



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1199788
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: _____

1199788

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</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	Patricia 1-16
Doc ID	1199788

All Electric Logs Run

Dual Induction
Dual Compensated
Microresistivity
Borehole Compensated



DRILL STEM TEST REPORT

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

250 N. Water STE. 300
Wichita KS. 67202

ATTN: Keith Reavis

Patricia #1-16

16-1s-37w Cheyenne,KS

Start Date: 2014.02.07 @ 13:18:00

End Date: 2014.02.08 @ 01:33:00

Job Ticket #: 55166 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.02.14 @ 10:03:05



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
 250 N. Water STE. 300
 Wichita KS. 67202
 ATTN: Keith Reavis

16-1s-37w Cheyenne, KS

Patricia #1-16

Job Ticket: 55166

DST#: 1

Test Start: 2014.02.07 @ 13:18:00

GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:16:15
 Time Test Ended: 01:33:00
 Interval: **4594.00 ft (KB) To 4640.00 ft (KB) (TVD)**
 Total Depth: 4640.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #54
 Reference Elevations: 3260.00 ft (KB)
 3247.00 ft (CF)
 KB to GR/CF: 13.00 ft

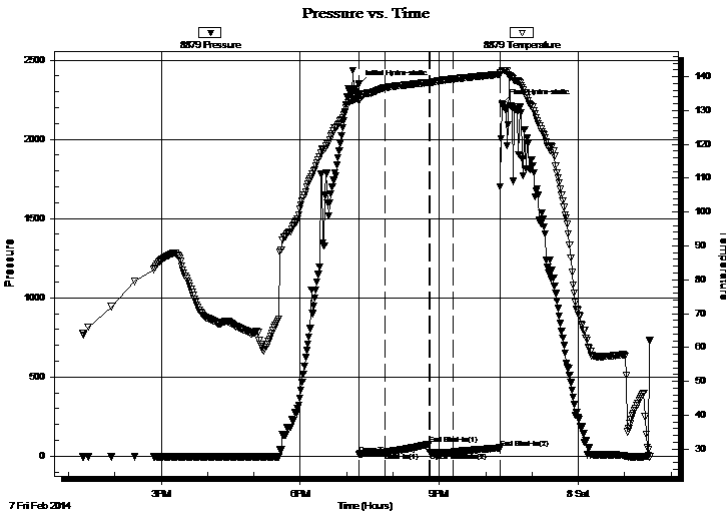
Serial #: 8879

Outside

Press@RunDepth: 26.04 psig @ 4595.00 ft (KB)
 Start Date: 2014.02.07 End Date: 2014.02.08
 Start Time: 13:18:05 End Time: 01:33:00
 Capacity: 8000.00 psig
 Last Calib.: 2014.02.08
 Time On Btm: 2014.02.07 @ 19:16:00
 Time Off Btm: 2014.02.07 @ 22:21:30

TEST COMMENT: 30 - IF - No Surface blow
 60 - ISI - No Return
 30 - FF - No Surface blow
 60 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2346.82	133.82	Initial Hydro-static
1	13.49	132.90	Open To Flow (1)
34	21.12	136.68	Shut-In(1)
91	75.82	138.30	End Shut-In(1)
92	26.21	138.37	Open To Flow (2)
122	26.04	139.26	Shut-In(2)
183	51.82	140.65	End Shut-In(2)
186	2224.34	141.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM - 95M - 5o	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

16-1s-37w Cheyenne,KS

250 N. Water STE. 300
Wichita KS. 67202

Patricia #1-16

Job Ticket: 55166

DST#: 1

ATTN: Keith Reavis

Test Start: 2014.02.07 @ 13:18:00

Tool Information

Drill Pipe:	Length: 4005.00 ft	Diameter: 3.80 inches	Volume: 56.18 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: 589.00 ft	Diameter: 2.25 inches	Volume: 2.90 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 59.08 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4594.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	73.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4572.00	
Hydraulic tool	5.00			4577.00	
Jars	5.00			4582.00	
Safety Joint	3.00			4585.00	
Packer	4.00			4589.00	27.00 Bottom Of Top Packer
Packer	5.00			4594.00	
Stubb	1.00			4595.00	
Recorder	0.00	6669	Inside	4595.00	
Recorder	0.00	8879	Outside	4595.00	
Perforations	9.00			4604.00	
Change Over Sub	1.00			4605.00	
Drill Pipe	31.00			4636.00	
Change Over Sub	1.00			4637.00	
Bullnose	3.00			4640.00	46.00 Bottom Packers & Anchor

Total Tool Length: 73.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

16-1s-37w Cheyenne,KS

250 N. Water STE. 300
Wichita KS. 67202

Patricia #1-16

Job Ticket: 55166

DST#: 1

ATTN: Keith Reavis

Test Start: 2014.02.07 @ 13:18:00

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: 66.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	OSM - 95M - 5o	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbf

Num Fluid Samples: 0

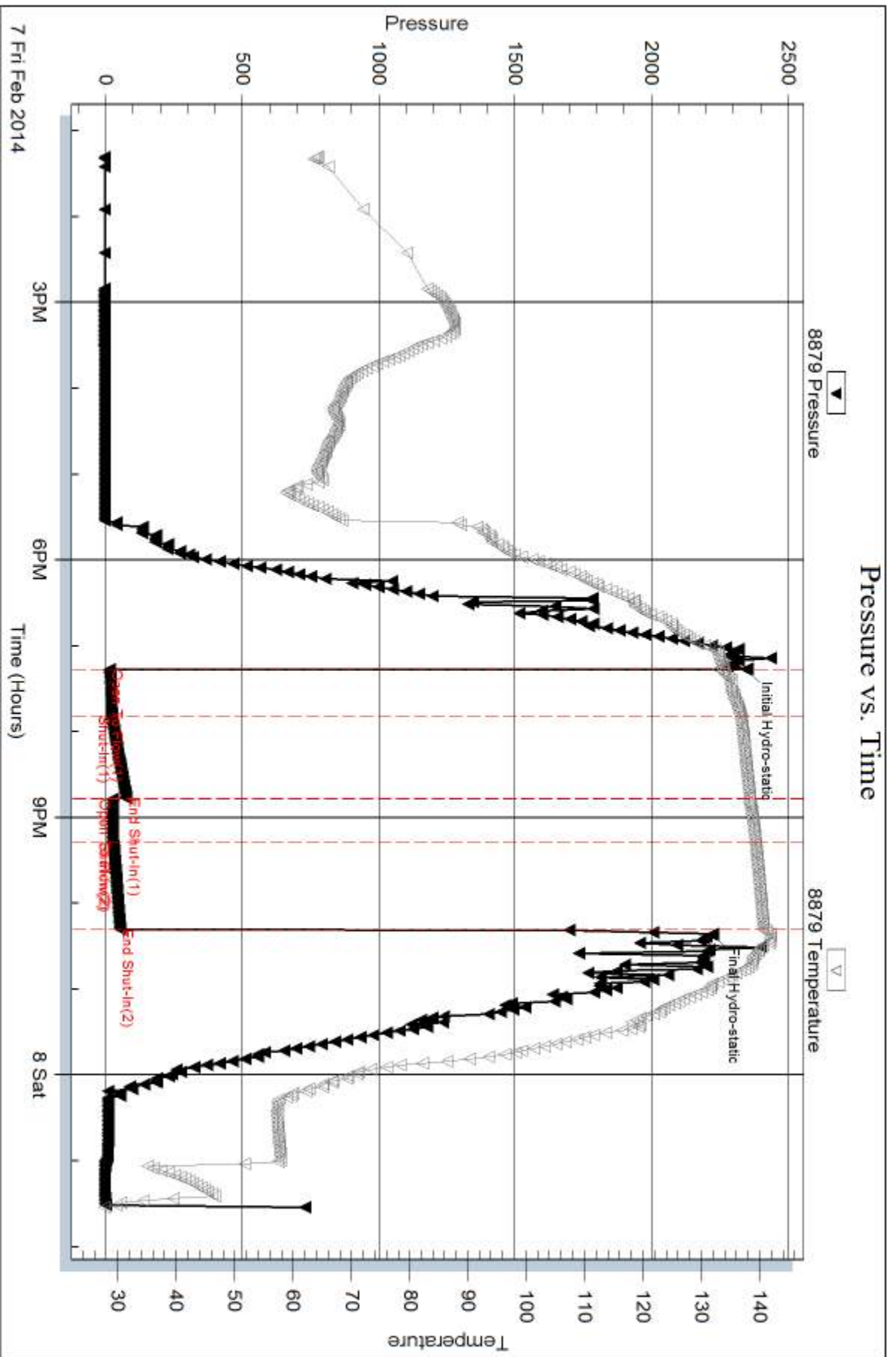
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



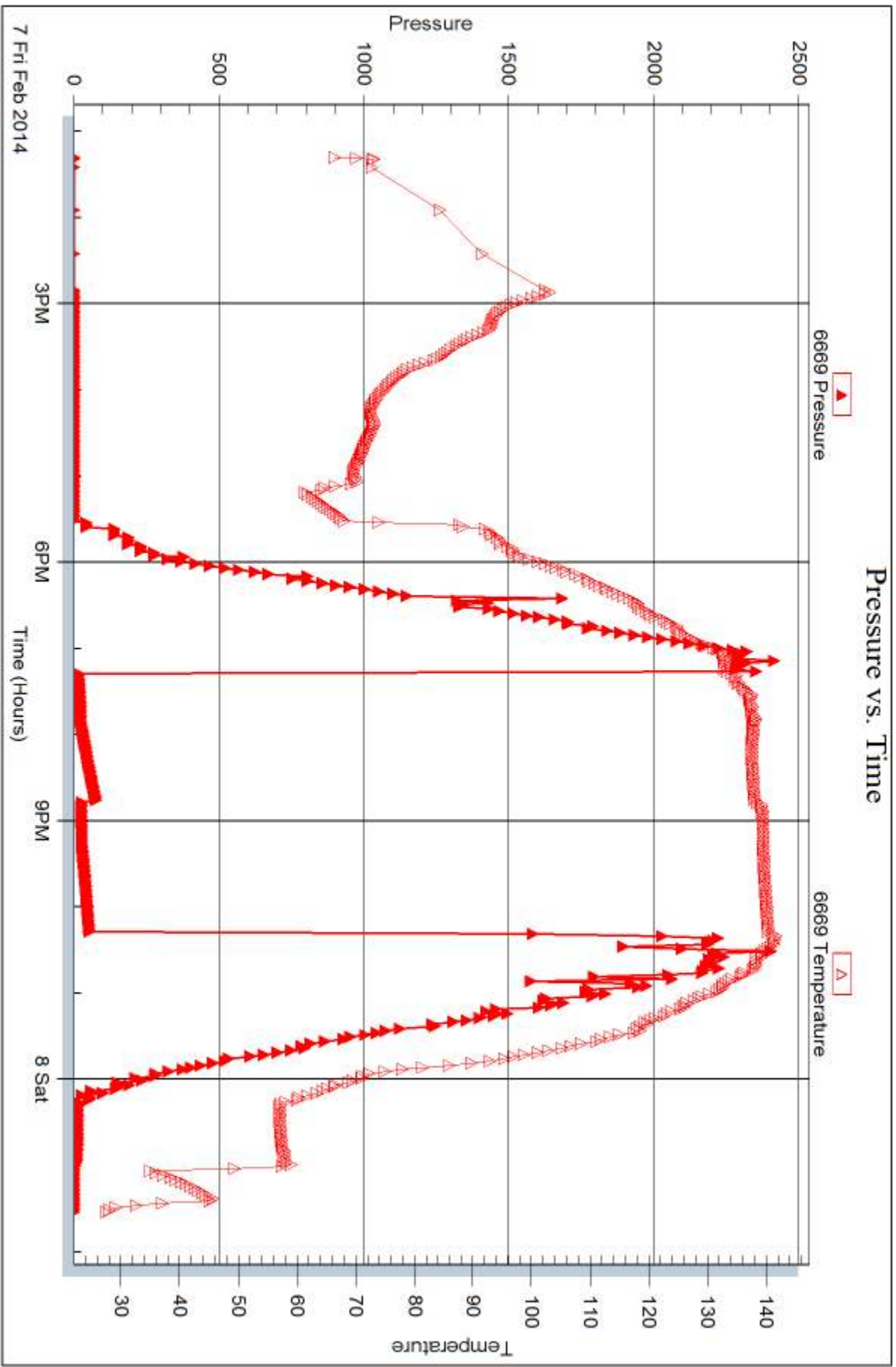
Serial #: 6669

Inside

Murfin Drilling Co., Inc.

Patricia #1-16

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 55166

Printed: 2014.02.14 @ 10:03:07



DRILL STEM TEST REPORT

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

250 N. Water STE. 300
Wichita KS. 67202

ATTN: Keith Reavis

Patricia #1-16

16-1s-37w Cheyenne,KS

Start Date: 2014.02.08 @ 14:07:00

End Date: 2014.02.08 @ 21:54:45

Job Ticket #: 55167 DST #: 2

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

Printed: 2014.02.14 @ 10:02:03

Murfin Drilling Co., Inc. 16-1s-37w Cheyenne,KS Patricia #1-16 DST # 2 Cherokee 2014.02.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
250 N. Water STE. 300
Wichita KS. 67202
ATTN: Keith Reavis

16-1s-37w Cheyenne,KS

Patricia #1-16

Job Ticket: 55167

DST#: 2

Test Start: 2014.02.08 @ 14:07:00

GENERAL INFORMATION:

Formation: **Cherokee**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 16:10:45
 Tester: Royal Fisher
 Time Test Ended: 21:54:45
 Unit No: #54
 Interval: **4694.00 ft (KB) To 4735.00 ft (KB) (TVD)**
 Reference Elevations: 3260.00 ft (KB)
 Total Depth: 4735.00 ft (KB) (TVD)
 3247.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 13.00 ft

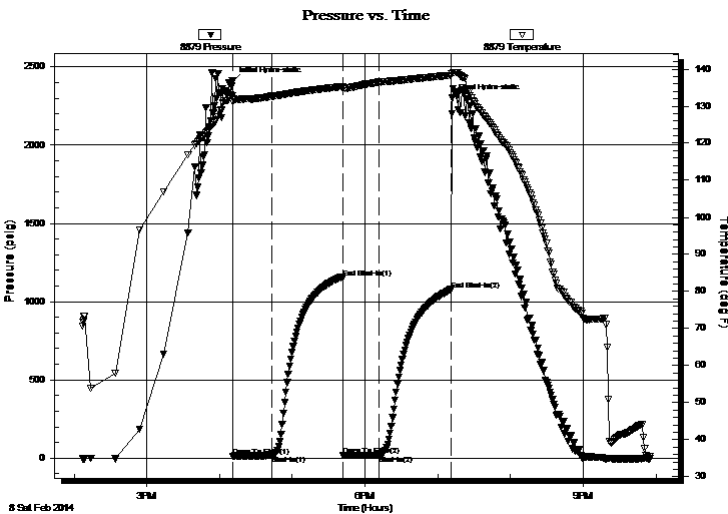
Serial #: 8879

Outside

Press@RunDepth: 20.41 psig @ 4695.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.02.08 End Date: 2014.02.08 Last Calib.: 2014.02.08
 Start Time: 14:07:05 End Time: 21:54:44 Time On Btm: 2014.02.08 @ 16:10:30
 Time Off Btm: 2014.02.08 @ 19:11:30

TEST COMMENT: 30 - IF - Weak Surface blow
 60 - ISI - No Return
 30 - FF - No Surface blow
 60 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2409.82	132.77	Initial Hydro-static
1	11.65	131.06	Open To Flow (1)
33	16.26	132.66	Shut-In(1)
92	1152.91	135.31	End Shut-In(1)
92	17.38	134.72	Open To Flow (2)
122	20.41	136.45	Shut-In(2)
181	1077.77	138.33	End Shut-In(2)
181	2300.40	138.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
6.00	Mud - 100M	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

16-1s-37w Cheyenne,KS

250 N. Water STE. 300
Wichita KS. 67202

Patricia #1-16

Job Ticket: 55167

DST#: 2

ATTN: Keith Reavis

Test Start: 2014.02.08 @ 14:07:00

Tool Information

Drill Pipe:	Length: 4098.00 ft	Diameter: 3.80 inches	Volume: 57.48 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: 589.00 ft	Diameter: 2.25 inches	Volume: 2.90 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 60.38 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4694.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	68.00 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			4672.00	
Hydraulic tool	5.00			4677.00	
Jars	5.00			4682.00	
Safety Joint	3.00			4685.00	
Packer	4.00			4689.00	27.00 Bottom Of Top Packer
Packer	5.00			4694.00	
Stubb	1.00			4695.00	
Recorder	0.00	6669	Inside	4695.00	
Recorder	0.00	8879	Outside	4695.00	
Perforations	37.00			4732.00	
Bullnose	3.00			4735.00	41.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

16-1s-37w Cheyenne,KS

250 N. Water STE. 300
Wichita KS. 67202

Patricia #1-16

Job Ticket: 55167

DST#: 2

ATTN: Keith Reavis

Test Start: 2014.02.08 @ 14:07:00

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
6.00	Mud - 100M	0.030

Total Length: 6.00 ft Total Volume: 0.030 bbl

Num Fluid Samples: 0

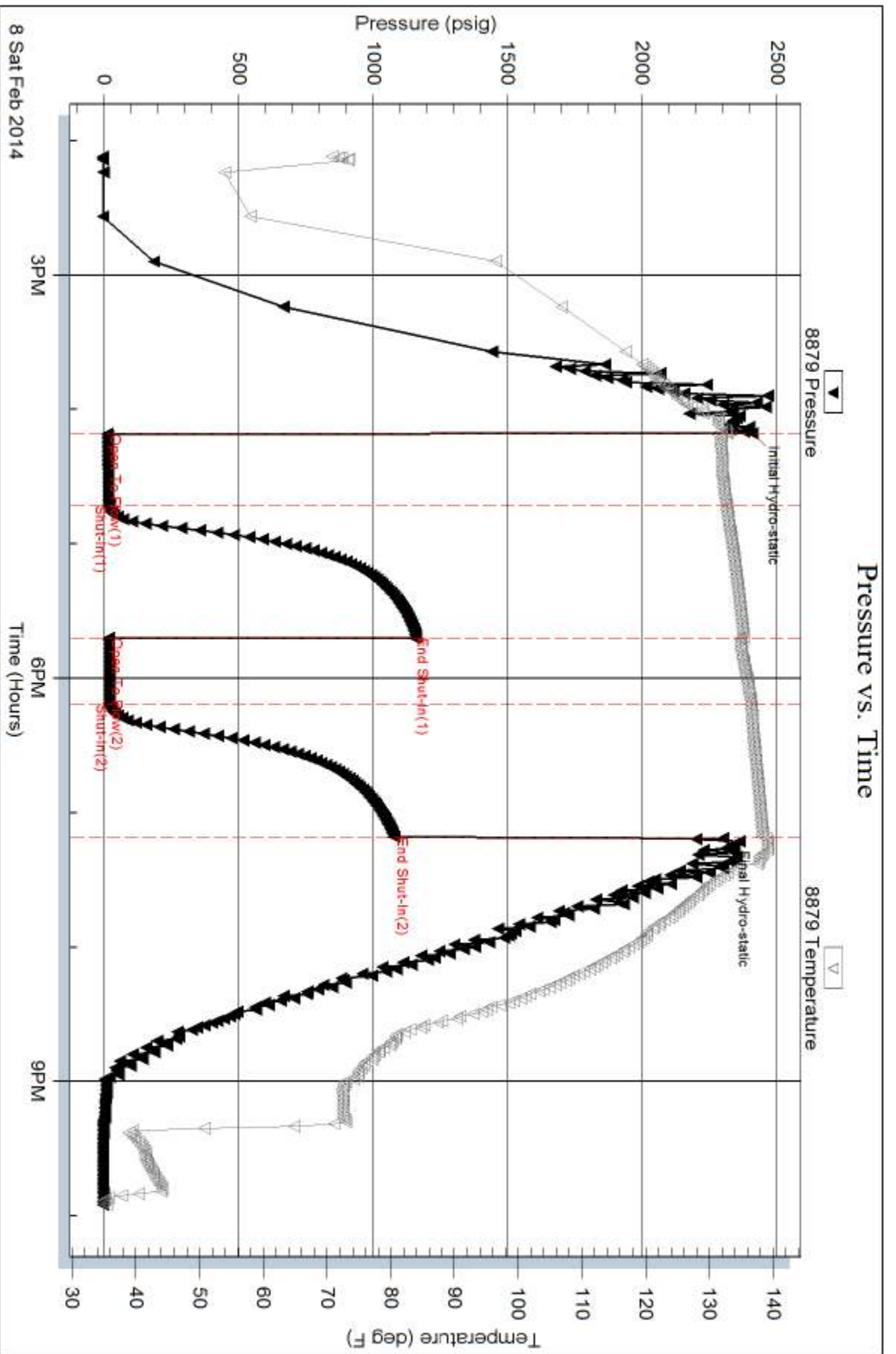
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



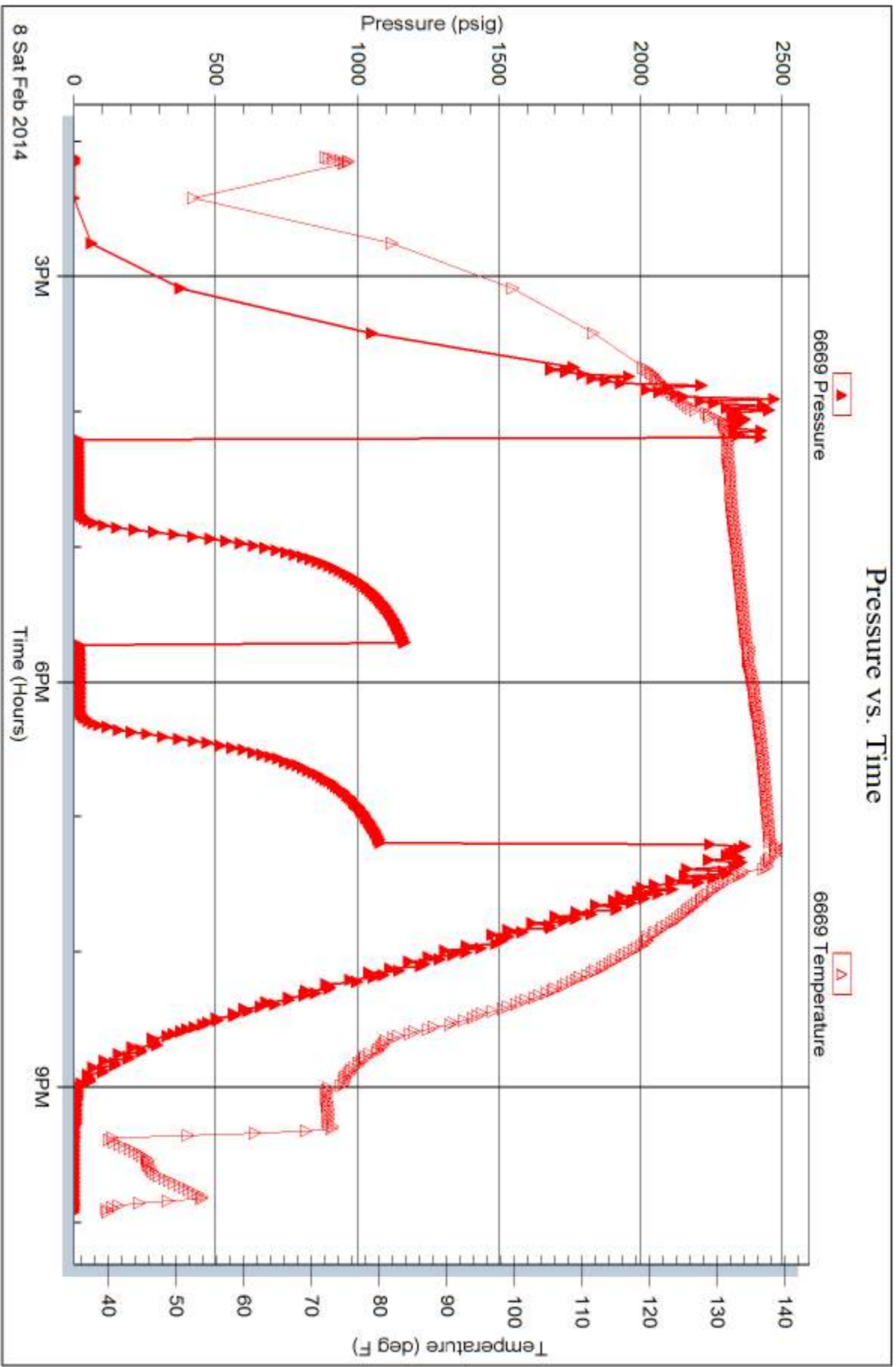
Serial #: 6669

Inside

Murfin Drilling Co., Inc.

Patricia #1-16

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 55167

Printed: 2014.02.14 @ 10:02:05



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55166

Well Name & No. Patricia #1-16 Test No. 1 Date 2-7-14
 Company Murkin Drilling Co., Inc. Elevation 3260 KB 3247 GL
 Address 250 N. Water Ste. 300 Wichita KS 67202
 Co. Rep / Geo. Keith Heavis Rig Murkin #25
 Location: Sec. 16 Twp. 1S Rge. 37W Co. Cheyenne State KS

Interval Tested 4594 - 4640 Zone Tested Lawnee
 Anchor Length 46' Drill Pipe Run 4005 Mud Wt. 9.2
 Top Packer Depth 4590 Drill Collars Run 589 Vis 666
 Bottom Packer Depth 4594 Wt. Pipe Run 0 WL 5.6
 Total Depth 4640 Chlorides 1000 ppm System LCM 6#

Blow Description IF - No Surface blow
ISI - No Return
FF - No Surface blow
FSI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>OCM</u>	<u>5</u>		<u>95</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 5' BHT 140°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2346 Test 1250 T-On Location 11:55am
 (B) First Initial Flow 13 Jars 250 T-Started 1:18pm
 (C) First Final Flow 21 Safety Joint 75 T-Open 7:17
 (D) Initial Shut-In 75 Circ Sub N/C T-Pulled 10:17
 (E) Second Initial Flow 26 Hourly Standby _____ T-Out 1:33
 (F) Second Final Flow 26 Mileage 146 R/T 226.30 Comments Hydromatic
 (G) Final Shut-In 51 Sampler _____ Froze up.
 (H) Final Hydrostatic 2224 Straddle _____ Ruined Shale Packer _____

Initial Open 30 Shale Packer 250 Ruined Packer _____
 Initial Shut-In 60 Extra Packer _____ Extra Copies _____
 Final Flow 30 Extra Recorder _____ Sub Total 0
 Final Shut-In 60 Day Standby _____ Total 2051.30
 Accessibility _____ MP/DST Disc't _____
 Sub Total 2051.30

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. **55167**

Well Name & No. Patricia #1-16 Test No. 2 Date 2-8-14
 Company Murfin Drilling Co., Inc. Elevation 3260 KB 3247 GL
 Address 250 N. Water St. 300 Wichita KS 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin #25
 Location: Sec. 16 Twp. 1S Rge. 37W Co. Cheyenne State KS

Interval Tested 4694 - 4735 Zone Tested Cherokee
 Anchor Length 41' Drill Pipe Run 4098 Mud Wt. 9.3
 Top Packer Depth 4690 Drill Collars Run 589' Vis 48
 Bottom Packer Depth 4694 Wt. Pipe Run 8 WL 6.4
 Total Depth 4735 Chlorides 900 ppm System LCM 10#

Blow Description IF - weak surface blow
ISI - No return
FF - No surface blow
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>6'</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 6' BHT 138°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2409 Test 1250 T-On Location 1:15pm
 (B) First Initial Flow 11 Jars 250 T-Started 2:07pm
 (C) First Final Flow 110 Safety Joint 75 T-Open 4:11pm
 (D) Initial Shut-In 11.52 Circ Sub N/C T-Pulled 7:11pm
 (E) Second Initial Flow 17 Hourly Standby _____ T-Out 9:55pm
 (F) Second Final Flow 20 Mileage 146 R/T 452.60 Comments _____
 (G) Final Shut-In 1077 Sampler _____ loaded tools 2/9 16:00?
 (H) Final Hydrostatic 2300 Straddle _____ Ruined Shale Packer _____

Initial Open 30 Shale Packer 250 Ruined Packer _____
 Initial Shut-In 60 Extra Packer _____ Extra Copies _____
 Final Flow 30 Extra Recorder _____ Sub Total 0
 Final Shut-In 60 Day Standby _____ Total 2277.60
 Accessibility _____ MP/DST Disc't _____
 Sub Total 2277.60

Approved By _____ Our Representative Keith Reavis

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.

OPERATOR

Company: Murfin Drilling Company, Inc.
 Address: 250 N. Water
 Suite 300
 Wichita, KS 67202
 Contact Geologist: Shauna Gunzelman
 Contact Phone Nbr: 316-267-3241
 Well Name: Patricia #1-16
 Location: Sec. 16 - T1S - R37W
 Pool: API: 15-023-21378-0000
 State: Kansas Field: Wildcat
 Country: USA



Scale 1:240 Imperial

Well Name: Patricia #1-16
 Surface Location: Sec. 16 - T1S - R37W
 Bottom Location: API: 15-023-21378-0000
 License Number: 30606
 Spud Date: 1/29/2014 Time: 21:15
 Region: Cheyenne County
 Drilling Completed: 2/9/2014 Time: 04:05
 Surface Coordinates: 1980' FNL & 2100' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 3247.00ft
 K.B. Elevation: 3260.00ft
 Logged Interval: 3560.00ft To: 4785.00ft
 Total Depth: 4785.00ft
 Formation: Cherokee
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 1980' FNL
 E/W Co-ord: 2100' FWL

LOGGED BY

Keith Reavis
Consulting Geologist

Company: Keith Reavis, Inc.
 Address: 3420 22nd Street
 Great Bend, KS 67530
 Phone Nbr: 620-617-4091
 Logged By: KLG #136 Name: Keith Reavis

CONTRACTOR

Contractor: Murfin Drilling Company
 Rig #: 25
 Rig Type: mud rotary
 Spud Date: 1/29/2014 Time: 21:15
 TD Date: 2/9/2014 Time: 04:05
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 3260.00ft Ground Elevation: 3247.00ft
 K.B. to Ground: 13.00ft

NOTES

Due to negative results of DST's #1 and #2 and evaluation of sample shows and electrical logs, it was determined that the #1 Patricia be plugged and abandoned as a dry hole.

The gamma ray and caliper curves were imported into this report from the electrical log suite. Sample tops from the Topeka down were generally low to logged formation tops. Neither ROP or electrical log curves were shifted to provide an exact match, but rather left as recorded in the field.

The samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully submitted,
 Keith Reavis

Murfin Drilling Company
daily drilling report

DATE	7:00 AM DEPTH	REMARKS
02/03/2014		Geologist Keith Reavis on location @ 2240 hrs, 3500 ft, bit trip
02/04/2014	3692	complete bit trip, ctch, resume drilling, Neva, Red Eagle, Foraker
02/05/2014	4154	drilling Topeka, Oread, Lansing
02/06/2014	4485	drilling Lansing, BKC, Marmaton, drill to 4595', stop above Pawnee, short trip, put rig to circulating, too cold to test
02/07/2014	4595	circulating until daylight, resume drilling 0750 hrs, cut Pawnee, show warrant DST, TOH w/bit and in w/tools, conduct DST #1,
02/08/2014	4667	complete DST #1, successful test, TIH w/bit, resume drilling, cut upper Cherokee, show warrants test, conduct and complete DST #2, TIH w/bit
02/09/2014	4785	resume drilling, TD @ 0405 hrs, ctch, TOH w/bit, conduct and complete logging operations 1300 hrs, geologist off location 1340 hrs

Murfin Drilling Company
well comparison sheet

Formation	DRILLING WELL				COMPARISON WELL				COMPARISON WELL			
	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
	Murfin - Patricia #1-16 1980' FNL & 2100' FWL Sec. 16 - T1S - R37W				Murfin - Patricia #2-16 660' FNL & 660' FWL Sec. 16 - T1S - R37W				Murfin - Jones B #1-9 710' FSL & 710' FWL Sec. 9 - T1S - R37W			
	3260 KB				3264 KB				3253 KB			
					Structural Relationship				Structural Relationship			
Neva	3658	-398	3664	-404	3666	-402	4	-2	3658	-405	7	1
Red Eagle	3726	-466	3729	-469	3729	-465	-1	-4	3722	-469	3	0
Foraker	3773	-513	3775	-515	3777	-513	0	-2	3769	-516	3	1
Topeka	4004	-744	4002	-742	4002	-738	-6	-4	3996	-743	-1	1
Oread	4137	-877	4135	-875	4136	-872	-5	-3	4127	-874	-3	-1
Lansing	4219	-959	4214	-954	4216	-952	-7	-2	4213	-960	1	6
Stark	4438	-1178	4432	-1172	4436	-1172	-6	0	4428	-1175	-3	3
BKC	4490	-1230	4486	-1226	4490	-1226	-4	0	4483	-1230	0	4
Pawnee	4616	-1356	4613	-1353	4612	-1348	-8	-5	4605	-1352	-4	-1
Cherokee	4697	-1437	4696	-1436	4696	-1432	-5	-4	4690	-1437	0	1
Total Depth	4785	-1525	4783	-1523	4845	-1581	56	58	4833	-1580	55	57

Drill Stem Test #1 - Pawnee

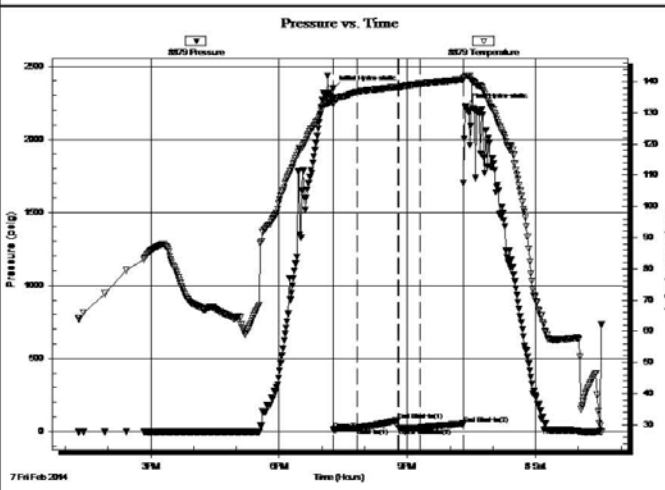
<p>TRILOBITE TESTING, INC.</p>	DRILL STEM TEST REPORT	
	Murfin Drilling Co., Inc. 250 N. Water STE 300 Wichita Ks. 67202 ATTN: Keith Reavis	16-1S-37W Patricia #1-16 Job Ticket: 55166 DST#: 1 Test Start: 2014.02.07 @ 13:18:00

GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock. ft (KB)
 Time Tool Opened: 19:16:15
 Time Test Ended: 01:33:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: #54
 Interval: **4594.00 ft (KB) To 4640.00 ft (KB) (TVD)**
 Total Depth: 4640.00 ft (KB) (TVD) Reference Elevations: 3260.00 ft (KB)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 13.00 ft
 End Depth: 3247.00 ft (CF)

Serial #: **8879**
 Press@RunDepth: 26.04 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.02.07 End Date: 2014.02.08 Last Calib.: 2014.02.08
 Start Time: 13:18:05 End Time: 01:33:00 Time On Btm: 2014.02.07 @ 19:16:00
 Time Off Btm: 2014.02.07 @ 22:21:30

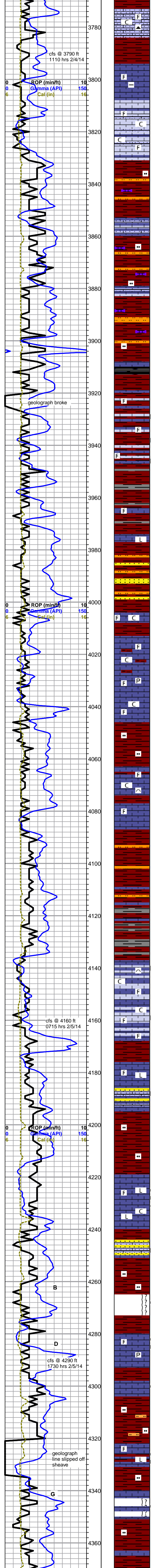
TEST COMMENT: 30 - IF - No Surface blow
 60 - ISI - No Return
 30 - FF - No Surface blow
 60 - FSI - No Return



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2346.82	133.82	Initial Hydro-static
1	13.49	132.90	Open To Flow (1)
34	21.12	136.68	Shut-In(1)
91	75.82	138.30	End Shut-In(1)
92	26.21	138.37	Open To Flow (2)
122	26.04	139.26	Shut-In(2)
183	51.82	140.65	End Shut-In(2)
186	2224.34	141.81	Final Hydro-static

Length (ft)	Description	Volume (bbl)
5.00	OSM - 95M - 5o	0.02

Gas Rates		
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/D)



Foraker 3773 -513

limestone, light gray to pale green, grainy, sandy, fossiliferous, some brown, sandy, with some calcite crystals and orange chert inclusions, some white to cream, cryptocrystalline, fossiliferous, dense, poor visible porosity, no shows, gray to lavender siltstones, abundant chalk

(3810 sample) limestone, dark gray, microcrystalline, mottled, fossiliferous, dense, with some brown cryptocrystalline, dense, arenaceous in part

(3820 sample) grades to limestone, light gray to cream, cryptocrystalline, fossiliferous to sandy to chalky, poor visible porosity, flood chalk in samples, no shows or odor

(3850 sample) shale, red, silty, soft, sticky, some pale green siltstones

shale with some limestone as above

as above

3910 and 3920 samples were missed

shale as above with limestone streaks, gray to cream, micro-cryptocrystalline, fossiliferous, some mottling, chalky in part, black asphaltic staining, some slight fractures, otherwise poor visible porosity, no show free oil or odor, light even mineral fluorescence, faint to fair milky cut

grades back to shale, red silty, gray, fissil,

shale a.a. with: limestone, light gray to cream, cryptocrystalline, fossiliferous to lithographic, dense, no shows

shale as above with pale green silstone to very fine grain sandstone, soft

Topeka 4004 -744

limestone, light gray to white, pale green, cryptocrystalline, fossiliferous, mostly dense, chalky in part, abundant chalk in tray, poor visible porosity, trace pyrite, no shows or odor, shales as above

limestone as above, some soft white bioclastic, abundant shales

red silty shale and siltstone, some pale green siltstone

as above with influx limestone, cream to light gray, cryptocrystalline, dense, fossiliferous to lithographic

red shales with flood soft light gray shale

Oread 4137 -877

limestone, white to light gray and pale green, microcrystalline, fossiliferous, trace bioclastic, some friable, poor visible porosity, scattered interclast dead gilsonitic stain, no cut, with limestone, gray, cryptocrystalline, lithographic to fossiliferous to arenaceous, barren, no odor or free oil in wet cup, light mineral fluorescence, abundant chalk

grades to limestone, light gray to gray, cryptocrystalline, fossiliferous to lithographic, dense, no shows

as above

limestone, light gray, bioclastic, chalky, with sandstone, pale green, very fine grain, fair rounding and sorting, friable to well cemented, poor visible porosity, both facies with dead black gilsonitic stain, spotted to saturated, no show free oil, no odor, poor fluorescence, no cut

shale, red, silty

Lansing 4219 -959

limestone, light gray to gray, cryptocrystalline, dense lithographic, with some scattered light gray to white limestone, chalky, fossiliferous, some edge etching and interclast crystal lined solution vugs, slightly gassy, trace free oil, no odor in wet cup, fair even fluorescence in tray, slow streaming cut in stained samples

limestone, pale green to gray/green, sandy, with sandstone, pale green to gray/green, very fine grain, well sorting, fair rounding, well cemented to friable, both facies with spotty-saturated black stain, no show free oil, poor fluorescence, no cut

(4290 sample) limestone, light gray to white, microcrystalline, recrystallized fossiliferous, pyritic in part, fractured and vuggy, good interclast and fracture staining, bleeding some heavy free oil, good sheen in tray, no odor, spotty fluorescence, excellent cut - with limestones, mottled cream pelletal, sandy, very pyritic, chalky, no show - cfs samples as above

limestones as above

shales, red, silty, some red siltstone

4340 sample - limestone, gray, cryptocrystalline, lithographic to arenaceous, some solution vugs, trace stain and dark tarry/clingy oil, with limestone, white, microcrystalline, fossiliferous, chalky, some interclast and pinpoint porosity, black spotty stain, sheen in tray, no odor in wet cup, light even fluorescence, fair cut

at tour change, samples missed from 4350 - 4370

4380 sample red silty shales, some varible gray and cream limestone from uphole, mostly fossiliferous, some coral fans, and some small vugs and interclast porosity, scattered staining, questionable free oil (sheen droplets in tray) no odor

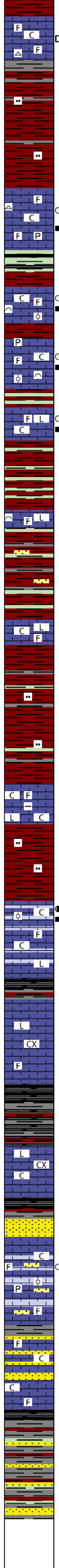
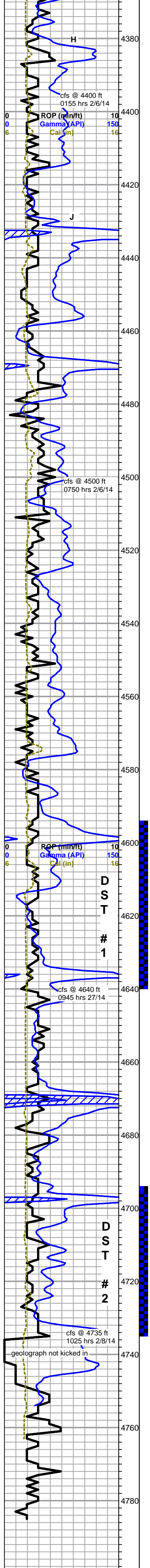
@ 3785 ft.
1115 hrs. 2/4/13
Vis. 62 Wt. 9.0
PV 22 YP 24
WL 5.2
Cake 2/32,
pH 10.5
CHL 800 ppm
Ca 10 ppm
Sol 5.0 LCM 8#
DMC \$5355.00
CMC \$17,017.00

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

Morgan Mud chk
@ 4207 ft.
1200 hrs. 2/5/13
Vis. 44 Wt. 9.2
PV 14 YP 13
WL 7.6
Cake 2/32,
pH 9.0
CHL 1000 ppm
Ca 10 ppm
Sol 6.4 LCM 8#
DMC \$848.00
CMC \$17,865.00

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



limestone, light gray, microcrystalline, fossiliferous, chalky, no show with limestone, gray to brown mottled, cherty to chalky reworked fossiliferous, arenaceous, no visible porosity, black dead speckled staining, no show free oil, no odor, fair overall fluorescence, no cut

shales, red and gray, silty

limestone, white to light gray, cryptocrystalline, chalky, fossiliferous, some edge etching and small vugs with light stain, trace tarry clingy free oil, limestone, gray mottled, recrystallized cherty fossiliferous, some small vugs, saturated black stain, sheen on water, no odor, good even fluorescence, slow milky cut, pyrite nodules

Stark Shale 4438 -1178
shale, green and black, grading to red

limestone, white to pale gray/green, fossiliferous to bioclastic to oolitic, very chalky, some good interclast porosity, friable in part, some pyritic, spotty brown to black stain, show tarry/clingy oil, trace sandy friable limestone, dark gray, black staining, no odor in wet cup, light fluorescence, slow fair milky cut

as above

L Zone - limestone, white, microcrystalline, chalky fossiliferous, poor porosity, trace black stain, limestone, gray, cryptocrystalline, lithographic, dense, few pieces gray fossiliferous, good interclast porosity and vugs, light stain, profuse streaming sheen, good streaming cut, overall fluorescence is good even, no odor in wet cup

Base KC 4490 -1230
red and green shales, some mottled

limestone, white to cream, cryptocrystalline, fossiliferous to lithographic, limestone, white chalky bioclastic, limestone, pale green, cryptocrystalline, argillaceous, no shows, abundant chalk

mixed gray, green and red shales, some scattered sandstone, light green, very fine grained, well rounded, fair sorting, friable, no shows

limestone, gray, micro-cryptocrystalline, soft arenaceous to dense lithographic and fossiliferous, abundant chalky, no shows

shale, mostly red silty, abundant bright burnt orange, some gray and green

limestone, gray, micro-cryptocrystalline, soft arenaceous to argillaceous with: dense lithographic and fossiliferous, flood of chalk in samples, no shows

cfs @ 4595', 1320 hrs 2/6/14, shor trip then stop and circ on hole until weather warms enough to test

red silty shales

Pawnee 4616 -1356
limestone, cream to light gray, micro-cryptocrystalline, fossiliferous to oolitic, appears recrystallized, some good interclast and vuggy porosity, light brown spotty to saturated stain, some rocks streaming oil sheen, good fluorescence, excellent bright cut, questionable fleeting odor in wet cup, abundant chalk

limestone grades to gray cryptocrystalline, fossiliferous to arenaceous to lithographic, mostly dense, trace tan chert, no shows

30 min cfs sample, flood black carbonaceous and red shale

limestone, light gray to gray, cryptocrystalline, slight fossiliferous to lithographic, some arenaceous, mostly dense, poor visible porosity, no shows

shale, black carbonaceous, gray and red

limestone, light gray to gray, cryptocrystalline, slight fossiliferous to lithographic, chalky in part, some arenaceous, mostly dense, poor visible porosity, no shows

Cherokee 4697 -1437
shale, black carbonaceous, gray and red

sandstone, cream to light gray and light orange, quartz, fine to very fine grain, poor to fair sorting, round to sub-angular, well cemented, slightly glauconitic and micaceous, poor porosity, no show

limestone, white to light gray, microcrystalline, fossiliferous, to oolitic, chalky, trace pyritic, few pieces with small solution vugs and inter-oolite porosity, spotty black stain, some gas bubbles, light sheen in one tray, no odor, poor fluorescence with faint cut and halo

increas in chalk, still carrying abundant sandstone a.a.

limestone, light gray to white, cryptocrystalline, slightly fossiliferous, some very chalky, with few sandstone clusters, quartz, fine grain, well rounded, fair sorted, fair cemented to slightly friable, poor visible porosity, abundant sand grains in bottom of tray, abundant chalk, no shows

samples, mostly shale, mixed, heavy red wash, with sandstone, fine to medium grain, sub-round to sub angular, poor to fair sorting, well cemented, some pyritic, trace arkose and mica, dense, no shows

as above, slight increase in sand

Rotary TD @ 4785 ft. 0405 hrs 2/9/14
Pioneer Log TD 4783 ft.
Complete Logging Operations 1300 hrs 2/9/14

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

Morgan Mud chk @ 4542 ft.
1105 hrs. 2/6/13
Vis. 47 Wt. 9.2
PV 15 YP 14
WL 7.2
Cake 2/32,
pH 10.0
CHL 1000 ppm
Ca 10 ppm
Sol 6.4 LCM 7#
DMC \$2775.00
CMC \$20,640.00

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

Patricia 1-16 dst 1.pdf

Morgan Mud chk @ 4640 ft.
1015 hrs. 2/7/13
Vis. 66 Wt. 9.2
PV 26 YP 22
WL 5.6
Cake 2/32,
pH 10.0
CHL 1000 ppm
Ca 10 ppm
Sol 6.4 LCM 6#
DMC \$2811.00
CMC \$23,451.00

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

Patricia 1-16 dst 2.pdf

Morgan Mud chk @ 4735 ft.
1130 hrs. 2/8/13
Vis. 48 Wt. 9.3
PV 15 YP 16
WL 6.4
Cake 2/32,
pH 9.5
CHL 900 ppm
Ca 10 ppm
Sol 7.1 LCM 10#
DMC \$504.00
CMC \$23,955.00

Patricia #1-16
 Daily Drilling Report
 Page Two

2/9/14 RTD 4785'. Cut 120'. DT: None. CT: 17½ hrs. Dev.: .9° @ 4785'. HC 4:05 AM 2/9/14. **DST #2 4694-4735 (Cherokee-Celia):** 30-60-30-60. IF: weak surface blow. FF: no blow. Rec.: 6' M. HP: 2410-2300. FP: 12/16, 17/20. SIP: 1153-1078. BHT: 138°. 7:40 AM Pioneer is on location and rigging up for e-logs.

2/10/14 RTD 4785'. CT: 22½ hrs. Pioneer logged 7:30AM to 1:30PM 2/9. LTD: 4783'. Allied plugged hole as follows using 60/40Poz, 4%Gel, ¼# Floseal, 25sxs @ 3235', 100sxs 2450', 40sxs @ 260', 10sxs @ 40', 30sxs RH, 15sxs MH. Started @ 9:00PM 2/9, Comp 1:30AM 2/10. Orders by Pat Bedore KCC Hays. RR @ 5:30AM 2/10. FINAL REPORT

MDCI Patricia #1-16 1980' FNL 2100' FWL Sec. 16-T1S-R37W 3260' KB							MDCI Jones B #1-9 710' FSL 710' FWL Sec. 9-T1S-R37W 3253' KB	
Formation	Sample top	Datum	Ref	Log Top	Datum	Ref	Log Top	Datum
Anhydrite	3219	+41	-4	3214	+46	+1	3208	+45
B/Anhydrite	3252	+8	-5	3246	+14	+1	3240	+13
Neva	3658	-398	+7	3665	-405	Flat	3658	-405
Red Eagle	3726	-466	+3	3728	-468	+1	3722	-469
Foraker	3773	-513	+3	3775	-515	+1	3769	-516
Topeka	4004	-744	-1	4002	-742	+1	3996	-743
Oread	4137	-877	-3	4135	-875	-1	4127	-874
Lansing	4219	-959	+1	4213	-953	+7	4213	-960
Stark	4438	-1178	-3	4433	-1173	+2	4428	-1175
BKC	4490	-1230	Flat	4486	-1226	+4	4483	-1230
Pawnee	4616	-1356	-4	4613	-1353	-1	4605	-1352
Cherokee	4697	-1437	Flat	4697	-1437	Flat	4690	-1457
Mississippi	NR			NR			NR	
RTD	4785	-1525					4835	-1582
LTD				4783	-1523		4833	-1580



PO Box 93999
Southlake, TX 76092

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

INVOICE

uost.
Prod-LH

Invoice Number: 141137
Invoice Date: Jan 29, 2014
Page: 1

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	62486	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jan 29, 2014	2/28/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Patricia #1-16		
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
968.00	CEMENT SERVICE	Ton Mileage Charge	2.60	2,516.80
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
100.00	CEMENT SERVICE	Pump Truck Mileage	7.70	770.00
1.00	CEMENT SERVICE	Manifold Head Rental	275.00	275.00
100.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	440.00
1.00	CEMENT SUPERVISOR	Andrew Forslund		
1.00	OPERATOR ASSISTANT	Brandon Wilkinson		

PKAD

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

\$ 3,521.99 *gw*

ONLY IF PAID ON OR BEFORE
Feb 23, 2014

Subtotal	10,062.85
Sales Tax	328.28
Total Invoice Amount	10,391.13
Payment/Credit Applied	
TOTAL	10,391.13

- 3521.99

ALLIED OIL & GAS SERVICES, LLC 062486

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
10akkey

DATE <u>1-29-14</u>	SEC. <u>16</u>	TWP. <u>1</u>	RANGE <u>37</u>	CALLED OUT	ON LOCATION	JOB START <u>2:30 Am</u>	JOB FINISH <u>3:00 Am</u>
LEASE <u>Metrica</u>	WELL # <u>1-16</u>	LOCATION <u>Bird city N state line</u>		COUNTY <u>Cheyenne</u>	STATE <u>KS</u>		
OLD OR <input checked="" type="radio"/> NEW (Circle one)		<u>E to rd 32 1/2 w into</u>					

CONTRACTOR <u>Metrica 25</u>	OWNER <u>Same</u>
TYPE OF JOB <u>Surface</u>	CEMENT
HOLE SIZE <u>12 1/2</u> T.D. <u>231'</u>	AMOUNT ORDERED <u>200 sks com 3/4cc</u>
CASING SIZE <u>8 5/8</u> DEPTH <u>231'</u>	
TUBING SIZE DEPTH	
DRILL PIPE DEPTH	
TOOL DEPTH	
PRES. MAX MINIMUM	COMMON <u>200 sks</u> @ <u>17.90</u> <u>3580.00</u>
MEAS. LINE SHOE JOINT	POZMIX @
CEMENT LEFT IN CSG. <u>15'</u>	GEL @
PERFS.	CHLORIDE <u>7 sks</u> @ <u>64.00</u> <u>448.00</u>
DISPLACEMENT <u>13.25 BBL</u>	ASC @

EQUIPMENT

PUMP TRUCK # <u>422</u>	CEMENTER <u>Andrew Forstead</u>	
	HELPER <u>Brandon Wilkinson</u>	
BULK TRUCK # <u>386</u>	DRIVER <u>Eddie (TWS)</u>	
BULK TRUCK #	DRIVER	
	HANDLING <u>210 cu/ft</u> @ <u>2.48</u> <u>520.80</u>	
	MILEAGE <u>2.60 ton/mile</u> <u>9/18 ton</u> <u>25/6.80</u>	
	TOTAL <u>7065.60</u>	

REMARKS:

Cement did circulate

Thank you

SERVICE

DEPTH OF JOB <u>231'</u>	
PUMP TRUCK CHARGE	<u>1512.25</u>
EXTRA FOOTAGE @	
MILEAGE <u>100 miles</u> @ <u>7.70</u>	<u>770.00</u>
MANIFOLD head @	<u>225.00</u>
Light Vehicle @ <u>4.80</u>	<u>440.00</u>

TOTAL 2997.25

CHARGE TO: Metrica

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 Raymond Blal

SIGNATURE R B L

SALES TAX (If Any) _____

TOTAL CHARGES 10,062.85

DISCOUNT 3,521.99 IF PAID IN 30 DAYS

6,540.85 Net.

ALLIED

OIL & GAS SERVICES, LLC

PO Box 93999
Southlake, TX 76092

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

*acct
Prod LTT*

INVOICE

Invoice Number: 141382

Invoice Date: Feb 9, 2014

Page: 1

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	62557	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Feb 9, 2014	3/11/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Patricia #1-16		
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
236.28	CEMENT SERVICE	Cubic Feet Charge	2.48	585.97
986.60	CEMENT SERVICE	Ton Mileage Charge	2.60	2,565.16
1.00	CEMENT SERVICE	Plug to Abandon	2,600.47	2,600.47
100.00	CEMENT SERVICE	Pump Truck Mileage	7.70	770.00
100.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	440.00
1.00	EQUIPMENT SALES	8-5/8 Wooden Plug	110.00	110.00
1.00	CEMENT SUPERVISOR	Alan Ryan		
1.00	EQUIPMENT OPERATOR	Kevin Ryan		

Account	Unit	W	No.	Amount	Disc	
10203				7798.07	PTA	1-16
3.6246.000						

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

\$ 3,674.21

ONLY IF PAID ON OR BEFORE Mar 6, 2014

Subtotal	10,607.75
Sales Tax	864.53
Total Invoice Amount	11,472.28
Payment/Credit Applied	
TOTAL	11,472.28

- 3674.21

7798.07

ALLIED OIL & GAS SERVICES, LLC 062557

Federal Tax I.D. # 20-8851475

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

SERVICE POINT:

Oshtemo, KY

DATE <u>1/9/14</u>	SEC. <u>10</u>	TWP. <u>1</u>	RANGE <u>37</u>	CALLED OUT	ON LOCATION	JOB START <u>12:30</u>	JOB FINISH <u>1:30</u>
LEASE <u>Participating</u>	WELL # <u>1-16</u>	LOCATION <u>Barkhorn ST State Line E70-33</u>			COUNTY <u>Chapman, KY</u>	STATE	
OLD OR NEW (Circle one)		<u>1 1/2 S W into</u>					

CONTRACTOR Max G. 25
 TYPE OF JOB PTA
 HOLE SIZE 7 1/2 T.D.
 CASING SIZE 8 1/2 DEPTH
 TUBING SIZE DEPTH
 DRILL PIPE 4 1/2 DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG.
 PERFS.
 DISPLACEMENT

OWNER Same
 CEMENT AMOUNT ORDERED 220 bags / 4000 lbs
114 PLO

COMMON	<u>132</u>	@ <u>17.80</u>	<u>2362.80</u>
POZMIX	<u>88</u>	@ <u>9.35</u>	<u>822.80</u>
GEL	<u>8</u>	@ <u>23.20</u>	<u>187.20</u>
CHLORIDE		@	
ASC		@	
	<u>Mosreal 53 1/2</u>	@ <u>2.22</u>	<u>116.85</u>
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>236</u>	@ <u>2.48</u>	<u>585.92</u>
MILEAGE	<u>2 mi</u>	@ <u>2.86</u>	<u>5.72</u>
			<u>2565.54</u>
			<u>28</u>
			<u>TOTAL 6660.28</u>

EQUIPMENT

PUMP TRUCK CEMENTER Ala Ryan
 # 425-281 HELPER Kevin Ryan
 BULK TRUCK
 # 386 DRIVER Juan A (Tias)
 BULK TRUCK
 # DRIVER

REMARKS:

3235' - 25 SK
2450' - 100 SK
200' - 40 SK
40' - 10 SK

RH - 30 SK
MH - 15 SK

CHARGE TO: Max Drilling Co
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB 3235
 PUMP TRUCK CHARGE 2600.00
 EXTRA FOOTAGE @
 MILEAGE 100 @ 7.25 725.00
 MANIFOLD @
100 @ 4.40 440.00
 @

TOTAL 3810.00

PLUG & FLOAT EQUIPMENT

5 1/2" wood plug @ 110.00
 @
 @
 @
 @

TOTAL 110.00

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 Raymond Blak
 SIGNATURE Raymond Blak

SALES TAX (if Any) _____
 TOTAL CHARGES 10,580.75
 DISCOUNT 3,664.76 IF PAID IN 30 DAYS
6,915.98 Net.