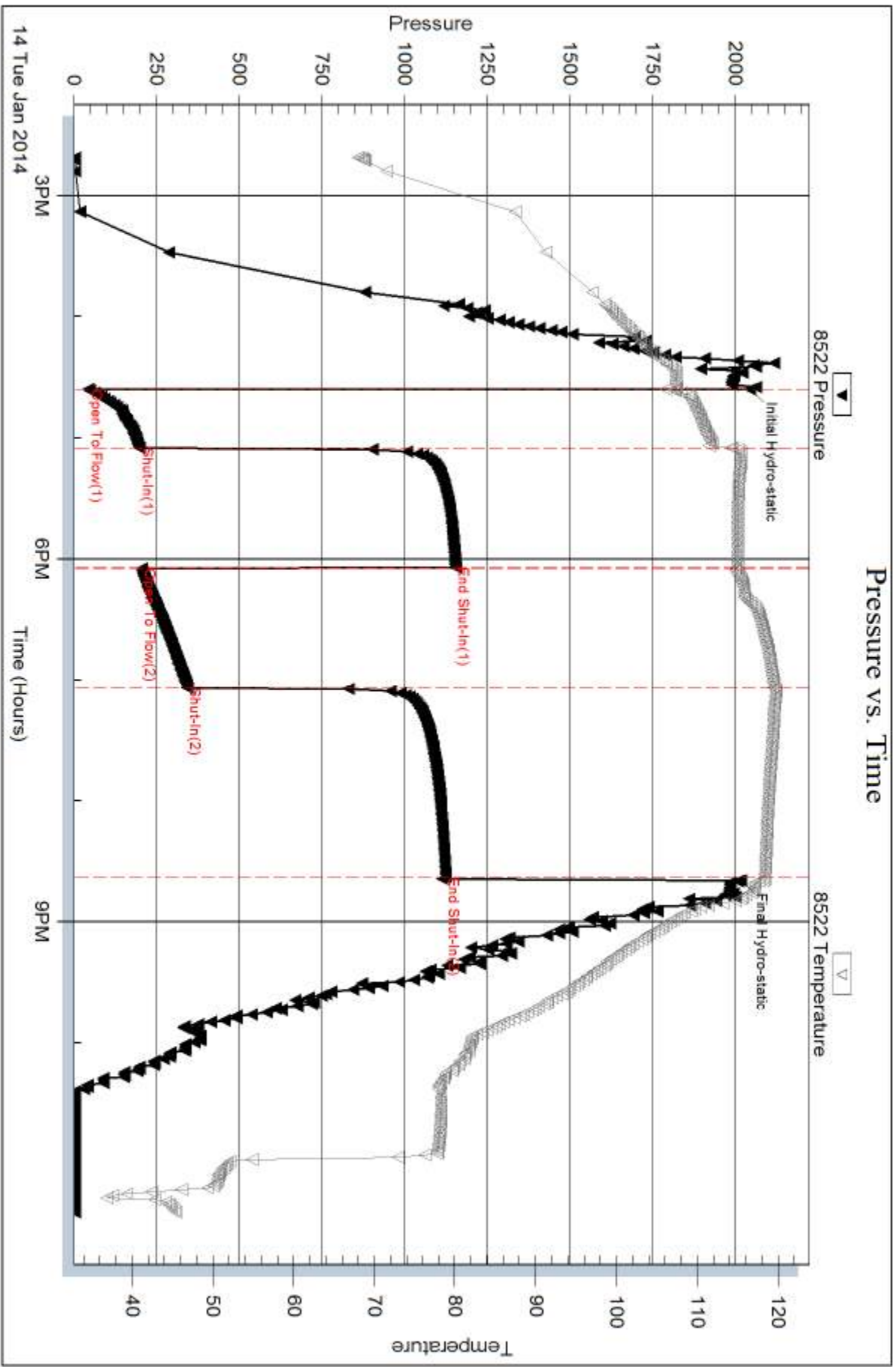
Recovery Comments: rw is .158 @ 40F = 70,000ppm

Serial #: 8522

Outside Marfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 2



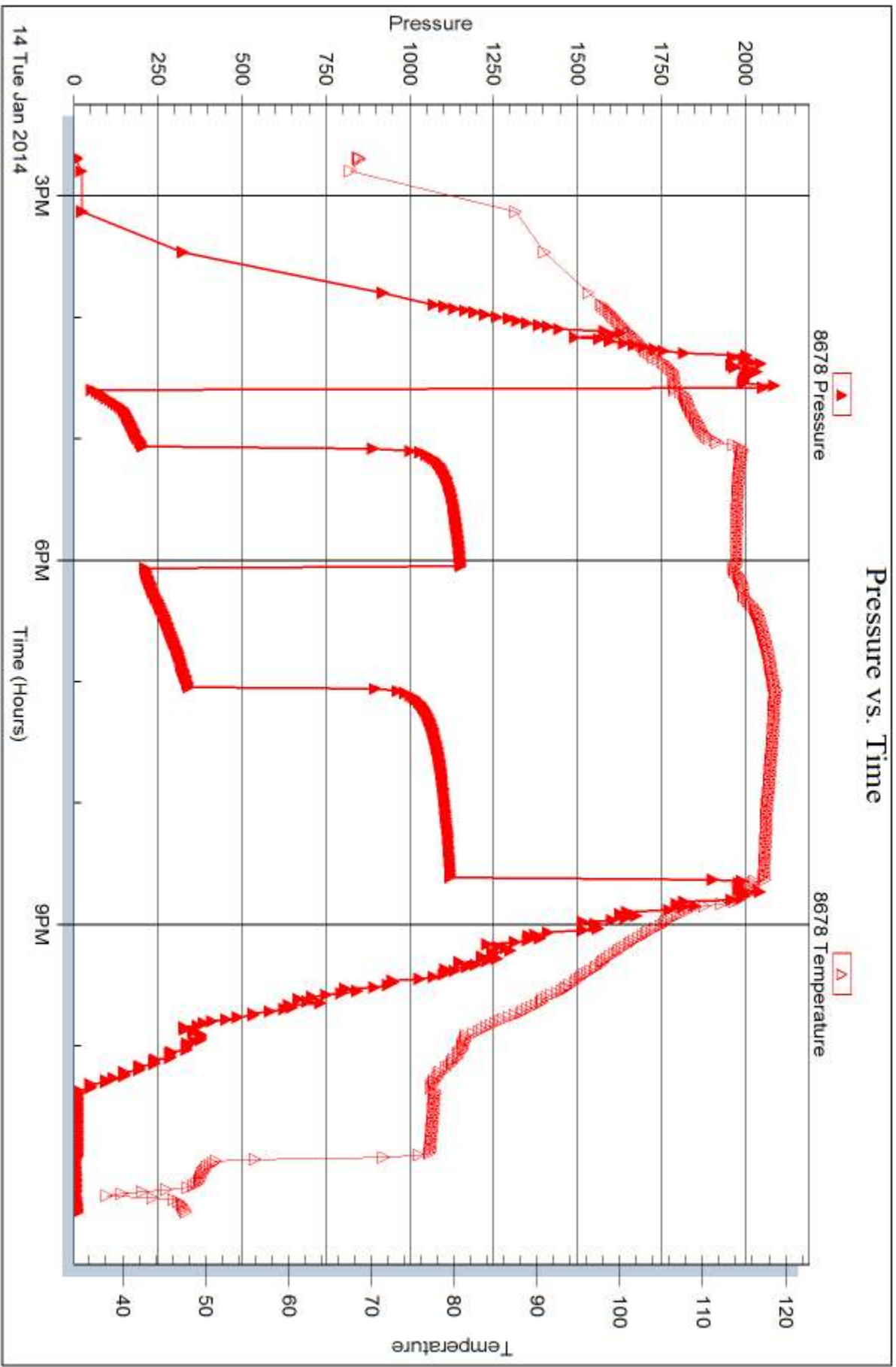
Serial #: 8678

Inside

Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 55685

Printed: 2014.01.23 @ 14:55:52



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.15 @ 18:31:00

End Date: 2014.01.16 @ 02:45:30

Job Ticket #: 54566 DST #: 3

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

Printed: 2014.01.23 @ 14:55:22



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan, KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54566

DST#: 3

ATTN: Saman Sharifaie

Test Start: 2014.01.15 @ 18:31:00

GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:24:00

Time Test Ended: 02:45:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III

Unit No: 69

Interval: 4167.00 ft (KB) To 4260.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4260.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8678

Inside

Press@RunDepth: 879.78 psig @ 4172.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.15

End Date:

2014.01.16

Last Calib.:

2014.01.16

Start Time: 18:31:05

End Time:

02:45:29

Time On Btm:

2014.01.15 @ 20:23:30

Time Off Btm:

2014.01.15 @ 22:56:30

TEST COMMENT:

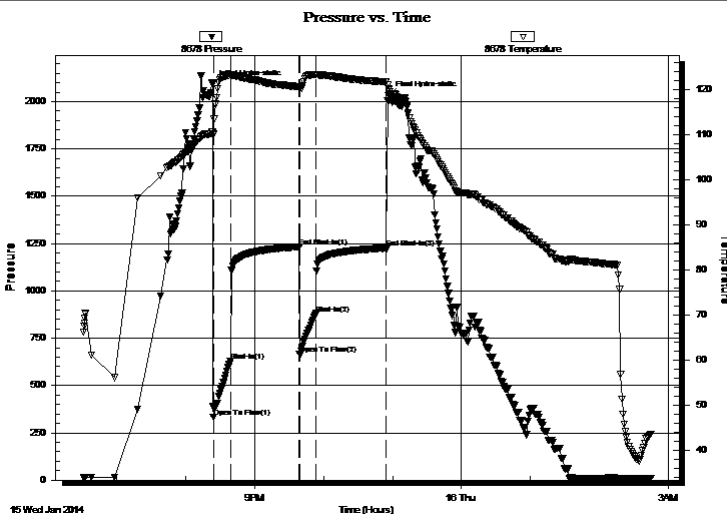
IF: B.o.b. in 1 min.

IS: Bled off in 4 1/2 mins.-Surface blow back after 1 min. shut in-built to 2 1/4-died back to 1 1/4 blow back

FF: B.o.b. in 1 min.

FS: Bled off in 1 1/2 mins.-No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2091.97	110.60	Initial Hydro-static
1	331.61	110.21	Open To Flow (1)
16	629.76	123.12	Shut-In(1)
76	1232.72	120.65	End Shut-In(1)
76	665.85	120.38	Open To Flow (2)
90	879.78	123.30	Shut-In(2)
151	1225.84	121.69	End Shut-In(2)
153	2033.54	120.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Mcw 10m 90w	1.31
378.00	OgMcw 5o 15g 30m 50w	5.30
378.00	OgMcw 10o 20g 20m 50w	5.30
946.00	GoWm 5g 15o 30w 50m	13.27
5.00	Co 100o	0.07
0.00	Rw .260@41=49000	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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54566

DST#: 3

ATTN: Saman Sharifaie

Test Start: 2014.01.15 @ 18:31:00

Tool Information

Drill Pipe:	Length: 3916.00 ft	Diameter: 3.80 inches	Volume: 54.93 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume: 56.10 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	74000.00 lb
Depth to Top Packer:	4167.00 ft			Final	84000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	93.00 ft				
Tool Length:	120.00 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			4141.00	
Shut In Tool	5.00			4146.00	
Hydraulic tool	5.00			4151.00	
Jars	5.00			4156.00	
Safety Joint	2.00			4158.00	
Packer	5.00			4163.00	27.00 Bottom Of Top Packer
Packer	4.00			4167.00	
Stubb	1.00			4168.00	
Perforations	4.00			4172.00	
Recorder	0.00	8678	Inside	4172.00	
Recorder	0.00	8522	Outside	4172.00	
Perforations	19.00			4191.00	
Change Over Sub	1.00			4192.00	
Drill Pipe	63.00			4255.00	
Change Over Sub	1.00			4256.00	
Perforations	1.00			4257.00	
Bullnose	3.00			4260.00	93.00 Bottom Packers & Anchor
Total Tool Length:	120.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54566

DST#: 3

ATTN: Saman Sharifaie

Test Start: 2014.01.15 @ 18:31:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

49000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.95 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
248.00	Mcw 10m 90w	1.311
378.00	OgMcw 5o 15g 30m 50w	5.302
378.00	OgMcw 10o 20g 20m 50w	5.302
946.00	GoWm 5g 15o 30w 50m	13.270
5.00	Co 100o	0.070
0.00	Rw .260@41=49000	0.000
0.00	105 GIP	0.000

Total Length: 1955.00 ft Total Volume: 25.255 bbl

Num Fluid Samples: 0

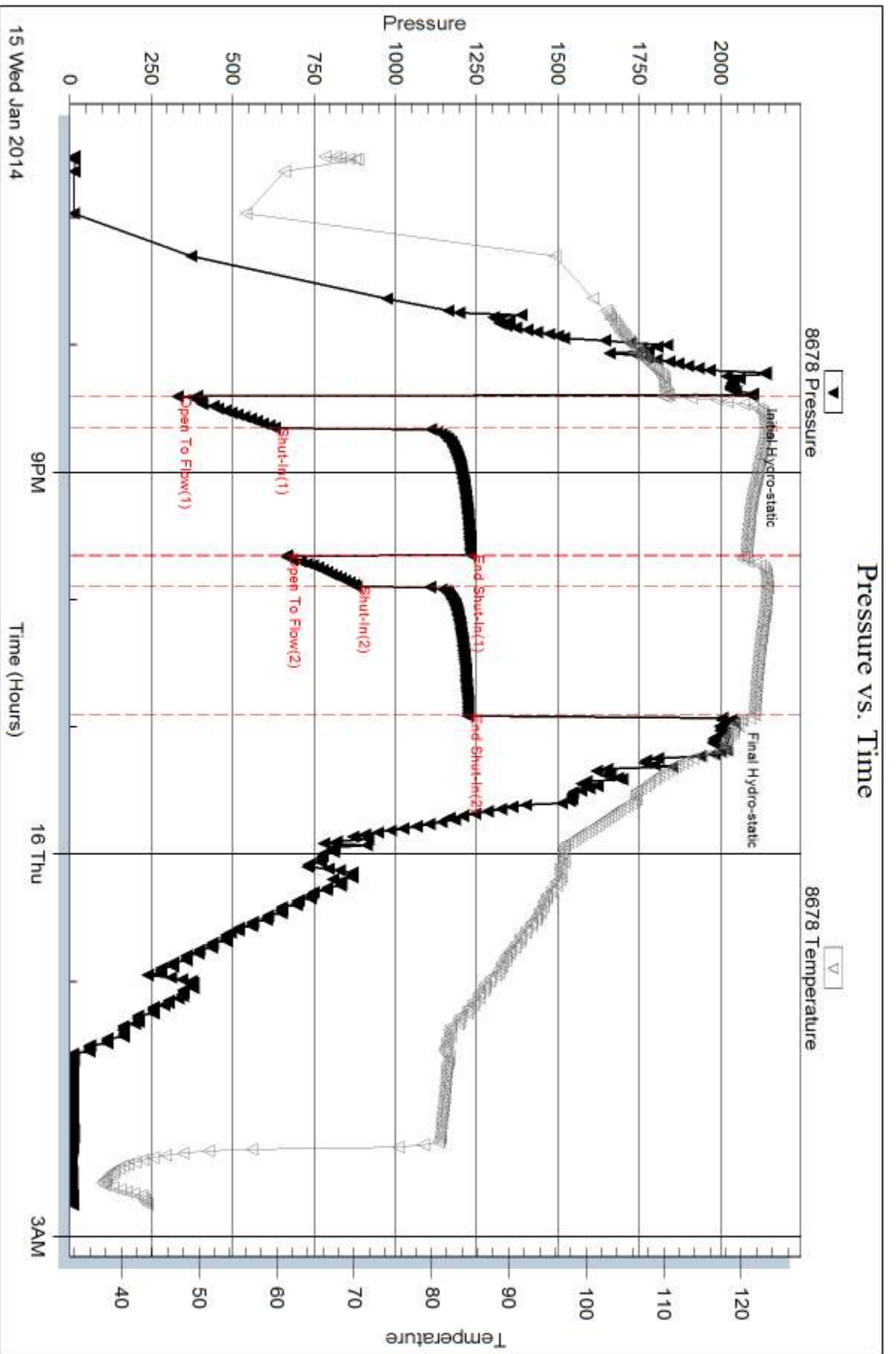
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 105 GIP

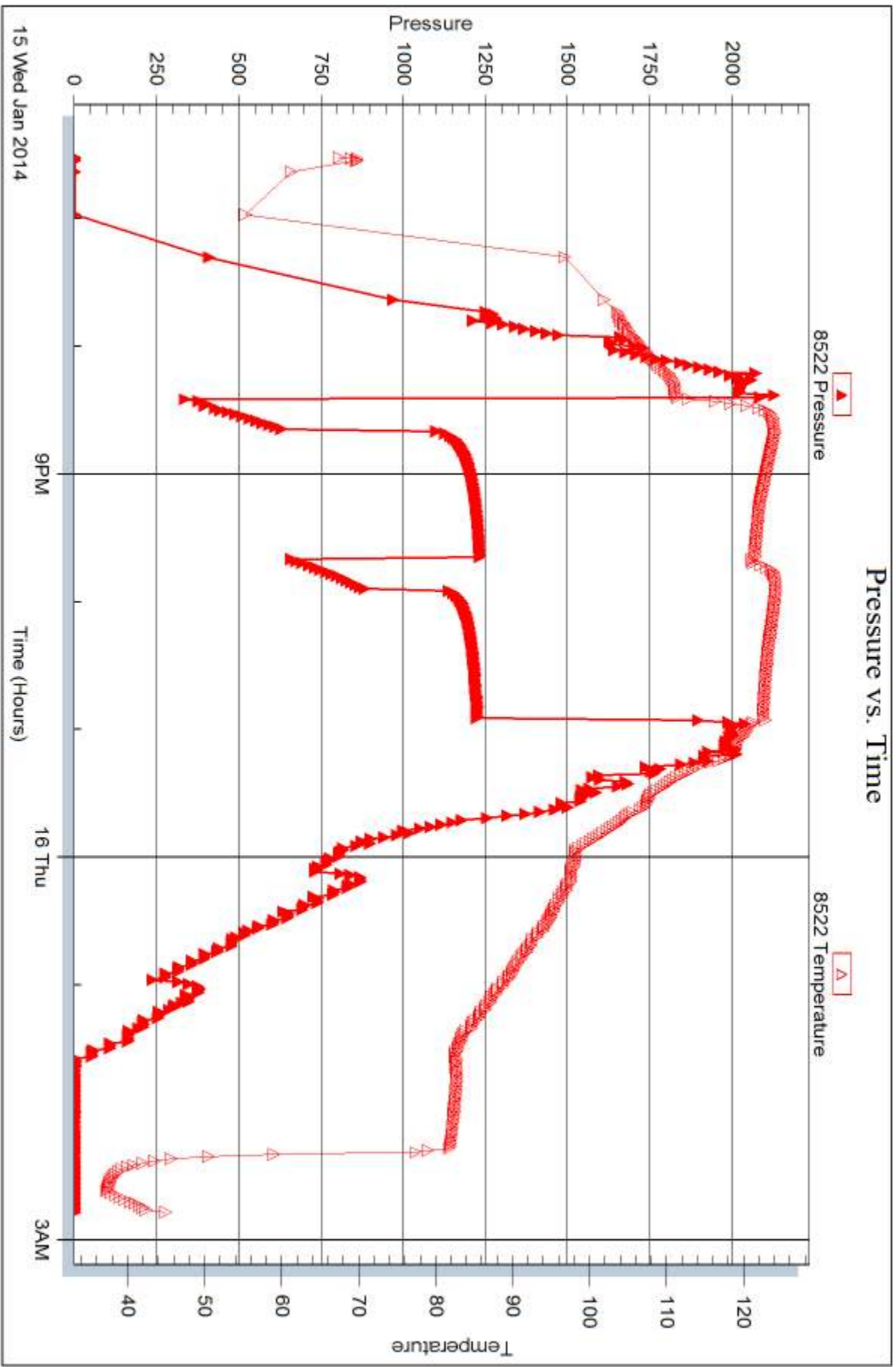


Serial #: 8522

Outside Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 54566

Printed: 2014.01.23 @ 14:55:25



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.17 @ 04:38:00

End Date: 2014.01.17 @ 14:05:00

Job Ticket #: 54567 DST #: 4

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

Printed: 2014.01.23 @ 14:54:52



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan, KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54567

DST#: 4

ATTN: Saman Sharifaie

Test Start: 2014.01.17 @ 04:38:00

GENERAL INFORMATION:

Formation: **X-Line-Lenapah-Marma**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:39:15

Time Test Ended: 14:05:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III

Unit No: 69

Interval: 4316.00 ft (KB) To 4446.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4446.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8678

Inside

Press@RunDepth: 200.53 psig @ 4321.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.17

End Date:

2014.01.17

Last Calib.:

2014.01.17

Start Time: 04:38:05

End Time:

14:05:00

Time On Btm:

2014.01.17 @ 07:38:30

Time Off Btm:

2014.01.17 @ 11:40:15

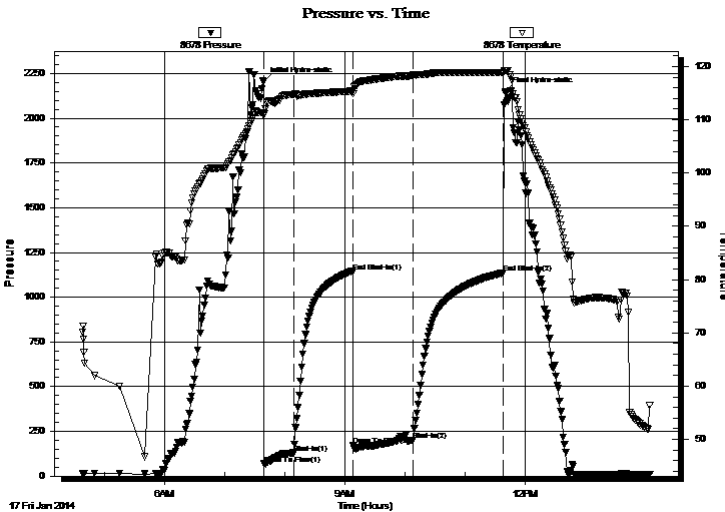
TEST COMMENT: IF: BOB in 11 1/2 mins.

IS: Bled off in 2 mins.-5 1/2 of Blow back

FF: 6 in. Immediately- BOB. in 6 mins.

FS: Bled off in 2 mins.-7 1/4 in. of Blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2203.40	111.24	Initial Hydro-static
1	68.74	110.80	Open To Flow (1)
31	129.45	114.67	Shut-In(1)
90	1142.21	115.38	End Shut-In(1)
90	169.67	114.90	Open To Flow (2)
150	200.53	118.39	Shut-In(2)
240	1136.35	118.85	End Shut-In(2)
242	2148.66	119.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Gocm 20g 20o 60m	1.31
189.00	Cgo 20g 80o	2.65
0.00	756 GIP	0.00
0.00	Gravity 29@50=30	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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54567

DST#: 4

ATTN: Saman Sharifaie

Test Start: 2014.01.17 @ 04:38:00

GENERAL INFORMATION:

Formation: **X-Line-Lenapah-Marma**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:39:15

Time Test Ended: 14:05:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III

Unit No: 69

Interval: 4316.00 ft (KB) To 4446.00 ft (KB) (TVD)

Total Depth: 4446.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3046.00 ft (KB)

3035.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8522

Outside

Press@RunDepth: psig @ 4321.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.17

End Date:

2014.01.17

Last Calib.:

2014.01.17

Start Time: 04:38:05

End Time:

14:06:30

Time On Btm:

Time Off Btm:

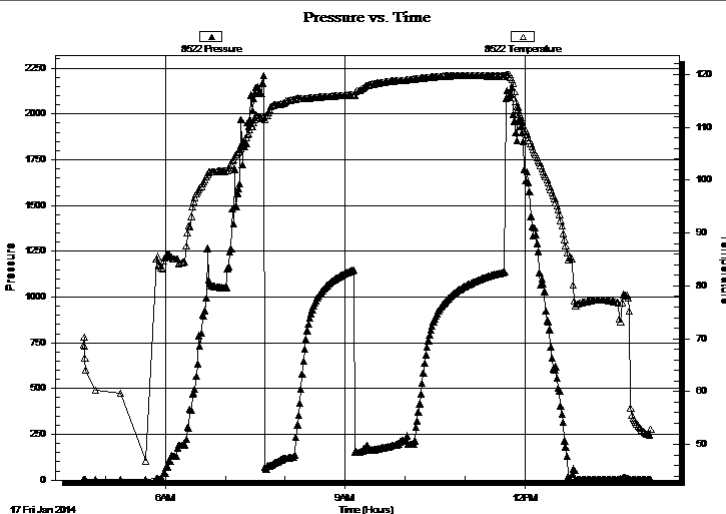
TEST COMMENT: IF: BOB in 11 1/2 mins.

IS: Bled off in 2 mins.-5 1/2 of Blow back

FF: 6 in. Immediately- BOB. in 6 mins.

FS: Bled off in 2 mins.-7 1/4 in. of Blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Gocm 20g 20o 60m	1.31
189.00	Cgo 20g 80o	2.65
0.00	756 GIP	0.00
0.00	Gravity 29@50=30	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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54567

DST#: 4

ATTN: Saman Sharifaie

Test Start: 2014.01.17 @ 04:38:00

Tool Information

Drill Pipe:	Length: 4075.00 ft	Diameter: 3.80 inches	Volume: 57.16 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 58.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4316.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	130.00 ft			
Tool Length:	157.00 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			4290.00	
Shut In Tool	5.00			4295.00	
Hydraulic tool	5.00			4300.00	
Jars	5.00			4305.00	
Safety Joint	2.00			4307.00	
Packer	5.00			4312.00	27.00 Bottom Of Top Packer
Packer	4.00			4316.00	
Stubb	1.00			4317.00	
Perforations	4.00			4321.00	
Recorder	0.00	8678	Inside	4321.00	
Recorder	0.00	8522	Outside	4321.00	
Perforations	25.00			4346.00	
Change Over Sub	1.00			4347.00	
Drill Pipe	94.00			4441.00	
Change Over Sub	1.00			4442.00	
Perforations	1.00			4443.00	
Bullnose	3.00			4446.00	130.00 Bottom Packers & Anchor
Total Tool Length:	157.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54567

DST#: 4

ATTN: Saman Sharifaie

Test Start: 2014.01.17 @ 04:38:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
248.00	Gocm 20g 20o 60m	1.311
189.00	Cgo 20g 80o	2.651
0.00	756 GIP	0.000
0.00	Gravity 29@50=30	0.000

Total Length: 437.00 ft

Total Volume: 3.962 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

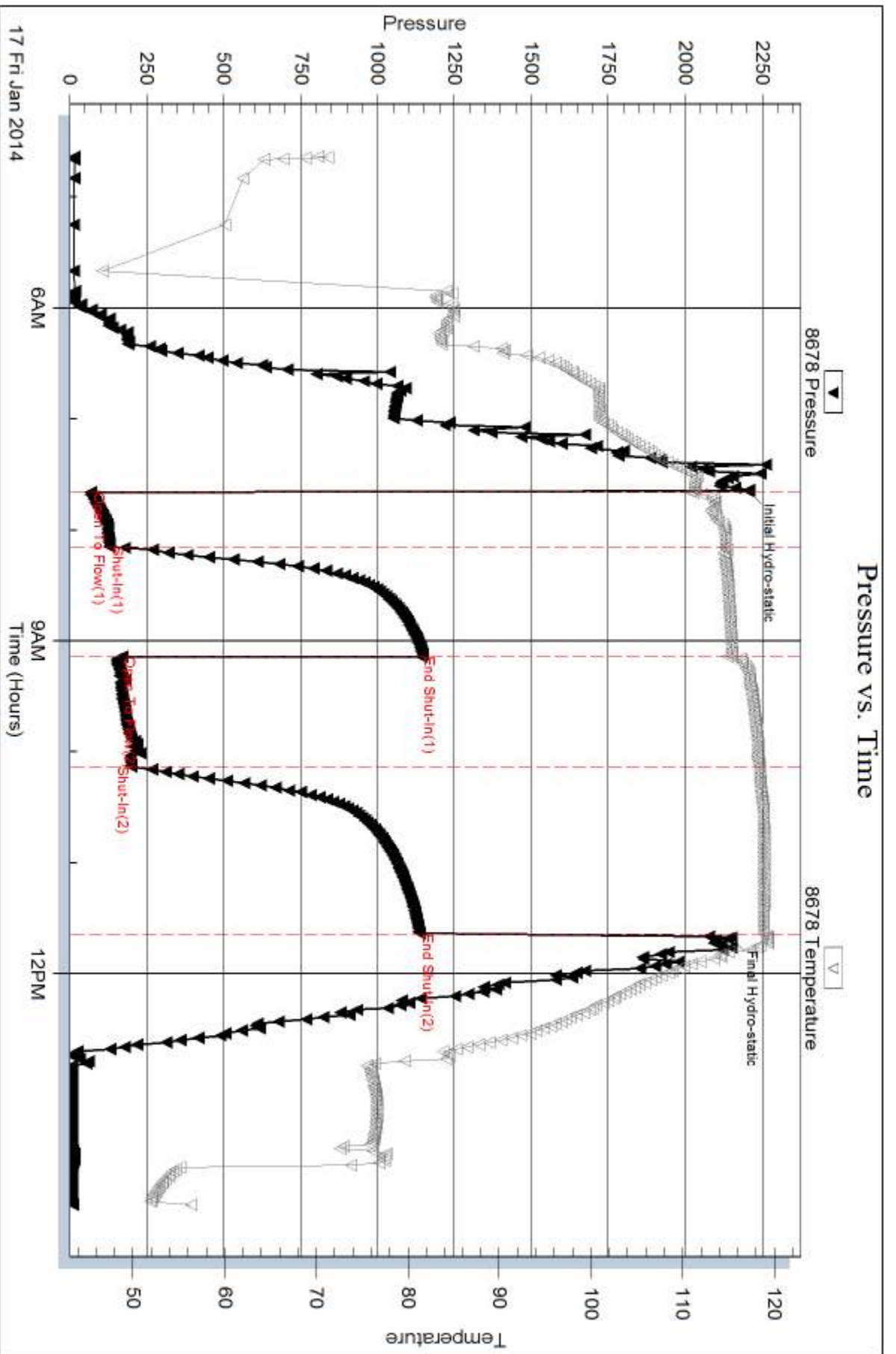
Serial #: 8678

Inside

Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 54567

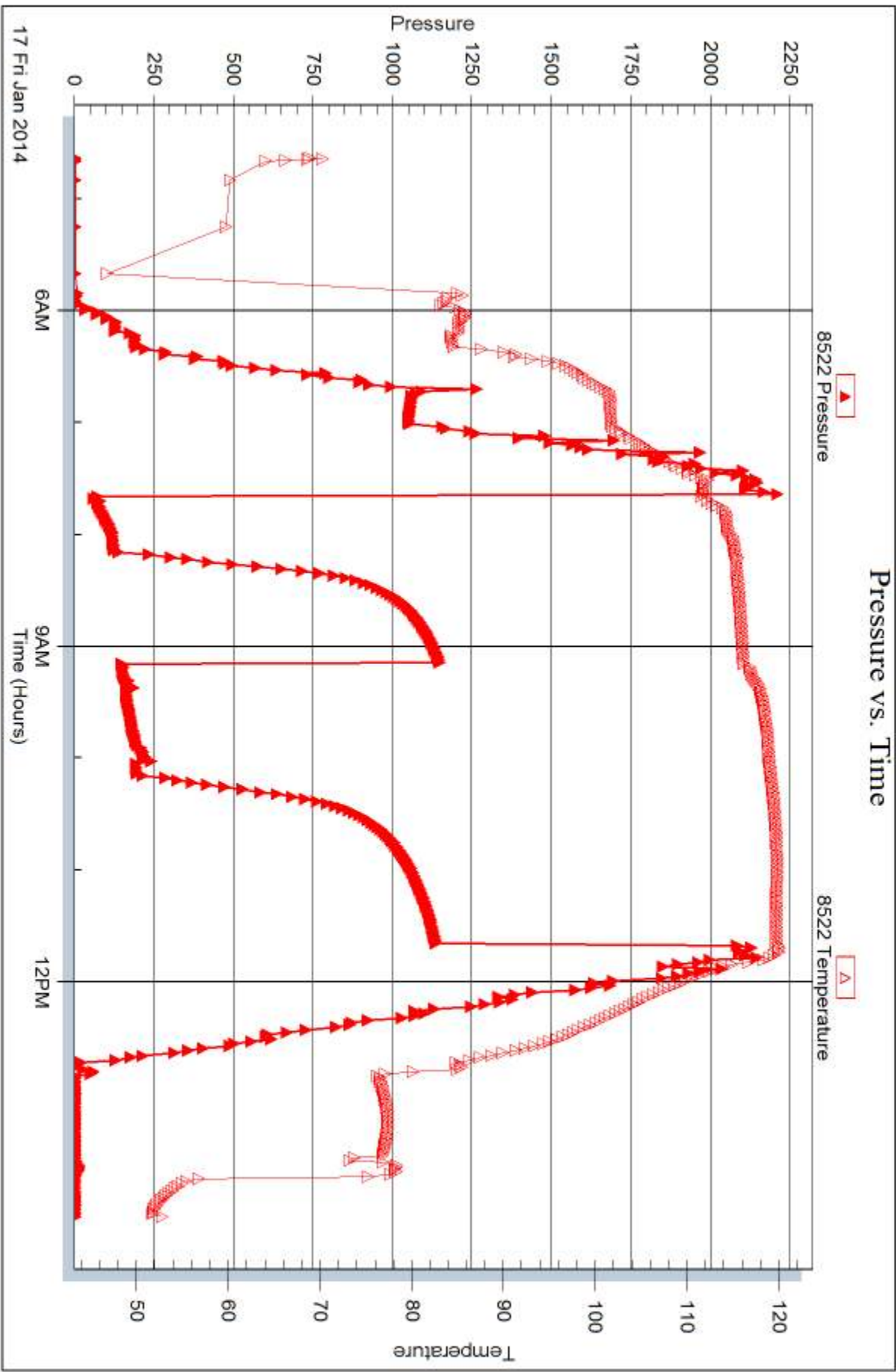
Printed: 2014.01.23 @ 14:54:54

Serial #: 8522

Outside Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 4





DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.18 @ 05:34:00

End Date: 2014.01.18 @ 15:14:00

Job Ticket #: 54568 DST #: 5

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

Printed: 2014.01.23 @ 14:54:04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54568

DST#: 5

ATTN: Saman Sharifaie

Test Start: 2014.01.18 @ 05:34:00

GENERAL INFORMATION:

Formation: **Pawnee-Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:11:00

Time Test Ended: 15:14:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III

Unit No: 69

Interval: 4448.00 ft (KB) To 4534.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4534.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8678

Inside

Press@RunDepth: 252.10 psig @ 4450.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.18

End Date:

2014.01.18

Last Calib.:

2014.01.18

Start Time:

05:34:05

End Time:

15:14:00

Time On Btm:

2014.01.18 @ 08:10:45

Time Off Btm:

2014.01.18 @ 12:11:45

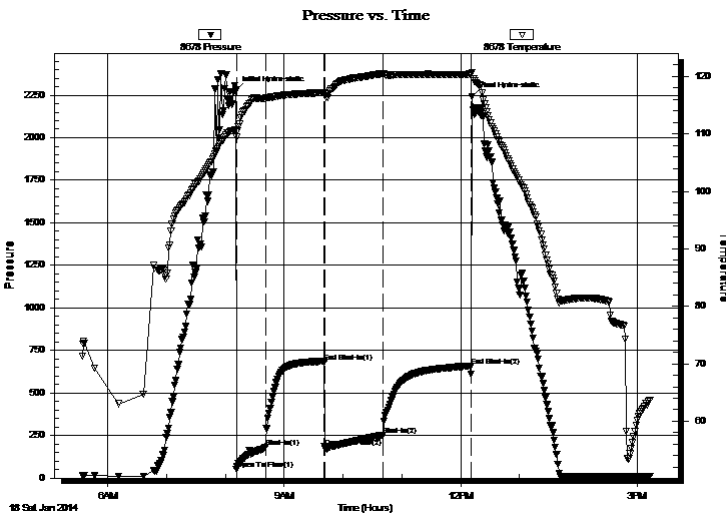
TEST COMMENT: IF: BOB in 7 mins. 45 sec.

IS: Bled off in 2 mins.-2 3/4 in. of Blow back-Died back to 1 3/4 in

FF: BOB in 7 mins.

FS: Bled off in 2 1/2 mins.-BOB. in 21 mins.-Died back to 7 in.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2279.09	110.70	Initial Hydro-static
1	50.54	109.41	Open To Flow (1)
31	182.49	116.17	Shut-In(1)
90	682.61	117.20	End Shut-In(1)
91	183.33	116.95	Open To Flow (2)
150	252.10	120.51	Shut-In(2)
240	659.31	120.38	End Shut-In(2)
241	2239.73	120.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Gocm 10g 40o 50m	1.31
283.00	Cgo 30g 70o	3.97
0.00	GIP 599	0.00
0.00	Gravity=30	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

ATTN: Saman Sharifaie

4 13s 32w Logan,KS

Nancy #1-4

Job Ticket: 54568

DST#: 5

Test Start: 2014.01.18 @ 05:34:00

GENERAL INFORMATION:

Formation: **Pawnee-Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:11:00

Time Test Ended: 15:14:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III

Unit No: 69

Interval: 4448.00 ft (KB) To 4534.00 ft (KB) (TVD)

Total Depth: 4534.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3046.00 ft (KB)

3035.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8522 Outside

Press@RunDepth: psig @ 4450.00 ft (KB)

Start Date: 2014.01.18

End Date: 2014.01.18

Start Time: 05:34:05

End Time: 15:15:30

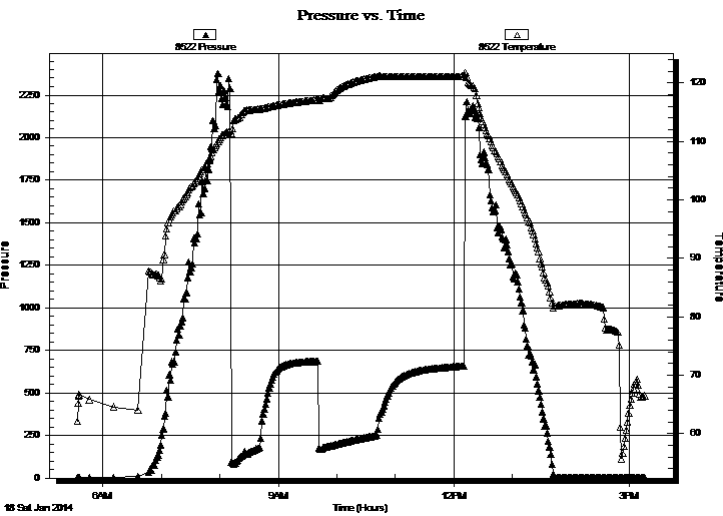
Capacity: 8000.00 psig

Last Calib.: 2014.01.18

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: BOB in 7 mins. 45 sec.
IS: Bled off in 2 mins.-2 3/4 in. of Blow back-Died back to 1 3/4 in
FF: BOB in 7 mins.
FSI: Bled off in 2 1/2 mins.-BOB. in 21 mins.-Died back to 7 in.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Gocm 10g 40o 50m	1.31
283.00	Cgo 30g 70o	3.97
0.00	GIP 599	0.00
0.00	Gravity=30	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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54568

DST#: 5

ATTN: Saman Sharifaie

Test Start: 2014.01.18 @ 05:34:00

Tool Information

Drill Pipe:	Length: 4200.00 ft	Diameter: 3.80 inches	Volume: 58.91 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	26000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose:	90000.00 lb
			<u>Total Volume: 60.08 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial	75000.00 lb
Depth to Top Packer:	4448.00 ft			Final	78000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	86.00 ft				
Tool Length:	113.00 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			4422.00	
Shut In Tool	5.00			4427.00	
Hydraulic tool	5.00			4432.00	
Jars	5.00			4437.00	
Safety Joint	2.00			4439.00	
Packer	5.00			4444.00	27.00 Bottom Of Top Packer
Packer	4.00			4448.00	
Stubb	1.00			4449.00	
Perforations	1.00			4450.00	
Recorder	0.00	8678	Inside	4450.00	
Recorder	0.00	8522	Outside	4450.00	
Perforations	15.00			4465.00	
Change Over Sub	1.00			4466.00	
Drill Pipe	63.00			4529.00	
Change Over Sub	1.00			4530.00	
Perforations	1.00			4531.00	
Bullnose	3.00			4534.00	86.00 Bottom Packers & Anchor
Total Tool Length:	113.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 54568

DST#: 5

ATTN: Saman Sharifaie

Test Start: 2014.01.18 @ 05:34:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
248.00	Gocm 10g 40o 50m	1.311
283.00	Cgo 30g 70o	3.970
0.00	GIP 599	0.000
0.00	Gravity=30	0.000

Total Length: 531.00 ft

Total Volume: 5.281 bbl

Num Fluid Samples: 0

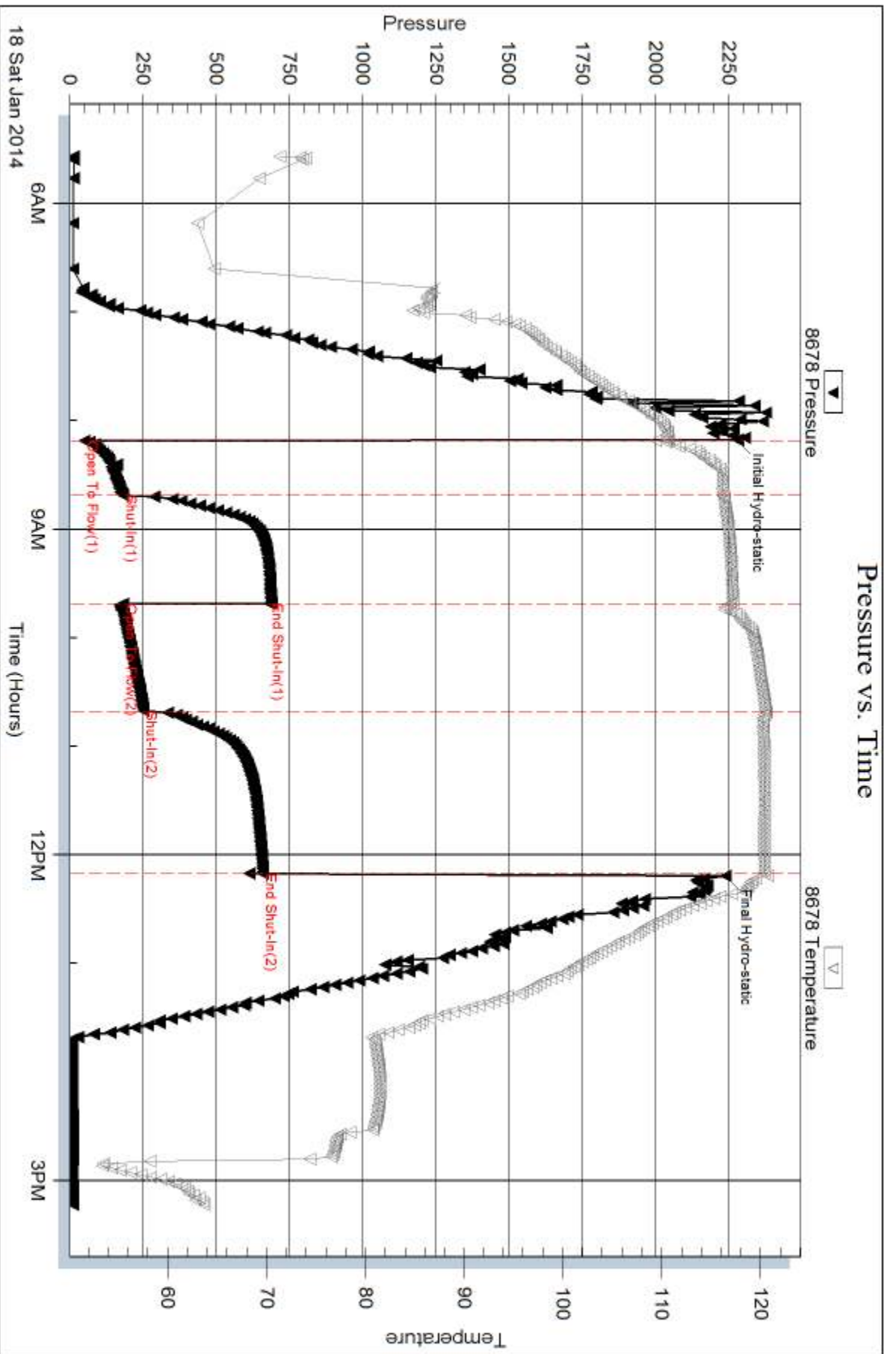
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

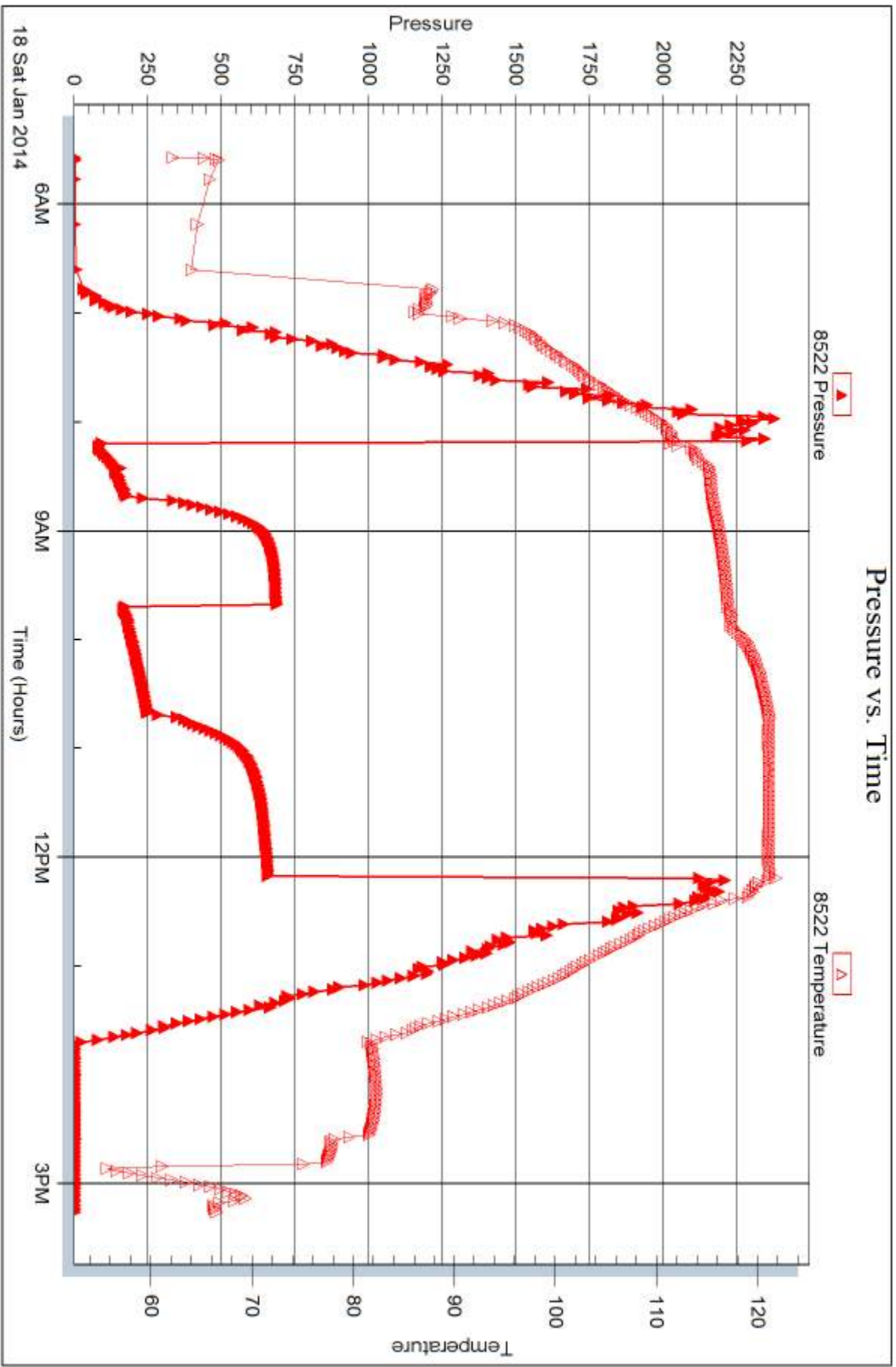


Serial #: 8522

Outside Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 54568

Printed: 2014.01.23 @ 14:54:06



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.19 @ 08:27:00

End Date: 2014.01.19 @ 17:28:30

Job Ticket #: 55686 DST #: 6

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

Printed: 2014.01.23 @ 14:53:35



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan, KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55686

DST#: 6

ATTN: Saman Sharifaie

Test Start: 2014.01.19 @ 08:27:00

GENERAL INFORMATION:

Formation: **Cherokee, Johnson, A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:45:15

Time Test Ended: 17:28:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4540.00 ft (KB) To 4632.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4632.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8522 Outside

Press@RunDepth: 229.46 psig @ 4541.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.19

End Date:

2014.01.19

Last Calib.:

2014.01.19

Start Time: 08:27:05

End Time:

17:28:30

Time On Btm:

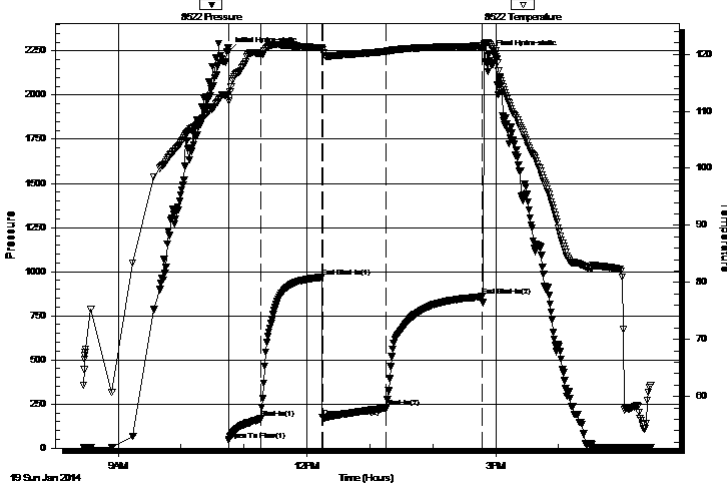
2014.01.19 @ 10:45:00

Time Off Btm:

2014.01.19 @ 14:53:45

TEST COMMENT: IF: 5" blow.
IS: No return.
FF: BOB @ 20 min.
FS: 1 1/2" return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2247.73	112.86	Initial Hydro-static
1	44.20	111.77	Open To Flow (1)
31	166.37	120.12	Shut-In(1)
90	968.19	121.09	End Shut-In(1)
90	174.11	120.75	Open To Flow (2)
151	229.46	120.48	Shut-In(2)
243	858.71	121.42	End Shut-In(2)
249	2229.04	121.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	gow cm 10g 10o 15 w 65m	0.59
180.00	gocm 20g 25o 55m	1.45
200.00	go 40g 60o	2.81
0.00	335 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

4 13s 32w Logan, KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55686

DST#: 6

ATTN: Saman Sharifaie

Test Start: 2014.01.19 @ 08:27:00

GENERAL INFORMATION:

Formation: **Cherokee, Johnson, A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:45:15

Time Test Ended: 17:28:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4540.00 ft (KB) To 4632.00 ft (KB) (TVD)

Total Depth: 4632.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3046.00 ft (KB)

3035.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8678 Inside

Press@RunDepth: psig @ 4541.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.19 End Date: 2014.01.19

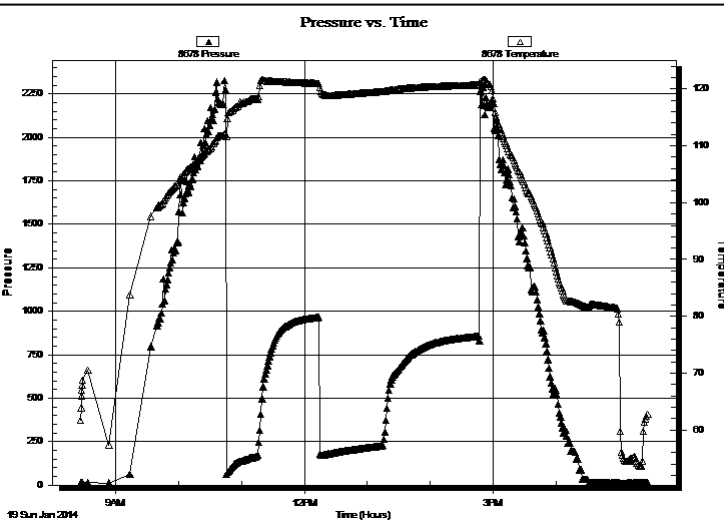
Last Calib.: 2014.01.19

Start Time: 08:27:05 End Time: 17:27:15

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 5" blow.
IS: No return.
FF: BOB @ 20 min.
FS: 1 1/2" return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	gow cm 10g 10o 15 w 65m	0.59
180.00	gocm 20g 25o 55m	1.45
200.00	go 40g 60o	2.81
0.00	335 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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55686

DST#: 6

ATTN: Saman Sharifaie

Test Start: 2014.01.19 @ 08:27:00

Tool Information

Drill Pipe:	Length: 4293.00 ft	Diameter: 3.80 inches	Volume: 60.22 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose:	100000.0 lb
			<u>Total Volume: 61.39 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	75000.00 lb
Depth to Top Packer:	4540.00 ft			Final	76000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	92.00 ft				
Tool Length:	119.00 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			4514.00	
Shut In Tool	5.00			4519.00	
Hydraulic tool	5.00			4524.00	
Jars	5.00			4529.00	
Safety Joint	2.00			4531.00	
Packer	5.00			4536.00	27.00 Bottom Of Top Packer
Packer	4.00			4540.00	
Stubb	1.00			4541.00	
Recorder	0.00	8678	Inside	4541.00	
Recorder	0.00	8522	Outside	4541.00	
Perforations	23.00			4564.00	
Change Over Sub	1.00			4565.00	
Drill Pipe	63.00			4628.00	
Change Over Sub	1.00			4629.00	
Bullnose	3.00			4632.00	92.00 Bottom Packers & Anchor

Total Tool Length: 119.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55686

DST#: 6

ATTN: Saman Sharifaie

Test Start: 2014.01.19 @ 08:27:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 72.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	gow cm 10g 10o 15 w 65m	0.590
180.00	gocm 20g 25o 55m	1.450
200.00	go 40g 60o	2.805
0.00	335 GIP	0.000

Total Length: 500.00 ft

Total Volume: 4.845 bbl

Num Fluid Samples: 0

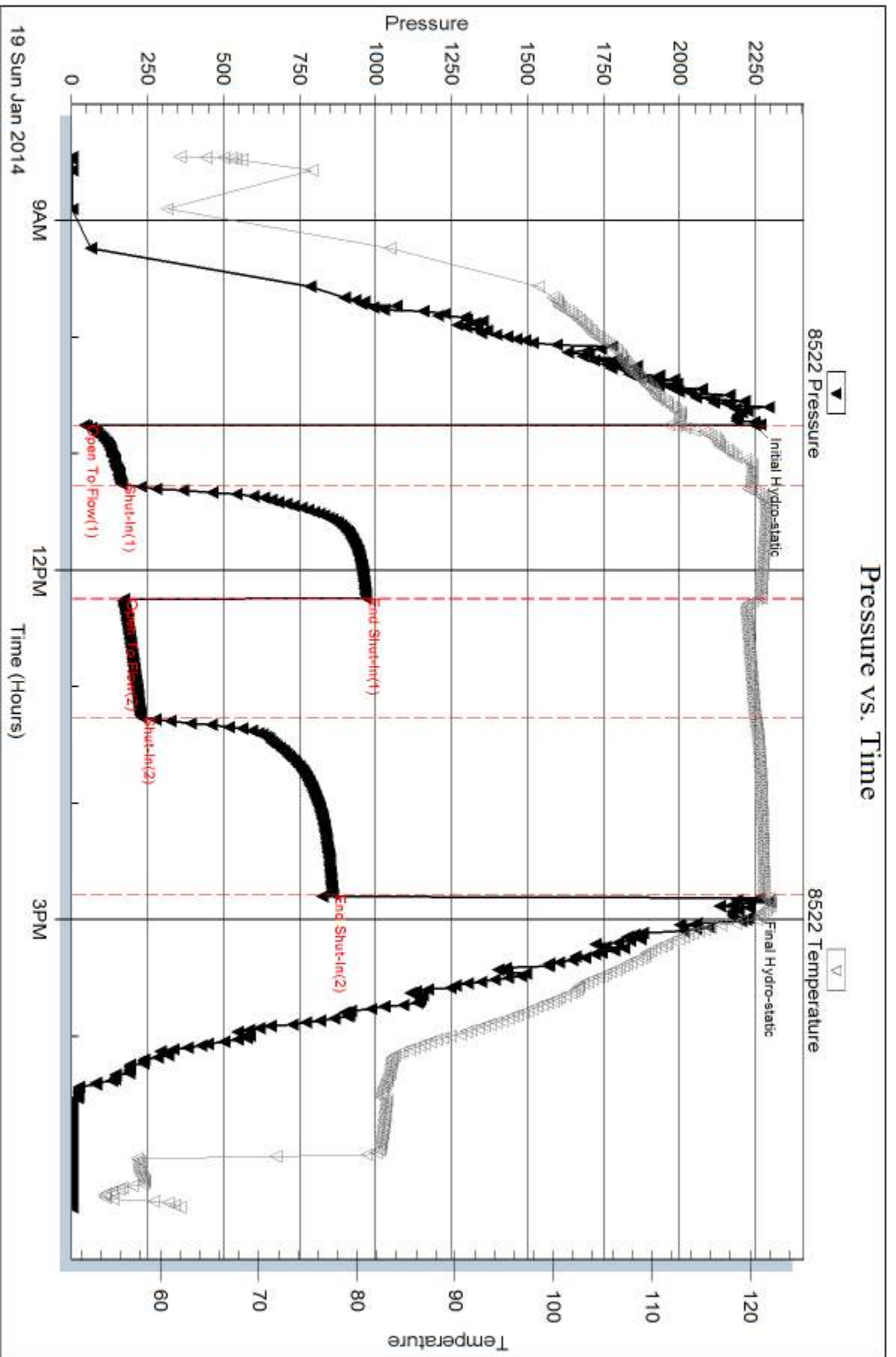
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



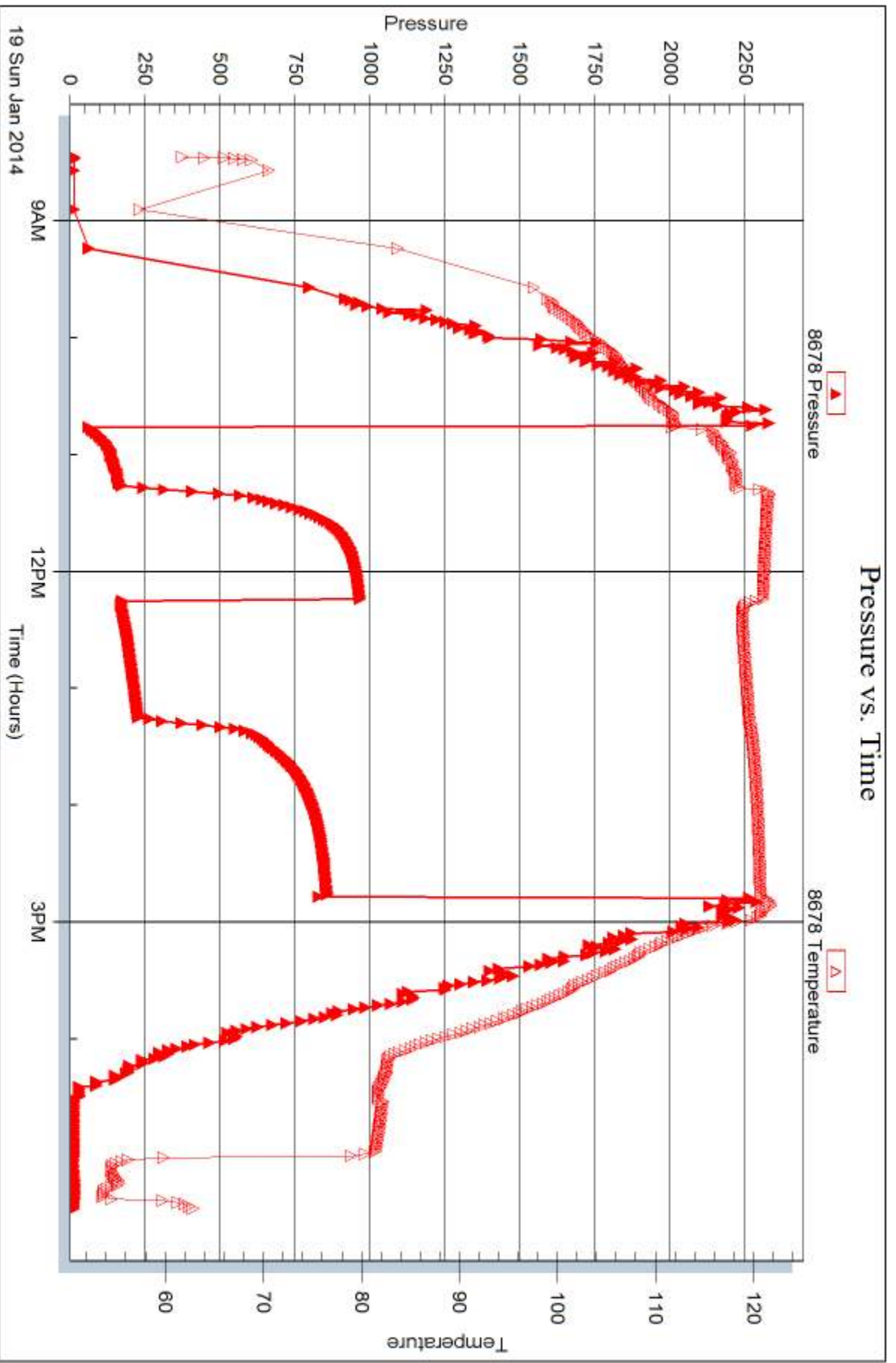
Serial #: 8678

Inside

Murfin Drilling Co, Inc

Nancy #1-4

DST Test Number: 6



Trilobite Testing, Inc

Ref. No: 55686

Printed: 2014.01.23 @ 14:53:38



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Saman Sharifaie

Nancy #1-4

4 13s 32w Logan,KS

Start Date: 2014.01.20 @ 00:40:00

End Date: 2014.01.20 @ 09:29:30

Job Ticket #: 55687 DST #: 7

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

Printed: 2014.01.23 @ 14:48:09



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co, Inc

4 13s 32w Logan, KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55687

DST#: 7

ATTN: Saman Sharifaie

Test Start: 2014.01.20 @ 00:40:00

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:07:15

Time Test Ended: 09:29:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4617.00 ft (KB) To 4677.00 ft (KB) (TVD)

Reference Elevations: 3046.00 ft (KB)

Total Depth: 4677.00 ft (KB) (TVD)

3035.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8522 Outside

Press@RunDepth: 127.91 psig @ 4618.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.20

End Date:

2014.01.20

Last Calib.:

2014.01.20

Start Time: 00:40:05

End Time:

09:29:30

Time On Btm:

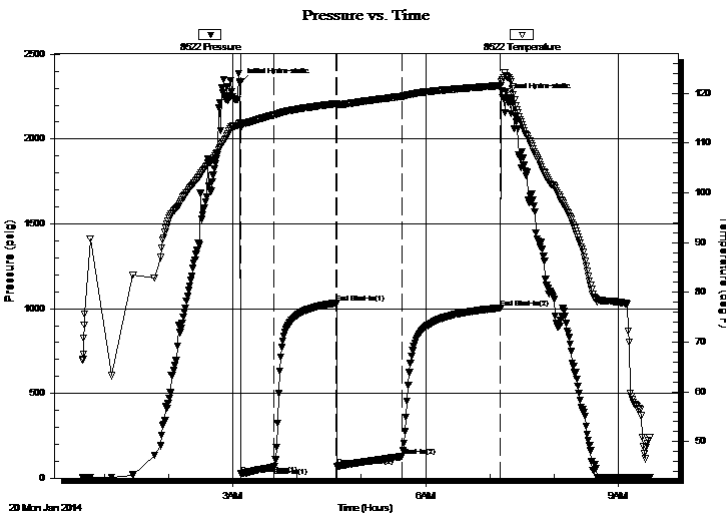
2014.01.20 @ 03:07:00

Time Off Btm:

2014.01.20 @ 07:11:45

TEST COMMENT: IF: 3" blow.
IS: No return.
FF: 4" blow.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2333.60	114.13	Initial Hydro-static
1	24.81	112.99	Open To Flow (1)
32	64.02	115.61	Shut-In(1)
90	1033.63	117.89	End Shut-In(1)
91	70.54	117.64	Open To Flow (2)
151	127.91	119.36	Shut-In(2)
243	1004.37	121.52	End Shut-In(2)
245	2243.01	122.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	omcw 10o 40w 50m	0.89
40.00	ocm ocm 25o 75m	0.20
10.00	oil	0.05
0.00	70' 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

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55687

DST#: 7

ATTN: Saman Sharifaie

Test Start: 2014.01.20 @ 00:40:00

Tool Information

Drill Pipe:	Length: 4356.00 ft	Diameter: 3.80 inches	Volume: 61.10 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 62.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4617.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	87.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4591.00	
Shut In Tool	5.00			4596.00	
Hydraulic tool	5.00			4601.00	
Jars	5.00			4606.00	
Safety Joint	2.00			4608.00	
Packer	5.00			4613.00	27.00 Bottom Of Top Packer
Packer	4.00			4617.00	
Stubb	1.00			4618.00	
Recorder	0.00	8678	Inside	4618.00	
Recorder	0.00	8522	Outside	4618.00	
Perforations	23.00			4641.00	
Change Over Sub	1.00			4642.00	
Drill Pipe	31.00			4673.00	
Change Over Sub	1.00			4674.00	
Bullnose	3.00			4677.00	60.00 Bottom Packers & Anchor

Total Tool Length: 87.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co, Inc

4 13s 32w Logan,KS

250 N Water Ste 300
Wichita, KS 67202

Nancy #1-4

Job Ticket: 55687

DST#: 7

ATTN: Saman Sharifaie

Test Start: 2014.01.20 @ 00:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
180.00	omcw 10o 40w 50m	0.885
40.00	ocm ocm 25o 75m	0.197
10.00	oil	0.049
0.00	70' GIP	0.000

Total Length: 230.00 ft Total Volume: 1.131 bbf

Num Fluid Samples: 0

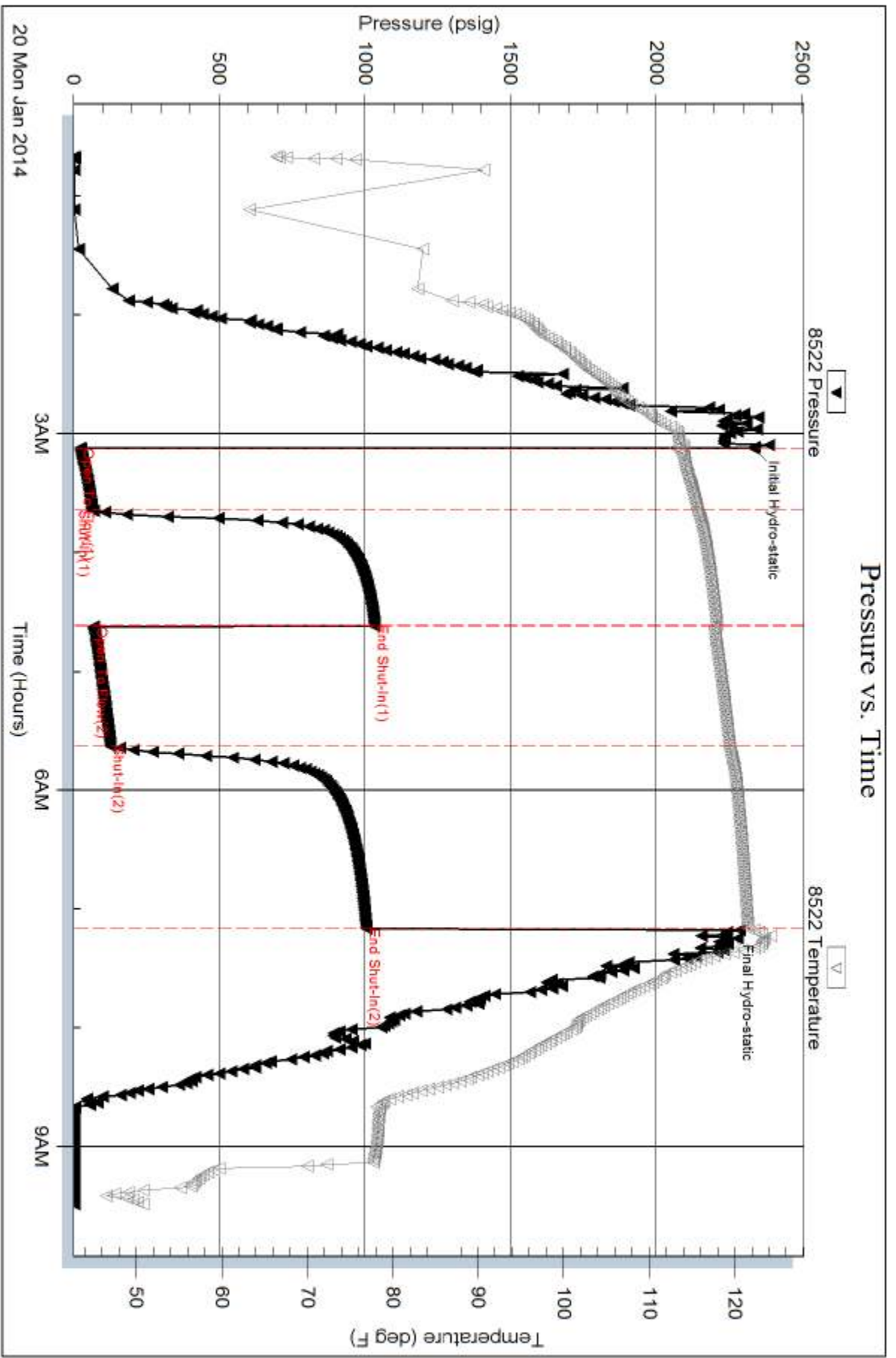
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .200 @ 49F = 55,000ppm



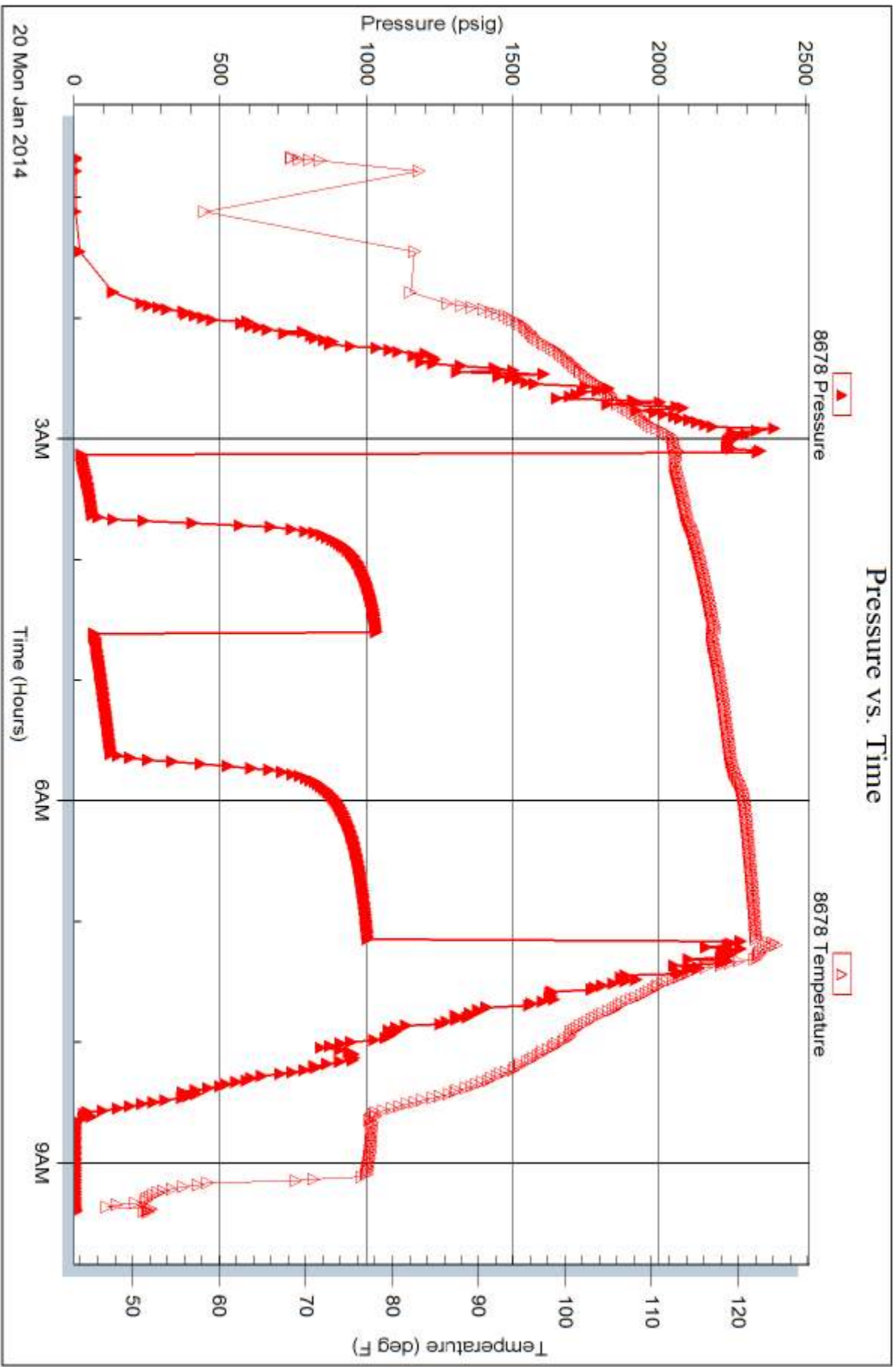
Serial #: 8678

Inside

Murfin Drilling Co, Inc

Nancy #1-4

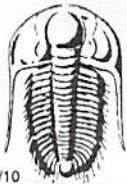
DST Test Number: 7



Trilobite Testing, Inc

Ref. No: 55687

Printed: 2014.01.23 @ 14:48:11



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55684**

4/10

Well Name & No. Nancy #1-4 Test No. 1 Date 1/14/14
 Company Murkin Drilling Co, Inc Elevation 3046 KB 3035 GL
 Address 250 N Water Ste 300 Wichita, ks 67202
 Co. Rep / Geo. Saman Sharifare Rig Murkin #22
 Location: Sec. 4 Twp. 13s Rge. 32w Co. Logan State Ks

Interval Tested 4020 4070 Zone Tested Lke A-B
 Anchor Length 50' Drill Pipe Run 3781 Mud Wt. 9.2
 Top Packer Depth 4015 Drill Collars Run 238 Vis 71
 Bottom Packer Depth 4020 Wt. Pipe Run Ø WL 6.0
 Total Depth 4070 Chlorides 2500 ppm System LCM .5#

Blow Description IFI BOB @ 8min
ISI 1" return
FF: BOB @ 9min
FSI: 1" return

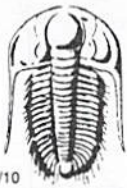
Rec	Feet of	%gas	%oil	%water	%mud
<u>180</u>	<u>60</u>	<u>40</u>	<u>60</u>		
<u>180</u>	<u>OWC M</u>		<u>20</u>	<u>30</u>	<u>50</u>
<u>490</u>	<u>SMCW (OTL SCUM)</u>			<u>95</u>	<u>5</u>
	<u>210 GIP</u>				

Rec Total 850 BHT 119 Gravity 33 API RW .145 @ 45° F Chlorides 84000 ppm

(A) Initial Hydrostatic <u>1996</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>1430</u>
(B) First Initial Flow <u>38</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1534</u>
(C) First Final Flow <u>219</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1742</u>
(D) Initial Shut-In <u>1158</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2142</u>
(E) Second Initial Flow <u>227</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0042</u>
(F) Second Final Flow <u>416</u>	<input checked="" type="checkbox"/> Mileage <u>76 R/T</u> 117.80	Comments
(G) Final Shut-In <u>1147</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1927</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Initial Shut-In <u>66</u>	<input type="checkbox"/> Day Standby	Total <u>1692.80</u>
Final Flow <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
Final Shut-In <u>90</u>	Sub Total <u>1692.80</u>	

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55685**

Well Name & No. Nancy #1-4 Test No. 2 Date 1/14/14
 Company Murkin Drilling Co, Inc Elevation 3046 KB 3035 GL
 Address 250 N Water Ste 300 Wichita, KS 67202
 Co. Rep / Geo. Samon Shari fure Rig Murkin 22
 Location: Sec. 4 Twp. 13s Rge. 32 W Co. Logan State KS

Interval Tested 4076 - 4134 Zone Tested LKC D-F
 Anchor Length 55' Drill Pipe Run 3822 Mud Wt. 9.1
 Top Packer Depth 4071 Drill Collars Run 238 Vis SS
 Bottom Packer Depth 4076 Wt. Pipe Run 0 WL 7.2
 Total Depth 4134 Chlorides 2800 ppm System LCM 0.5#

Blow Description IFI BOB @ 10 min
ISFI: Surface return
FFI BOB @ 15 min
FSI: 2" return.

Rec	Feet of	%gas	%oil	%water	%mud
90	60	35%	65%		
240	60 MCW	20%	20%	40%	20%
400	MCW (OTL SPOTS)			90%	10%
	200' GIP				
Rec Total	730	BHT 118	Gravity 37	API RW 158 @ 40° F	Chlorides 79000 ppm

(A) Initial Hydrostatic 2045 Test 1250 T-On Location 1430
 (B) First Initial Flow 44 Jars 250 T-Started 1441
 (C) First Final Flow 199 Safety Joint 75 T-Open 1634
 (D) Initial Shut-In 1156 Circ Sub 4c T-Pulled 2054
 (E) Second Initial Flow 206 Hourly Standby _____ T-Out 2324
 (F) Second Final Flow 344 Mileage 76.4 117.80
 (G) Final Shut-In 1125 Sampler _____
 (H) Final Hydrostatic 2018 Straddle _____

Initial Open 30 Shale Packer _____ Ruined Shale Packer _____
 Initial Shut-In 60 Shale Packer _____ Ruined Packer _____
 Final Flow 60 Extra Packer _____ Extra Copies _____
 Final Shut-In 90 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1692.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1692.80

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54566

Well Name & No. Nancy #1-4 Test No. D3 Date 1-15-14
 Company Murfin Drilling Co. Inc Elevation 3046 KB 3035 GL
 Address 250 N. Water Ste. #300 Wichita, KS 67202
 Co. Rep / Geo. Saman Sharifaie Rig Murfin #22
 Location: Sec. 4 Twp. 13-S Rge. 32-W Co. Logan State KS

Interval Tested 4167 - 4260 Zone Tested LKC 'H-J'
 Anchor Length 93' Drill Pipe Run 3916 Mud Wt. 9.3
 Top Packer Depth 4163 Drill Collars Run 238 Vis 55
 Bottom Packer Depth 4167 Wt. Pipe Run Ø WL 6.0
 Total Depth 4260 Chlorides 3200 ppm System LCM#6

Blow Description IF: Bobin 1min.
IST: Bled off in 4 1/2 min - surface Blowback after 1min. shut in - Built to 2 1/4 - Dred back to 1 1/4
FF: B. ob in 1min.
FST: Bled off in 1/2 min. - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>248</u>	<u>Ø mcw</u>			<u>90</u>	<u>10</u>
<u>378</u>	<u>Ø gmcw</u>	<u>15</u>	<u>5</u>	<u>50</u>	<u>30</u>
<u>378</u>	<u>Ø gmcw</u>	<u>20</u>	<u>10</u>	<u>50</u>	<u>20</u>
<u>946</u>	<u>Ø GOWM</u>	<u>5</u>	<u>15</u>	<u>30</u>	<u>50</u>
<u>5</u>	<u>Co / 105 GIP</u>		<u>100</u>		

Rec Total 1955 BHT 120 Gravity — API RW .240 @ 41 °F Chlorides 49000 ppm
 (A) Initial Hydrostatic 2091 Test 1250 T-On Location 18:20
 (B) First Initial Flow 331 Jars 250 T-Started 18:31
 (C) First Final Flow 629 Safety Joint 75 T-Open 20:24
 (D) Initial Shut-In 1232 Circ Sub N/C T-Pulled 22:54
 (E) Second Initial Flow 665 Hourly Standby _____ T-Out 02:47
 (F) Second Final Flow 879 Mileage 76 R-T 117.80 Comments _____
 (G) Final Shut-In 1225 Sampler _____
 (H) Final Hydrostatic 2033 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 15 Extra Packer _____ Extra Copies _____
 Initial Shut-In 60 Extra Recorder _____ Sub Total 0
 Final Flow 15 Day Standby _____ Total 1692.80
 Final Shut-In 60 Accessibility _____ MP/DST Disc't _____
 Sub Total 1692.80

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54567

Well Name & No. Nancy #1-4 Test No. 4 Date 1-17-14
 Company Murfin Drilling Co. Inc Elevation 3046 KB 3035 GL
 Address 250 N. Water St #300 - Wichita, KS 67202
 Co. Rep / Geo. Samah Sharifaide Rig Murfin #22
 Location: Sec. 4 Twp. 13 S Rge. 32-W Co. Logan State KS

Interval Tested 4316 - 4446 Zone Tested XLine - Lenapah - Marmaton
 Anchor Length 130' Drill Pipe Run 4075 Mud Wt. 9.4
 Top Packer Depth 4312 Drill Collars Run 248 Vis 60
 Bottom Packer Depth 4316 Wt. Pipe Run Ø WL 6.4
 Total Depth 4446 Chlorides 3400 ppm System LCM #6

Blow Description IF: Bob in 1 1/2 min.
ISI: Bled off in 2 mins - 5/2" of Blowback
FF: 6 in Immediately - Bob in 6 min.
FSD: Bled off in 2 mins - 7/4 in of Blowback

Rec	Feet of	%gas	%oil	%water	%mud
2408	90cm	20	20	60	
189	CGO	20	80		
	756 GIP				
Rec Total	437				

BHT 119 Gravity 30 API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2203 Test 1250 T-On Location 04:05
 (B) First Initial Flow 684 Jars 250 T-Started 4:38
 (C) First Final Flow 129 Safety Joint 75 T-Open 07:39
 (D) Initial Shut-In 1142 Circ Sub N/C T-Pulled 11:39
 (E) Second Initial Flow 1670 Hourly Standby Watt 1-16-14 T-Out 14:07
 (F) Second Final Flow 200 Mileage 117.80 02:47 2HR Comments _____
 (G) Final Shut-In 1136 Sampler _____
 (H) Final Hydrostatic 2148 Straddle _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 60 Ruined Packer 6" 320
 Final Flow 60 Extra Packer _____
 Final Shut-In 90 Extra Recorder _____
 Day Standby 1d 1.25h Sub Total 41.67
 Accessibility _____ Total 2054.47
 Sub Total 1692.80 MP/DST Disc't _____

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. 54568

Well Name & No. Nancy #1-4 Test No. 5 Date 1-18-14
 Company Murfin Drilling Co. Inc. Elevation 3046 KB 3035 GL
 Address 2500 N. Water Ste. #300 - Wichita, KS 67202
 Co. Rep / Geo. Saman Sharifqie Rig Murfin #22
 Location: Sec. 4 Twp. 13-5 Rge. 32-W Co. Logan State KS

Interval Tested 4448-4534 Zone Tested Pawnee - Ft. Scott
 Anchor Length 86' Drill Pipe Run 4200' Mud Wt. 9.4
 Top Packer Depth 4444 Drill Collars Run 238 Vis 60
 Bottom Packer Depth 4448 Wt. Pipe Run 8 WL 6.0
 Total Depth 4534 Chlorides 3,000 ppm System LCM #6

Blow Description IF B.o.b. in 7min 45 sec.
ISI: Bled off in 2 mins. - 2 3/4 in of Blowback - Died back to 1 3/4 Blowback
FF: B.o.b. in 7 mins.
FSI: Bled off in 2 1/2 mins. B.o.b. in 21 mins - Died back to 7 in of Blowback

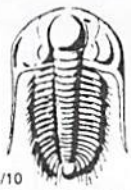
Rec	Feet of	%gas	%oil	%water	%mud
<u>248</u>	<u>90cm</u>	<u>10</u>	<u>40</u>	<u>50</u>	
<u>283</u>	<u>CGO</u>	<u>30</u>	<u>70</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>GIP-599</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total _____ BHT 121 Gravity 30 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2279 Test 1250 T-On Location 5:22
 (B) First Initial Flow 51 Jars 250 T-Started 5:34
 (C) First Final Flow 182 Safety Joint 75 T-Open 08:11
 (D) Initial Shut-In 683 Circ Sub _____ T-Pulled 12:11
 (E) Second Initial Flow 183 Hourly Standby _____ T-Out 15:15
 (F) Second Final Flow 252 Mileage 117.80 Comments _____
 (G) Final Shut-In 659 Sampler _____
 (H) Final Hydrostatic 2240 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1692.80
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1692.80

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55686**

Well Name & No. Nancy #1-4 Test No. 6 Date 1/19/14
 Company Murkin Drilling Co Inc Elevation 3046 KB 3035 GL
 Address 250 N Water Ste 300 Wichita, KS 67202
 Co. Rep / Geo. Suman Sharif Ane Rig Murkin 2 L
 Location: Sec. 4 Twp. 13S Rge. 32W Co. Logan State Ks

Interval Tested 4540 - 4632 Zone Tested Cherokee, Johnson, and Atoka
 Anchor Length 92' Drill Pipe Run 4293 Mud Wt. _____
 Top Packer Depth 4535 Drill Collars Run 238 Vis _____
 Bottom Packer Depth 4540 Wt. Pipe Run 8 WL _____
 Total Depth 4632 Chlorides 2600 ppm System LCM _____

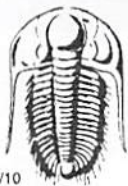
Blow Description IFI 5" blow
ISF: No return
FF: BOB @ 20 min.
FSF: 1 1/2" return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>200</u>	<u>00</u>	<u>40</u>	<u>60</u>		
<u>180</u>	<u>60 CM</u>	<u>20</u>	<u>20</u>	<u>55</u>	
<u>120</u>	<u>60 WCM</u>	<u>10</u>	<u>10</u>	<u>15</u>	<u>65</u>
	<u>335' GIP</u>				
Rec Total	<u>500</u>	BHT	<u>121</u>	Gravity	<u>29</u>

(A) Initial Hydrostatic 2248 Test 1250 T-On Location 0745
 (B) First Initial Flow 44 Jars 250 T-Started 0827
 (C) First Final Flow 166 Safety Joint 75 T-Open 1044
 (D) Initial Shut-In 969 Circ Sub 1/4 T-Pulled 1444
 (E) Second Initial Flow 174 Hourly Standby _____ T-Out 1729
 (F) Second Final Flow 229 Mileage 76 KT 117.80
 (G) Final Shut-In 859 Sampler _____
 (H) Final Hydrostatic 2229 Straddle _____
 Shale Packer _____ Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1692.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1692.80

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55687

Well Name & No. Nancy #1-4 Test No. 7 Date 1/20/14
 Company Murfin Drilling Co, Inc Elevation 3046 KB 3035 GL
 Address 250 N Water Ste 300 Wichita, KS 67202
 Co. Rep / Geo. Suman Sharifare Rig Murfin 22
 Location: Sec. 4 Twp. 13S Rge. 32W Co. Logan State Ks

Interval Tested 4617-4677 Zone Tested Marrow Sand
 Anchor Length 60 Drill Pipe Run 4356 Mud Wt. 9.2
 Top Packer Depth 4612 Drill Collars Run 238 Vis 53
 Bottom Packer Depth 4617 Wt. Pipe Run 0 WL 6.4
 Total Depth 4677 Chlorides 2600 ppm System LCM 6*

Blow Description IF: 3" blow
ISTI: No return
FF: 4" blow
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Oil</u>	<u>100</u>			
<u>40</u>	<u>OCM</u>	<u>25</u>		<u>75</u>	
<u>180</u>	<u>OCM</u>	<u>10</u>	<u>40</u>	<u>50</u>	
	<u>70' GIP</u>				

Rec Total 230 BHT 122 Gravity — API RW .200 @ 49 °F Chlorides 55,000 ppm

(A) Initial Hydrostatic <u>2334</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>2330</u>
(B) First Initial Flow <u>25</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0048</u>
(C) First Final Flow <u>64</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0305</u>
(D) Initial Shut-In <u>1034</u>	<input checked="" type="checkbox"/> Circ Sub <u>4/c</u>	T-Pulled <u>0705</u>
(E) Second Initial Flow <u>71</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0930</u>
(F) Second Final Flow <u>128</u>	<input checked="" type="checkbox"/> Mileage <u>26 RT</u> <u>117.80</u>	Comments
(G) Final Shut-In <u>1004</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2243</u>	<input type="checkbox"/> Straddle	

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total <u>1692.80</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1692.80</u>	

Approved By _____ Our Representative [Signature]

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

Saman Sharifaie Petroleum Geologist

GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY: Martin Drilling Co., Inc. LEASE: Nancy #1-4

FIELD: High Hat LOCATION: 1500' ENL. & 375' TWL. SECT: 4 TWP: 13S RGE: 3W

COUNTY: Logan STATE: Kansas CONTRACTOR: Martin Drilling #22

RTPD: 4/7/01 LITD: 4/7/21 COMPP: 01/22/14 MUD UP: 3300' TYPE MUD: Chemical

SAMPLES SAVED FROM: 3670' TO RTD DRILLING TIME KEPT FROM: 3675' TO RTD

SAMPLES EXAMINED FROM: 3670' TO RTD GEOLOGICAL SUPERVISION FROM: 3370' REFERENCE WELL: MD/C1 - Lanna #1-5

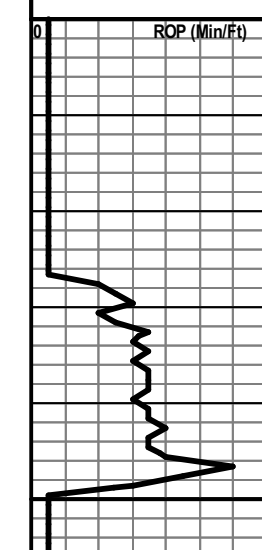
Formation Table with columns: Formation, Sample Tops, E-log Tops, and Strat. Includes formations like Amber, Ambrosia, and Mississippian.

ELEVATIONS: KB 3046'

CASING: CONDUCTOR: 8-5/8" at 2241' SURFACE: 5-1/2" at 4167'

MEASUREMENTS ARE ALL FROM KELLY BUSHING

ELECTRICAL SURVEYS: CND; DIL; MEL; SWIN; Ponder Hertzline

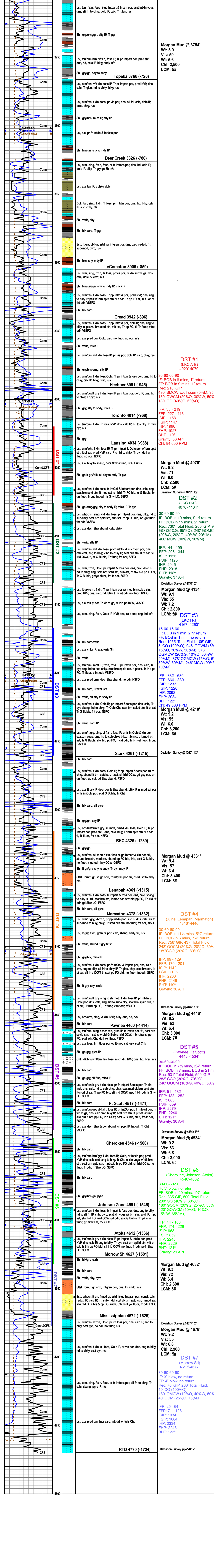


REMARKS: Due to fair to good shows of oil in multiple pay zones and positive DST results, it is recommended and agreed upon by all parties that production casing be set to further evaluate this well.

Respectfully Submitted, Saman Sharifaie, Petroleum Geologist

API #15-109-21238

*Tops have been adjusted to electric logs



Engineering Data section containing DST #1 through DST #7, Morgan Mud @ 3754', 4070', 4134', 4210', 4331', 4434', 4534', 4632', and 4678' with associated fluid properties and test results.

RTD 4770 (-1724)

Nancy #1-4
 Daily Drilling Report
 Page Four

		MDCI Nancy #1-4 1500' FNL 375' FWL Sec. 4-T13S-R32W 3046' KB				MDCI LANA #1-5 1710' FNL 375' FEL Sec. 5-T13S-R32W 3060' KB			
Formation	SampleTops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum	
Anhydrite	2527	+519	+4	2524	+522	+7	2545	+515	
B/Anhydrite	2549	+497	+4	2549	+497	+4	2567	+493	
Topeka	3767	-721	Flat	3766	-720	+1	3781	-721	
Heebner	3990	-944	+1	3991	-945	Flat	4005	-945	
Lansing	4028	-982	+3	4034	-988	-2	4046	-986	
Stark	4259	-1213	+5	4261	-1215	+3	4278	-1218	
BKC	4321	-1275	+6	4325	-1279	+2	4341	-1281	
Pawnee	4460	-1414	+2	4460	-1414	+2	4476	-1416	
Chero Sh	4544	-1498	Flat	4546	-1500	+2	4558	-1498	
Johnson	4588	-1542	+1	4591	-1545	+3	4602	-1542	
Mississippi	4668	-1622	-10	4672	-1626	-14	4672	-1612	
RTD	4770						4770		
LTD				4772			4772		



PO Box 93999
Southlake, TX 76092

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

sect.
Prod-L1

INVOICE

Invoice Number: 140744
Invoice Date: Jan 9, 2014
Page: 1

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	61437	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jan 9, 2014	2/8/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Nancy #1-4		
200.00	CEMENT MATERIALS	Class A Common	17.90	3,580.00
7.00	CEMENT MATERIALS	Chloride	64.00	448.00
210.00	CEMENT SERVICE	Cubic Feet Charge	2.48	520.80
145.20	CEMENT SERVICE	Ton Mileage Charge	2.60	377.52
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
15.00	CEMENT SERVICE	Pump Truck Mileage	7.70	115.50
1.00	CEMENT SERVICE	Swedge Manifold Rental	275.00	275.00
15.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	66.00
1.00	EQUIPMENT OPERATOR	Paul Beaver		
1.00	EQUIPMENT OPERATOR	Tyler Flipse		
1.00	OPERATOR ASSISTANT	Cory Brown		

Handwritten mark

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

\$ 2,413.27 *35%*

ONLY IF PAID ON OR BEFORE
Feb 3, 2014

Subtotal	6,895.07
Sales Tax	308.14
Total Invoice Amount	7,203.21
Payment/Credit Applied	
TOTAL	7,203.21

-2413.27
4789.94

ALLIED OIL & GAS SERVICES, LLC 061437

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Oakley KS

DATE <u>1-9-14</u>	SEC. <u>4</u>	TWP. <u>13</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION <u>9:00 p.m.</u>	JOB START <u>10:00 p.m.</u>	JOB FINISH <u>10:30 p.m.</u>
LEASE <u>Nancy</u>		WELL# <u>1-4</u>	LOCATION <u>Oakley S 12 mi to Gove</u>		COUNTY <u>Logan</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)		Rd 2 mi W S into (Between tank bits)					

CONTRACTOR Murfin 22 OWNER Same

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 226' CEMENT AMOUNT ORDERED 200 sks Com

CASING SIZE 8 5/8 DEPTH 225.77 3% CC

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 13.43 bbl water

EQUIPMENT

PUMP TRUCK # <u>120</u>	CEMENTER <u>Paul Beaver</u>		
BULK TRUCK # <u>566</u>	HELPER <u>Tyler Flipse</u>		
BULK TRUCK # _____	DRIVER <u>Gary Brown / Juan 2 (WS)</u>		
BULK TRUCK # _____	DRIVER _____		

COMMON	<u>200 sks @ 17.90</u>	<u>3580.00</u>
POZMIX	@	
GEL	@	
CHLORIDE	<u>7 sks @ 64.00</u>	<u>448.00</u>
ASC	@	
HANDLING	<u>210 ft³ @ 2.48</u>	<u>520.80</u>
MILBAGE	<u>2.66 tons x 15mi x 2.60</u>	<u>377.52</u>
TOTAL		<u>4926.32</u>

REMARKS:

Mix 200 sks Com 3% CC

Displace w/ water

Cement did circulate

Thank You!
Paul, Tyler
+ Crew

CHARGE TO: Murfin Drlg.

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>226'</u>	
PUMP TRUCK CHARGE		<u>1512.25</u>
EXTRA FOOTAGE	@	
MILBAGE <u>MILV 15</u>	@ <u>7.70</u>	<u>115.50</u>
MANIFOLD <u>swedge</u>	@	<u>275.00</u>
<u>MILV 15</u>	@ <u>4.40</u>	<u>66.00</u>
TOTAL		<u>1968.75</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

To: Allied Oil & Gas Services, LLC.

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

PRINTED NAME KELLY WILSON

SIGNATURE Kelly Wilson

SALES TAX (If Any) _____

TOTAL CHARGES 6,895.07

DISCOUNT 2,413.27 IF PAID IN 30 DAYS

4,481.79 Net.



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

Accty — ac: h12
 α: 6-1

Invoice

DATE	INVOICE #
1/27/2014	25372

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661

USED FOR
APPROVED

103
JR TUM

- Acidizing
- Cement
- Tool Rental

Cement Port Collar

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-4	Nancy	Logan		Oil	Development	Cement Port Collar	Don
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	6.00	480.00
576D-D	Pump Charge - Port Collar - 2524 Feet				1	Job	1,500.00	1,500.00
330	Swift Multi-Density Standard (MIDCON II)				175	Sacks	18.50	3,237.50T
276	Flocele				44	Lb(s)	2.50	110.00T
581D	Service Charge Cement				375	Sacks	2.00	750.00
583D	Drayage				1,492.68	Ton Miles	1.00	1,492.68
	Subtotal							7,570.18
	Sales Tax Logan County						7.65%	256.08

<p>Thank You For Your Business In 2013! We Look Forward To Serving You In 2014!</p>	<p>Total \$7,826.26</p>
---	--------------------------------



Services, Inc.

CHARGE TO: Murkin Dig Co.
ADDRESS

CITY, STATE, ZIP CODE

TICKET 25372

PAGE 1 OF 1

1. SERVICE LOCATIONS <u>Haysville</u>	WELL/PROJECT NO. <u>1-4</u>	LEASE <u>Nancy</u>	COUNTY/PARISH <u>Lopaki</u>	STATE <u>KS</u>	CITY	DATE <u>1-22-14</u>	OWNER
2. <u>Ness City, KS</u>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>CS</u>	RIG NAME/NO.	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>SW/Drakey, KS</u>	ORDER NO.	
3.	WELL TYPE <u>D-1</u>	WELL CATEGORY <u>12 Field</u>	JOB PURPOSE <u>Cement Port Collar</u>	WELL PERMIT NO.	WELL LOCATION		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS <u>@ 25.94'</u>						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		DESCRIPTION	MILEAGE	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT								
575		1			# 113	84	mi			600	50400
576 D		1			Round Charge - cut BH 8 1/2 in	100		25.94	ft.	15000	150000
330		2			SMD Cement	175	cks			1850	323750
276		2			Flocele	74	lbs			250	11000
581		2			Service Charge - Cement	375	cks	37317	lbs	200	75000
583		2			Drayage	80	mi	148.68	mi	100	149268
<p>LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.</p> <p>MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS</p>											
<p>REMIT PAYMENT TO: SWIFT SERVICES, INC. P.O. BOX 466 NESS CITY, KS 67560 785-798-2300</p>											
<p>SURVEY</p> <p>OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? <input type="checkbox"/></p> <p>WE UNDERSTOOD AND MET YOUR NEEDS? <input type="checkbox"/></p> <p>OUR SERVICE WAS PERFORMED WITHOUT DELAY? <input type="checkbox"/></p> <p>WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? <input type="checkbox"/></p> <p>ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND</p>											
<p>PAGE TOTAL 7572118</p> <p>TOTAL 782626</p>											

DATESIGNED 1-22-14 TIME SIGNED 11:00 A.M. P.M.

SWIFT OPERATOR [Signature] APPROVAL [Signature]

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 7-27-14 PAGE NO. 1

CUSTOMER *Mud Hole Co* WELL NO. *1-4* LEASE *Nancy* JOB TYPE *Cement Port Collar* TICKET NO. *25372*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	10:45							IN location - 375 SKS SMD cont Port Collar @ 2524'
	11:30					1200	1200	Tst closed - OK
		3				c	600	Open P.C. est. Rate (Have Blow) Hook to 2 3/8" Htg
		3				1000	1000	H/D ahead
		3	3			1000	600	CIR @ 3 BBI - Start SMD cont.
		3	85			500	500	cont CIR ¹⁶⁰ / ₈₅ (Tail in 15 SKS @ 13 #/gal)
		3	93			400	400	Fin cont 175 SKS total - Displ 8 1/2 BBI
		0	102			600	600	H/D Fin H/D
						c	1200	close P.C + Tst - OK
		3	9 15			400		RIS run to JTs Rev-out 2 plugs - clean
			30			400		Fin rev-out
	12:00							Job Complete Wash up + Rehook TTB
								160 SKS @ 11.2 #/gal - to CIR 15 SKS @ 13 #/gal - Tail in 175 SKS SMD cont used
	1:30							
								Thanks Don, Tom & John J.



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



Invoice

DATE	INVOICE #
1/21/2014	25370

BILL TO
Murfin Drilling Co Inc P. O. Box 130 Hill City, KS 67642-0130

- Acidizing
- Cement
- Tool Rental

UNCLASIFIED / C 103
APPROVED BY JRM

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-4	Nancy	Logan	Company Rig #22	Oil	Development	Cement LongStri...	Don
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	6.00	480.00
578D-L	Pump Charge - Long String - 4767 Feet				1	Job	1,500.00	1,500.00
221	Liquid KCL (Clayfix)				4	Gallon(s)	25.00	100.00T
280	Flocheck 21				500	Gallon(s)	3.00	1,500.00T
290	D-Air				3	Gallon(s)	42.00	126.00T
402-5	5 1/2" Centralizer				15	Each	70.00	1,050.00T
403-5	5 1/2" Cement Basket				2	Each	300.00	600.00T
404-5	5 1/2" Port Collar				1	Each	2,900.00	2,900.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	275.00	275.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	375.00	375.00T
413-5	5 1/2" Roto Wall Scratcher				40	Each	40.00	1,600.00T
419-5	5 1/2" Rotating Head Rental				1	Each	200.00	200.00T
325	Standard Cement				225	Sacks	14.50	3,262.50T
276	Flocele				57	Lb(s)	2.50	142.50T
283	Salt				1,125	Lb(s)	0.20	225.00T
284	Calseal				11	Sack(s)	35.00	385.00T
285	CFR-1				159	Lb(s)	4.50	715.50T
581D	Service Charge Cement				225	Sacks	2.00	450.00
583D	Drayage				941.96	Ton Miles	1.00	941.96
	Subtotal							16,828.46
	Sales Tax Logan County						7.65%	1,029.42

Thank You For Your Business In 2013!
We Look Forward To Serving You In 2014!

Total \$17,857.88



Services, Inc.

CHARGE TO: Miss Pini Doyle, Co.
ADDRESS

CITY, STATE, ZIP CODE

TICKET 25370

PAGE 1 OF 12

SERVICE LOCATIONS

1. Hayes KS WELLS/PROJECT NO. 1-4 LEASE NANCY COUNTY/PARISH LOGAN STATE KS CITY Logansport DATE 1-21-14 OWNER

2. Ness OK, KS TICKET TYPE CONTRACTOR CONTRACTOR Q Rigs RIG NAME/NO. # 22 SHIPPED VIA CT DELIVERED TO Swi/Doyle KS ORDER NO.

3. WELLS TYPE WELL WELL CATEGORY W Field JOB PURPOSE Revent Logging WELLS PERMIT NO. WELL LOCATION

4. REFERRAL LOCATION W Field (Butcher 2534)

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	LOC	ACCT	DF	DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
575		1			MILEAGE #1/3	80 mi				600	48000
578		1			Revent Charge - out Logging	1 ea		4767 ft		15000	15000
281		1			Liquid RCL	4 gal				2500	10000
282		1			Fluorok 21	500 gal				300	150000
290		1			D-Air	3 gal				4200	12600
402		1			Controlizers	15 ea		5 1/2 in		7000	105000
403		1			Cement Baskets	2 ea		5 1/2 in		30000	60000
404		1			Part Alias	1 ea		5 1/2 in		28000	28000
406		1			Letin Drive Plug & BATH	1 ea		5 1/2 in		27500	27500
407		1			Insect Etabatone 10/571-40	1 ea		5 1/2 in		37500	37500
413		1			Q&A 4000 Sinterballs	200 ea		4000		4000	160000
419		1			Rotating Head Reels	1 ea		5 1/2 in		20000	20000

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X DATE SIGNED 1-21-14 TIME SIGNED 1:30 A.M. P.M.

Black King

REMIT PAYMENT TO:

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	AMOUNT
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				10	706.00
WE UNDERSTOOD AND MET YOUR NEEDS?				6	122.46
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				16	888.46
WE OPERATED THE EQUIPMENT AND PERFORMED JOB SATISFACTORILY?				10	29.42
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO		TOTAL	17,857.88

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR Ken Sumner APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 1-21-14 PAGE NO. 1

CUSTOMER *Murphy Drilling Co.*

WELL NO. 1-4

LEASE *Nancy*

JOB TYPE *Cement Lining*

TICKET NO. 25370

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1245					15.5 #/ft	5 1/2	TO 4770' ON location - Rig L.O. D.P. <i>(Plot Equip)</i>
	1500							D.P. Laid Down - Change over
	1610							Start 5 1/2 15 #/ft casing to 4760'
								Insert float shoe w/ Auto-CAD
								L.O. Bottle - 55 - 19 1/2' @ 4747 1/2' <i>(113)</i>
								200' Bto Wall Scrubbers
								Port 1 - thru 14 x 53 Bkt. Pinned 53654
								Port Collar @ 2524' #54 Collar
	1710							CIR @ #60 - 30 min
	1740							Drop ball 60 lbs out
	1820							Tag & Lay down Finish run casing
	1845							start CIR / Rotate -
	1945							Fin CIR -
	1950	6	15				300	Pump Pump 15 BBL KCL flush
		5	12				250	Pump 500 gal Fto check
		5	5				250	Pump 5 BBL KCL spacer
		4 1/2					200	Start 175 gals EHC out
		4	42				1/2	Fin out - Wash out pump & lines
		9						Drop L.O. Plug
		8/7	85				300	Start Displ
		7/6	112				400	Caught 1/2 BBL press - slow rate
							1100	lost CIR press
	2030		113				1100	Pump Down - Hold
	2035							Release - Hold
	2045		7/5					Plug 24-30 gals out / 14 ft 20 gals out
	2100							Job Complete
								Wash up & Reelup

John J. Jaun R.
 John J. Jaun R.