



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1199792
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: _____

1199792

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: Yes No

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Holle Trust 1-22
Doc ID	1199792

All Electric Logs Run

Dual Induction
Dual Compensated
Microresistivity
Borehole Compensated



DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Robert Hendrix

Holle Trust #1-22

22/4s/31w Rawlins KS

Start Date: 2014.02.25 @ 17:02:00

End Date: 2014.02.26 @ 01:45:30

Job Ticket #: 53485 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.03 @ 15:33:54



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Robert Hendrix

22/4s/31w Rawlins KS

Holle Trust #1-22

Job Ticket: 53485 **DST#: 1**
 Test Start: 2014.02.25 @ 17:02:00

GENERAL INFORMATION:

Formation: **Toronto - Lans. "B"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:29:00
 Time Test Ended: 01:45:30
 Interval: **3870.00 ft (KB) To 3952.00 ft (KB) (TVD)**
 Total Depth: 3952.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 2871.00 ft (KB)
 2860.00 ft (CF)
 KB to GR/CF: 11.00 ft

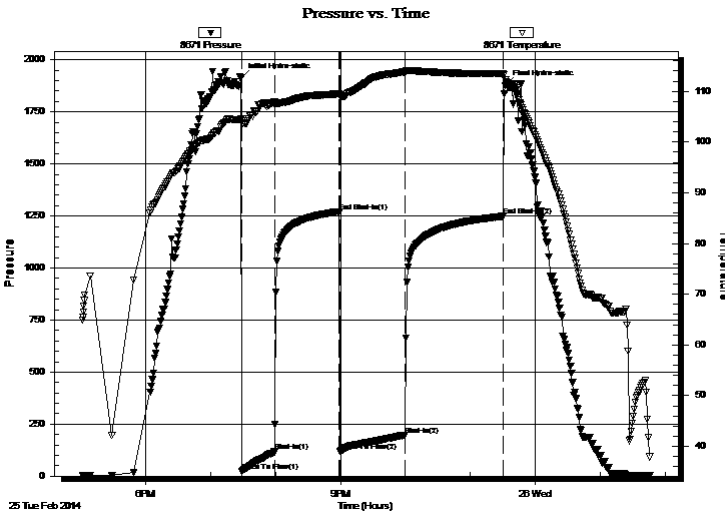
Serial #: 8671

Inside

Press@RunDepth: 197.17 psig @ 3871.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.02.25 End Date: 2014.02.26 Last Calib.: 2014.02.26
 Start Time: 17:02:05 End Time: 01:45:30 Time On Btm: 2014.02.25 @ 19:28:45
 Time Off Btm: 2014.02.25 @ 23:33:00

TEST COMMENT: 30 - IF: 1/2" Blow at open, built to 10" (Diesel in bucket)
 60 - IS: No blow back
 60 - FF: Blow built to BOB (11") at 40 min.
 90 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1914.50	104.70	Initial Hydro-static
1	22.63	103.81	Open To Flow (1)
31	117.35	107.85	Shut-In(1)
90	1270.85	109.51	End Shut-In(1)
91	118.96	109.14	Open To Flow (2)
151	197.17	113.84	Shut-In(2)
242	1248.46	113.49	End Shut-In(2)
245	1883.18	111.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
177.00	MCW 84%w, 16%m	0.87
59.00	MW 54%w, 46%m	0.29
124.00	WCM 90%m, 10%w	1.46
40.00	WM 56%m, 44%w	0.56

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Robert Hendrix

22/4s/31w Rawlins KS
Holle Trust #1-22
Job Ticket: 53485 **DST#: 1**
Test Start: 2014.02.25 @ 17:02:00

Tool Information

Drill Pipe:	Length: 3596.00 ft	Diameter: 3.80 inches	Volume: 50.44 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: 267.00 ft	Diameter: 2.25 inches	Volume: 1.31 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 51.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3870.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	110.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3847.00	
Hydraulic tool	5.00			3852.00	
Jars	5.00			3857.00	
Safety Joint	3.00			3860.00	
Packer	5.00			3865.00	28.00 Bottom Of Top Packer
Packer	5.00			3870.00	
Stubb	1.00			3871.00	
Recorder	0.00	8671	Inside	3871.00	
Recorder	0.00	8320	Outside	3871.00	
Perforations	15.00			3886.00	
Blank Spacing	62.00			3948.00	
Perforations	1.00			3949.00	
Bullnose	3.00			3952.00	82.00 Bottom Packers & Anchor

Total Tool Length: 110.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Robert Hendrix

22/4s/31w Rawlins KS
Holle Trust #1-22
Job Ticket: 53485 **DST#: 1**
Test Start: 2014.02.25 @ 17:02:00

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:	39000 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.97 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1300.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
177.00	MCW 84%w , 16%m	0.870
59.00	MW 54%w , 46%m	0.290
124.00	WCM 90%m, 10%w	1.457
40.00	WM 56%m, 44%w	0.561

Total Length: 400.00 ft Total Volume: 3.178 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: RW = .234 ohms @ 56.5 deg F
Chlorides = 39,000 ppm

Serial #: 8671

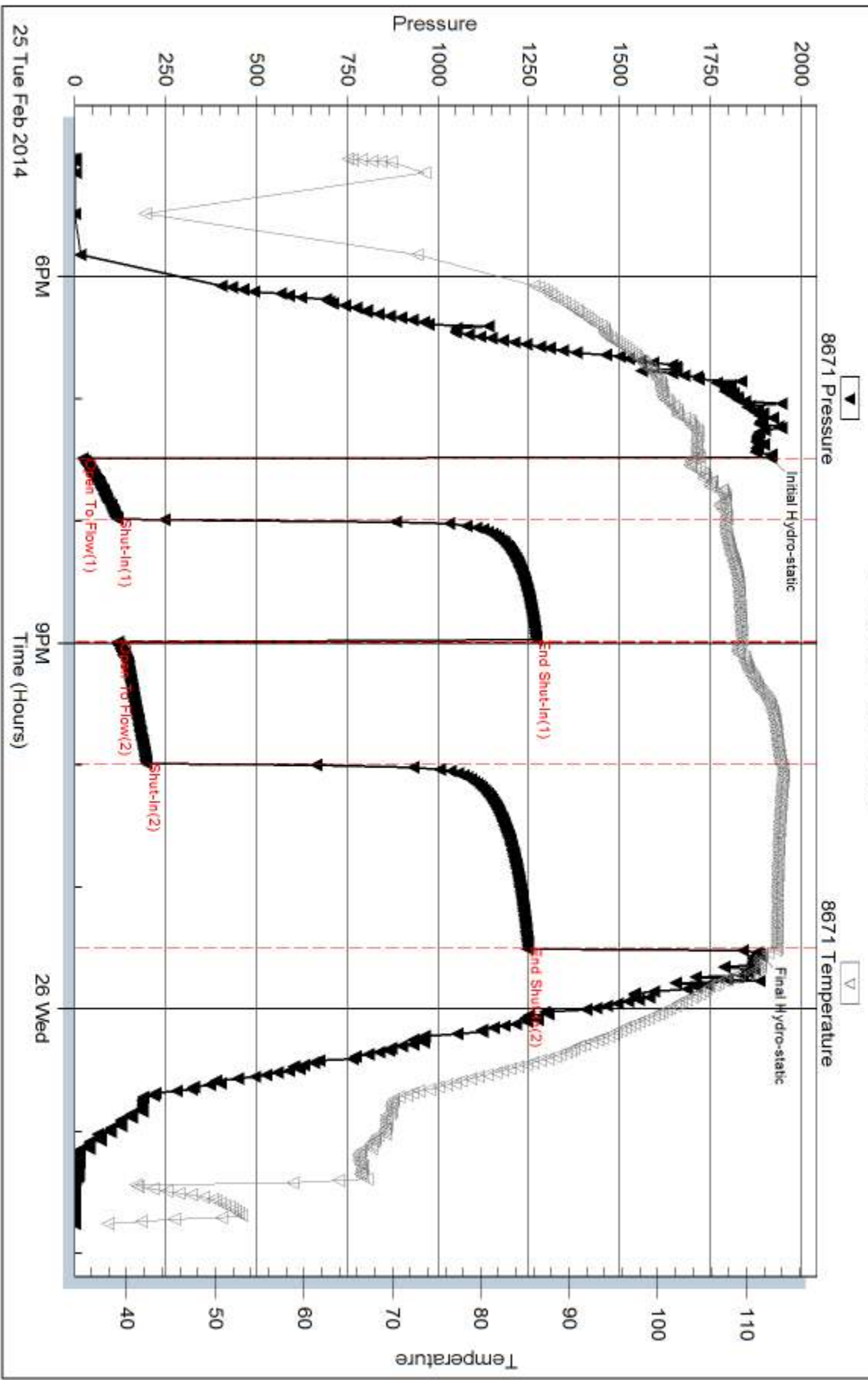
Inside

Murfin Drilling Co., Inc

Holle Trust #1-22

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 53485

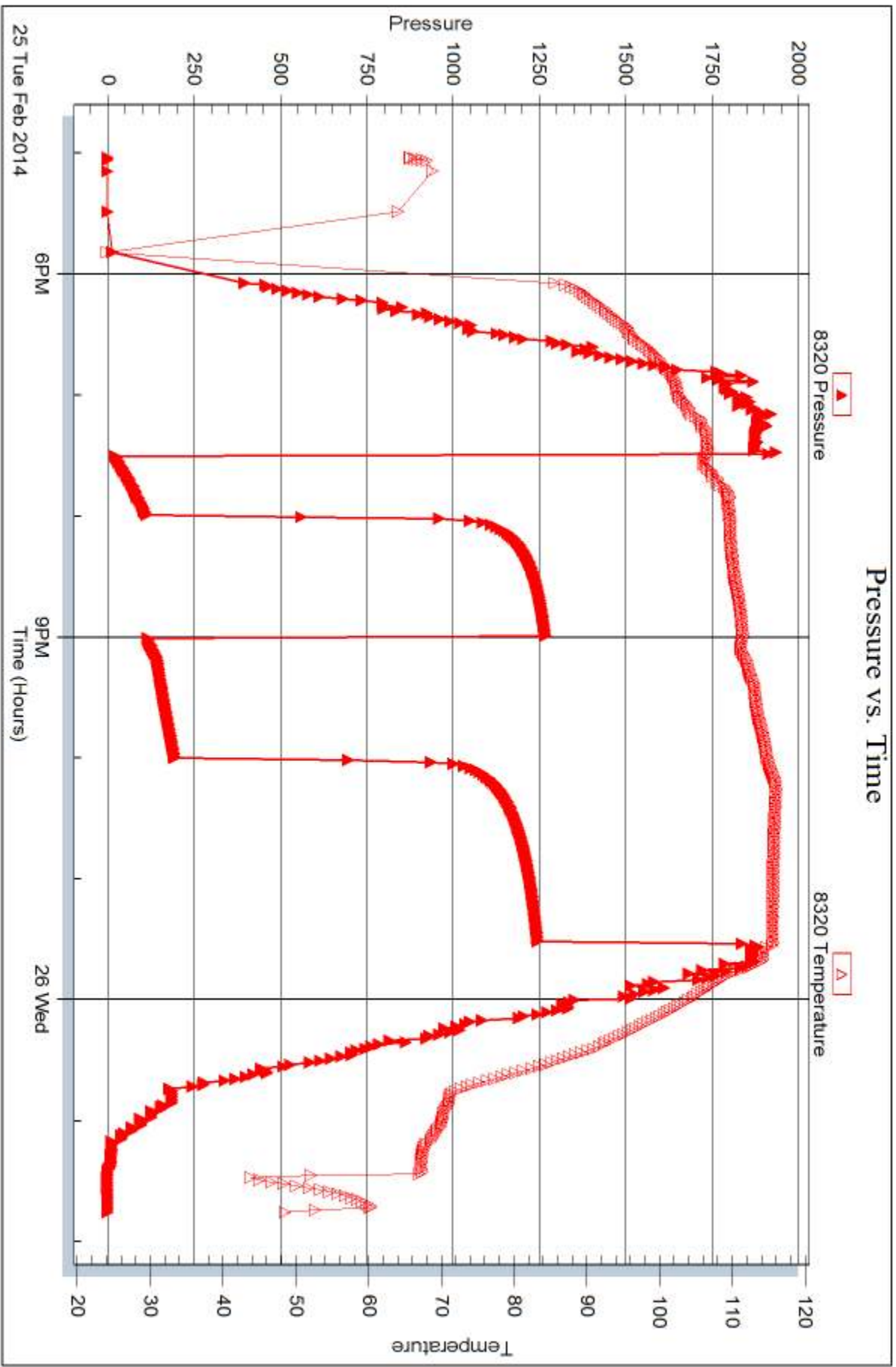
Printed: 2014.03.03 @ 15:33:57

Serial #: 8320

Outside Murfin Drilling Co., Inc

Holle Trust #1-22

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 53485

Printed: 2014.03.03 @ 15:33:57



DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Robert Hendrix

Holle Trust #1-22

22/4s/31w Rawlins KS

Start Date: 2014.02.26 @ 12:30:00

End Date: 2014.02.26 @ 18:54:00

Job Ticket #: 53486 DST #: 2

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

Printed: 2014.03.03 @ 15:33:14



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Robert Hendrix

22/4s/31w Rawlins KS

Holle Trust #1-22

Job Ticket: 53486 **DST#: 2**
 Test Start: 2014.02.26 @ 12:30:00

GENERAL INFORMATION:

Formation: **LKC "E - F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:07:30
 Time Test Ended: 18:54:00
 Interval: **3967.00 ft (KB) To 3993.00 ft (KB) (TVD)**
 Total Depth: 3993.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 2871.00 ft (KB)
 2860.00 ft (CF)
 KB to GR/CF: 11.00 ft

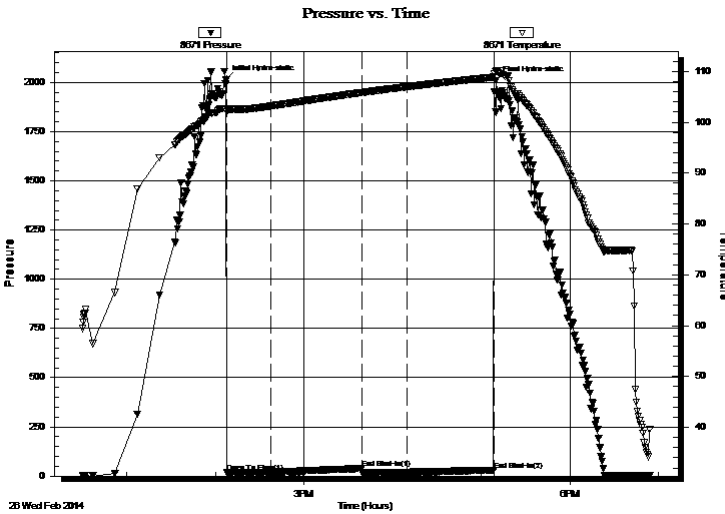
Serial #: 8671

Inside

Press@RunDepth: 20.11 psig @ 3968.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.02.26 End Date: 2014.02.26 Last Calib.: 2014.02.26
 Start Time: 12:30:05 End Time: 18:53:59 Time On Btm: 2014.02.26 @ 14:07:15
 Time Off Btm: 2014.02.26 @ 17:10:00

TEST COMMENT: 30 - IF: Blow built to 1/4", died back, dead at 20 min.
 60 - IS!: No blow back
 30 - FF: No blow
 60 - FS!: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2012.95	102.50	Initial Hydro-static
1	18.72	101.99	Open To Flow (1)
30	20.04	103.15	Shut-In(1)
92	39.39	105.83	End Shut-In(1)
93	19.87	105.84	Open To Flow (2)
123	20.11	106.96	Shut-In(2)
182	29.87	108.86	End Shut-In(2)
183	2008.40	110.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud w/oil spots 97%m, 3%o	0.01

* 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
250 N. Water Suite 300
Wichita, KS 67202
ATTN: Robert Hendrix

22/4s/31w Rawlins KS
Holle Trust #1-22
Job Ticket: 53486 **DST#: 2**
Test Start: 2014.02.26 @ 12:30:00

Tool Information

Drill Pipe:	Length: 3690.00 ft	Diameter: 3.80 inches	Volume: 51.76 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: 267.00 ft	Diameter: 2.25 inches	Volume: 1.31 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 53.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3967.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3944.00	
Hydraulic tool	5.00			3949.00	
Jars	5.00			3954.00	
Safety Joint	3.00			3957.00	
Packer	5.00			3962.00	28.00 Bottom Of Top Packer
Packer	5.00			3967.00	
Stubb	1.00			3968.00	
Recorder	0.00	8671	Inside	3968.00	
Recorder	0.00	8320	Outside	3968.00	
Perforations	22.00			3990.00	
Bullnose	3.00			3993.00	26.00 Bottom Packers & Anchor

Total Tool Length: 54.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc

22/4s/31w Rawlins KS

250 N. Water Suite 300
Wichita, KS 67202

Holle Trust #1-22

Job Ticket: 53486

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.02.26 @ 12:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud w /oil spots 97%m, 3%o	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8671

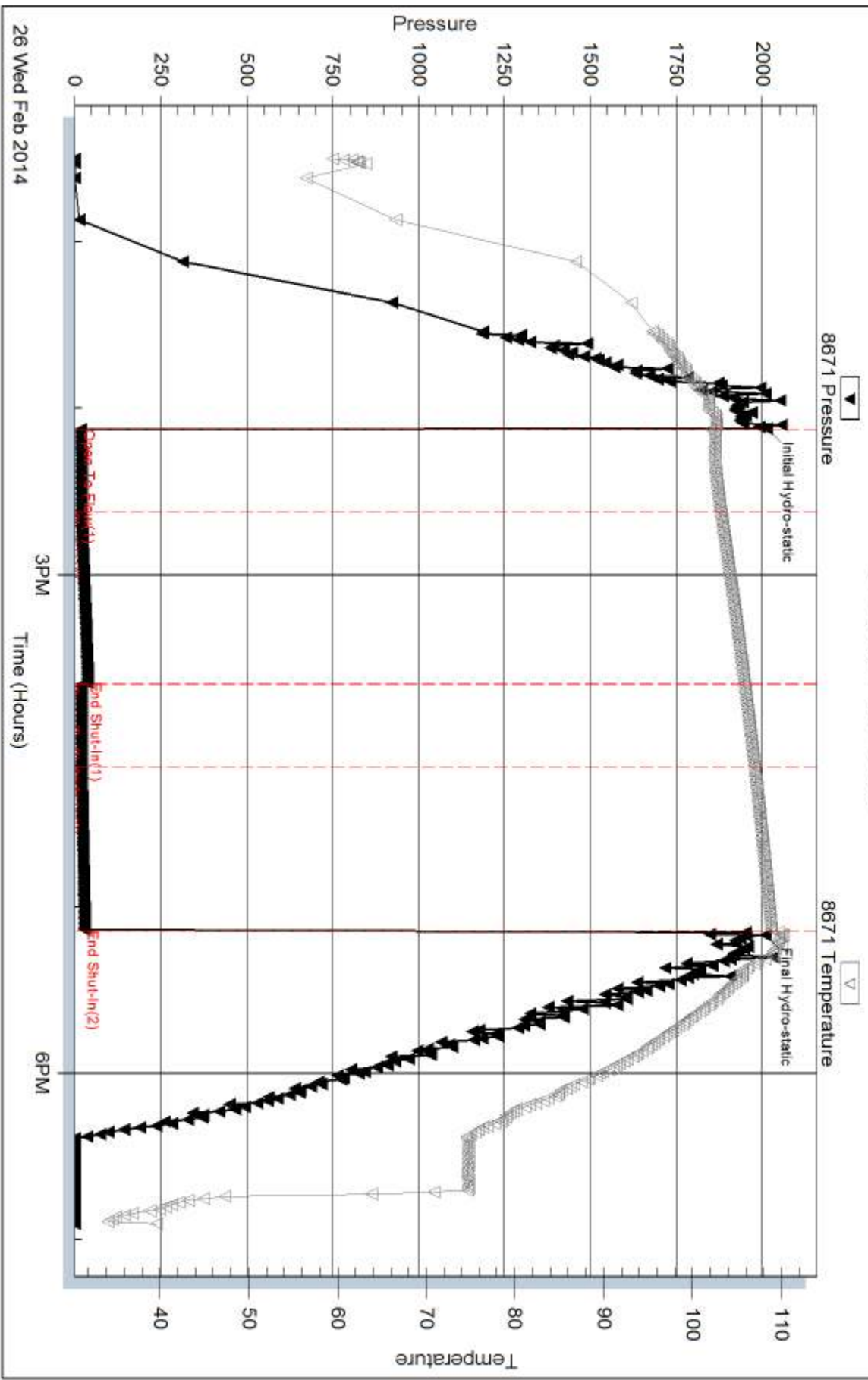
Inside

Murfin Drilling Co., Inc

Holle Trust #1-22

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 53486

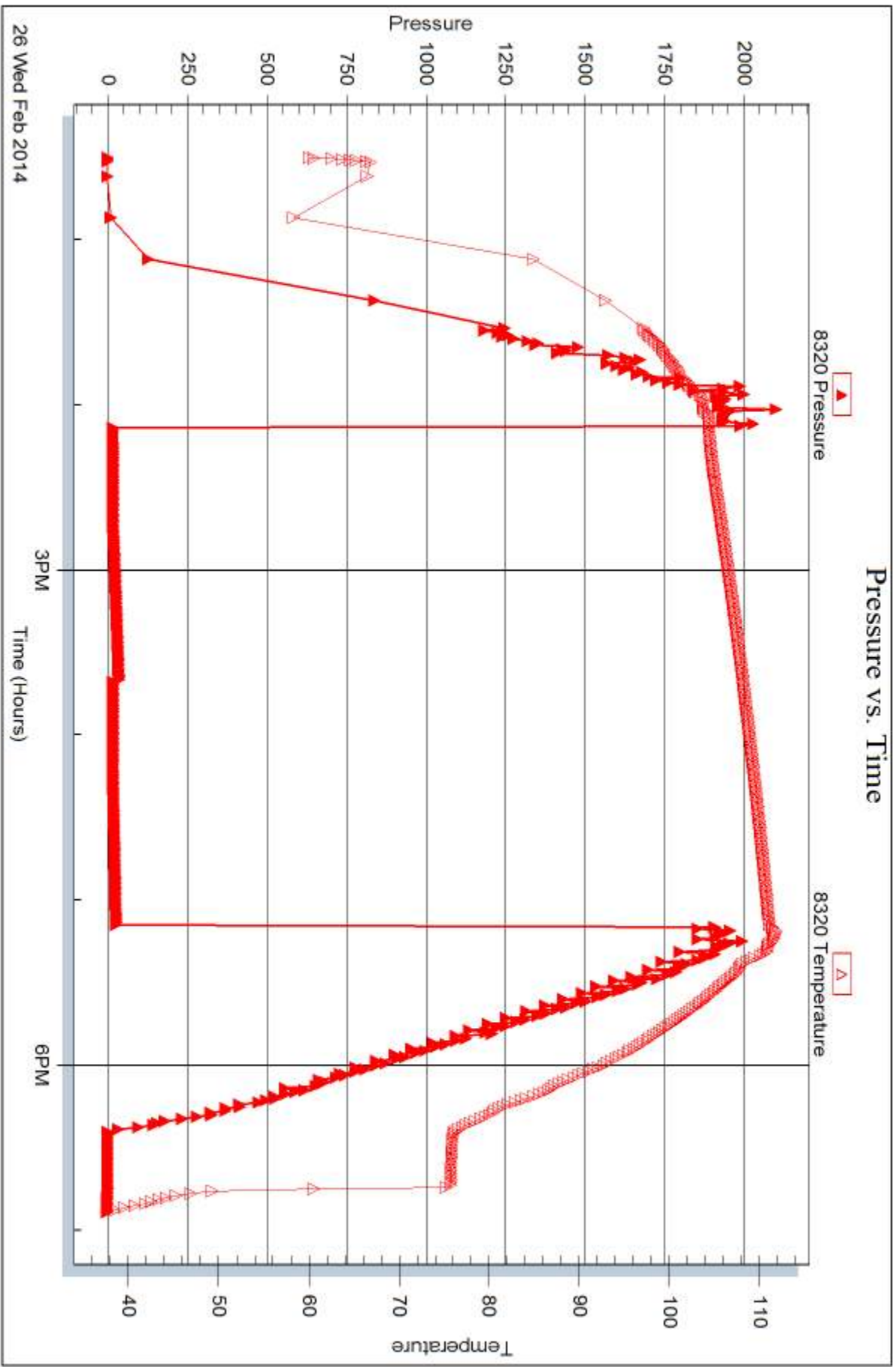
Printed: 2014.03.03 @ 15:33:16

Serial #: 8320

Outside Murfin Drilling Co., Inc

Hole Trust #1-22

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 53486

Printed: 2014.03.03 @ 15:33:17



DRILL STEM TEST REPORT

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

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Robert Hendrix

Holle Trust #1-22

22/4s/31w Rawlins KS

Start Date: 2014.02.27 @ 07:43:00

End Date: 2014.02.27 @ 15:12:15

Job Ticket #: 53487 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.03 @ 15:32:26

Murfin Drilling Co., Inc

22/4s/31w Rawlins KS

Holle Trust #1-22

DST # 3

LKC "G - J"

2014.02.27



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Robert Hendrix

22/4s/31w Rawlins KS

Holle Trust #1-22

Job Ticket: 53487

DST#: 3

Test Start: 2014.02.27 @ 07:43:00

GENERAL INFORMATION:

Formation: **LKC "G - J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:16:30
 Time Test Ended: 15:12:15
 Interval: **4000.00 ft (KB) To 4085.00 ft (KB) (TVD)**
 Total Depth: 4085.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 2871.00 ft (KB)
 2860.00 ft (CF)
 KB to GR/CF: 11.00 ft

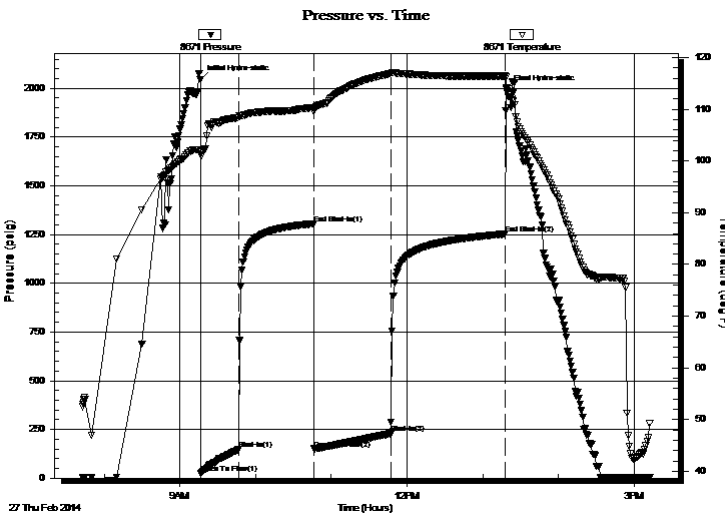
Serial #: 8671

Inside

Press@RunDepth: 228.26 psig @ 4001.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.02.27 End Date: 2014.02.27 Last Calib.: 2014.02.27
 Start Time: 07:43:05 End Time: 15:12:14 Time On Btm: 2014.02.27 @ 09:16:15
 Time Off Btm: 2014.02.27 @ 13:19:00

TEST COMMENT: 30 - IF: Blow built to BOB (11") at 28 min.
 60 - IS: No blow back
 60 - FF: Blow built to BOB at 32 min.
 90 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2043.30	101.83	Initial Hydro-static
1	25.31	101.15	Open To Flow (1)
31	147.83	108.43	Shut-In(1)
90	1304.97	110.32	End Shut-In(1)
91	150.25	110.08	Open To Flow (2)
151	228.26	116.95	Shut-In(2)
242	1252.43	116.44	End Shut-In(2)
243	1995.07	114.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
236.00	MCW 89%w, 11%m	1.16
219.00	WM 52%m, 48%w	2.79

* 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

22/4s/31w Rawlins KS

250 N. Water Suite 300
Wichita, KS 67202

Holle Trust #1-22

Job Ticket: 53487

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.02.27 @ 07:43:00

Tool Information

Drill Pipe:	Length: 3721.00 ft	Diameter: 3.80 inches	Volume: 52.20 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: 267.00 ft	Diameter: 2.25 inches	Volume: 1.31 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 53.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4000.00 ft			Final 68000.00 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:

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

Shut In Tool	5.00			3977.00	
Hydraulic tool	5.00			3982.00	
Jars	5.00			3987.00	
Safety Joint	3.00			3990.00	
Packer	5.00			3995.00	28.00 Bottom Of Top Packer
Packer	5.00			4000.00	
Stubb	1.00			4001.00	
Recorder	0.00	8671	Inside	4001.00	
Recorder	0.00	8320	Outside	4001.00	
Perforations	15.00			4016.00	
Blank Spacing	64.00			4080.00	
Perforations	2.00			4082.00	
Bullnose	3.00			4085.00	85.00 Bottom Packers & Anchor

Total Tool Length: 113.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc

22/4s/31w Rawlins KS

250 N. Water Suite 300
Wichita, KS 67202

Holle Trust #1-22

Job Ticket: 53487

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.02.27 @ 07:43:00

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:

55000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
236.00	MCW 89%w, 11%m	1.161
219.00	WM 52%m, 48%w	2.790

Total Length: 455.00 ft Total Volume: 3.951 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .162 ohms @ 63.1 deg F

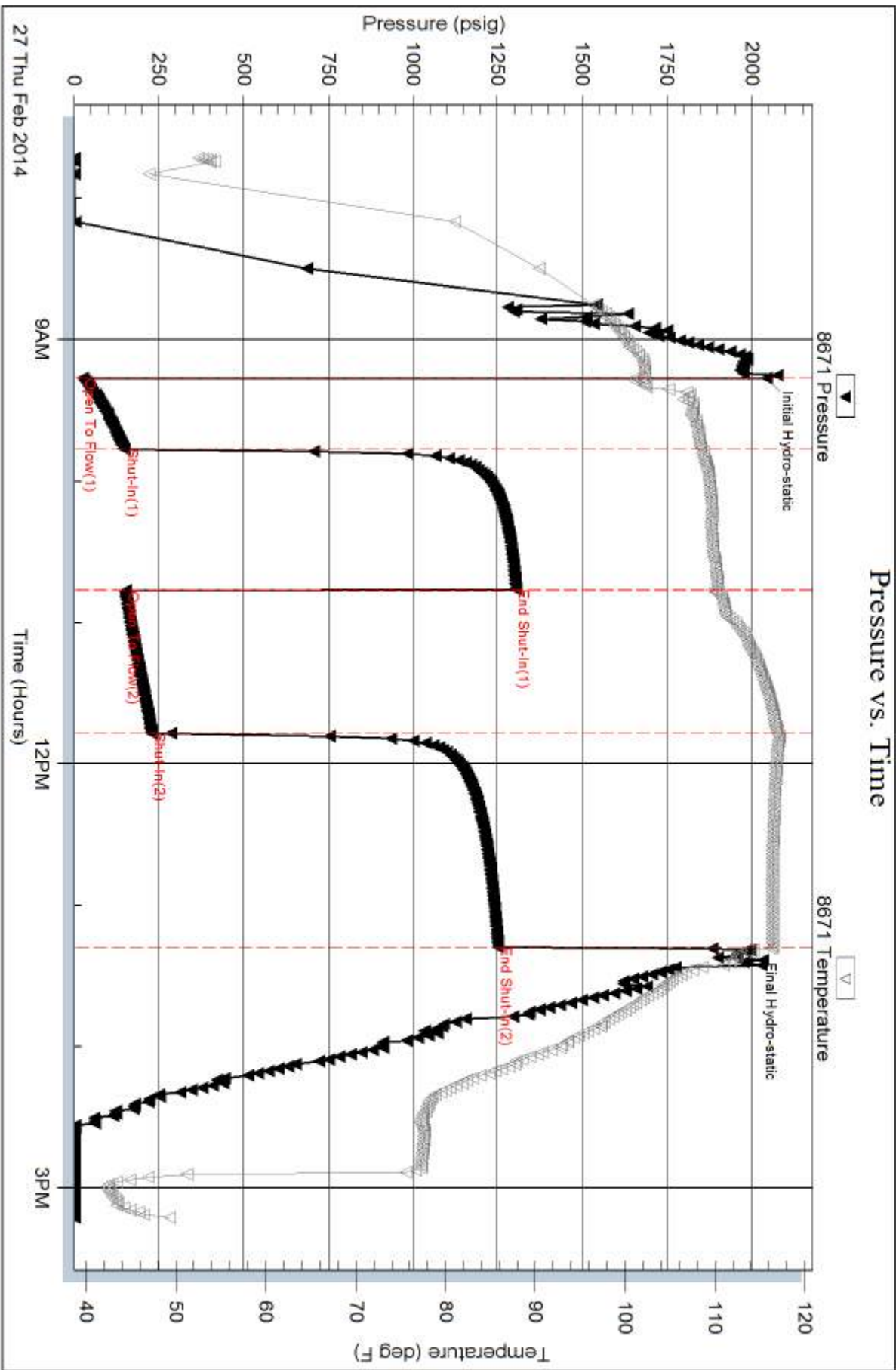
Serial #: 8671

Inside

Murfin Drilling Co., Inc

Holle Trust #1-22

DST Test Number: 3

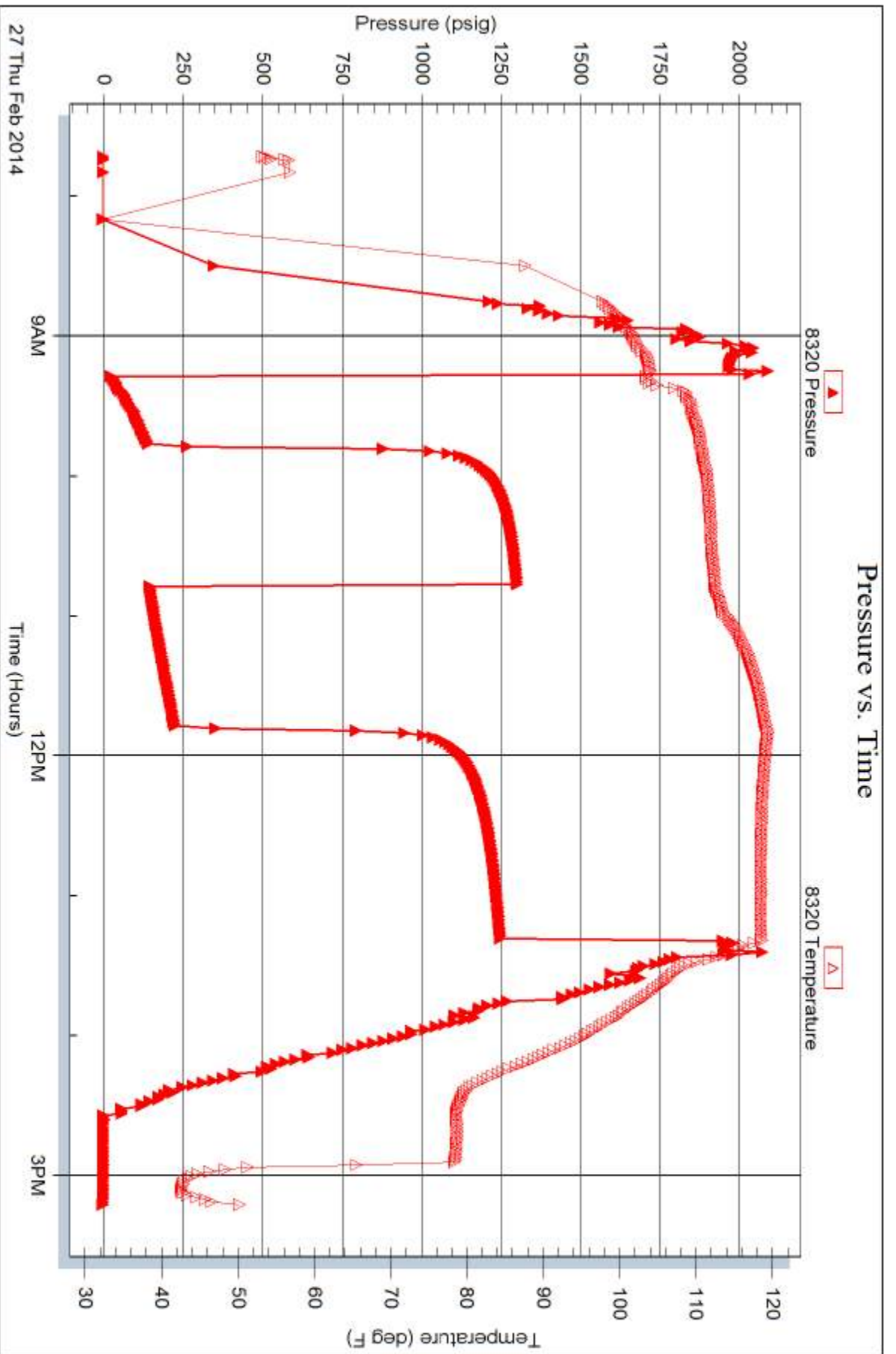


Serial #: 8320

Outside Murfin Drilling Co., Inc

Holle Trust #1-22

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 53487

Printed: 2014.03.03 @ 15:32:29



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53485

4/10

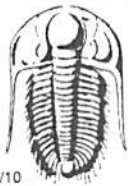
Well Name & No. Holle Trust #1-22 Test No. 1 Date 2-25-14
 Company Murfin Drilling Co., Inc Elevation 2871 KB 2860 GL
 Address 250 N Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 22 Twp. 4 S Rge. 31w Co. Rawlins State KS

Interval Tested 3870 - 3952 Zone Tested Toronto - Lans. "B"
 Anchor Length 82 Drill Pipe Run 3596 Mud Wt. 9.1
 Top Packer Depth 3865 Drill Collars Run ~~2000~~ 267 Vis 58
 Bottom Packer Depth 3870 Wt. Pipe Run - WL 6.0
 Total Depth 3952 Chlorides 1300 ppm System LCM 8
 Blow Description IF: 1/2" Blow at open, built to 10" (Diesel in bucket)
ISI: No blowback
FF: Blow built to BOB (11") at 40 min.
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>wm</u>		<u>44</u>	<u>56</u>	
<u>124</u>	<u>wcm</u>		<u>10</u>	<u>90</u>	
<u>59</u>	<u>mw</u>		<u>54</u>	<u>46</u>	
<u>177</u>	<u>mcw</u>		<u>84</u>	<u>16</u>	
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 400 BHT 113 Gravity - API RW .234 @ 56.5° F Chlorides 39,000 ppm
 (A) Initial Hydrostatic 1915 Test ★ 1150 T-On Location 16:00 7/25
 (B) First Initial Flow 23 Jars ★ 250 T-Started 17:02
 (C) First Final Flow 117 Safety Joint ★ 75 T-Open 19:29
 (D) Initial Shut-In 1271 Circ Sub T-Pulled 23:30
 (E) Second Initial Flow 119 Hourly Standby T-Out 1:40 7/26
 (F) Second Final Flow 197 Mileage 48RT 74.40 Comments _____
 (G) Final Shut-In 1248 Sampler _____
 (H) Final Hydrostatic 1883 Straddle _____
 Initial Open 30 Shale Packer _____
 Initial Shut-In 60 Extra Packer _____
 Final Flow 60 Extra Recorder _____
 Final Shut-In 90 Day Standby _____
 Accessibility _____
 Sub Total 1549.40 MP/DST Disc't _____

Approved By _____ Our Representative James Winder
 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. 53486

4/10

Well Name & No. Holle Trust #1-22 Test No. 2 Date 2-26-14
 Company Murfin Drilling Co. Inc. Elevation 2871 KB 2860 GL
 Address 250 N Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 22 Twp. 4s Rge. 31w Co. Rawlins State KS

Interval Tested 3967 - 3993 Zone Tested Lans. "E-F"
 Anchor Length 26 Drill Pipe Run 3690 Mud Wt. 9.3
 Top Packer Depth 3962 Drill Collars Run 267 Vis 56
 Bottom Packer Depth 3967 Wt. Pipe Run - WL 5.2
 Total Depth 3993 Chlorides 1500 ppm System LCM 7

Blow Description IF: Blow built to 1/4" died back, dead at 20min.
ISI: No blowback
FF: No blow
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>mud w/oil spots</u>	<u>-</u>	<u>3</u>	<u>-</u>	<u>97</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

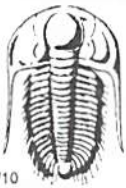
Rec Total 2 BHT 109 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 2013 Test * 1150 T-On Location 11:45
 (B) First Initial Flow 19 Jars * 250 T-Started 12:30
 (C) First Final Flow 20 Safety Joint * 75 T-Open 14:07
 (D) Initial Shut-In 39 Circ Sub T-Pulled 17:08
 (E) Second Initial Flow 20 Hourly Standby T-Out 18:50
 (F) Second Final Flow 20 Mileage 48RT 74.40 Comments _____
 (G) Final Shut-In 30 Sampler _____
 (H) Final Hydrostatic 2008 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 60 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1549.40
 Final Shut-In 60 Accessibility _____ MP/DST Disc't _____
 Sub Total 1549.40

Approved By Rh D. Shif Our Representative James Winder

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. 53487

Well Name & No. Halle Trust #1-22 Test No. 3 Date 2-27-14
 Company Murfin Drilling Co., Inc Elevation 2871 KB 2860 GL
 Address 250 N. Water Suite 300 Wichita, KS 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 22 Twp. 4s Rge. 3lw Co. Rawlins State KS

Interval Tested 4000 - 4085 Zone Tested Lans "E-J"
 Anchor Length 85 Drill Pipe Run 3721 Mud Wt. 9.2
 Top Packer Depth 3995 Drill Collars Run 267 Vis 57
 Bottom Packer Depth 4000 Wt. Pipe Run - WL 5.2
 Total Depth 4085 Chlorides 1500 ppm System LCM 8.0

Blow Description IF: Blow built to BOB (11") at 28 min.
ISI: No blowback
FF: Blow built to BOB at 32 min.
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>219</u>	<u>WM</u>	-	-	<u>48</u>	<u>52</u>
<u>236</u>	<u>mcw</u>	-	-	<u>89</u>	<u>11</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 455 BHT 116 Gravity - API RW .162 @ 61.3 °F Chlorides 55,000 ppm

(A) Initial Hydrostatic 2043 Test * 1250 T-On Location 7:20
 (B) First Initial Flow 25 Jars * 250 T-Started 7:43
 (C) First Final Flow 148 Safety Joint * 75 T-Open 9:16
 (D) Initial Shut-In 1305 Circ Sub T-Pulled 13:17
 (E) Second Initial Flow 150 Hourly Standby T-Out 15:05
 (F) Second Final Flow 228 Mileage 48 RTx2 148.80 Comments Tools loaded 22:30
 (G) Final Shut-In 1252 Sampler 2/28
 (H) Final Hydrostatic 1995 Straddle Ruined Shale Packer

Initial Open 30 Ruined Packer * 320
 Initial Shut-In 60 Extra Copies
 Final Flow 60 Extra Recorder Sub Total 0
 Final Shut-In 90 Day Standby * 1d 7.5h Total 2043.80
 Accessibility MP/DST Disc't
 Sub Total 1723.80

Approved By [Signature] Our Representative James Winder

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.

Holle Trust #1-22
 Daily Drilling Report
 Page Two

- 2/27/14 Depth 4085'. Cut 111'. DT: None. CT: 18¼ hrs. Dev.: None. **DST #2 3967-3993' (LKC D'-F):** 30-60-30-60. IF: blw built to ¼", died back, dead @ 20mins. FF: no blw. Rec.: 2'M w/oil spts (97%M, 3%O). HP: 2013-2008. FP: 19/20, 20/20. SIP: 30-30. BHT: 109°. **LKC G:** lst, f-mxln, sl chalky, oolitic in part, foss, 10% sample, fr interxln por, black spotty to sat stain, slsfo, fr odor. **LKC H:** lst, fxln, chalky, oolitic in part, no vis por, ns. **LKC J:** lst, fxln sl chalky, mostly dense, sl oolitic in part, 1% sample, sl vug por, lt spotty stain, v- slsfo, faint odor. **DST #3 4000-4085 (LKC G-J):** 30-60-60-90. IF: blw built to BOB (11") @ 28mins. FF: blw built to BOB @ 32mins. Rec.: 236'MCW (89%W, 11%M), 219WM (52%M, 48%W). HP: 2043-1995. FP: 25/148, 150/228. SIP: 1305-1252. BHT: 116°.
- 2/28/14 Depth 4259'. Cut 174'. DT: None. CT: 13½ hrs. Dev.: None.
- 3/1/14 RTD 4522'. Cut 263'. DT: None. CT: 11hrs. Dev.: 1° @ 4522'. HC @ 11:00PM 2/28. Pioneer started logging @ 5:00AM. LTD 4524'.
- 3/2/14 RTD: 4522'. CT: 15½ hrs. Pioneer finished logging @ 9:30AM 3/1. Allied plugged hole as follows using 60/40Poz, 4%Gel, ¼#Flo seal, 25sxs @ 2650', 100sxs @ 1850', 40sxs @ 275', 10sxs @ 40', 30sxs RH, 15sxs MH. Started @ 4:00PM Compl @ 6:30PM 3/1. Orders Darrell Dipman KCC Hays. RR @ 10:30PM 3/1. FINAL REPORT.

		Holle Trust #1-22 1800' FNL 405' FEL Sec. 22-4S-31W 2871' KB					Alex #1-23 660' FSL 900' FWL Sec. 23-4S-31W 2939' KB		
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum	
Anhydrite	2633	+238	-7	2637	+234	-11	2694	+245	
B/Anhydrite	2667	+204	-7	2670	+201	-10	2728	+211	
Topeka	3706	-835	-14	3710	-839	-18	3760	-821	
Heebner	3881	-1010	-23	3873	-1002	-15	3926	-987	
Lansing	3916	-1045	-12	3920	-1049	-16	3972	-1033	
Stark	4085	-1214	-15	4087	-1216	-17	4138	-1199	
BKC	4136	-1265	-16	4134	-1263	-14	4188	-1249	
Pawnee	4249	-1378	-16	4247	-1376	-14	4301	-1362	
Cherokee	4333	-1462	-13	4332	-1461	-12	4388	-1449	
Mississippi	4452	-1581	-16	4451	-1580	-15	4504	-1565	
RTD	4522						4598		
LTD				4524			4602		



PO Box 93999
Southlake, TX 76092

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

Prod-LH

INVOICE

Invoice Number: 141499
Invoice Date: Feb 22, 2014
Page: 1

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	62221	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Feb 22, 2014	3/24/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Holls Trust #1-22		
190.00	CEMENT MATERIALS	Class A Common	17.90	3,401.00
11.00	CEMENT MATERIALS	Chloride	64.00	704.00
199.50	CEMENT SERVICE	Cubic Feet Charge	2.48	494.76
446.50	CEMENT SERVICE	Ton Mileage Charge	2.60	1,160.90
1.00	CEMENT SERVICE	Surface	1,512.75	1,512.75
50.00	CEMENT SERVICE	Pump Truck Mileage	7.70	385.00
50.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	220.00
1.00	CEMENT SUPERVISOR	Kelly Gabel		
1.00	EQUIPMENT OPERATOR	Wayne McGhghy		

Subtotal	7,878.41
Sales Tax	324.30
Total Invoice Amount	8,202.71
Payment/Credit Applied	
TOTAL	8,202.71

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

\$ 2,757.44 *25%*

ONLY IF PAID ON OR BEFORE
Mar 19, 2014

-2757.44
5445.27
OK MSR



PO Box 93999
Southlake, TX 76092

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

INVOICE

Invoice Number: 141757
Invoice Date: Mar 1, 2014
Page: 1

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	62004	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Mar 1, 2014	3/31/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Holle Trust 1-22, Section 22, Township 4 South, Range 31W		
132.00	CEMENT MATERIALS	Class A Common	17.90	2,362.80
88.00	CEMENT MATERIALS	Pozmix	9.35	822.80
8.00	CEMENT MATERIALS	Gel	23.40	187.20
55.00	CEMENT MATERIALS	Flo Seal	2.97	163.35
236.43	CEMENT SERVICE	Cubic Feet Charge	2.48	586.35
493.50	CEMENT SERVICE	Ton Mileage Charge	2.60	1,283.10
1.00	CEMENT SERVICE	Plug to Abandon	2,483.59	2,483.59
50.00	CEMENT SERVICE	Pump Truck Mileage	7.70	385.00
50.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	220.00
1.00	EQUIPMENT SALES	8-5/8 Wooden Plug	107.36	107.36
1.00	EQUIPMENT OPERATOR	Paul Beaver		
1.00	EQUIPMENT OPERATOR	Tyler Flipse		
1.00	OPERATOR ASSISTANT	Brandon Wilkinson		

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

\$ 2,972.96

ONLY IF PAID ON OR BEFORE
Mar 26, 2014

Subtotal	8,601.55
Sales Tax	679.52
Total Invoice Amount	9,281.07
Payment/Credit Applied	9,281.07
TOTAL	0.00

ALLIED OIL & GAS SERVICES, LLC 062004

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Oakley KS

DATE <u>3-1-14</u>	SEC <u>22</u>	TWP <u>45</u>	RANGE <u>31 W</u>	CALLED OUT	ON LOCATION	JOB START <u>5:30am</u>	JOB FINISH <u>12:30pm</u>
LEASE <u>Holle</u>	WELL <u>122</u>	LOCATION <u>Rexford 2N, 1E, 8N, 3W</u>	COUNTY <u>Rawlins</u>	STATE <u>KS</u>			
OLD OR <u>NEW</u> (Circle one)			<u>Sink</u>				

CONTRACTOR Murfin & OWNER Same

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. 4552' CEMENT

CASING SIZE DEPTH AMOUNT ORDERED 220 sks 60/40

TUBING SIZE DEPTH 4% gel 1/4" Flo-seal

DRILL PIPE 4 1/2 DEPTH 2650'

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT 1st plug 5 water 29.13 bbl mud 2nd plug 12 bbl mud

EQUIPMENT

PUMP TRUCK CEMENTER Paul Beaver

120 HELPER Tyler Flipse

BULK TRUCK

600 DRIVER Brandon Wilkinson

BULK TRUCK

DRIVER

COMMON 132 sks @ 17.90 2362.80

POZMIX 88 sks @ 9.35 822.80

GEL 8 sks @ 23.40 187.20

CHLORIDE @

ASC @

Flo-seal 55 @ 2.97 163.35

@

@

@

@

@

@

HANDLING 236.43 ft³ @ 2.48 586.35

MILEAGE 9.87 tons x 50 mi = 493.50

1283.10

TOTAL 5,405.60

REMARKS:

1st plug mix 25 sks @ 2650'

Displace w/ water and 29.13 bbl mud

2nd plug mix 100 sks @ 1850'

Displace w/ water and 12 bbl mud

3rd plug mix 40 sks @ 275'

4th plug mix 10 sks @ 40' w/ wooden plug

mix 30 sks in R.H

mix 20 sks in M.H

Thank you!

SERVICE

DEPTH OF JOB 2650'

PUMP TRUCK CHARGE 2483.59

EXTRA FOOTAGE @

MILEAGE M.H. 50 @ 7.70 385.00

MANIFOLD @

M.H. 50 @ 4.40 220.00

@

TOTAL 3088.59

PLUG & FLOAT EQUIPMENT

wooden plug @ 107.36

@

@

@

@

TOTAL 107.36

To: Allied Oil & Gas Services, LLC.

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

SALES TAX (If Any) _____

TOTAL CHARGES 8,601.55

DISCOUNT 2,972.96 IF PAID IN 30 DAYS

5,628.58 Net

PRINTED NAME Aruro Carbonal

SIGNATURE Aruro Carbonal

CHARGE TO: Murfin Drlg Co

STREET _____

CITY _____ STATE _____ ZIP _____