



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1226805
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: _____

1226805

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

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

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

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

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

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Meyer 1-8
Doc ID	1226805

All Electric Logs Run

DIL
DUCP
MEL
BHCS



PO Box 93999
Southlake, TX 76092

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

*Direct
Prod-MG*

INVOICE

Invoice Number: 144727
Invoice Date: Jul 29, 2014
Page: 1

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

Federal Tax I.D.#: 20-8651475

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Murfin	55388	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-01	Russell	Jul 29, 2014	8/28/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Meyer #1-8		
165.00	CEMENT MATE	Class A Common	17.90	2,953.50
468.00	CEMENT MATE	Chloride	1.10	514.80
165.00	CEMENT SERVI	Cubic Feet Charge	2.48	409.20
195.00	CEMENT SERVI	Ton Mileage Charge	2.75	536.25
1.00	CEMENT SERVI	Surface	1,512.25	1,512.25
25.00	CEMENT SERVI	Light Vehicle Mileage	4.40	110.00
50.00	CEMENT SERVI	Pump Truck Mileage	7.70	385.00
1.00	CEMENT SUPEI	Robert Yakubovich		
1.00	EQUIPMENT OF	Nathan Donner		
1.00	EQUIPMENT OF	Kevin Rupp		

Subtotal	6,421.00
Sales Tax	265.32
Total Invoice Amount	6,686.32
Payment/Credit Applied	
TOTAL	6,686.32

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

\$ 2247.35 *35%
oh 56*

ONLY IF PAID ON OR BEFORE

Aug 28, 2014

*- 2247.35
4438.97*

OK MTR

ALLIED OIL & GAS SERVICES, LLC 055388

Federal Tax I.D.# 20-5975804

Corrected

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Russell KS

DATE <i>7-29-14</i>	SEC. <i>8</i>	TWP. <i>8</i>	RANGE <i>14</i>	CALLED OUT	ON LOCATION	JOB START <i>9:00 AM</i>	JOB FINISH <i>9:30 AM</i>
LEASE <i>Meyer</i>	WELL # <i>1-8</i>	LOCATION <i>Russell KS 1/2 W 4 - Pridmore KS</i>			COUNTY <i>Russell</i>	STATE <i>KS</i>	
OLD OR NEW (Circle one)	<i>1/2 E 1 W 1 W 5 N E 10</i>			<i>Osborne</i>			

CONTRACTOR *Mudrin 24*
 TYPE OF JOB *Surface*
 HOLE SIZE *12 1/4* T.D. *220*
 CASING SIZE *8 7/8 23 1/2* DEPTH *220*
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT *15*
 CEMENT LEFT IN CSG. *15*
 PERFS.
 DISPLACEMENT *13*

OWNER
 CEMENT AMOUNT ORDERED *165 com 370cc ~~280~~ 1*
 COMMON *165* @ *17.90* *2953.50*
 POZMIX @
 GEL @
 CHLORIDE *468* @ *1.10* *514.80*
 ASC @
 @
Material @ *3468.30*
 @
Disc @ *1213.98*
 @
 @
 @
 HANDLING *165 sks* @ *2.48* *409.20*
 MILEAGE *195 1/2 hr* @ *2.75* *536.25*
 TOTAL *4413.75*

EQUIPMENT

PUMP TRUCK CEMENTER *Robert Yakubovich*
 # *409* HELPER *Nathan Donner*
 BULK TRUCK
 # *410* DRIVER *Kevin Rupp*
 BULK TRUCK
 # DRIVER

REMARKS:

See log

Thank you!!!

CHARGE TO: *Mudrin Drilling Company*
 STREET
 CITY STATE ZIP

SERVICE

DEPTH OF JOB *220*
 PUMP TRUCK CHARGE *1512.25*
 EXTRA FOOTAGE @
 MILEAGE *25 1/2 hr* @ *4.40* *110.00*
 MANIFOLD @
50 1/2 hr @ *7.70* *385.00*
 @

Disc 1033.74 TOTAL *2954.70*
~~TOTAL 2007.25~~

PLUG & FLOAT EQUIPMENT

@
 @
 @
 @
 @

TOTAL

SALES TAX (If Any)
 TOTAL CHARGES *6421.06*
 DISCOUNT *2247.35* *35%* IF PAID IN 30 DAYS
 net \$ *4173.65*

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 *Anthony Martin*
 SIGNATURE *Anthony Martin*

ALLIED OIL & GAS SERVICES, LLC 063505

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Russell
Troutman

DATE <u>8-5-14</u>	SEC <u>8</u>	TWP. <u>10</u>	RANGE <u>14</u>	CALLED OUT	ON LOCATION <u>1pm</u>	JOB START <u>2:30 PM</u>	JOB FINISH <u>5:30 PM</u>
LEASE <u>Meyer</u>		WELL # <u>1-8</u>	LOCATION <u>Paradise-E-N7</u>		COUNTY <u>Denton</u>	STATE <u>TX</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Murfin 24
 TYPE OF JOB Rotary plug
 HOLE SIZE 7 7/8 T.D.
 CASING SIZE DEPTH
 TUBING SIZE DEPTH
 DRILL PIPE 4 1/2 DEPTH 3616
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. PH
 PERFS.
 DISPLACEMENT Fraser

OWNER
 CEMENT AMOUNT ORDERED 2905x 60/40 4 1/2 gal
 COMMON @
 POZMIX @
 GEL @
 CHLORIDE @
 ASC @
1/4 4 1/2 gal 290 @ 18.92 5486.80
Material @ 5486.80
Line @ 1920.38
Service
 HANDLING 290 st @ 2.98 719.20
 MILEAGE 324.08 r/m 2.75 891.22

EQUIPMENT
 PUMP TRUCK CEMENTER Josh Hark
 # 417 HELPER Danny Sinner
 BULK TRUCK
 # 475-473 DRIVER John Price
 BULK TRUCK
 # DRIVER

REMARKS:

on location rig up - had safety meeting
Run 4 1/2 drill pipe - fill hole w/ plug mud
#1 - 3616ft - 50 ST
#2 - 1150 - 50 PH - 30
#3 - 625 - 100
#4 - 270 - 50
#5 - 40 - 10
Plug down 7:25am rig down

DEPTH OF JOB 3616
 PUMP TRUCK CHARGE 2600.47
 EXTRA FOOTAGE @
 MILEAGE 25 LVMZ @ 4.40 110.00
 MANIFOLD @
50 4V MZ @ 7.70 385.00
4705.89
Line 1647.06 TOTAL 3095.47

CHARGE TO: Murfin drilling
 STREET
 CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

Wooden plug @ 110.00 110.00
 @
 @
 @
Line 38.50 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.

SALES TAX (if Any)
 TOTAL CHARGES 10302.69
 DISCOUNT 3605.94 (35.90) IF PAID IN 30 DAYS

PRINTED NAME K. Anthony Martin

SIGNATURE K. Anthony Martin

net \$ 6696.75

Thank you!!

Meyer #1-8
 Daily Drilling Report
 Page Two

8/5/14 RTD: 3719'. Cut 419'. DT: 2hrs (LC @ 3533, 100BBLs). CT: 5¼ hrs. Dev.: None. HC @ 3:15AM 8/5. TOOH F/log

8/6/14 RTD: 3719'. CT: 24hrs. Dev.: 1° @ 3719. Pioneer logged 7:30AM – 9:00AM, bridge @ 3190', TIH w/bit & circ 1½ hrs & TOOH for log. Logged 4:00PM -8:00PM 8/5. LTD: 3716'. Allied plugged hole, 11:00PM 8/5 – 3:00AM 8/6, as follows using 60/40Poz, 4%Gel, ¼#Floreal, 50sxs @ 3626', 50sxs @ 1150', 100sxs @ 625', 50sxs @ 270', 10sxs @ 40', 30sxs RH. Orders: Chris Neely, KCC Hays. RR @ 7:00AM 8/6/14.

MDCI Meyer #1-8 2310 FSL 1200 FWL Sec. 8-T10S-R14W 1920' KB					MDCI Tim #1-8 2310 FNL 1100 FWL Sec. 8-T10S-R14W 1953' KB			
Formation	Sample top	Datum	Ref	Log Top	Datum	Ref	Log Top	Datum
Anhydrite	1140	+780	-42	1138	+782	-40	1131	+822
B/Anhydrite	1169	+751	-30	1168	+752	-29	1172	+781
Topeka	2834	-914	-9	2832	-912	-7	2858	-905
Heebner	3083	-1163	-11	3079	-1159	-7	3105	-1152
Toronto	3104	-1186	-11	3100	-1180	-7	3126	-1173
Lansing	3134	-1214	-11	3130	-1210	-7	3156	-1203
Stark	3347	-1427	-12	3344	-1424	-9	3368	-1415
BKC	3402	-1482	-13	3398	-1478	-9	3422	-1469
Cherokee	3512	-1592	-13	3508	-1588	-9	3532	-1579
Viola	3580	-1660	-9	3580	-1660	-9	3604	-1651
Simpson	3617	-1697	-8	3610	-1690	-1	3642	-1689
Arbuckle	3654	-1734	+4	3636	-1716	+22	3691	-1738
RTD	3719	-1799					3750	-1797
LTD				3716			3751	-1798



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Jeff Christian

Meyer #1-8

8-10s-14w Osborne,KS

Start Date: 2014.08.01 @ 10:42:00

End Date: 2014.08.01 @ 18:34:00

Job Ticket #: 59275 DST #: 1

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

Printed: 2014.08.06 @ 10:43:03



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
 250 N Water Ste 300
 Wichita, KS 67202
 ATTN: Jeff Christian

8-10s-14w Osborne, KS

Meyer #1-8

Job Ticket: 59275

DST#: 1

Test Start: 2014.08.01 @ 10:42:00

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:56:30

Time Test Ended: 18:34:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Phillip Gage

Unit No: 58

Interval: 2860.00 ft (KB) To 2880.00 ft (KB) (TVD)

Reference Elevations: 1919.00 ft (KB)

Total Depth: 2880.00 ft (KB) (TVD)

1914.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 8679 Inside

Press@RunDepth: 79.47 psig @ 2861.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.01

End Date:

2014.08.01

Last Calib.: 2014.08.01

Start Time: 10:42:01

End Time:

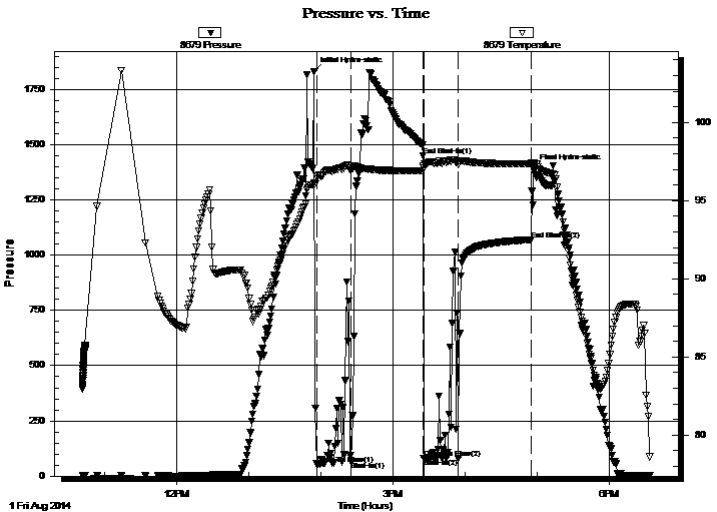
18:34:00

Time On Btm: 2014.08.01 @ 13:54:30

Time Off Btm: 2014.08.01 @ 16:57:00

TEST COMMENT: 30-IF-Weak Surface Blow , Died in 14 mins
 60-ISI-No Return
 30-FF-Built to 1/4"
 60-FSI-No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1831.68	96.13	Initial Hydro-static
2	55.16	96.57	Open To Flow (1)
31	65.63	96.99	Shut-In(1)
91	1450.80	97.20	End Shut-In(1)
91	80.62	97.08	Open To Flow (2)
120	79.47	97.32	Shut-In(2)
181	1069.76	97.36	End Shut-In(2)
183	1388.82	97.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	M, 100% m, with oil spots	0.63

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc

8-10s-14w Osborne, KS

250 N Water Ste 300
Wichita, KS 67202

Meyer #1-8

Job Ticket: 59275

DST#: 1

ATTN: Jeff Christian

Test Start: 2014.08.01 @ 10:42:00

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:56:30

Time Test Ended: 18:34:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Phillip Gage

Unit No: 58

Interval: 2860.00 ft (KB) To 2880.00 ft (KB) (TVD)

Reference Elevations: 1919.00 ft (KB)

Total Depth: 2880.00 ft (KB) (TVD)

1914.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 6625 Outside

Press@RunDepth: psig @ 2861.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.01

End Date:

2014.08.01

Last Calib.:

2014.08.01

Start Time: 10:42:01

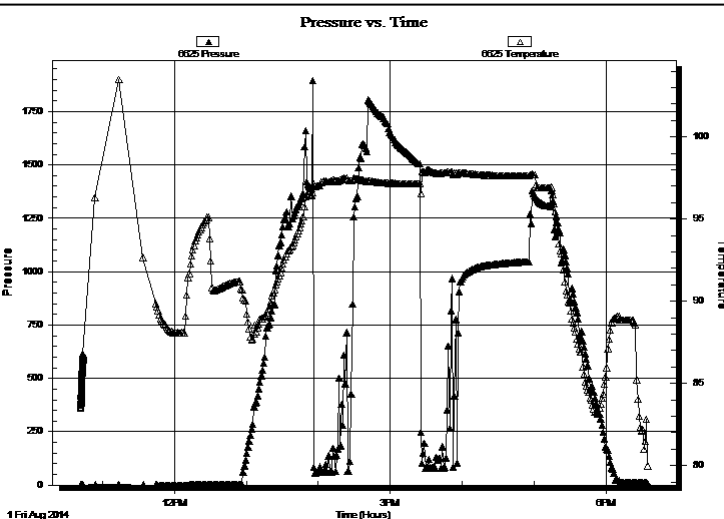
End Time:

18:35:00

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF-Weak Surface Blow , Died in 14 mins
60-ISI-No Return
30-FF-Built to 1/4"
60-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
100.00	M, 100% m, with oil spots	0.63

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 Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne, KS
Meyer #1-8
Job Ticket: 59275 **DST#: 1**
Test Start: 2014.08.01 @ 10:42:00

Tool Information

Drill Pipe:	Length: 2775.00 ft	Diameter: 3.80 inches	Volume: 38.93 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 85.00 ft	Diameter: 2.25 inches	Volume: 0.42 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 39.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	2860.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	40.00 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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Change Over Sub	1.00			2841.00	
Shut In Tool	5.00			2846.00	
Hydraulic tool	5.00			2851.00	
Packer	5.00			2856.00	20.00 Bottom Of Top Packer
Packer	4.00			2860.00	
Stubb	1.00			2861.00	
Recorder	0.00	6625	Outside	2861.00	
Recorder	0.00	8679	Inside	2861.00	
Perforations	15.00			2876.00	
Bullnose	4.00			2880.00	20.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne,KS
Meyer #1-8
Job Ticket: 59275 **DST#: 1**
Test Start: 2014.08.01 @ 10:42:00

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: 79.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1600.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	M, 100% m, with oil spots	0.628

Total Length: 100.00 ft Total Volume: 0.628 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

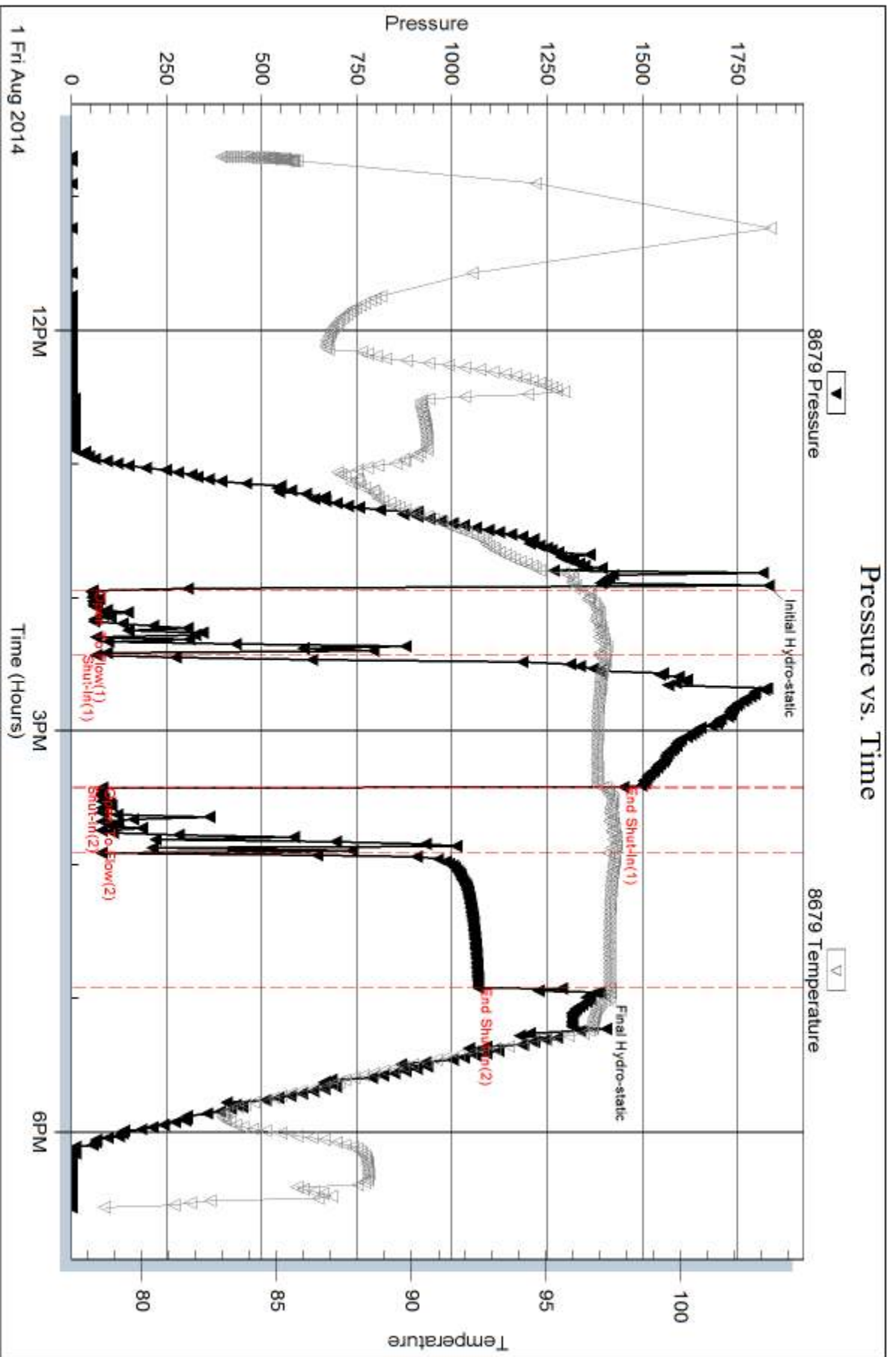
Serial #: 8679

Inside

Murfin Drilling Co. Inc

Meyer #1-8

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59275

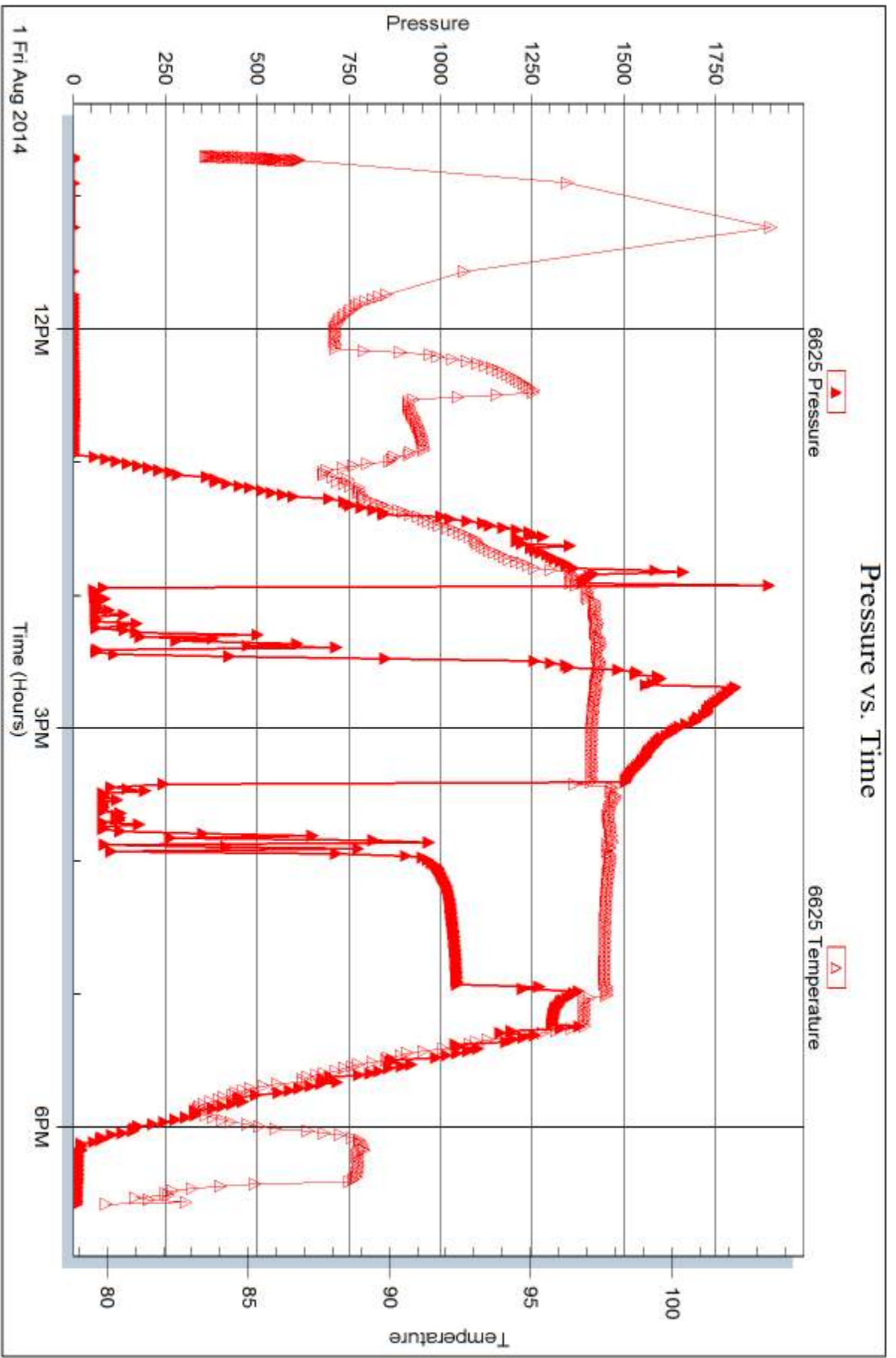
Printed: 2014.08.06 @ 10:43:05

Serial #: 6625

Outside Murfin Drilling Co. Inc

Meyer #1-8

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59275

Printed: 2014.08.06 @ 10:43:05



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Jeff Christian

Meyer #1-8

8-10s-14w Osborne,KS

Start Date: 2014.08.01 @ 21:57:00

End Date: 2014.08.02 @ 05:58:00

Job Ticket #: 58726 DST #: 2

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

Printed: 2014.08.06 @ 10:43:45



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne, KS

Meyer #1-8

Job Ticket: 58726

DST#: 2

Test Start: 2014.08.01 @ 21:57:00

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:33:00

Time Test Ended: 05:58:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 58

Interval: 2857.00 ft (KB) To 2880.00 ft (KB) (TVD)

Reference Elevations: 1919.00 ft (KB)

Total Depth: 2880.00 ft (KB) (TVD)

1914.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8679

Inside

Press@RunDepth: 41.62 psig @ 2858.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.01

End Date:

2014.08.02

Last Calib.:

2014.08.02

Start Time: 21:57:01

End Time:

05:58:00

Time On Btm:

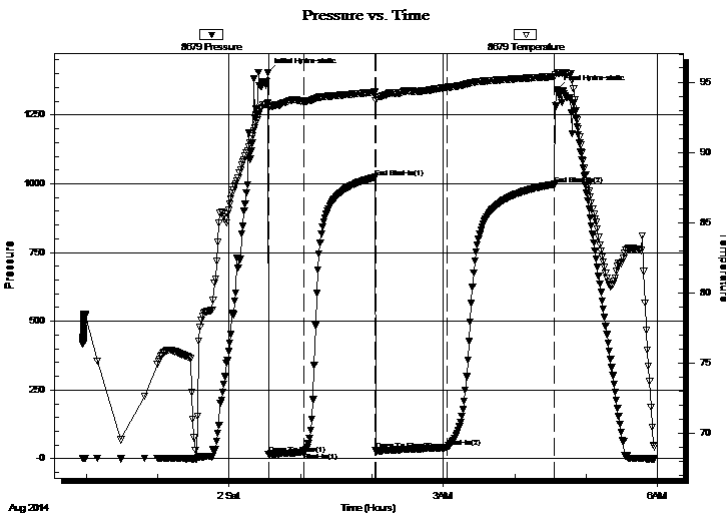
2014.08.02 @ 00:32:30

Time Off Btm:

2014.08.02 @ 04:35:30

TEST COMMENT: 30-IF-Built to 1 1/2"
60-ISI-No Return
60-FF-Surface blow started at 8 mins, built to 1 1/4"
90-FSI-No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1403.03	93.51	Initial Hydro-static
1	17.57	93.21	Open To Flow (1)
31	24.87	93.65	Shut-In(1)
90	1023.26	94.29	End Shut-In(1)
91	29.50	93.70	Open To Flow (2)
151	41.62	94.64	Shut-In(2)
241	998.32	95.40	End Shut-In(2)
243	1343.20	95.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOCM, 10%o, 90%m	0.30

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
 250 N Water Ste 300
 Wichita, KS 67202
 ATTN: Jeff Christian

8-10s-14w Osborne, KS

Meyer #1-8

Job Ticket: 58726 **DST#: 2**

Test Start: 2014.08.01 @ 21:57:00

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:33:00

Time Test Ended: 05:58:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 58

Interval: 2857.00 ft (KB) To 2880.00 ft (KB) (TVD)

Reference Elevations: 1919.00 ft (KB)

Total Depth: 2880.00 ft (KB) (TVD)

1914.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6625 Outside

Press@RunDepth: psig @ 2858.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.01 End Date: 2014.08.02

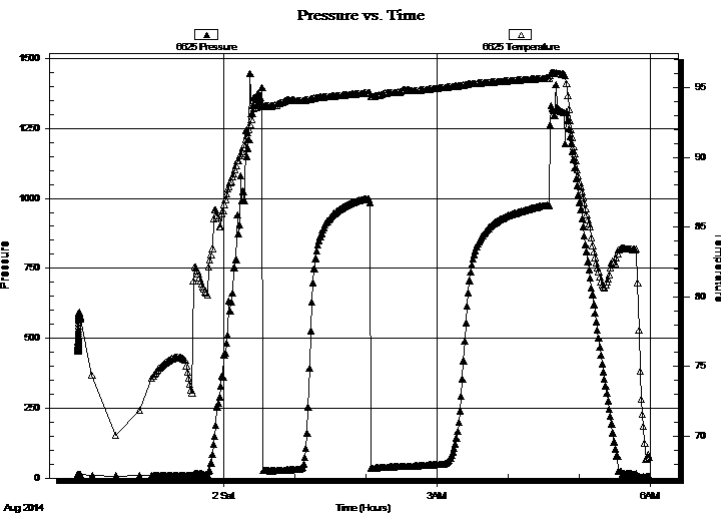
Last Calib.: 2014.08.02

Start Time: 21:57:01 End Time: 05:59:30

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF-Built to 1 1/2"
 60-ISI-No Return
 60-FF-Surface blow started at 8 mins, built to 1 1/4"
 90-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOCM, 10%o, 90%m	0.30

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne,KS
Meyer #1-8
Job Ticket: 58726 **DST#: 2**
Test Start: 2014.08.01 @ 21:57:00

Tool Information

Drill Pipe:	Length: 2775.00 ft	Diameter: 3.80 inches	Volume: 38.93 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 85.00 ft	Diameter: 2.25 inches	Volume: 0.42 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 39.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	2857.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2838.00	
Shut In Tool	5.00			2843.00	
Hydraulic tool	5.00			2848.00	
Packer	5.00			2853.00	20.00 Bottom Of Top Packer
Packer	4.00			2857.00	
Stubb	1.00			2858.00	
Recorder	0.00	6625	Outside	2858.00	
Recorder	0.00	8679	Inside	2858.00	
Perforations	18.00			2876.00	
Bullnose	4.00			2880.00	23.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne,KS
Meyer #1-8
Job Ticket: 58726 **DST#: 2**
Test Start: 2014.08.01 @ 21:57:00

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: 79.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1600.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

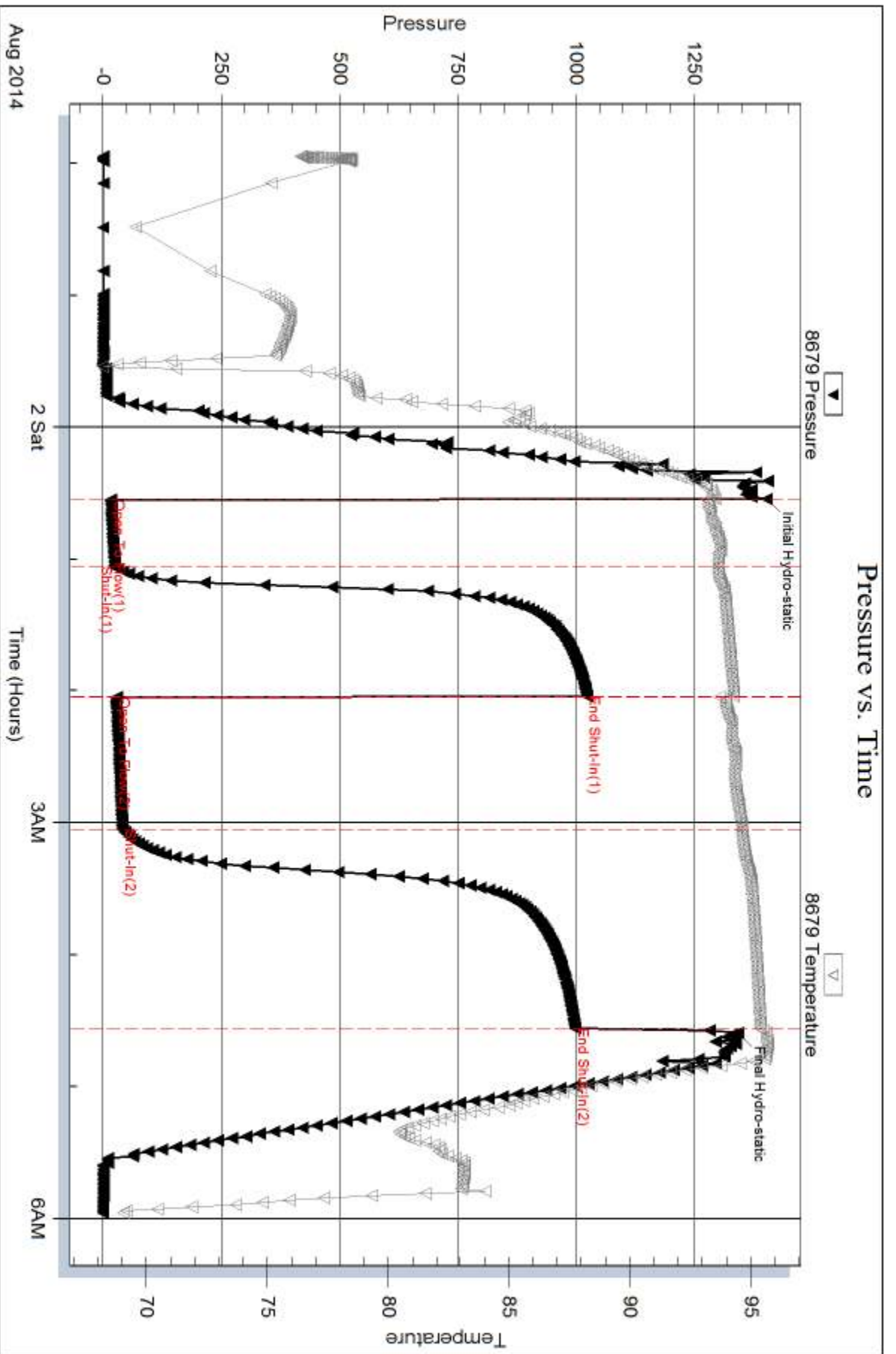
Length ft	Description	Volume bbl
60.00	SOCM, 10%o, 90%m	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

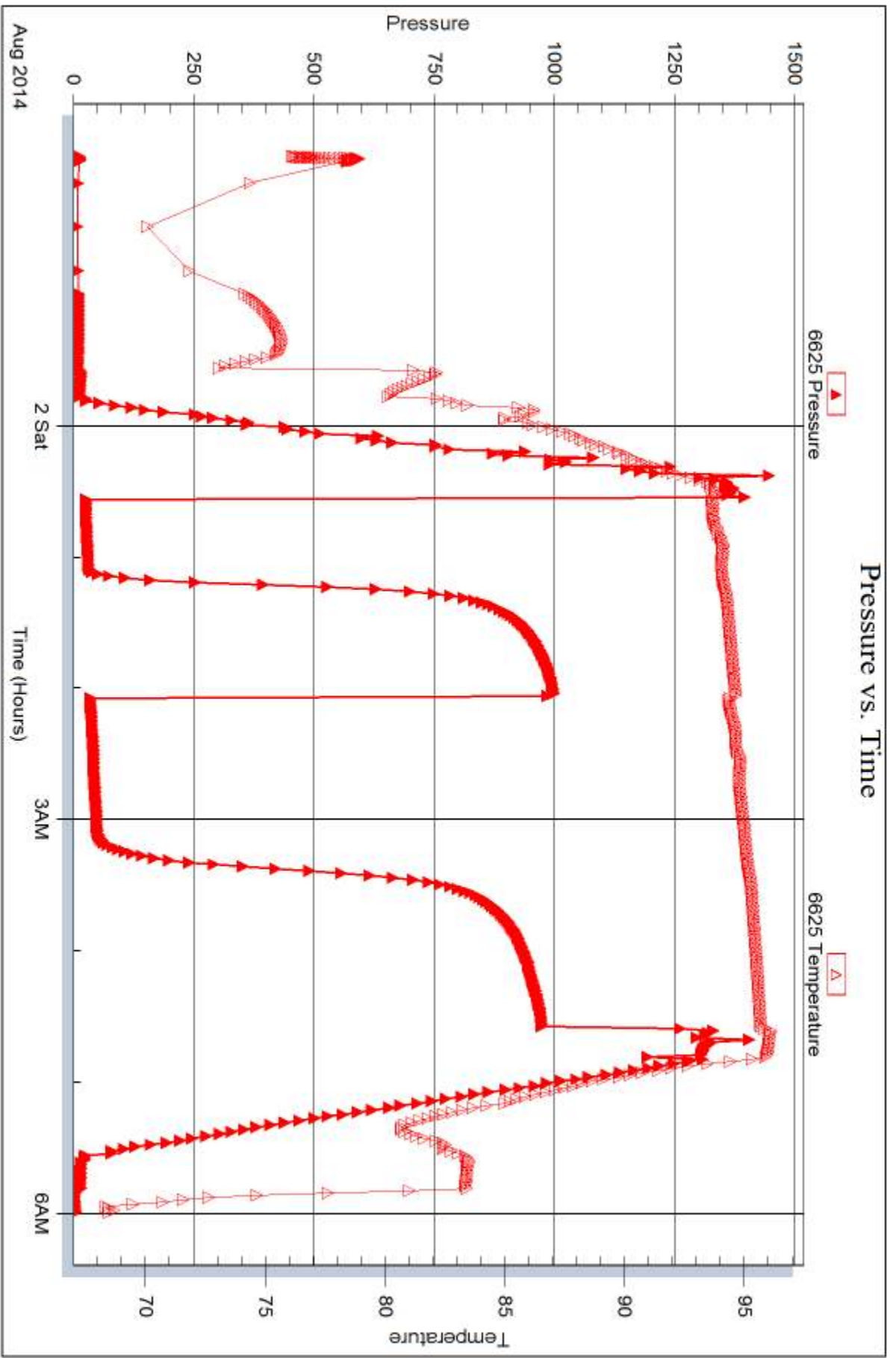


Serial #: 6625

Outside Murfin Drilling Co. Inc

Meyer #1-8

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 58726

Printed: 2014.08.06 @ 10:43:46



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Jeff Christian

Meyer #1-8

8-10s-14w Osborne,KS

Start Date: 2014.08.02 @ 16:29:00

End Date: 2014.08.02 @ 22:49:00

Job Ticket #: 58727 DST #: 3

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

Printed: 2014.08.06 @ 10:28:04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne, KS

Meyer #1-8

Job Ticket: 58727

DST#: 3

Test Start: 2014.08.02 @ 16:29:00

GENERAL INFORMATION:

Formation: **Lecompton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:21:30

Time Test Ended: 22:49:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 58

Interval: 2953.00 ft (KB) To 3021.00 ft (KB) (TVD)

Reference Elevations: 1919.00 ft (KB)

Total Depth: 3021.00 ft (KB) (TVD)

1914.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8679

Inside

Press@RunDepth: 23.90 psig @ 2954.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.02

End Date:

2014.08.02

Last Calib.:

2014.08.02

Start Time: 16:29:01

End Time:

22:49:00

Time On Btm:

2014.08.02 @ 18:21:00

Time Off Btm:

2014.08.02 @ 21:23:30

TEST COMMENT: 30-IF-Built to 1/8", died in 27 mins
60-ISI-No Return
30-FF-No Blow
60-FSI-No Return

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1458.33	97.45	Initial Hydro-static
1	16.86	97.00	Open To Flow (1)
30	19.44	97.35	Shut-In(1)
90	1004.42	98.05	End Shut-In(1)
90	20.31	97.68	Open To Flow (2)
121	23.90	97.96	Shut-In(2)
182	943.97	98.45	End Shut-In(2)
183	1511.59	98.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	M, 100%m	0.02

Gas Rates

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

* Recovery from multiple tests



DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
 250 N Water Ste 300
 Wichita, KS 67202
 ATTN: Jeff Christian

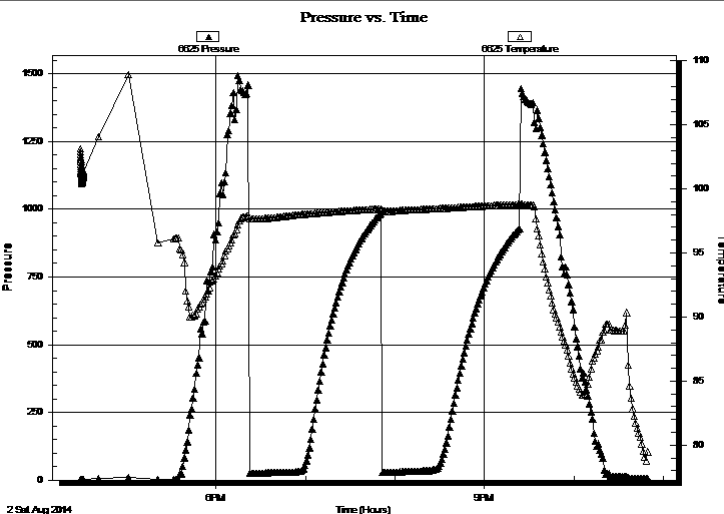
8-10s-14w Osborne, KS
Meyer #1-8
 Job Ticket: 58727 **DST#: 3**
 Test Start: 2014.08.02 @ 16:29:00

GENERAL INFORMATION:

Formation: **Lecompton**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 18:21:30 Tester: Phillip Gage
 Time Test Ended: 22:49:00 Unit No: 58
Interval: 2953.00 ft (KB) To 3021.00 ft (KB) (TVD) Reference Elevations: 1919.00 ft (KB)
 Total Depth: 3021.00 ft (KB) (TVD) 1914.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 6625 Outside
 Press@RunDepth: psig @ 2954.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.02 End Date: 2014.08.02 Last Calib.: 2014.08.02
 Start Time: 16:29:01 End Time: 22:50:00 Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-Built to 1/8", died in 27 mins
 60-ISI-No Return
 30-FF-No Blow
 60-FSI-No Return



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

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	M, 100%m	0.02

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne, KS
Meyer #1-8
Job Ticket: 58727 **DST#: 3**
Test Start: 2014.08.02 @ 16:29:00

Tool Information

Drill Pipe:	Length: 2869.00 ft	Diameter: 3.80 inches	Volume: 40.24 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 85.00 ft	Diameter: 2.25 inches	Volume: 0.42 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 40.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	2953.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	88.00 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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Change Over Sub	1.00			2934.00	
Shut In Tool	5.00			2939.00	
Hydraulic tool	5.00			2944.00	
Packer	5.00			2949.00	20.00 Bottom Of Top Packer
Packer	4.00			2953.00	
Stubb	1.00			2954.00	
Recorder	0.00	6625	Outside	2954.00	
Recorder	0.00	8679	Inside	2954.00	
Perforations	30.00			2984.00	
Change Over Sub	1.00			2985.00	
Drill Pipe	31.00			3016.00	
Change Over Sub	1.00			3017.00	
Bullnose	4.00			3021.00	68.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne,KS
Meyer #1-8
Job Ticket: 58727 **DST#: 3**
Test Start: 2014.08.02 @ 16:29:00

Mud and Cushion Information

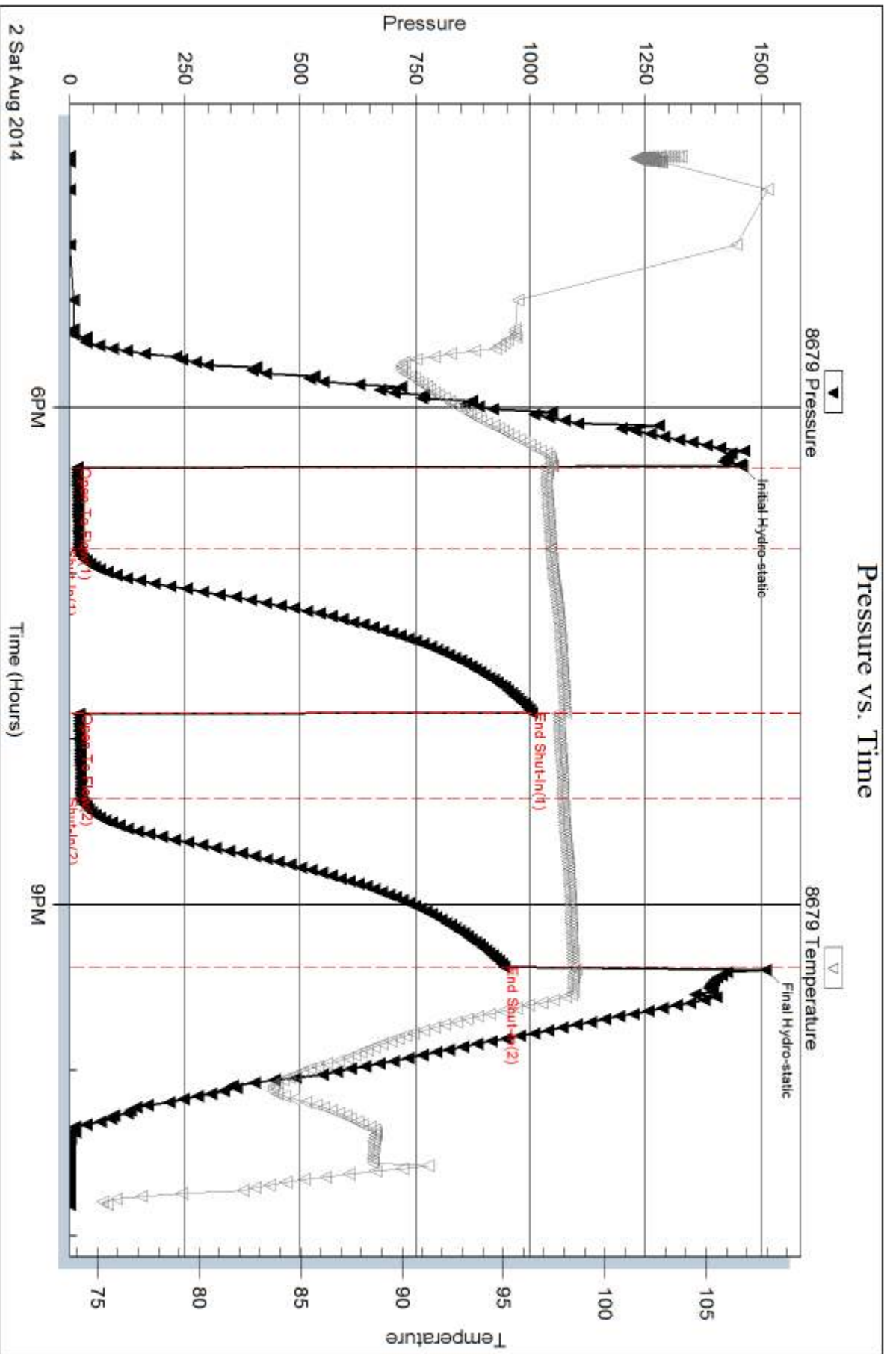
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 84.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	M, 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

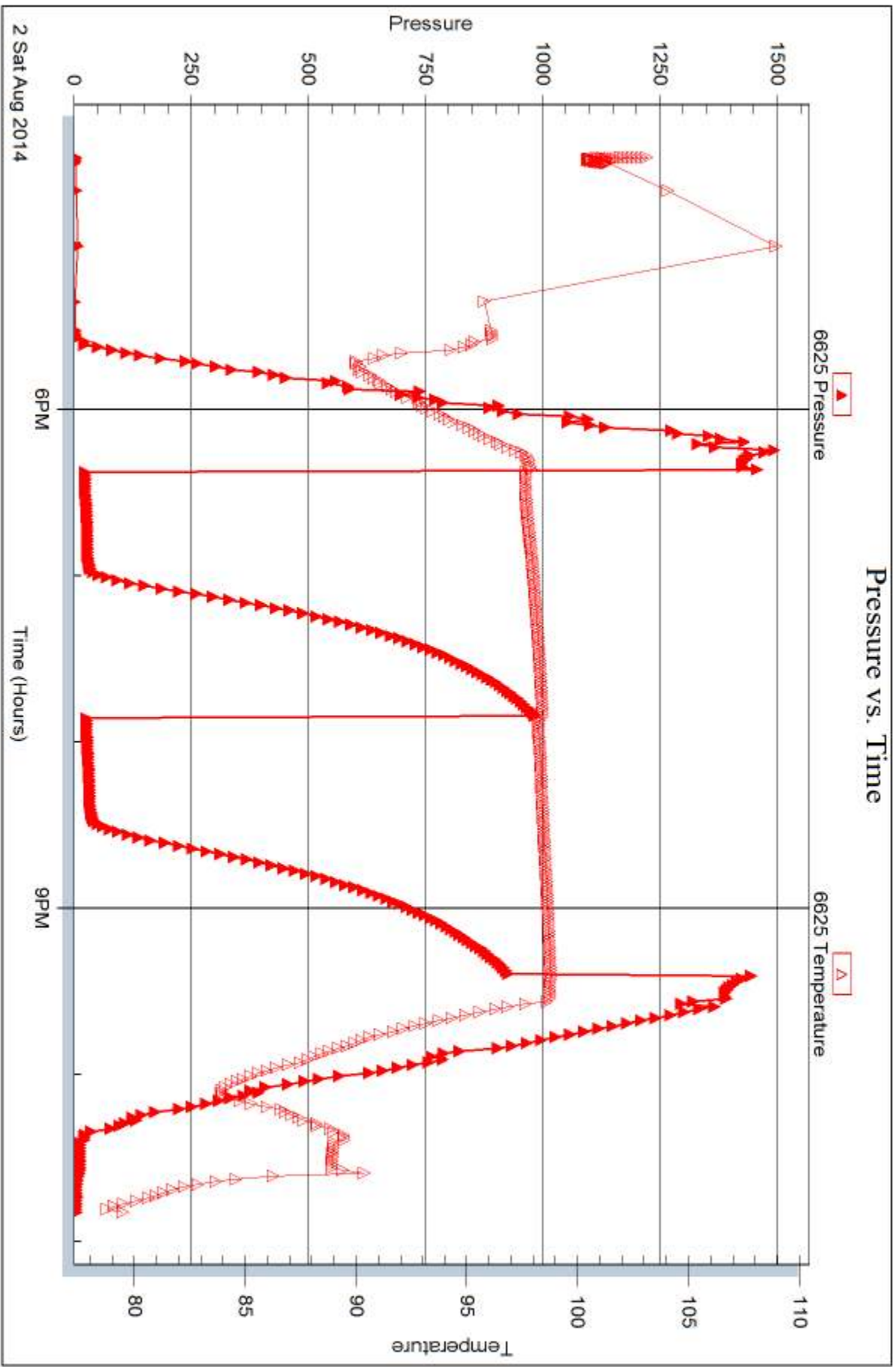


Serial #: 6625

Outside Murfin Drilling Co. Inc

Meyer #1-8

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 58727

Printed: 2014.08.06 @ 10:28:07



DRILL STEM TEST REPORT

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

250 N Water Ste 300
Wichita, KS 67202

ATTN: Jeff Christian

Meyer #1-8

8-10s-14w Osborne,KS

Start Date: 2014.08.03 @ 14:41:00

End Date: 2014.08.03 @ 23:13:30

Job Ticket #: 58728 DST #: 4

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

Printed: 2014.08.06 @ 10:27:24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
 250 N Water Ste 300
 Wichita, KS 67202
 ATTN: Jeff Christian

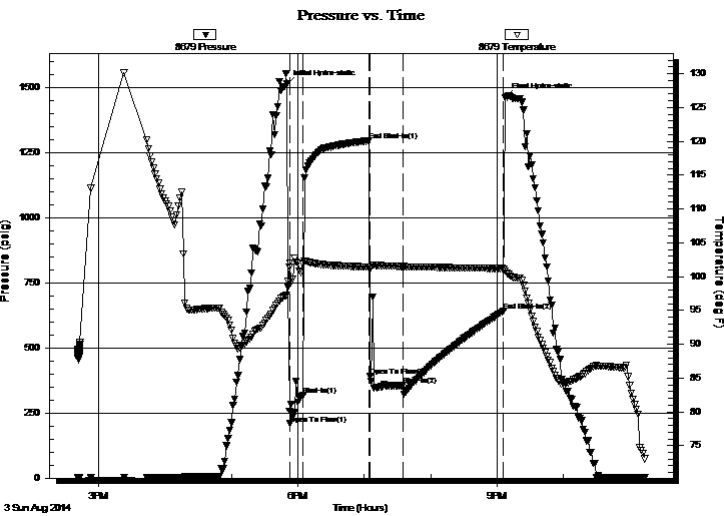
8-10s-14w Osborne, KS
Meyer #1-8
 Job Ticket: 58728 **DST#: 4**
 Test Start: 2014.08.03 @ 14:41:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 17:53:00 Tester: Phillip Gage
 Time Test Ended: 23:13:30 Unit No: 58
 Interval: **3114.00 ft (KB) To 3200.00 ft (KB) (TVD)** Reference Elevations: 1919.00 ft (KB)
 Total Depth: 3200.00 ft (KB) (TVD) 1914.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 8679 Inside
 Press@RunDepth: 355.96 psig @ 3115.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.03 End Date: 2014.08.03 Last Calib.: 2014.08.03
 Start Time: 14:41:01 End Time: 23:13:30 Time On Btm: 2014.08.03 @ 17:50:00
 Time Off Btm: 2014.08.03 @ 21:07:30

TEST COMMENT: 15-IF-BOB in 30 secs.
 60-ISI-No Return
 30-FF-Built to 10", died back to 8"
 90-FSI-No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1514.20	97.18	Initial Hydro-static
3	208.61	101.98	Open To Flow (1)
15	318.21	101.77	Shut-In(1)
75	1296.21	101.41	End Shut-In(1)
76	392.43	101.42	Open To Flow (2)
105	355.96	101.49	Shut-In(2)
196	641.73	101.17	End Shut-In(2)
198	1463.83	100.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
692.00	M, 100% m, with oil spots	8.93

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc
 250 N Water Ste 300
 Wichita, KS 67202
 ATTN: Jeff Christian

8-10s-14w Osborne, KS
Meyer #1-8
 Job Ticket: 58728 **DST#: 4**
 Test Start: 2014.08.03 @ 14:41:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:53:00
 Time Test Ended: 23:13:30

Test Type: Conventional Bottom Hole (Reset)
 Tester: Phillip Gage
 Unit No: 58

Interval: 3114.00 ft (KB) To 3200.00 ft (KB) (TVD)
 Total Depth: 3200.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1919.00 ft (KB)
 1914.00 ft (CF)
 KB to GR/CF: 5.00 ft

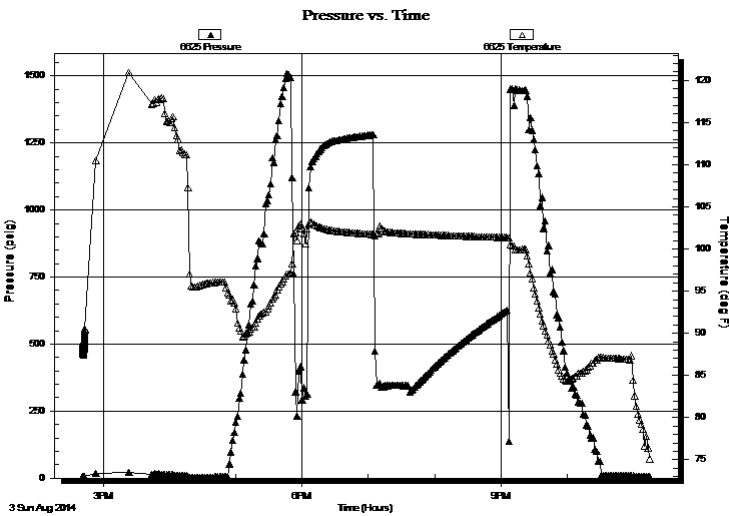
Serial #: 6625 Outside

Press@RunDepth: psig @ 3115.00 ft (KB)
 Start Date: 2014.08.03 End Date: 2014.08.03
 Start Time: 14:41:01 End Time: 23:15:00

Capacity: 8000.00 psig
 Last Calib.: 2014.08.03
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 15-IF-BOB in 30 secs.
 60-ISI-No Return
 30-FF-Built to 10", died back to 8"
 90-FSI-No Return

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
692.00	M, 100% m, w with oil spots	8.93

* 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

8-10s-14w Osborne,KS

250 N Water Ste 300
Wichita, KS 67202

Meyer #1-8

Job Ticket: 58728

DST#: 4

ATTN: Jeff Christian

Test Start: 2014.08.03 @ 14:41:00

Tool Information

Drill Pipe:	Length: 3026.00 ft	Diameter: 3.80 inches	Volume: 42.45 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 85.00 ft	Diameter: 2.25 inches	Volume: 0.42 bbl	Weight to Pull Loose:	53000.00 lb
			<u>Total Volume: 42.87 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3114.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	86.00 ft				
Tool Length:	106.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3095.00	
Shut In Tool	5.00			3100.00	
Hydraulic tool	5.00			3105.00	
Packer	5.00			3110.00	20.00 Bottom Of Top Packer
Packer	4.00			3114.00	
Stubb	1.00			3115.00	
Recorder	0.00	6625	Outside	3115.00	
Recorder	0.00	8679	Inside	3115.00	
Perforations	16.00			3131.00	
Change Over Sub	1.00			3132.00	
Drill Pipe	63.00			3195.00	
Change Over Sub	1.00			3196.00	
Bullnose	4.00			3200.00	86.00 Bottom Packers & Anchor

Total Tool Length: 106.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc
250 N Water Ste 300
Wichita, KS 67202
ATTN: Jeff Christian

8-10s-14w Osborne, KS
Meyer #1-8
Job Ticket: 58728 **DST#: 4**
Test Start: 2014.08.03 @ 14:41:00

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: 79.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4400.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
692.00	M, 100% m, with oil spots	8.933

Total Length: 692.00 ft Total Volume: 8.933 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8679

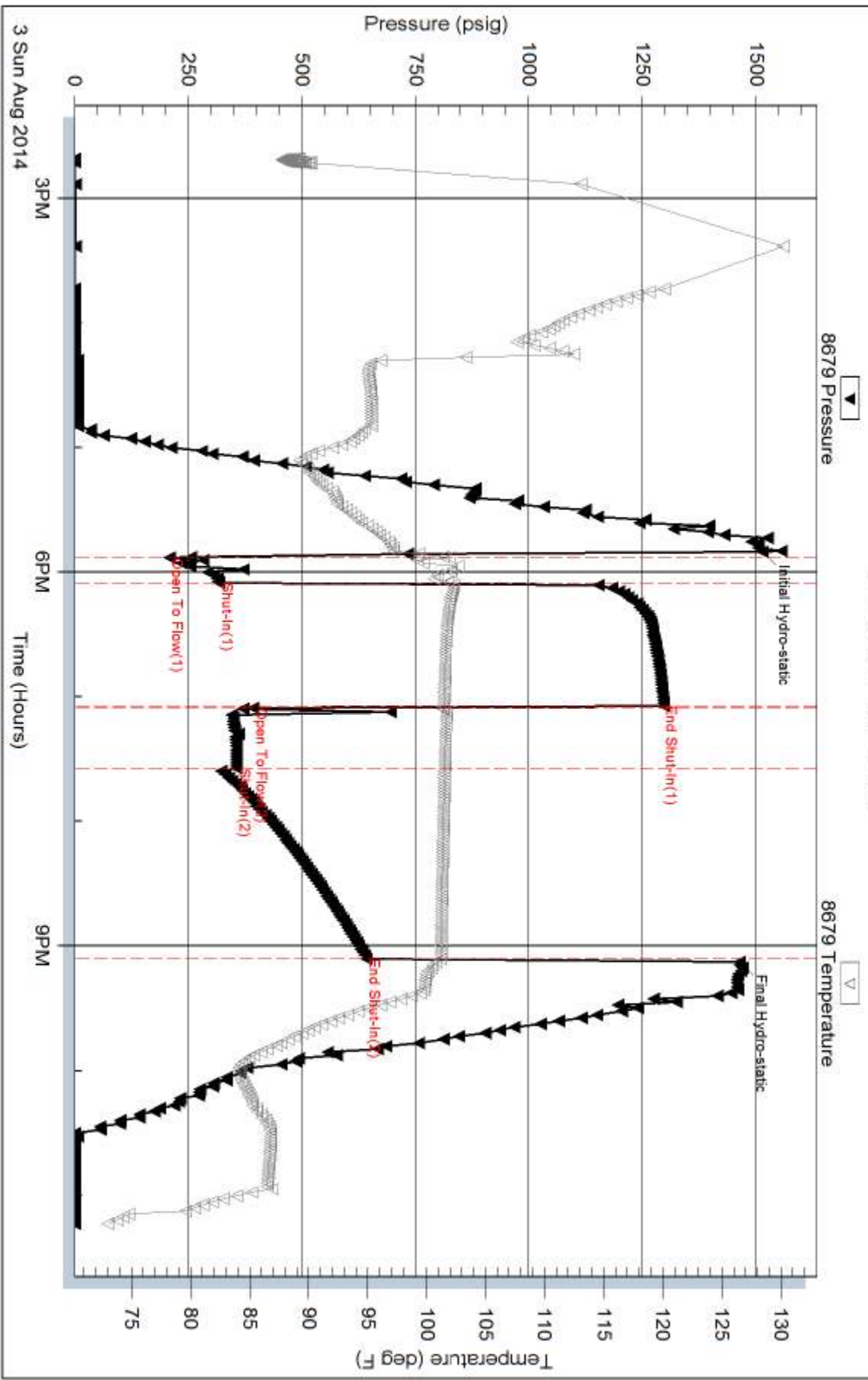
Inside

Murfin Drilling Co. Inc

Meyer #1-8

DST Test Number: 4

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 58728

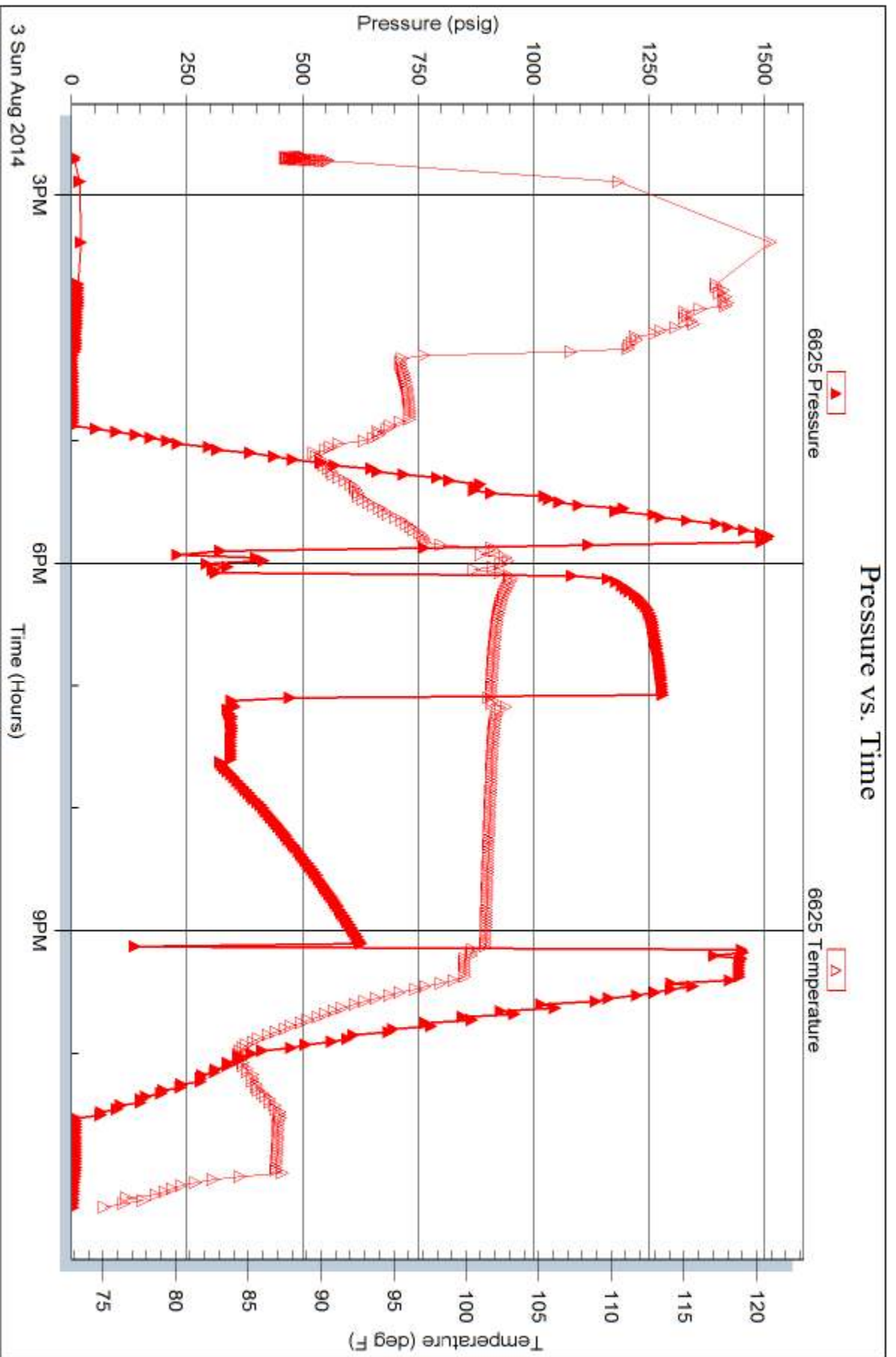
Printed: 2014.08.06 @ 10:27:25

Serial #: 6625

Outside Murfin Drilling Co. Inc

Meyer #1-8

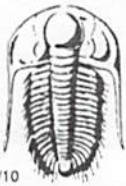
DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 58728

Printed: 2014.08.06 @ 10:27:25



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59275

Well Name & No. Meyer #1-8 Test No. 1 Date 8-1-14
 Company Martin Drilling Co Inc Elevation 1919 KB 1914 GL
 Address 250 N Water Ste 300 Wichita, KS 67202
 Co. Rep / Geo. Jeff Christian Rig Martin 24
 Location: Sec. 8 Twp. 10s Rge. 14w Co. Osborne State KS

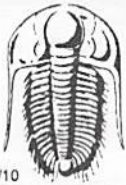
Interval Tested 2860-2880 Zone Tested Topok
 Anchor Length 20' Drill Pipe Run 2775 Mud Wt. 8.6
 Top Packer Depth 2855 Drill Collars Run 85 Vis 79
 Bottom Packer Depth 2860 Wt. Pipe Run 0 WL 5.2
 Total Depth 2880 Chlorides 1,600 ppm System LCM 2F

Blow Description IF Weak Surface Blow, Died in 14 mins
ISF No Return
FF - Built to 1/4"
FSI - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>100'</u>	<u>M, with oil spots</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 100' BHT 97 Gravity API RW @ F Chlorides ppm
 (A) Initial Hydrostatic 1831 Test 1150 T-On Location 09:43
 (B) First Initial Flow 55 Jars T-Started 10:42
 (C) First Final Flow 65 Safety Joint T-Open 13:56
 (D) Initial Shut-In 1450 Circ Sub T-Pulled 16:56
 (E) Second Initial Flow 80 Hourly Standby T-Out 18:36
 (F) Second Final Flow 79 Mileage 116 RT 179.80 Comments Tool Plugged due to 15' of fill in bottom of hole, Tool slid
 (G) Final Shut-In 1069 Sampler Ruined Shale Packer 7'
 (H) Final Hydrostatic 1388 Straddle Ruined Packer
 Initial Open 30 Shale Packer Extra Copies
 Initial Shut-In 60 Extra Packer Sub Total 0
 Final Flow 30 Extra Recorder Total 1329.80
 Final Shut-In 60 Day Standby MP/DST Disc't
 Sub Total 1329.80 Accessibility

Approved By _____ Our Representative Phil Gray Thank You
 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. 58726

4/10

Well Name & No. Meyer #1-8 Test No. 2 Date 8-1-14
 Company Martin Drilling Co Inc Elevation 1914 KB 1914 GL
 Address 250 N Water Stc 300 Wichita, KS 67202
 Co. Rep / Geo. Jeff Christian Rig Martin 24
 Location: Sec. 8 Twp. 10s Rge. 14w Co. Osborne State KS

Interval Tested 2857 - 2880 Zone Tested Topeka
 Anchor Length 23' Drill Pipe Run 2775 Mud Wt. 8.6
 Top Packer Depth 2852 Drill Collars Run 85 Vis 79
 Bottom Packer Depth 2857 Wt. Pipe Run 0 WL 5.2
 Total Depth 2880 Chlorides 1,600 ppm System LCM 2#
 Blow Description FF - Built to 1 1/2"
DSI - No Return
FF - Surface Blow started @ 2mins, Built to 1 1/4"
FSI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60'</u>	<u>SOLCM</u>		<u>10</u>		<u>90</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60' BHT 95 Gravity — API RW — @ — °F Chlorides — ppm
 (A) Initial Hydrostatic 1403 Test 1150 T-On Location 20:30
 (B) First Initial Flow 17 Jars _____ T-Started 21:57
 (C) First Final Flow 24 Safety Joint _____ T-Open 00:34
 (D) Initial Shut-In 1023 Circ Sub _____ T-Pulled 04:34
 (E) Second Initial Flow 29 Hourly Standby _____ T-Out 06:00
 (F) Second Final Flow 41 Mileage 116 RT 179.80 Comments _____
 (G) Final Shut-In 998 Sampler _____
 (H) Final Hydrostatic 1343 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1329.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1329.80

Approved By _____ Our Representative Phillip Gage Thank You

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58727

4/10

Well Name & No. Meyer #1-8 Test No. 3 Date 8-2-14
 Company Martin Drilling Co Inc Elevation 1919 KB 1914 GL
 Address 250 N Water Ste 300 Wichita, KS 67202
 Co. Rep / Geo. Jeff Christian Rig Martin 24
 Location: Sec. 8 Twp. 10s Rge. 14w Co. Osborne State KS

Interval Tested 2953-3021 Zone Tested Lecompton
 Anchor Length 68' Drill Pipe Run 2869 Mud Wt. 8.7
 Top Packer Depth 2948 Drill Collars Run 85 Vis 84
 Bottom Packer Depth 2953 Wt. Pipe Run 0 WL 5.2
 Total Depth 3021 Chlorides 2,800 ppm System LCM 2#

Blow Description IF - Built to 1/8", died in 27 mhs.
ESI - No Return
FF - No Blow
FSE - No Return

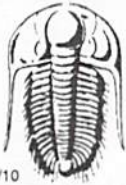
Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>M</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5' BHT 98 Gravity API RW @ ° F Chlorides ppm
 (A) Initial Hydrostatic 1458 Test 1150 T-On Location 16:28
 (B) First Initial Flow 16 Jars _____ T-Started 16:29
 (C) First Final Flow 19 Safety Joint _____ T-Open 18:22
 (D) Initial Shut-In 1004 Circ Sub _____ T-Pulled 21:22
 (E) Second Initial Flow 20 Hourly Standby _____ T-Out 22:51
 (F) Second Final Flow 23 Mileage 116 RT 179.80 Comments _____
 (G) Final Shut-In 993 Sampler _____
 (H) Final Hydrostatic 1511 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 60
 Sub Total 1329.80
 Total 1329.80
 MP/DST Disc't _____

Approved By _____ Our Representative Jeff Christian Thank You

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58728

4/10

Well Name & No. Mayer #1-8 Test No. 4 Date 8-3-14
 Company Murfin Drilling Co Inc Elevation 1919 KB 1914 GL
 Address 250 N Water St 300 Wichita, KS 67202
 Co. Rep / Geo. Jeff Christian Rig Murfin 24
 Location: Sec. 8 Twp. 10s Rge. 14w Co. Oskage State KS

Interval Tested 3114 - 3200 Zone Tested LKC "A-D"
 Anchor Length 86' Drill Pipe Run 3026 Mud Wt. 9.0
 Top Packer Depth 3109 Drill Collars Run 85 Vis 79
 Bottom Packer Depth 3114 Wt. Pipe Run 0 WL 6.0
 Total Depth 3200 Chlorides 4,400 ppm System LCM 2#

Blow Description IF - BOB in 30 sec.
ISL - No Return.
PF - Built to 10", died back to 8"
FSL - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>692'</u>	<u>M, with oil spots</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 692' BHT 101 Gravity — API RW — @ — °F Chlorides — ppm
 (A) Initial Hydrostatic 1514 Test 1150 T-On Location 14:39
 (B) First Initial Flow 208 Jars — T-Started 14:41
 (C) First Final Flow 318 Safety Joint — T-Open 17:51
 (D) Initial Shut-In 1296 Circ Sub — T-Pulled 21:06
 (E) Second Initial Flow 392 Hourly Standby — T-Out 23:15
 (F) Second Final Flow 355 Mileage 116 RT 179.80 Comments —
 (G) Final Shut-In 641 Sampler —
 (H) Final Hydrostatic 1463 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Extra Recorder — Sub Total 0
 Day Standby — Total 1329.80
 Accessibility — MP/DST Disc't —

Initial Open 15
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 90
 Sub Total 1329.80

Approved By _____ Our Representative Phillip Gray Thank You
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60489

4/10

Well Name & No. Meyer #1-8 Test No. — Date 8-5-14
 Company Murfin Drilling Co. INC. Elevation 1919 KB 1914 GL
 Address 250 N. Water Suite 300 Wichita KS. 67202
 Co. Rep / Geo. Jeff Christian Rig Murfin 24
 Location: Sec. 8 Twp. 10-5 Rge. 14-W Co. Osborne State KS

Interval Tested _____ Zone Tested _____
 Anchor Length _____ Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth _____ Drill Collars Run _____ Vis _____
 Bottom Packer Depth _____ Wt. Pipe Run _____ WL _____
 Total Depth _____ Chlorides _____ ppm System LCM _____

Blow Description Got truck on 8-4-14 @ 17:30 Loaded tool on 8-5-14 @ 20:45 ; Initial log hit bridge went into Recondition Hole Rotary Chain Broke on way out of Hole!

Rec	Feet of	%gas	%oil	%water	%mud

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

(A) Initial Hydrostatic _____ Test _____ T-On Location _____
 (B) First Initial Flow _____ Jars _____ T-Started _____
 (C) First Final Flow _____ Safety Joint _____ T-Open _____
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled _____
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 20:45 Loaded tool
 (F) Second Final Flow _____ Mileage 96/R.T., 116 179.80 8-5-14 - Loaded tool
 (G) Final Shut-In _____ Sampler _____ 20:45:00
 (H) Final Hydrostatic _____ Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Initial Open _____ Extra Packer _____ Extra Copies _____
 Initial Shut-In _____ Extra Recorder _____ Sub Total 800
 Final Flow _____ Day Standby 1d 21.5h Total 979.80
 Final Shut-In _____ Accessibility _____ MP/DST Disc't _____
 Sub Total 179.80

Approved By _____ Our Representative [Signature]

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

Jeff Christian

PETROLEUM GEOLOGIST
Wichita, Kansas

GEOLOGISTS' REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR MURKIN DRILLING COMPANY LEASE MEYER # 1-8 LOCATION 2310' FSI & 1200' FWL	ELEVATIONS KB 1920' GL 1915'
SEC. 8 TWP. 10 S RANG. 14 W COUNTY OSBORNE STATE KANSAS	
FIELD KINGS API 15-141-20466	
CONTRACTOR COMPANY TOOLS RIG NO. 24 DRILLING STARTED 07/29/2014 COMPLETED 08/05/2014 MUD DISPLACED 2828' MUD TYPE CHEMICAL DRILLING TIME KEPT FROM 2720' TO RTD SAMPLES SAVED FROM 2720' TO RTD SAMPLES EXAMINED FROM 2720' TO RTD GEOLOGICAL SUPERVISION FROM 2780' TO RTD	
MEASUREMENTS FROM KB CASING RECORD Conductor NONE Surface 8.5/8" @ 220' W/ 145 SX Production NONE	
ELECTRICAL SURVEYS: TO RTD TO RTD TO RTD CML/DLI	
FORMATION NAME TOP DATE TIME TOP DATE TIME ANHYDRITE 1138' (-782) 1141' (-779) TOPEKA 2832' (-912) 2835' (-915) HEBNER 3079' (-1159) 3083' (-1163) LANSING 3130' (-1210) 3134' (-1214) BKC 3398' (-1478) 3402' (-1482) CHEROKEE 3508' (-1588) 3512' (-1592) VIOLA 3889' (-1660) 3890' (-1660) STAMPSON 3889' (-1660) 3617' (-1627) ARBUCKLE 3636' (-1716) 3654' (-1734) TOTAL DEPTH 3716' (-1796) 3719' (-1799)	

DATE	7:00 AM DEPTH	REMARKS
7/29/14	MIRT	SPUD 3:45 pm
7/30/14	305'	DRLG. dev. 3/4 deg. @ 220'
7/31/14	2000'	DRLG.
8/1/14	2880'	CFS
8/2/14	2880'	TIH after DST # 2
8/3/14	3145'	DRLG.
8/4/14	3300'	DRLG.
8/5/14	3719'	TOH for Log. RTD 3719' @ 3:15 am. Dev. 1 deg. Hit Bridge @ 3190'. Recondition hole. Finish Logging @

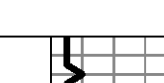
Remarks

The Meyer # 1-8 was declared dry and abandoned. All sample shows of oil were drill stem tested and condemned.

Ground level elevation raised 1' while making location, per tool pusher.

Electric log measurements correlate about 3' to 4' high compared to rotary measurements.

Samples deposited at the Kansas Geological Survey.

Respectfully Submitted,

 Jeff Christian

LITH.	0	DRILL TIME (MIN/FT)	10	DEPTH (M)	SAMPLE DESCRIPTIONS	REMARKS
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