



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1228008
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

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

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1228008

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

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

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

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

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

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

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

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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: _____ _____
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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Burk 'E' 1-14
Doc ID	1228008

All Electric Logs Run

DIL
DUCP
MEL
BHCS



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling CO INC**

250 N Water STE 300
Wichita KS 67202

ATTN: Robert Hendrix

Burk E #1-14

14 1 36 Rawlins KS

Start Date: 2014.07.05 @ 12:25:00

End Date: 2014.07.05 @ 20:53:00

Job Ticket #: 53693 DST #: 1

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

Printed: 2014.07.08 @ 16:26:20



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53693

DST#: 1

ATTN: Robert Hendrix

Test Start: 2014.07.05 @ 12:25:00

GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:56:00

Time Test Ended: 20:53:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Robert Zodrow

Unit No: 49

Interval: 4258.00 ft (KB) To 4313.00 ft (KB) (TVD)

Reference Elevations: 3309.00 ft (KB)

Total Depth: 4313.00 ft (KB) (TVD)

3298.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6769 Outside

Press@RunDepth: 94.03 psig @ 4259.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.05

End Date:

2014.07.05

Last Calib.:

2014.07.05

Start Time: 12:25:05

End Time:

20:52:59

Time On Btm:

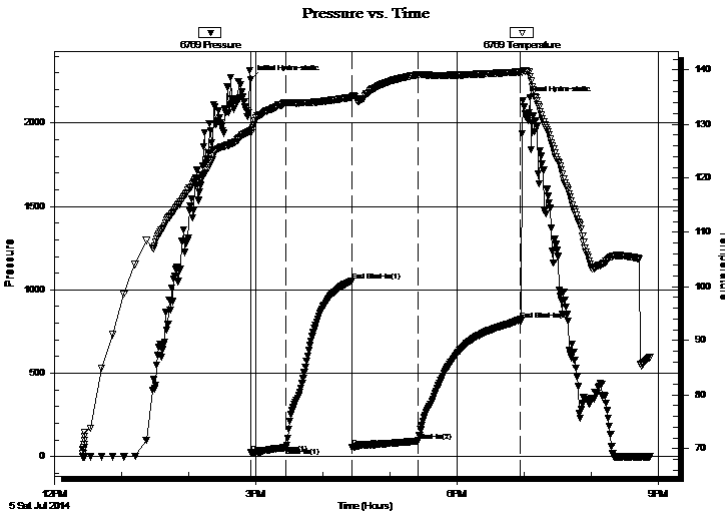
2014.07.05 @ 14:55:30

Time Off Btm:

2014.07.05 @ 18:59:30

TEST COMMENT: 30-IF- Blow built to 3"
60-ISI- No return
60-FF- Blow started in 15 mins built to 2"
90-FSI- No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2260.00	128.71	Initial Hydro-static
1	23.28	128.47	Open To Flow (1)
31	54.11	133.94	Shut-In(1)
91	1052.91	134.95	End Shut-In(1)
91	58.48	135.09	Open To Flow (2)
150	94.03	139.14	Shut-In(2)
241	821.91	139.65	End Shut-In(2)
244	2136.05	139.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
140.00	ocm 25%o 75%m	0.69

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53693

DST#: 1

ATTN: Robert Hendrix

Test Start: 2014.07.05 @ 12:25:00

Tool Information

Drill Pipe:	Length: 4041.00 ft	Diameter: 3.88 inches	Volume: 59.10 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: 207.00 ft	Diameter: 2.25 inches	Volume: 1.02 bbl	Weight to Pull Loose: 88000.00 lb
			<u>Total Volume: 60.12 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4258.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	82.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4236.00	
Hydraulic tool	5.00			4241.00	
Jars	5.00			4246.00	
Safety Joint	3.00			4249.00	
Packer	5.00			4254.00	27.00 Bottom Of Top Packer
Packer	4.00			4258.00	
Stubb	1.00			4259.00	
Recorder	0.00	8521	Inside	4259.00	
Recorder	0.00	6769	Outside	4259.00	
Perforations	18.00			4277.00	
Change Over Sub	1.00			4278.00	
Drill Pipe	31.00			4309.00	
Change Over Sub	1.00			4310.00	
Bullnose	3.00			4313.00	55.00 Bottom Packers & Anchor

Total Tool Length: 82.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53693

DST#: 1

ATTN: Robert Hendrix

Test Start: 2014.07.05 @ 12:25:00

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: 72.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
140.00	ocm 25%o 75%m	0.688

Total Length: 140.00 ft Total Volume: 0.688 bbl

Num Fluid Samples: 0

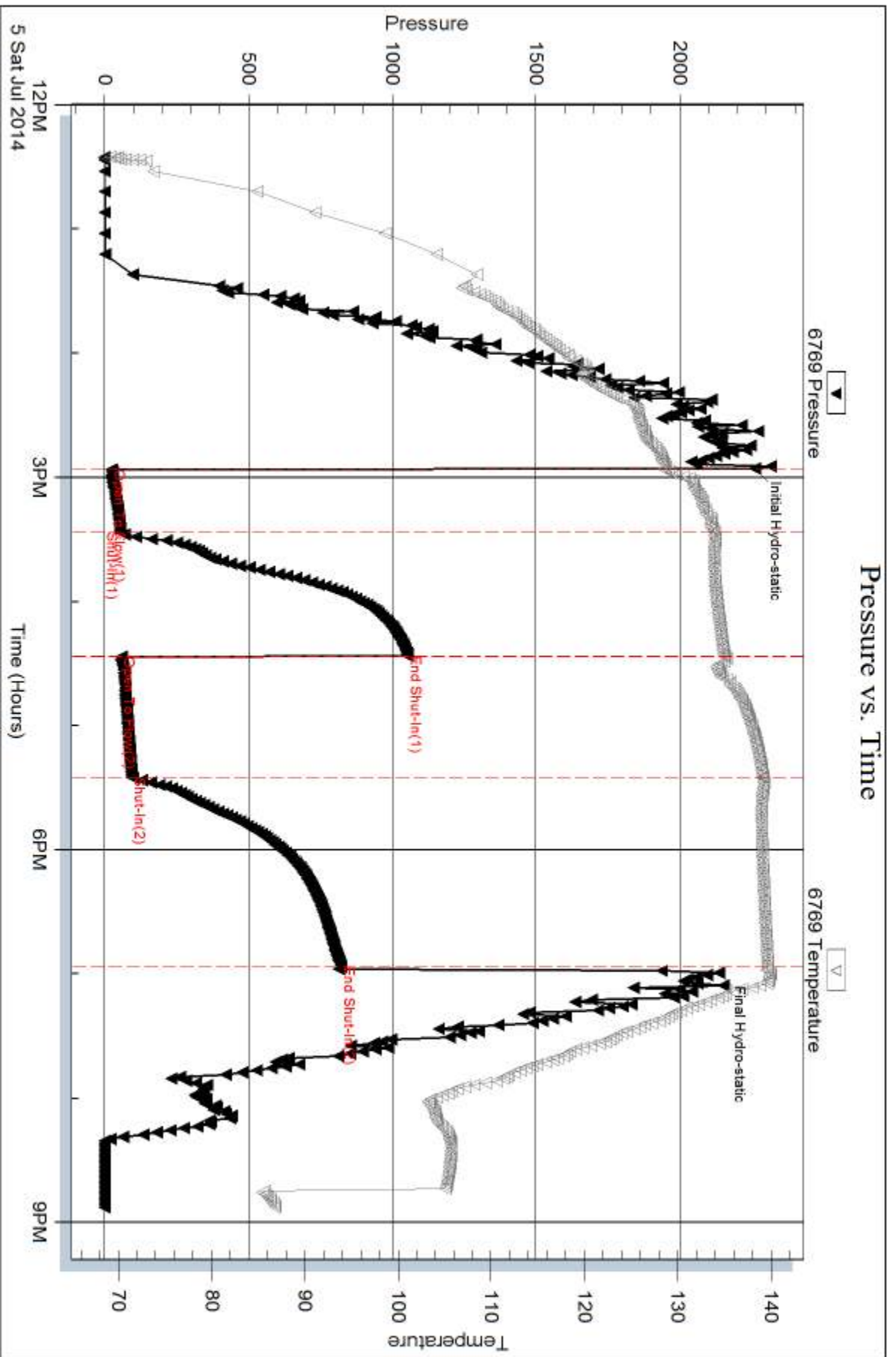
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



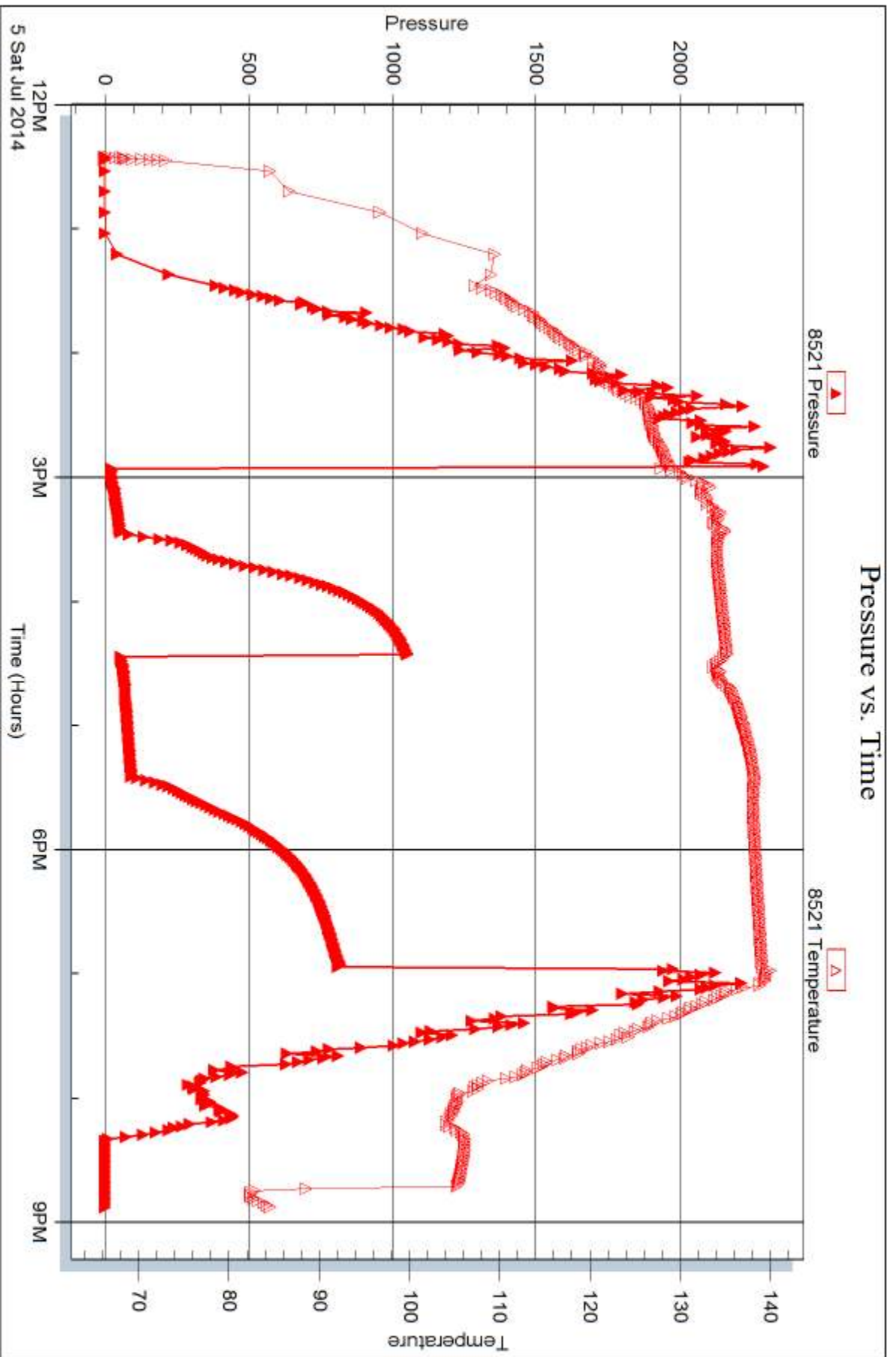
Serial #: 8521

Inside

Murfin Drilling CO INC

Burk E#1-14

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling CO INC**

250 N Water STE 300
Wichita KS 67202

ATTN: Robert Hendrix

Burk E #1-14

14 1 36 Rawlins KS

Start Date: 2014.07.06 @ 05:35:00

End Date: 2014.07.06 @ 14:48:00

Job Ticket #: 53694 DST #: 2

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

Printed: 2014.07.08 @ 16:11:03



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53694

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.07.06 @ 05:35:00

GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:08:00

Time Test Ended: 14:48:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 49

Interval: 4327.00 ft (KB) To 4376.00 ft (KB) (TVD)

Reference Elevations: 3309.00 ft (KB)

Total Depth: 4313.00 ft (KB) (TVD)

3298.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6769 Outside

Press@RunDepth: 95.09 psig @ 4328.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.06

End Date:

2014.07.06

Last Calib.:

2014.07.06

Start Time: 05:35:05

End Time:

14:48:00

Time On Btm:

2014.07.06 @ 08:07:30

Time Off Btm:

2014.07.06 @ 12:12:00

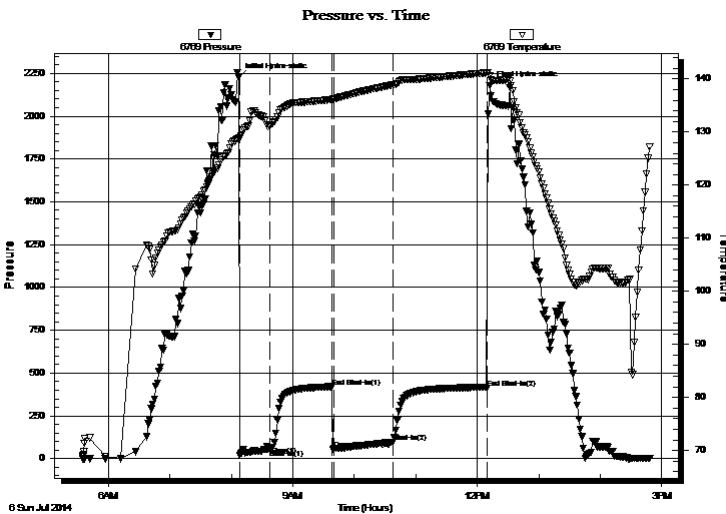
TEST COMMENT: 30-IF- Blow built to 5 3/4"

60-ISI- No return

60-FF- Blow built to 7"

90-FSI- No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2225.91	128.91	Initial Hydro-static
1	20.37	128.79	Open To Flow (1)
31	53.03	131.13	Shut-In(1)
91	420.52	136.13	End Shut-In(1)
93	57.30	136.24	Open To Flow (2)
150	95.09	138.88	Shut-In(2)
242	411.96	141.15	End Shut-In(2)
245	2179.30	140.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	gocm 10%g 65%m 25%o	0.30
60.00	gmco 10%g 5%m 85%o	0.30
90.00	clean gassy oil 15%g 85%o	0.47
0.00	126' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53694

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.07.06 @ 05:35:00

Tool Information

Drill Pipe:	Length: 4103.00 ft	Diameter: 3.88 inches	Volume: 60.00 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: 207.00 ft	Diameter: 2.25 inches	Volume: 1.02 bbl	Weight to Pull Loose: 94000.00 lb
			<u>Total Volume: 61.02 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	4327.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	49.00 ft			
Tool Length:	76.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4305.00	
Hydraulic tool	5.00			4310.00	
Jars	5.00			4315.00	
Safety Joint	3.00			4318.00	
Packer	5.00			4323.00	27.00 Bottom Of Top Packer
Packer	4.00			4327.00	
Stubb	1.00			4328.00	
Recorder	0.00	8521	Inside	4328.00	
Recorder	0.00	6769	Outside	4328.00	
Perforations	12.00			4340.00	
Change Over Sub	1.00			4341.00	
Drill Pipe	31.00			4372.00	
Change Over Sub	1.00			4373.00	
Bullnose	3.00			4376.00	49.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53694

DST#: 2

ATTN: Robert Hendrix

Test Start: 2014.07.06 @ 05:35:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	gocm 10%g 65%m 25%o	0.295
60.00	gmco 10%g 5%m 85%o	0.295
90.00	clean gassy oil 15%g 85%o	0.472
0.00	126' GIP	0.000

Total Length: 210.00 ft

Total Volume: 1.062 bbl

Num Fluid Samples: 0

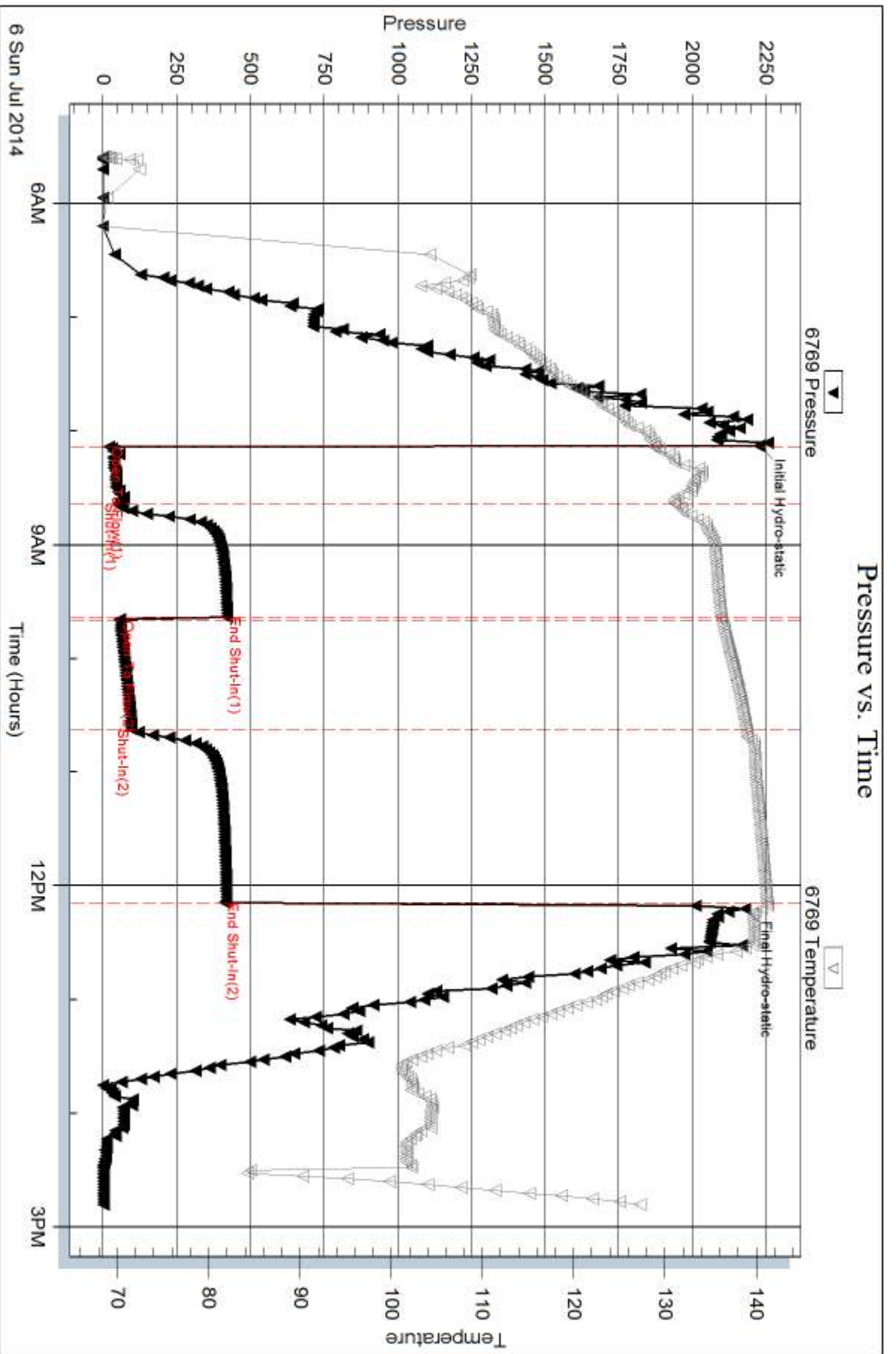
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



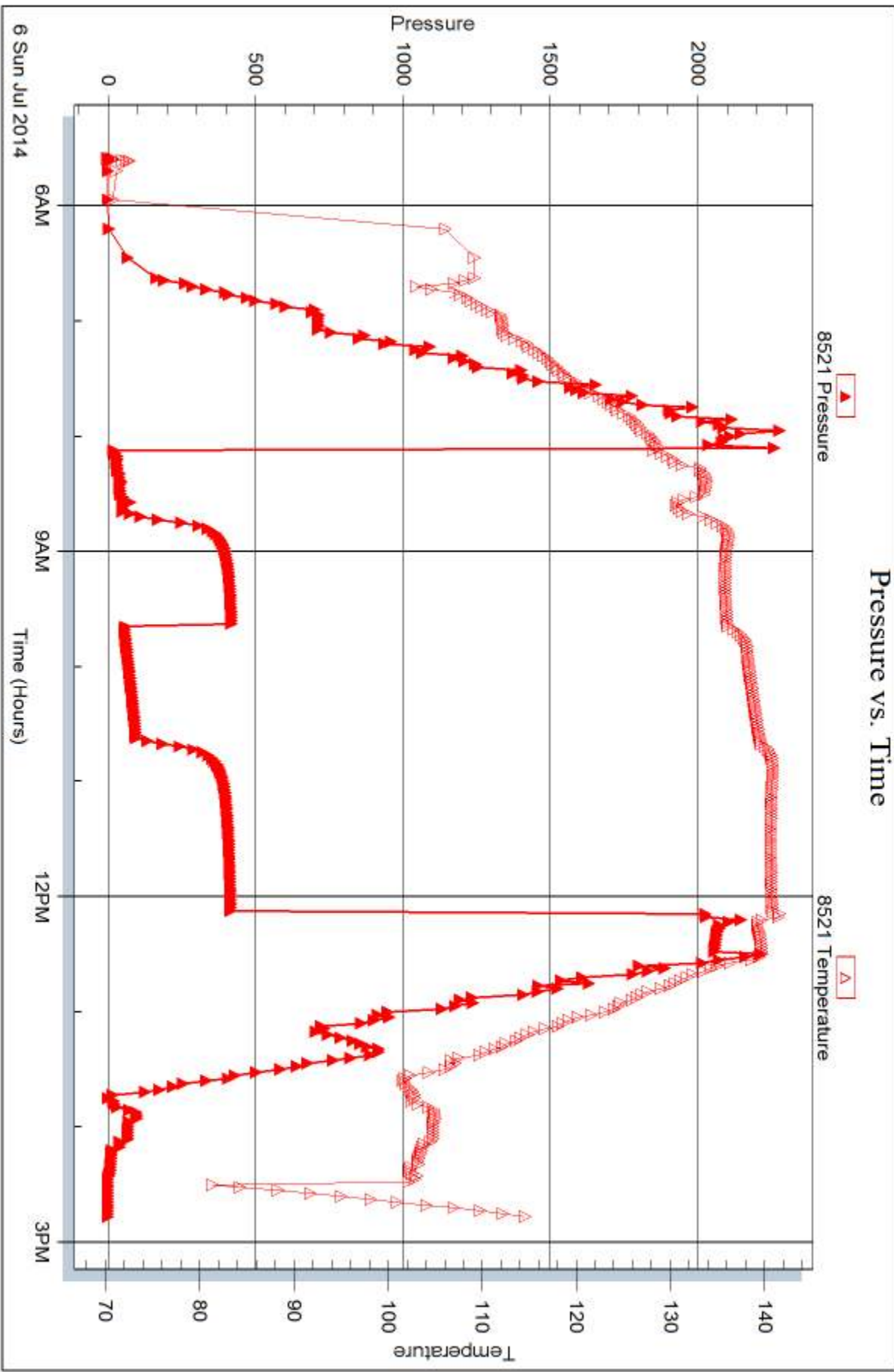
Serial #: 8521

Inside

Murfin Drilling CO INC

Burk E#1-14

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling CO INC**

250 N Water STE 300
Wichita KS 67202

ATTN: Robert Hendrix

Burk E #1-14

14 1 36 Rawlins KS

Start Date: 2014.07.07 @ 02:45:00

End Date: 2014.07.07 @ 11:01:30

Job Ticket #: 53695 DST #: 3

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

Printed: 2014.07.08 @ 16:03:26



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53695

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.07.07 @ 02:45:00

GENERAL INFORMATION:

Formation: **LKC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:13:30

Time Test Ended: 11:01:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 49

Interval: 4417.00 ft (KB) To 4470.00 ft (KB) (TVD)

Reference Elevations: 3309.00 ft (KB)

Total Depth: 4313.00 ft (KB) (TVD)

3298.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6769 Outside

Press@RunDepth: 68.50 psig @ 4418.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.07

End Date:

2014.07.07

Last Calib.:

2014.07.07

Start Time:

02:45:05

End Time:

11:01:29

Time On Btm:

2014.07.07 @ 05:12:30

Time Off Btm:

2014.07.07 @ 09:16:00

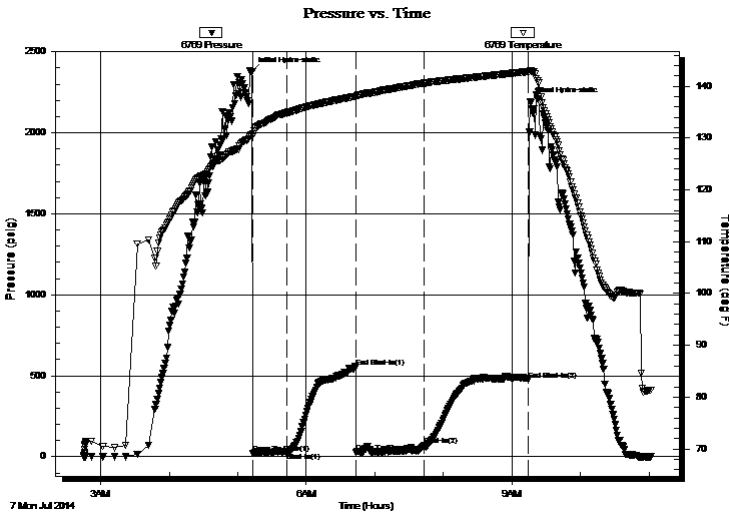
TEST COMMENT: 30-IS- Blow built to 3/4"

60-IS- No return

60-FF- No blow

90-FS- No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2379.26	130.29	Initial Hydro-static
1	23.12	130.72	Open To Flow (1)
31	25.50	134.87	Shut-In(1)
91	555.02	138.03	End Shut-In(1)
91	29.55	138.07	Open To Flow (2)
151	68.50	140.56	Shut-In(2)
242	475.57	142.82	End Shut-In(2)
244	2191.03	143.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud w ith oil spots 100%m	0.05

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53695

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.07.07 @ 02:45:00

Tool Information

Drill Pipe:	Length: 4197.00 ft	Diameter: 3.88 inches	Volume: 61.38 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: 207.00 ft	Diameter: 2.25 inches	Volume: 1.02 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 62.40 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4417.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4395.00	
Hydraulic tool	5.00			4400.00	
Jars	5.00			4405.00	
Safety Joint	3.00			4408.00	
Packer	5.00			4413.00	27.00 Bottom Of Top Packer
Packer	4.00			4417.00	
Stubb	1.00			4418.00	
Recorder	0.00	8521	Inside	4418.00	
Recorder	0.00	6769	Outside	4418.00	
Perforations	16.00			4434.00	
Change Over Sub	1.00			4435.00	
Drill Pipe	31.00			4466.00	
Change Over Sub	1.00			4467.00	
Bullnose	3.00			4470.00	53.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling CO INC

14 1 36 Rawlins KS

250 N Water STE 300
Wichita KS 67202

Burk E #1-14

Job Ticket: 53695

DST#: 3

ATTN: Robert Hendrix

Test Start: 2014.07.07 @ 02:45:00

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: 57.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
10.00	mud w ith oil spots 100%m	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbf

Num Fluid Samples: 0

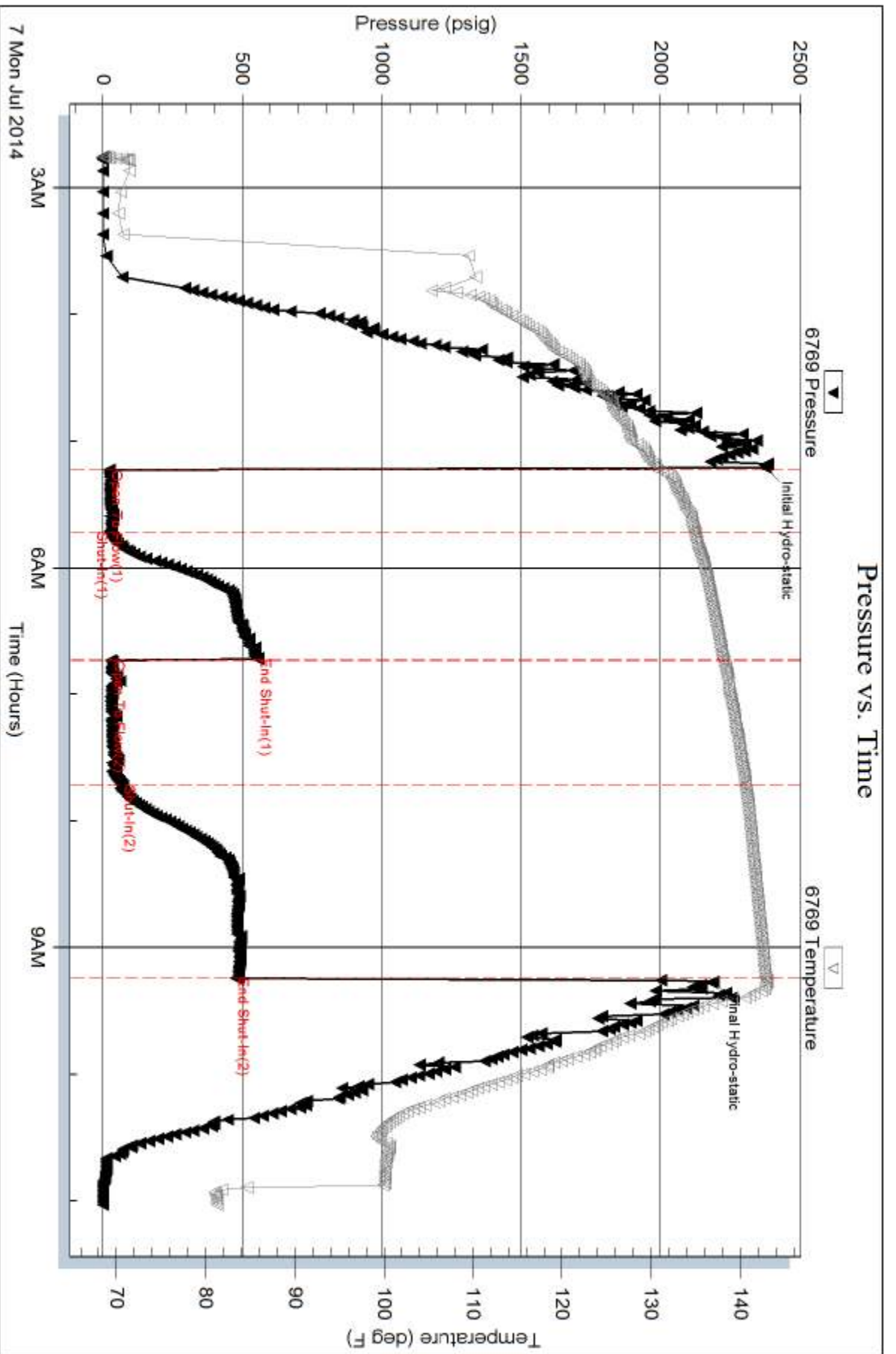
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



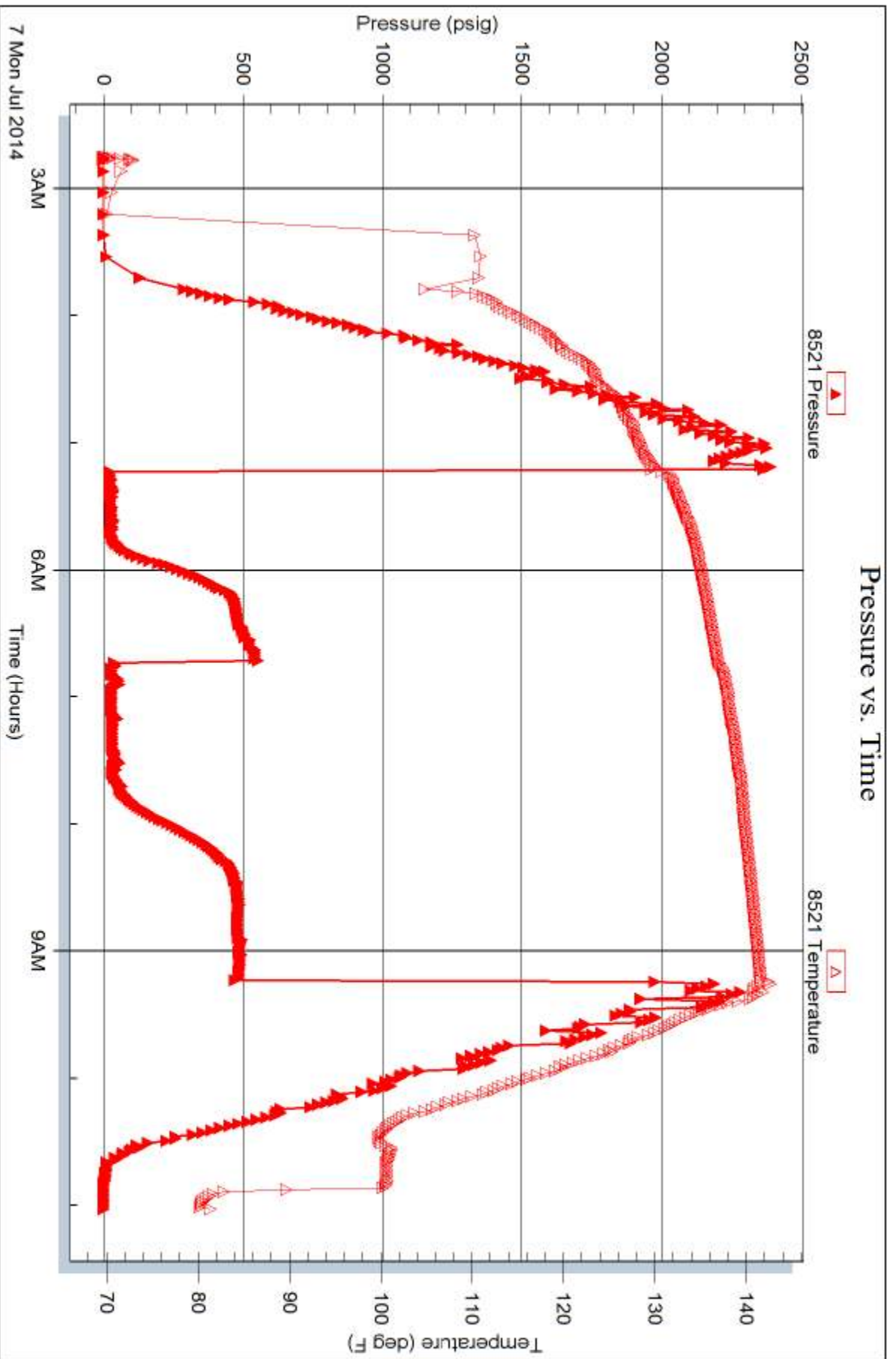
Serial #: 8521

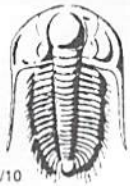
Inside

Murfin Drilling CO INC

Burk E#1-14

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53693

Well Name & No. Burk E #1-14 Test No. 1 Date 7-5-2014
 Company Murfin Drilling Co. Inc Elevation 3309 KB 23298 GL
 Address 250 N Waver ST E 300 Wichita KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 14 Twp. 1 Rge. 36 Co. Rawlins State KS.

Interval Tested 4258-4313 Zone Tested LKC "0"
 Anchor Length 55 Drill Pipe Run 4041 Mud Wt. 9.3
 Top Packer Depth 4254 Drill Collars Run 207 Vis 72
 Bottom Packer Depth 4258 Wt. Pipe Run 0 WL 6.0
 Total Depth 4313 Chlorides 600 ppm System LCM 12

Blow Description IF - Blow built to 3"
ISI - NO return
FF - Blow started in 15 mins built to 2"
FSI - NO return

Rec	Feet of	%gas	%oil	%water	%mud
<u>140</u>	<u>OCM</u>	<u>25</u>		<u>75</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

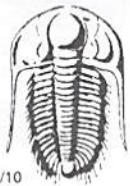
Rec Total 140 BHT 139 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 2260 Test 1250 T-On Location 11:25 7-5
 (B) First Initial Flow 23 Jars 250 T-Started 12:25 7-5
 (C) First Final Flow 54 Safety Joint 75 T-Open 14:56 7-5
 (D) Initial Shut-In 1053 Circ Sub _____ T-Pulled 18:56 7-5
 (E) Second Initial Flow 58 Hourly Standby _____ T-Out 20:53 7-5
 (F) Second Final Flow 94 Mileage 114 RT 176.70 Comments _____
 (G) Final Shut-In 822 Sampler _____
 (H) Final Hydrostatic 2136 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 60 Shale Packer _____
 Final Flow 60 Extra Packer _____
 Final Shut-In 90 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1751.70 MP/DST Disc't _____

Approved By Rh D. Lilly Our Representative Robert Zecher

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. 53694

Well Name & No. Burk E #1-14 Test No. 2 Date 7-6-2014
 Company Murfin Drilling Co Inc Elevation 3309 KB 3298 GL
 Address 250 N water STE 300 Wichita KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 14 Twp. 1 Rge. 36 Co. Rawlins State KS

Interval Tested 4327 - 4376 Zone Tested LKC "H"
 Anchor Length 49 Drill Pipe Run 4103 Mud Wt. 9.3
 Top Packer Depth 4323 Drill Collars Run 207 Vis 54
 Bottom Packer Depth ~~4300~~ 4327 Wt. Pipe Run 0 WL 6.4
 Total Depth 4376 Chlorides 600 ppm System LCM 11

Blow Description IF - Blow built to 5 3/4"
ISE - NO return
FF - Blow built to 7"
FSE - NO return

Rec	Feet of	%gas	%oil	%water	%mud
90	clean oil gassy oil	15	85		
60	oil gmco	10	85		5
60	gocm	10	25		65
	126' MIP				

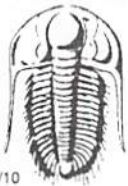
Rec Total 210 BHT 141 Gravity 28 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2226 Test 1250 T-On Location 05:00 7-6
 (B) First Initial Flow ~~20~~ 20 Jars 250 T-Started 05:35 7-6
 (C) First Final Flow ~~53~~ 53 Safety Joint 75 T-Open 08:08 7-6
 (D) Initial Shut-In 421 Circ Sub _____ T-Pulled 12:09 7-6
 (E) Second Initial Flow 57 Hourly Standby _____ T-Out 14:48 7-6
 (F) Second Final Flow 95 Mileage 114 RT 176.70 Comments _____
 (G) Final Shut-In 412 Sampler _____
 (H) Final Hydrostatic 2179 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 60 Day Standby _____ Total 1751.70
 Final Shut-In 90 Accessibility _____ MP/DST Disc't _____
 Sub Total 1751.70

Approved By [Signature] Our Representative Robert Zedlow

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. 53695

Well Name & No. Burk E #1-14 Test No. 3 Date 7-7-2014
 Company Murfin Drilling Co. Inc. Elevation 3309 KB 3298 GL
 Address 250 N water St E 300 Wichita KS, 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #2
 Location: Sec. 14 Twp. 1 Rge. 36 Co. Rawlins State KS

Interval Tested 4417 - 4470 Zone Tested LKC "J"
 Anchor Length 53 Drill Pipe Run 4197 Mud Wt. 9.4
 Top Packer Depth 4413 Drill Collars Run 207 Vis 57
 Bottom Packer Depth 4417 Wt. Pipe Run 0 WL 6.4
 Total Depth 4470 Chlorides 600 ppm System LCM 12
 Blow Description IF - Blow built to 3/4"
ISI - NO return
FF - NO blow
FSI - NO return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>mud w/ spots</u>	<u>Spotted</u>		<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 143 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2379 Test 1250 T-On Location 02:15 7-7
 (B) First Initial Flow 23 Jars 250 T-Started 02:45 7-7
 (C) First Final Flow 26 Safety Joint 75 T-Open 05:13 7-7
 (D) Initial Shut-In 555 Circ Sub _____ T-Pulled 09:14 7-7
 (E) Second Initial Flow 30 Hourly Standby _____ T-Out 11:02 7-7
 (F) Second Final Flow 69 Mileage 114 RT 176.70
 (G) Final Shut-In 476 Sampler _____
 (H) Final Hydrostatic 2191 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

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

Sub Total 1751.70

Comments _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1751.70
 MP/DST Disc't _____

Approved By

Robert D. Hendrix

Our Representative

Robert Zedrow

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

Robert D. Hendrix

Petroleum Geologist

GEOLOGISTS REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY **Murfin Drilling Company Inc.**

LEASE **Burk 'E' #1-14**

FIELD **Wildcat**

LOCATION **3307sl & 13207fwl**

SEC **14** TWPSP **1s** RGE **36w**

COUNTY **Rawlins** STATE **Kansas**

CONTRACTOR **Murfin Drilling Co. Inc. Rig #2**

SPUD **7/1/2014** COMP **7/8/2014**

RTD **4614'** LTD **4614'**

MUD UP **3348'** TYPE MUD **Chemical**

SAMPLES SAVED FROM **3600'** TO **TD**

DRILLING TIME KEPT FROM **3600'** TO **TD**

SAMPLES EXAMINED FROM **3600'** TO **TD**

GEOLOGICAL SUPERVISION FROM **3600'**

GEOLOGIST ON WELL **Robert D. Hendrix**

KB **3309'**

DF **---**

GL **3298'**

Measurements Are All From **Kelly Busting**

CASING

CONDUCTOR

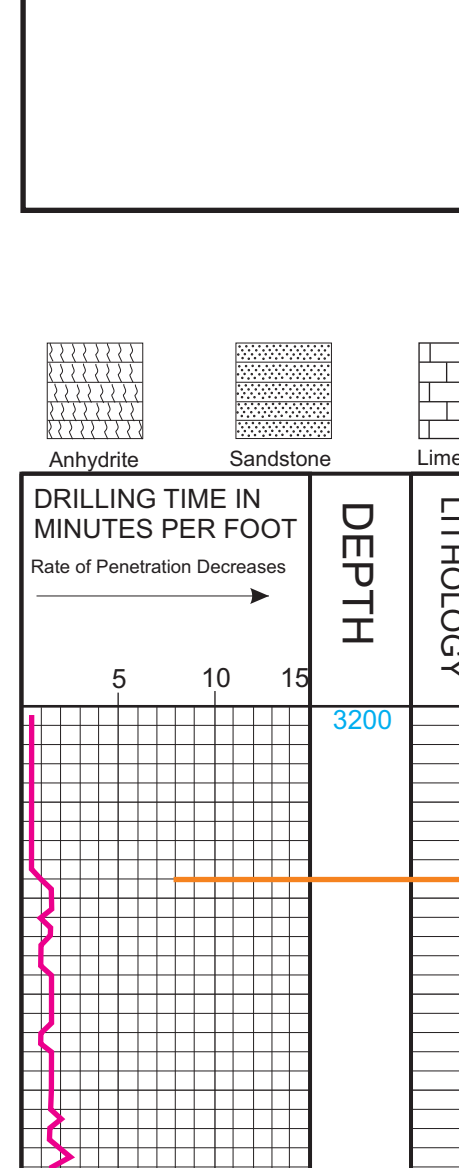
SURFACE **8.18" at 265'**

PRODUCTION **5.12" @ 4610'**

ELECTRICAL SURVEYS

Promote, Indentation, Meter, Some
Borehole Energy Services

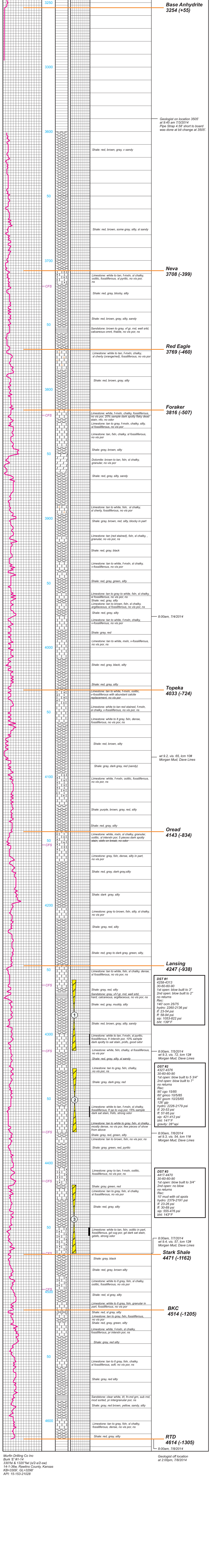
FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	3218 (-91)	3218 (-91)
Neva	3708 (-399)	3708 (-399)
Foraker	3816 (-507)	3816 (-507)
Topoka	4030 (-721)	4033 (-724)
Oread	4142 (-833)	4143 (-834)
Lansing	4244 (-938)	4247 (-938)
Stark Shale	4464 (-1162)	4471 (-1162)
BKC	4514 (-1205)	4514 (-1205)



REMARKS:

LEGEND

	Anhydrite		Sandstone		Limestone		Shale		Carb Sh		Cherty LS		Chert		Dolomite
--	-----------	--	-----------	--	-----------	--	-------	--	---------	--	-----------	--	-------	--	----------



Murfin Drilling Co Inc
Burk 'E' #1-14
3307sl & 13207fwl (s/2-s/2-sw)
14-1-36w, Rawlins County, Kansas
KB=3309, GL=3298'
API: 15-153-21028

Geologist off location at 2:00pm, 7/8/2014



*acct
Prod-MG*

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 144203
Invoice Date: Jul 1, 2014
Page: 1

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

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	64051	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jul 1, 2014	7/31/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Burk E #1-14		
225.00	CEMENT MATERIALS	Class A Common	17.90	4,027.50
635.00	CEMENT MATERIALS	Chloride	1.10	698.50
236.25	CEMENT SERVICE	Cubic Feet Charge	2.48	585.90
871.20	CEMENT SERVICE	Ton Mileage Charge	2.75	2,395.80
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
80.00	CEMENT SERVICE	Pump Truck Mileage	7.70	616.00
1.00	CEMENT SERVICE	Swedge Manifold Rental	275.00	275.00
80.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	352.00
1.00	EQUIPMENT OPERATOR	Paul Beaver		

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

\$ 3,662.03

ONLY IF PAID ON OR BEFORE
Jul 31, 2014

Subtotal	10,462.95
Sales Tax	373.35
Total Invoice Amount	10,836.30
Payment/Credit Applied	
TOTAL	10,836.30

OK

ALLIED OIL & GAS SERVICES, LLC 064051

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Oakley KS

DATE <u>7-1-14</u>	SEC. <u>14</u>	TWP. <u>1</u>	RANGE <u>36</u>	CALLED OUT	ON LOCATION <u>1:00pm</u>	JOB START <u>2:00pm</u>	JOB FINISH <u>2:30pm</u>
LEASE <u>Burk's</u>	WELL# <u>1-14</u>	LOCATION <u>Beardsley N to AA W to S15</u>		COUNTY <u>Rawlins</u>	STATE <u>KS</u>		
OLD OR <u>NEW</u> (Circle one)		LOCATION <u>N to Dead End 14 W</u>					

CONTRACTOR Murfin J
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 26.5
CASING SIZE 8 5/8 DEPTH 26.4
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 15.86 bbl water
EQUIPMENT
PUMP TRUCK CEMENTER Paul Beaver
420 HELPER Terry Heinrich
BULK TRUCK
818/287 DRIVER Juan 1 TWS
BULK TRUCK
DRIVER

OWNER Same
CEMENT AMOUNT ORDERED 225 sks 3 1/2 CC
COMMON 225 sks @ 17.90 4027.50
POZMIX @
GEL @
CHLORIDE 635 # @ 1.10 698.50
ASC @
Materio C. @ 4700.00
(1.65% 10/35%) @
HANDLING 236.25 # @ 2.48 585.90
MILEAGE 10.82 hrs @ 80mi x 2.75 2385.80
TOTAL

REMARKS:
Mix 225 sks Com 3 1/2 CC
Displace w/ water
Cement did circulate
Thank you!
Paul, Terry & Juan

SERVICE
DEPTH OF JOB 26.5'
PUMP TRUCK CHARGE 1512.25
EXTRA FOOTAGE @
MILEAGE MILV 80 @ 7.70 616.00
MANIFOLD Swedge @ 275.00
MILV 80 @ 440 352.00
(2,007.93/35%) TOTAL 5,786.95

CHARGE TO: Murfin Drlg.
STREET
CITY STATE ZIP

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 Armando Cabera
SIGNATURE Armando Cabera

SALES TAX (if Any)
TOTAL CHARGES 10,462.95
DISCOUNT 3,662.03 (35%) IF PAID IN 30 DAYS
6,800.91 Net.



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



Invoice

DATE	INVOICE #
7/8/2014	26649

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661
USED FOR <u>1C 103</u>
APPROVED <u>JH FH</u>

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-14	Burk E	Rawlins	Company Tools	Oil	Development	Top To Bottom ...	Nick

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	150	Miles	6.00	900.00
579D	Pump Charge - Top To Bottom LongString - 4614 Feet	1	Job	2,000.00	2,000.00
221	Liquid KCL (Clayfix)	4	Gallon(s)	25.00	100.00T
281	Mud Flush	500	Gallon(s)	1.25	625.00T
290	D-Air	5	Gallon(s)	42.00	210.00T
403-5	5 1/2" Cement Basket	3	Each	300.00	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
409-5	5 1/2" Turbolizer	15	Each	90.00	1,350.00T
413-5	5 1/2" Roto Wall Scratcher	16	Each	40.00	640.00T
419-5	5 1/2" Rotating Head Rental	1	Each	200.00	200.00T
325	Standard Cement	200	Sacks	14.50	2,900.00T
330	Swift Multi-Density Standard (MIDCON II)	300	Sacks	18.50	5,550.00T
276	Flocele	125	Lb(s)	2.50	312.50T
283	Salt	1,000	Lb(s)	0.20	200.00T
284	Calseal	9	Sack(s)	35.00	315.00T
285	CFR-1	150	Lb(s)	4.50	675.00T
581D	Service Charge Cement	500	Sacks	2.00	1,000.00
583D	Drayage	3,773	Ton Miles	1.00	3,773.00
	Subtotal				22,300.50
	Sales Tax Rawlins County			7.90%	1,155.57

We Appreciate Your Business!

Total \$23,456.07



CHARGE TO: Martin Dely Co Inc
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

TICKET 26649

PAGE 1 OF 2

1. SERVICE LOCATIONS: 1. HALL KS WELL/PROJECT NO: #1-14 LEASE: Bucke "E" COUNTY/PARISH: Rushlin STATE: KS CITY: _____ DATE: 7-8-14 OWNER: SWIFT

2. NESS CITY, KS TICKET TYPE: SERVICE CONTRACTOR: Co Tools #2 RIG NAME/NO.: _____ SHIPPED VIA: Local Truck ORDER NO.: _____

3. WELL TYPE: _____ WELL CATEGORY: Development JOB PURPOSE: Top to Bottom Drilling WELL PERMIT NO.: _____ WELL LOCATION: _____

4. REFERRAL LOCATION: _____ INVOICE INSTRUCTIONS: _____

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	UM	QTY.		
575						4	per			200.00	800.00
579					Parony Change (Top to Bottom)	1	per			200.00	200.00
221					KCL	4	per			100.00	400.00
281					Mud Flash	5	per			100.00	500.00
290					D-Air	5	per			200.00	1000.00
403					Basket	3	per			200.00	600.00
406					E.D. Plug + Baffle	1	per			275.00	275.00
407					Insect Proof Sleeve w/ HLL	1	per			375.00	375.00
409					Forbolizers	15	per			90.00	1350.00
413					Rotamill Separators	16	per			40.00	640.00
414					Rotating Head	1	per			200.00	200.00

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

DATE SIGNED: 7-8-14 TIME SIGNED: A.M. P.M.

SWIFT OPERATOR: _____ APPROVAL: _____

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

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? YES NO

WE UNDERSTOOD AND MET YOUR NEEDS? YES NO

OUR SERVICE WAS PERFORMED WITHOUT DELAY? YES NO

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? YES NO

ARE YOU SATISFIED WITH OUR SERVICE? YES NO

CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL: 1

TOTAL: 23,456.07

Rollins TAX 7.99%

1,155.57

23,456.07

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 7-8-14 PAGE NO.

CUSTOMER *Murphy Drilling Co. Inc.*

WELL NO. # *1-14*

LEASE *Burke "F"*

JOB TYPE *Top To Bottom*

TICKET NO. *26649*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2100							<i>0.100 w/FF</i>
								<i>RTD 4416</i>
								<i>5 1/2" x 15.5' x 4411' x 19'</i>
								<i>Turbo 1-10, 12, 14, 16, 33, 62</i>
								<i>Back 17, 34, 62</i>
								<i>16 scratches</i>
	2120							<i>Start FE</i>
	2130							<i>Halfway Breakcirc 10 min</i>
	2330							<i>Bottom Breakcirc</i>
	0020	2	7/4					<i>Plug R/H MH 30/15 sks SMD</i>
	0030	5	0			200		<i>Start 20 gal Mud flush</i>
		5	12/0			200		<i>Start 20 bbl KCL flush</i>
	0035	5	20/0			200		<i>Start 20 sks SMD @ 11"</i>
	0104	5	145/0			200		<i>Start 200 sks EA-2</i>
	0114		48					<i>End Cement</i>
								<i>wash P/L</i>
								<i>Drop L.D. Plug</i>
	0120	6	0			200		<i>Start Displacement</i>
	0123	5	72			550		<i>Circ Cement</i>
	0140		109			450/1000		<i>Land Plug</i>
								<i>Release Pressure</i>
								<i>Float Hold</i>
								<i>C/C 25 sks top, t</i>
								<i>Thank you</i>
								<i>Nick, David, Tony, James, & Craig</i>

Burk 'E' #1-14
 Daily Drilling Report
 Page Two

- 7/7/14 Depth 4470'. Cut 94'. DT: None. CT: 18½ hrs. Dev.: None. **LKC J:** Ls white to tan, fxl, oolitic in part, foss, gd vug por, gd dark sat stain, gdsfo, strong odor. **DST #3 4417-4470:** 30-60-60-90. IF: blw built to ¾". FF: no blw. Rec.: 10'M w/oil spts. HP: 2379-2191. FP: 23/26, 30/69. SIP: 555-476. BHT: 143°.
- 7/8/14 RTD 4614'. Cut 144'. DT: 1hr pump. CT: 12¾ hrs. Dev.: None. HC @ 2:45AM 7/8. To run 5 ½" prod csg.
- 7/9/14 RTD: 4614'. CT: 22 ¾ hrs. Pioneer logged 9:45AM – 1:30PM LTD: 4614'. Ran 115jts of 5½" prod csg, set @ 4610'. Swift cmt w/450sxs (250sxs SMD, 200EA2). PD @ 1:45AM 7/9. 30sxs RH, 20sxs MH. RR @ 5:45AM 7/9/14. FINAL REPORT

Formation	MDCI Burk 'E' #1-14 330' FNL 1320' FWL Sec. 14-T1S-R36W 3309' KB						MDCI Burk Trust 'A' #6-23 330' FNL 1650' FWL Sec. 23-T1S-R36W 3302' KB	
	Sample top	Datum	Ref	Log Top	Datum	Ref	Log Top	Datum
Anhydrite	3218	+91	+3	3217	+92	+4	3214	+88
B/Anhydrite	3255	+54	-3	3251	+58	+1	3245	+57
Neva	3708	-399	-3	3708	-399	-3	3698	-396
Red Eagle	3769	-460	-3	3768	-459	-2	3759	-457
Foraker	3816	-507	-3	3816	-507	-3	3806	-504
Topeka	4033	-724	-4	4031	-722	-2	4022	-720
Oread	4143	-834	-2	4143	-834	-2	4134	-832
Lansing	4247	-938	-4	4244	-935	-1	4236	-934
Stark	4471	-1162	-4	4465	-1156	+2	4460	-1158
BKC	4514	-1205	-5	4514	-1205	-5	4502	-1200
RTD	4614	-1305					4605	
LTD				4614	-1305		4606	