



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1077010
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: _____

1077010

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> _____
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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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Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

March 22, 2012

Leon Rodak
Murfin Drilling Co., Inc.
250 N WATER STE 300
WICHITA, KS 67202-1216

Re: ACO1
API 15-137-20594-00-00
Schulze 1-12
SW/4 Sec.12-02S-24W
Norton County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Leon Rodak

Schulze Unit #1-12 2030 FSL 690 FWL Sec. 12-2S-24W 2481' KB							Julie #1 570' FNL 2300' FEL Sec. 12-2S-24W 2500' KB	
Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Anhydrite	2024	+457	-9	2024	+457	-9	2034	+466
B/Anhydrite	2052	+429	-9	2052	+429	-9	2062	+438
Neva	2850	-369	-6	4858	-377	-14	2863	-363
Topeka	3254	-773	-3	3458	-777	-7	3270	-770
Heebner	3430	-949	-7	3430	-949	-7	3442	-942
Toronto	3460	-979	-6	3465	-984	-11	3473	-973
Lansing	3474	-993	-7	3480	-999	-13	3486	-986
Stark	3620	-1139	-7	3620	-1139	-7	3632	-1132
BKC	3663	-1182	-8	3663	-1182	-8	3674	-1174
Arbuckle	3704	-1223	-5	3704	-1223	-5	3718	-1218
Reagan Sn	3739	-1258		3734	-1253		NDE	NDE
Granite Wsh	3754	-1273		3738	-1257		NDE	NDE
RTD	3799	-1318						
LTD				3797	-1316		3756	-1256

Robert D. Hendrix

Petroleum Geologist

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY	Murfin Drilling Co. Inc.	ELEVATIONS	KB 2481
LEASE	Schulze 1-12	FIELD	Wildcat
LOCATION	2330' FSL & 690' FEEL	SEC	12 TWPSP 2 S RGE 24W
COUNTY	Norton STATE Kansas	CONTRACTOR	Murfin Drilling Rigs #21
SPUD	2/01/2012 COMP 2/08/2012	RTD	3/29 LTD 3/9/12
MUD UP	2610 TYPE MUD Chemical	SAMPLES SAVED FROM	2700 TO RTD
DRILLING TIME KEPT FROM	2700 TO RTD	SAMPLES EXAMINED FROM	2700 TO RTD
GEOLOGICAL SUPERVISION FROM 204760 RTD		GEOLOGIST ON WELL Robert D. Hendrix	
FORMATION TOPS		ELECTRIC LOG	
Neiva	2858 (-377)	2855 (-374)	2023 (+457)
Topeka	3257 (-77)	3254 (-74)	2024 (+457)
Heebner Sh.	3430 (-949)	3430 (-949)	2855 (-374)
Lansing	3480 (-999)	3474 (-993)	3430 (-949)
Tamaring	3620 (-1139)	3620 (-1139)	3474 (-993)
Stark Sh.	3663 (-1182)	3663 (-1182)	3620 (-1139)
BKC	3704 (-1223)	3704 (-1223)	3663 (-1182)
Arbuckle	3754 (-1273)	3754 (-1273)	3704 (-1223)
Granite Wash	3757 (-1273)	3754 (-1273)	3754 (-1273)

MEASUREMENTS ARE ALL FROM KELLY BUSHING CASING

CONDUIT 8" 5/8" AT 3' 5"

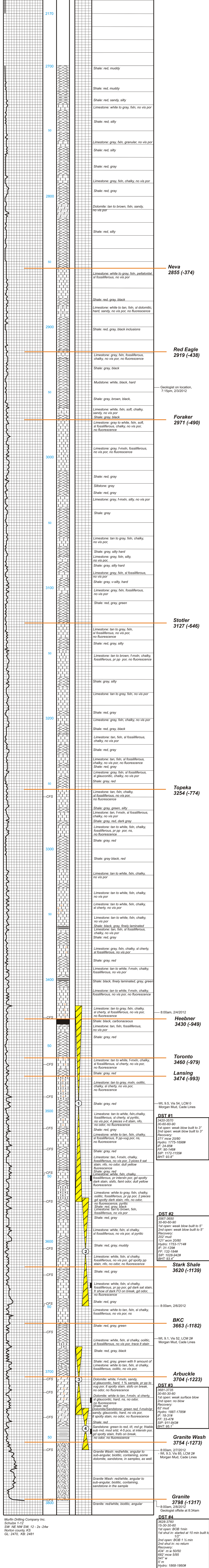
PRODUCTION None

ELECTRICAL SURVEYS D.L./C.N.-CD Metro/Scientific Log-Tech

REMARKS

LEGEND

	Anhydrite		Sandstone		Limestone		Shale		Carb Sh		Cherty LS		Chert		Dolomite
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DRILL STEM TEST REPORT

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

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Robert Hendrix

Schulze #1-12

12-2s-24w Norton,KS

Start Date: 2012.02.05 @ 02:40:00

End Date: 2012.02.05 @ 10:38:30

Job Ticket #: 042036 DST #: 1

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

Printed: 2012.02.24 @ 14:33:33

Murfin Drilling Co.Inc. 12-2s-24w Norton,KS Schulze #1-12 DST # 1 Tor-LKC,G 2012.02.05



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042036

DST#: 1

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 02:40:00

GENERAL INFORMATION:

Formation: **Tor-LKC,G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:53:30

Time Test Ended: 10:38:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Kreuzer Jr.

Unit No: 36

Interval: 3420.00 ft (KB) To 3570.00 ft (KB) (TVD)

Reference Elevations: 2481.00 ft (KB)

Total Depth: 3570.00 ft (KB) (TVD)

2470.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6752 Inside

Press @ Run Depth: 145.92 psig @ 3421.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.05 End Date: 2012.02.05

Last Calib.: 2012.02.05

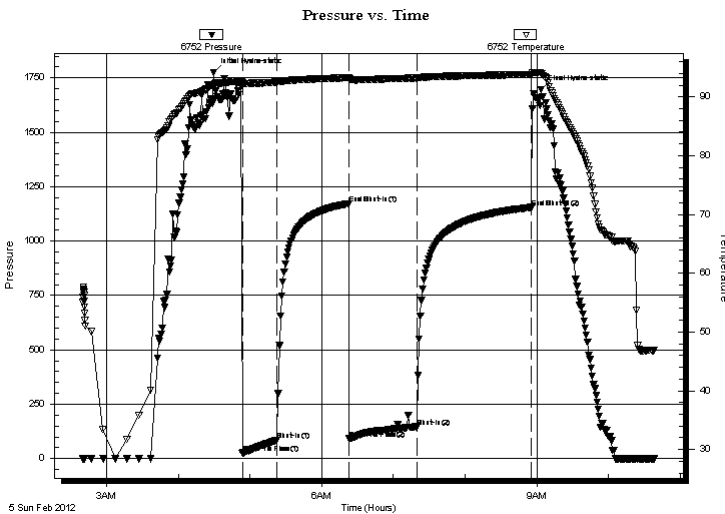
Start Time: 02:40:05 End Time: 10:38:29

Time On Btm: 2012.02.05 @ 04:29:30

Time Off Btm: 2012.02.05 @ 09:03:30

TEST COMMENT: IF: Weak blow, Built to 3 in. over 30 mins.
IS: No blow back over 60 mins.
FF: Weak blow, Built to 3 in. over 60 mins.
FS: No blow back over 90 mins.

PRESSURE SUMMARY



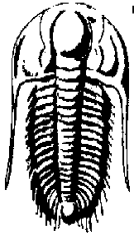
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1775.30	92.05	Initial Hydro-static
24	23.87	92.37	Open To Flow (1)
53	85.07	92.54	Shut-In(1)
113	1171.95	93.26	End Shut-In(1)
114	90.21	93.09	Open To Flow (2)
170	145.92	93.21	Shut-In(2)
266	1154.86	93.82	End Shut-In(2)
274	1697.72	94.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
271.00	w cm-20%w 80%m	1.61

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042036

DST#: 1

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 02:40:00

GENERAL INFORMATION:

Formation:	Tor-LKC,G			Test Type:	Conventional Bottom Hole (Initial)
Deviated:	No Whipstock:	ft (KB)		Tester:	Chuck Kreuzer Jr.
Time Tool Opened:	04:53:30			Unit No:	36
Time Test Ended:	10:38:30			Reference Elevations:	2481.00 ft (KB)
Interval:	3420.00 ft (KB) To 3570.00 ft (KB) (TVD)				2470.00 ft (CF)
Total Depth:	3570.00 ft (KB) (TVD)			KB to GR/CF:	11.00 ft
Hole Diameter:	7.88 inches	Hole Condition:	Fair		

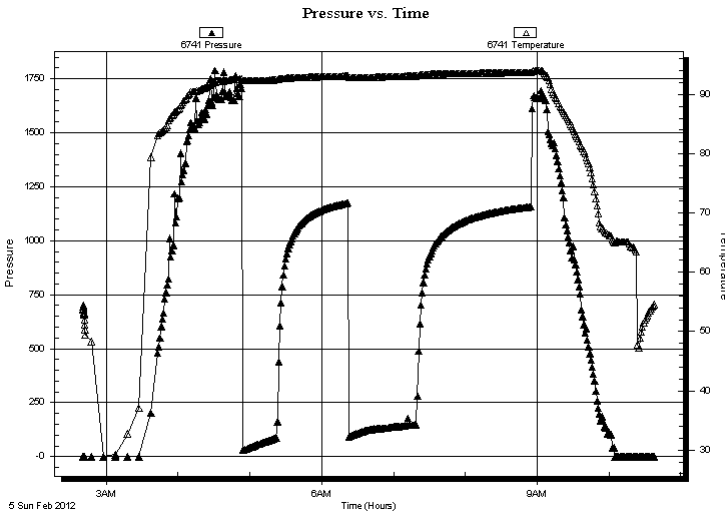
Serial #: 6741

Outside

Press @ Run Depth:	psig @	3421.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2012.02.05	End Date:	2012.02.05	Last Calib.:	2012.02.05
Start Time:	02:40:35	End Time:	10:38:29	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: Weak blow , Built to 3 in. over 30 mins.
IS: No blow back over 60 mins.
FF: Weak blow , Built to 3 in. over 60 mins.
FS: No blow back over 90 mins.

PRESSURE SUMMARY



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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
271.00	w cm-20%w 80%m	1.61

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042036

DST#: 1

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 02:40:00

Tool Information

Drill Pipe:	Length: 3173.00 ft	Diameter: 3.80 inches	Volume: 44.51 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.70 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3420.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	150.79 ft			
Tool Length:	178.79 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3397.00	
Hydraulic tool	5.00			3402.00	
Jars	5.00			3407.00	
Safety Joint	3.00			3410.00	
Packer	5.00			3415.00	28.00 Bottom Of Top Packer
Packer	5.00			3420.00	
Stubb	1.00			3421.00	
Recorder	0.00	6752	Inside	3421.00	
Recorder	0.00	6741	Outside	3421.00	
Perforations	5.00			3426.00	
Change Over Sub	0.60			3426.60	
Blank Spacing	125.59			3552.19	
Change Over Sub	0.60			3552.79	
Perforations	15.00			3567.79	
Bullnose	3.00			3570.79	150.79 Bottom Packers & Anchor

Total Tool Length: 178.79



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.Inc.

12-2s-24w Norton,KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042036

DST#: 1

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 02:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
271.00	w cm-20%w 80%m	1.606

Total Length: 271.00 ft Total Volume: 1.606 bbl

Num Fluid Samples: 0

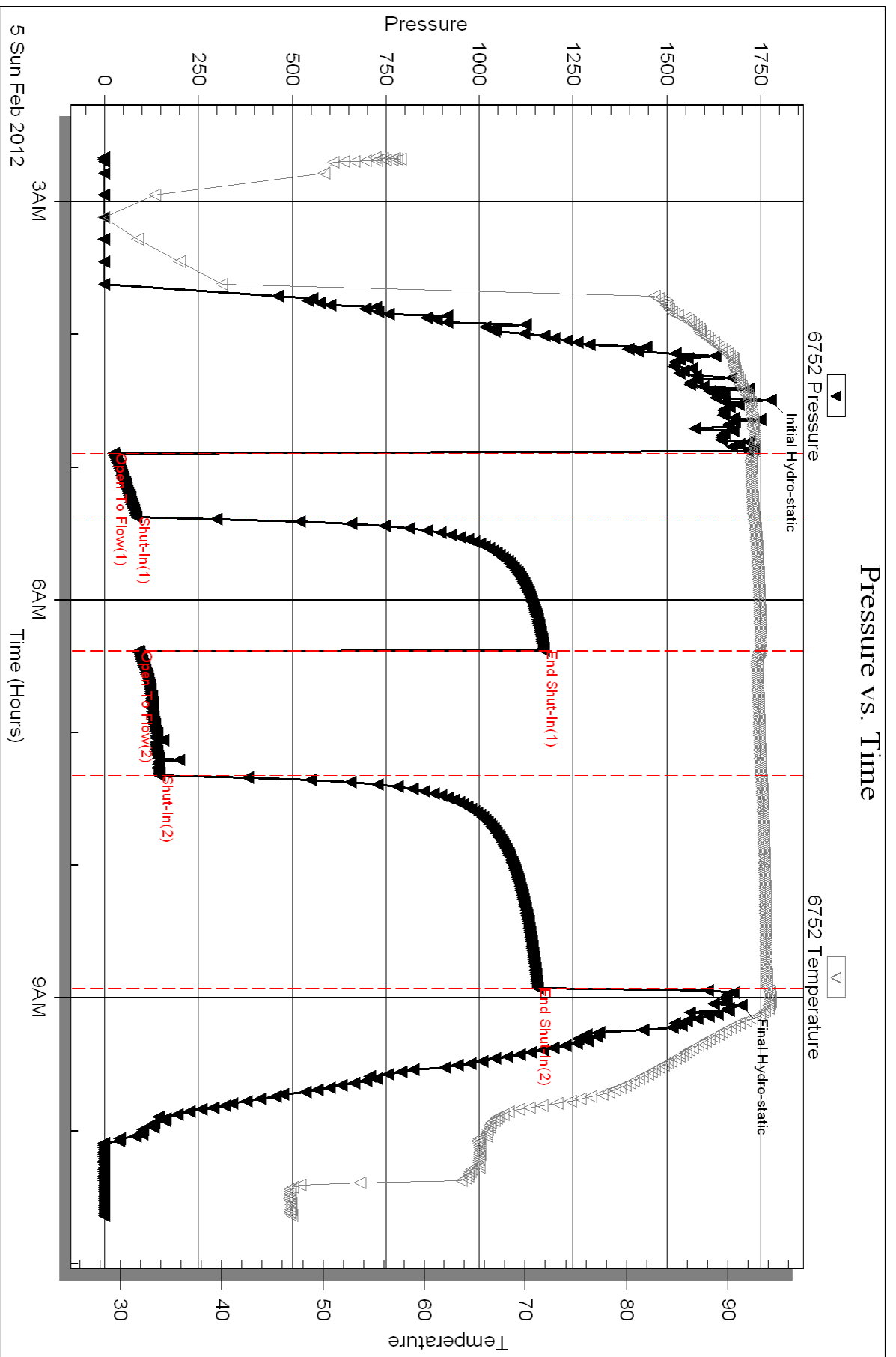
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

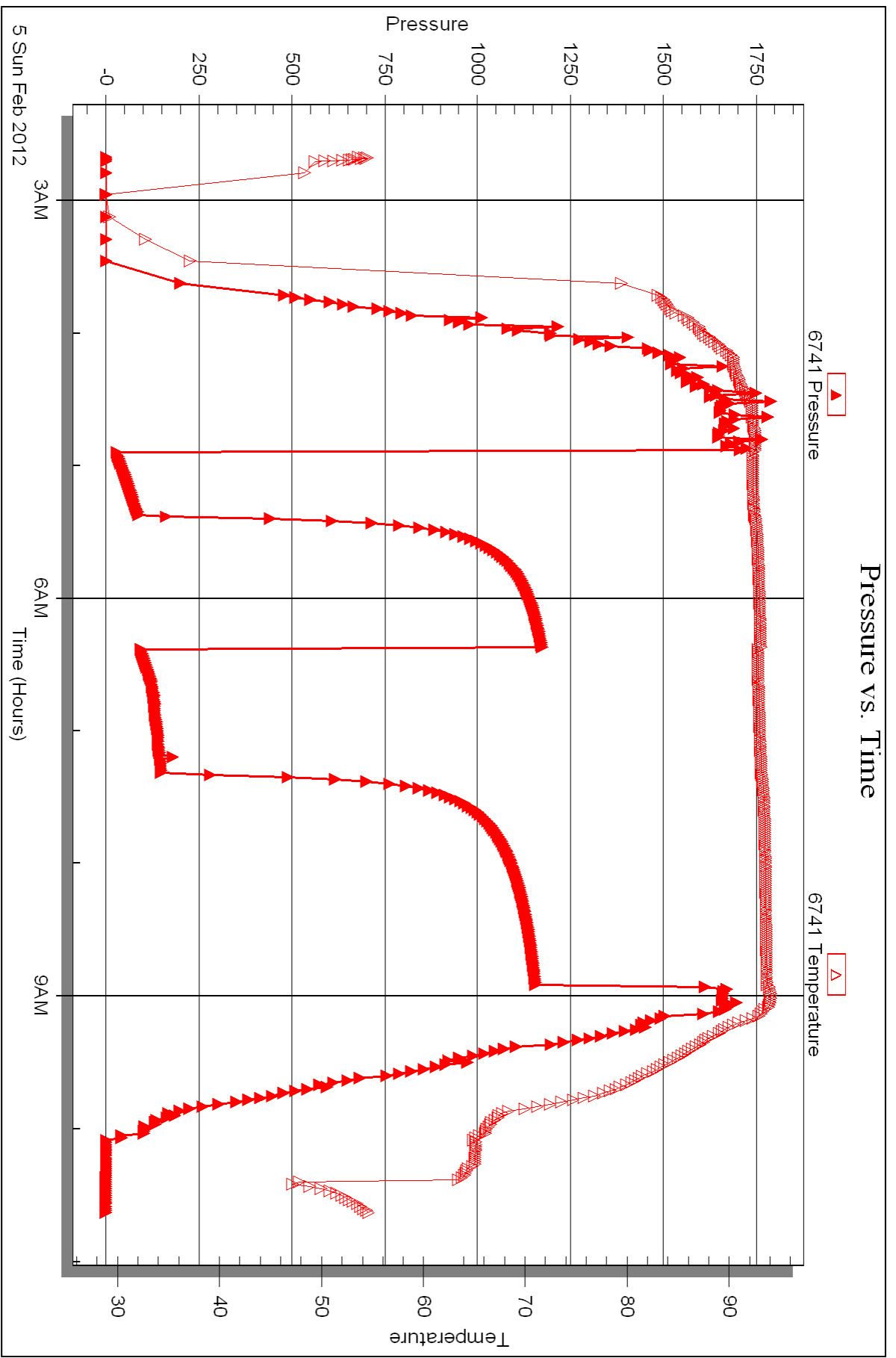


Serial #: 6741

Outside Murfin Drilling Co. Inc.

Schulze #1-12

DST Test Number: 1





DRILL STEM TEST REPORT

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

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Robert Hendrix

Schulze #1-12

12-2s-24w Norton,KS

Start Date: 2012.02.05 @ 23:10:00

End Date: 2012.02.06 @ 06:33:00

Job Ticket #: 042037 DST #: 2

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

Printed: 2012.02.24 @ 14:29:56

Murfin Drilling Co.Inc. 12-2s-24w Norton,KS Schulze #1-12 DST # 2 LKC:H-K 2012.02.05



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042037

DST#: 2

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 23:10:00

GENERAL INFORMATION:

Formation: **LKC H-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:45:30

Time Test Ended: 06:33:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 36

Interval: 3567.00 ft (KB) To 3650.00 ft (KB) (TVD)

Reference Elevations: 2481.00 ft (KB)

Total Depth: 3650.00 ft (KB) (TVD)

2470.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6752

Inside

Press @ Run Depth: 183.79 psig @ 3568.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.05

End Date:

2012.02.06

Last Calib.:

2012.02.06

Start Time: 23:10:05

End Time:

06:32:59

Time On Btm:

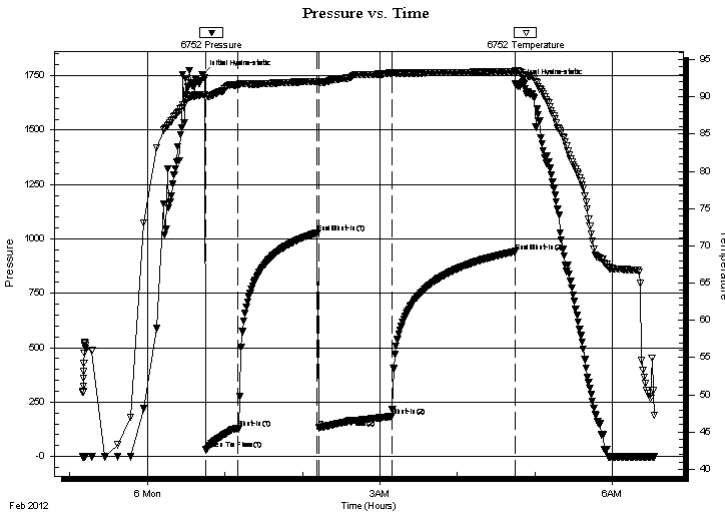
2012.02.06 @ 00:42:30

Time Off Btm:

2012.02.06 @ 04:45:00

TEST COMMENT: IF: Weak blow, Built to 5 in. over 30 mins.
IS: No blow back over 60 mins.
FF: Weak blow, Built to 5 in. over 60 mins.
FS: No blow back over 90 mins.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1752.78	90.27	Initial Hydro-static
3	30.98	89.98	Open To Flow (1)
28	128.75	91.63	Shut-In(1)
89	1028.49	92.08	End Shut-In(1)
90	132.14	91.97	Open To Flow (2)
147	183.79	93.18	Shut-In(2)
242	941.82	93.39	End Shut-In(2)
243	1713.77	93.54	Final Hydro-static

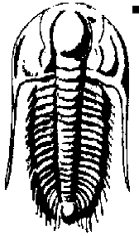
Recovery

Length (ft)	Description	Volume (bbl)
121.00	w cm-20%w 80%m	0.60
202.00	mud-100%m	1.74

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.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042037

DST#: 2

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 23:10:00

GENERAL INFORMATION:

Formation: **LKC H-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:45:30

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Tester: Chuck Kreuzer Jr.

Unit No: 36

Interval: 3567.00 ft (KB) To 3650.00 ft (KB) (TVD)

Total Depth: 3650.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2481.00 ft (KB)

2470.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6741

Outside

Press @ RunDepth: psig @ 3568.00 ft (KB)

Start Date: 2012.02.05

End Date:

2012.02.06

Start Time: 23:10:05

End Time:

06:32:29

Capacity: 8000.00 psig

Last Calib.:

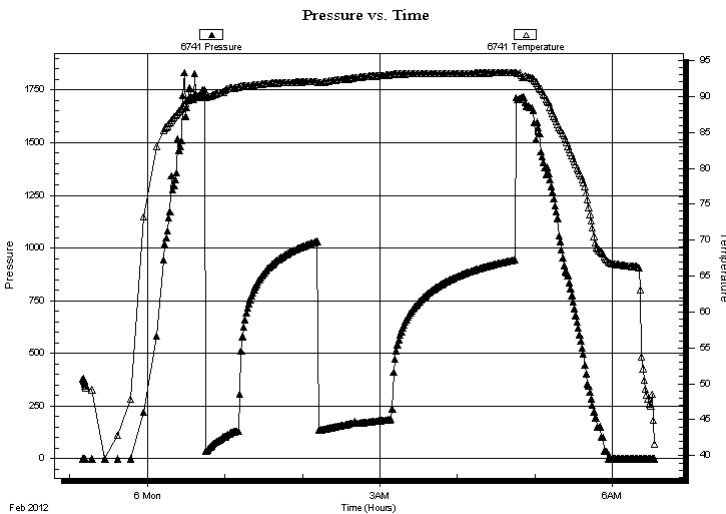
2012.02.06

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak blow, Built to 5 in. over 30 mins.
IS: No blow back over 60 mins.
FF: Weak blow, Built to 5 in. over 60 mins.
FS: No blow back over 90 mins.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
121.00	w cm-20%w 80%m	0.60
202.00	mud-100%m	1.74

* 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.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042037

DST#: 2

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 23:10:00

Tool Information

Drill Pipe:	Length: 3323.00 ft	Diameter: 3.80 inches	Volume: 46.61 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.80 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3567.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.95 ft			
Tool Length:	111.95 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3544.00	
Hydraulic tool	5.00			3549.00	
Jars	5.00			3554.00	
Safety Joint	3.00			3557.00	
Packer	5.00			3562.00	28.00 Bottom Of Top Packer
Packer	5.00			3567.00	
Stubb	1.00			3568.00	
Recorder	0.00	6752	Inside	3568.00	
Recorder	0.00	6741	Outside	3568.00	
Perforations	3.00			3571.00	
Change Over Sub	0.60			3571.60	
Blank Spacing	62.75			3634.35	
Change Over Sub	0.60			3634.95	
Perforations	13.00			3647.95	
Bullnose	3.00			3650.95	83.95 Bottom Packers & Anchor

Total Tool Length: 111.95



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042037

DST#: 2

ATTN: Robert Hendrix

Test Start: 2012.02.05 @ 23:10:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
121.00	w cm-20%w 80%m	0.595
202.00	mud-100%m	1.740

Total Length: 323.00 ft

Total Volume: 1.606 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

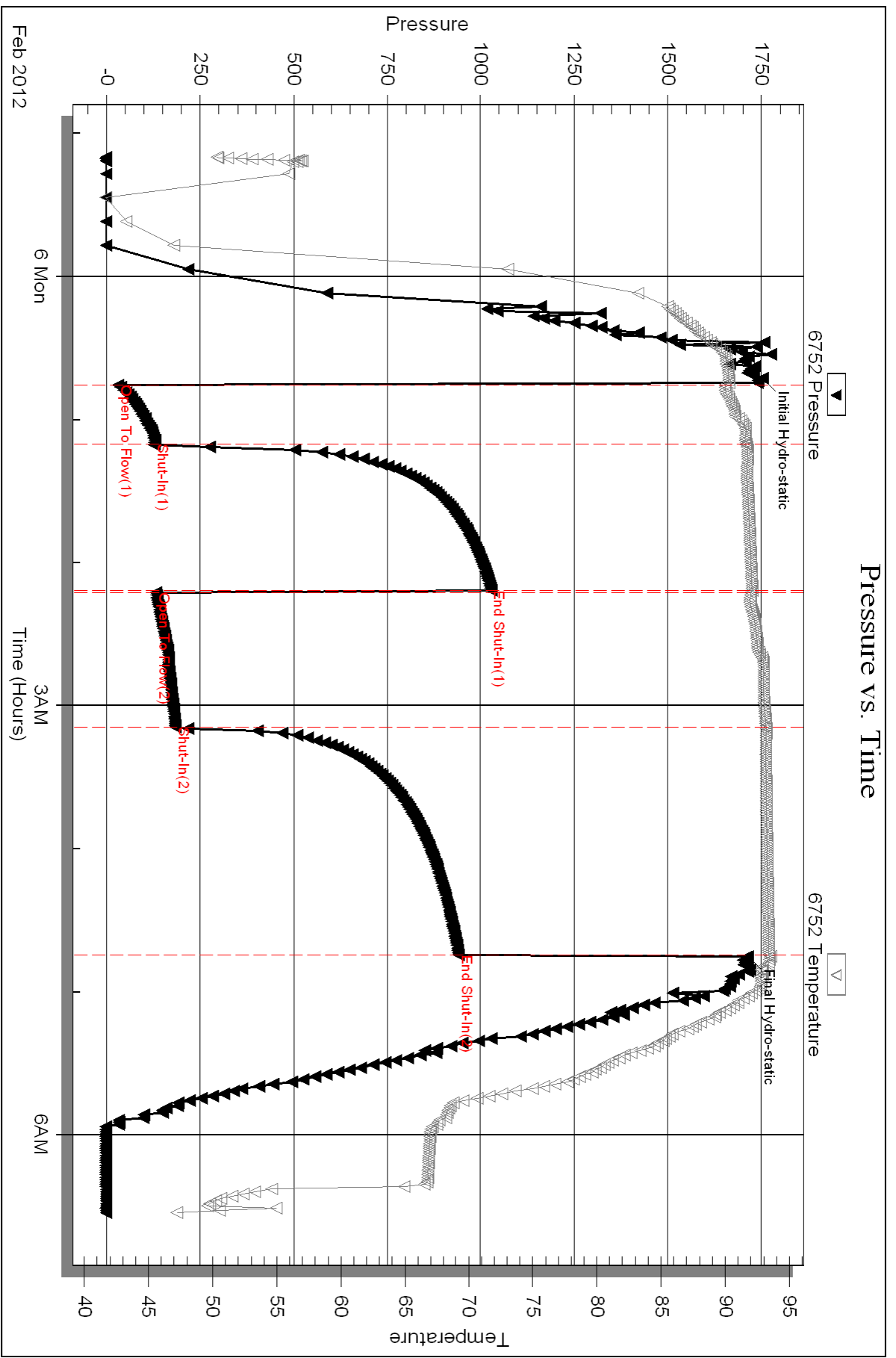
Serial #: 6752

Inside

Murfin Drilling Co. Inc.

Schulze #1-12

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 042037

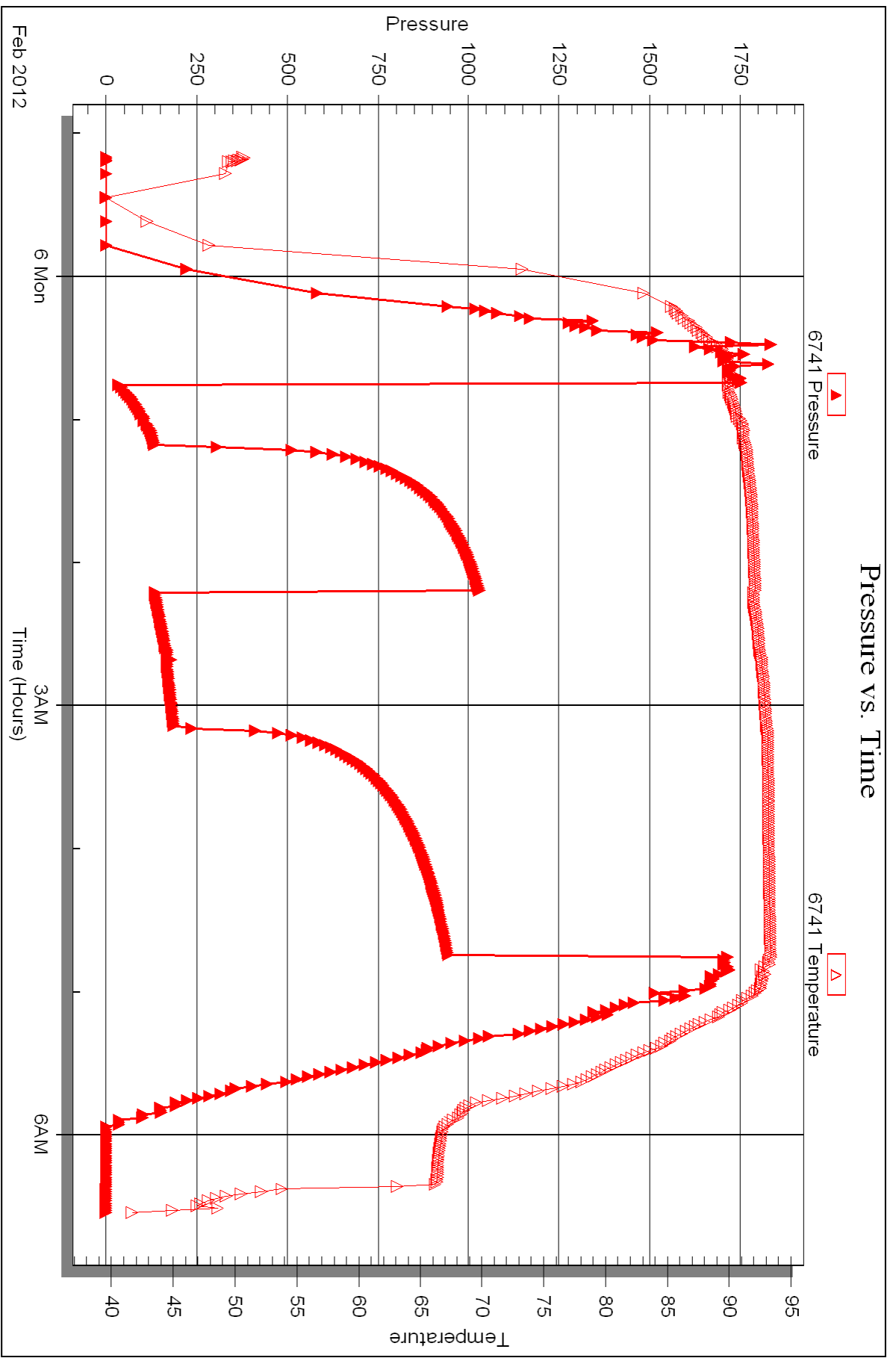
Printed: 2012.02.24 @ 14:29:58

Serial #: 6741

Outside Murfin Drilling Co. Inc.

Schulze #1-12

DST Test Number: 2





DRILL STEM TEST REPORT

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

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Robert Hendrix

Schulze #1-12

12-2s-24w Norton,KS

Start Date: 2012.02.06 @ 19:20:00

End Date: 2012.02.07 @ 01:41:00

Job Ticket #: 042038 DST #: 3

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

Printed: 2012.02.24 @ 14:28:38



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042038

DST#: 3

ATTN: Robert Hendrix

Test Start: 2012.02.06 @ 19:20:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:01:30

Time Test Ended: 01:41:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 36

Interval: 3681.00 ft (KB) To 3735.00 ft (KB) (TVD)

Reference Elevations: 2481.00 ft (KB)

Total Depth: 3735.00 ft (KB) (TVD)

2470.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6752 Inside

Press @ Run Depth: 47.00 psig @ 3682.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.06

End Date:

2012.02.07

Last Calib.:

2012.02.07

Start Time:

19:20:05

End Time:

01:40:59

Time On Btm:

2012.02.06 @ 20:57:30

Time Off Btm:

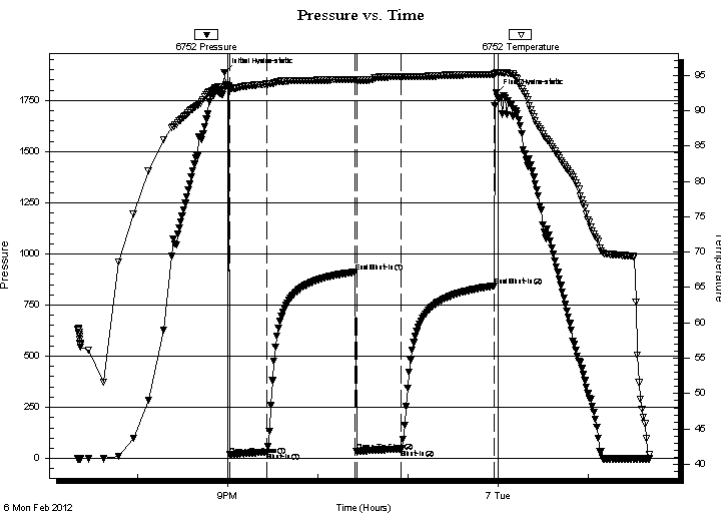
2012.02.06 @ 23:58:30

TEST COMMENT: IF: Weak blow, built to surface over 30 mins.

IS: No blow back over 60 mins.

FF: No blow over 30 mins.

FS: No blow back over 60 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1886.88	93.36	Initial Hydro-static
4	17.61	92.99	Open To Flow (1)
28	30.97	93.72	Shut-In(1)
87	910.72	94.42	End Shut-In(1)
88	33.29	94.31	Open To Flow (2)
118	47.00	94.79	Shut-In(2)
180	843.39	95.08	End Shut-In(2)
181	1785.22	95.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	Mud 100M	0.30

* 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.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042038

DST#: 3

ATTN: Robert Hendrix

Test Start: 2012.02.06 @ 19:20:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:01:30

Time Test Ended: 01:41:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 36

Interval: 3681.00 ft (KB) To 3735.00 ft (KB) (TVD)

Reference Elevations: 2481.00 ft (KB)

Total Depth: 3735.00 ft (KB) (TVD)

2470.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6741 Outside

Press @ RunDepth: psig @ 3682.00 ft (KB)

Start Date: 2012.02.06

End Date:

2012.02.07

Capacity: 8000.00 psig

Last Calib.:

2012.02.07

Start Time:

19:20:05

End Time:

01:41:59

Time On Btm:

Time Off Btm:

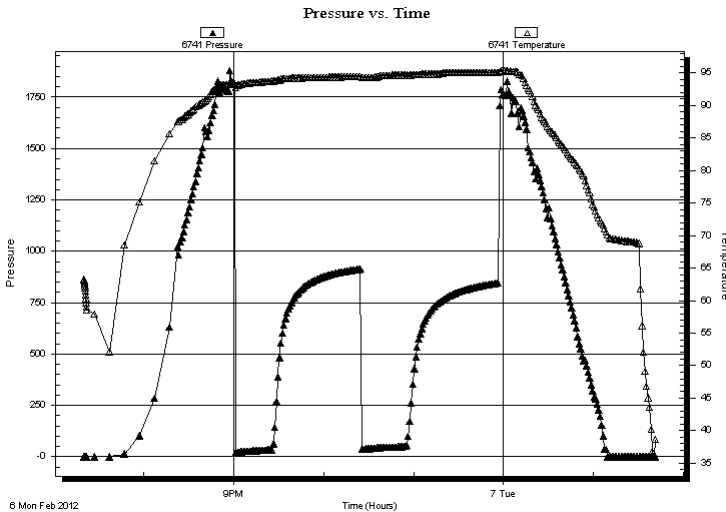
TEST COMMENT: IF: Weak blow, built to surface over 30 mins.

IS: No blow back over 60 mins.

FF: No blow over 30 mins.

FS: No blow back over 60 mins.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
62.00	Mud 100M	0.30

* 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.

12-2s-24w Norton,KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042038

DST#: 3

ATTN: Robert Hendrix

Test Start: 2012.02.06 @ 19:20:00

Tool Information

Drill Pipe:	Length: 3424.00 ft	Diameter: 3.80 inches	Volume: 48.03 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 61000.00 lb
			<u>Total Volume: 49.22 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	3681.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.79 ft			
Tool Length:	82.79 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3658.00	
Hydraulic tool	5.00			3663.00	
Jars	5.00			3668.00	
Safety Joint	3.00			3671.00	
Packer	5.00			3676.00	28.00 Bottom Of Top Packer
Packer	5.00			3681.00	
Stubb	1.00			3682.00	
Recorder	0.00	6752	Inside	3682.00	
Recorder	0.00	6741	Outside	3682.00	
Perforations	3.00			3685.00	
Change Over Sub	0.60			3685.60	
Blank Spacing	31.59			3717.19	
Change Over Sub	0.60			3717.79	
Perforations	15.00			3732.79	
Bullnose	3.00			3735.79	54.79 Bottom Packers & Anchor

Total Tool Length: 82.79



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.Inc.

12-2s-24w Norton,KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 042038

DST#: 3

ATTN: Robert Hendrix

Test Start: 2012.02.06 @ 19:20:00

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: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
62.00	Mud 100M	0.305

Total Length: 62.00 ft Total Volume: 0.305 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6752

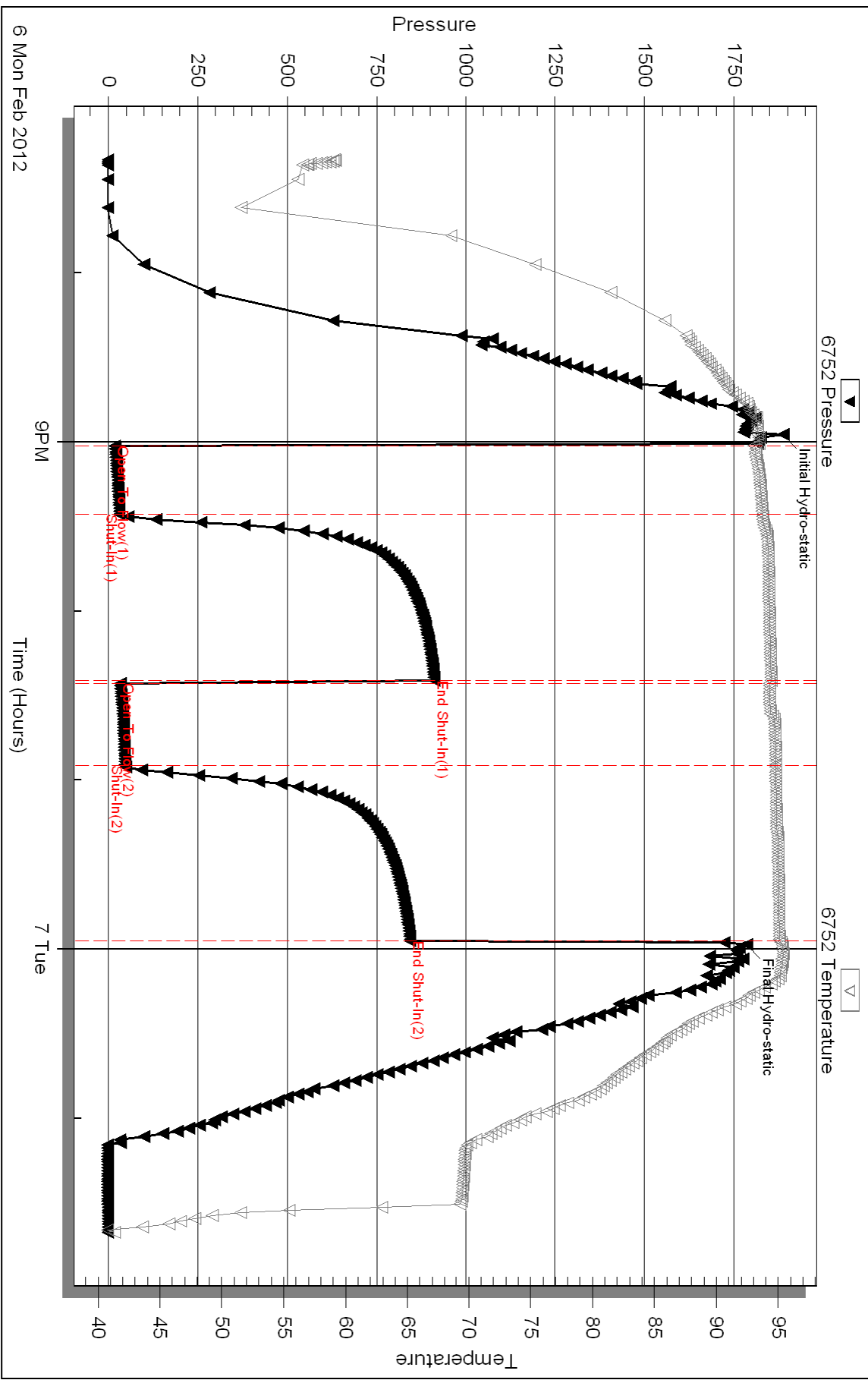
Inside

Murfin Drilling Co. Inc.

Schulze #1-12

DST Test Number: 3

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 042038

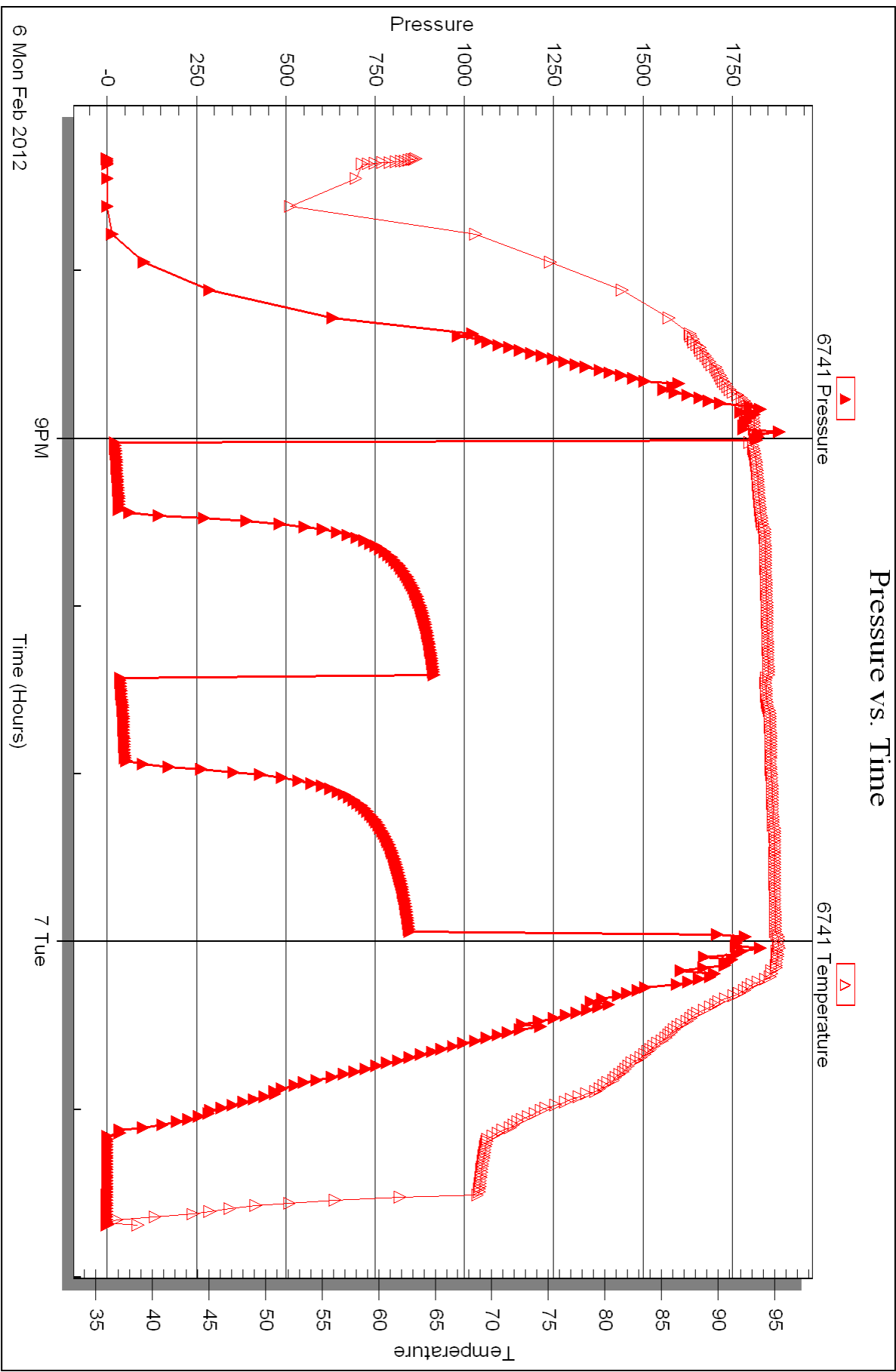
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Serial #: 6741

Outside Murfin Drilling Co. Inc.

Schulze #1-12

DST Test Number: 3





DRILL STEM TEST REPORT

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

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Robert Hendrix

Schulze #1-12

12-2s-24w Norton,KS

Start Date: 2012.02.07 @ 11:54:00

End Date: 2012.02.07 @ 17:57:00

Job Ticket #: 43100 DST #: 4

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

Printed: 2012.02.24 @ 14:27:35



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 43100

DST#: 4

ATTN: Robert Hendrix

Test Start: 2012.02.07 @ 11:54:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:28:30

Time Test Ended: 17:57:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3728.00 ft (KB) To 3760.00 ft (KB) (TVD)

Reference Elevations: 2481.00 ft (KB)

Total Depth: 3760.00 ft (KB) (TVD)

2470.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8648

Inside

Press @ Run Depth: 750.74 psig @ 3729.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.07

End Date:

2012.02.07

Last Calib.:

2012.02.07

Start Time: 11:54:05

End Time:

17:56:59

Time On Btm:

2012.02.07 @ 13:28:00

Time Off Btm:

2012.02.07 @ 15:49:30

TEST COMMENT:

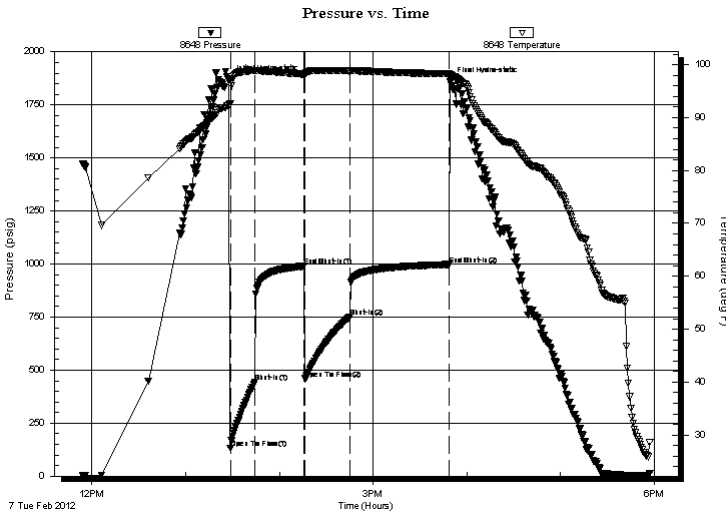
IF- BOB in 1 min.

IS- Weak surface return started at 10 min. Built to 1/2"

FF- BOB in 1 1/2 min.

FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1868.60	92.32	Initial Hydro-static
1	130.11	92.51	Open To Flow (1)
17	442.39	98.84	Shut-In(1)
48	989.88	98.21	End Shut-In(1)
49	459.16	98.08	Open To Flow (2)
77	750.74	98.81	Shut-In(2)
141	997.63	98.25	End Shut-In(2)
142	1860.09	98.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
547.00	W 100W (Mud trace)	5.52
682.00	MW 95W 5M	9.57
434.00	MW 50M 50W	6.09

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: Robert Hendrix

12-2s-24w Norton, KS

Schulze #1-12

Job Ticket: 43100

DST#: 4

Test Start: 2012.02.07 @ 11:54:00

GENERAL INFORMATION:

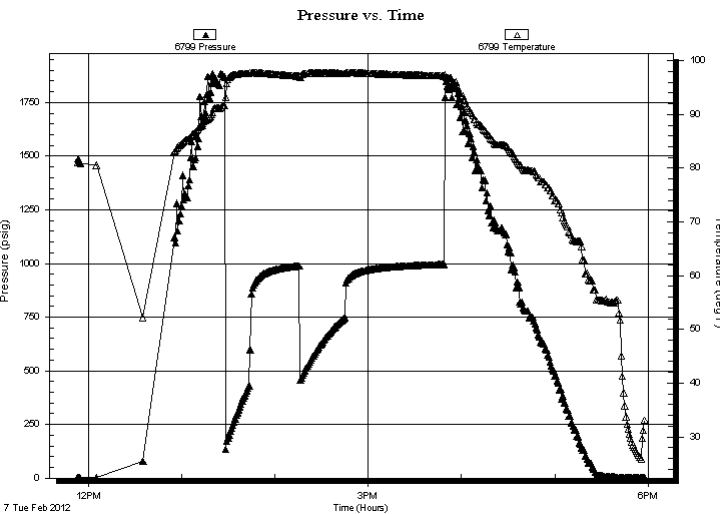
Formation: **Reagan Sand**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 13:28:30 Tester: Kevin Mack
Time Test Ended: 17:57:00 Unit No: 43

Interval: **3728.00 ft (KB) To 3760.00 ft (KB) (TVD)** Reference Elevations: 2481.00 ft (KB)
Total Depth: 3760.00 ft (KB) (TVD) 2470.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 11.00 ft

Serial #: 6799 Inside

Press @ RunDepth: psig @ 3729.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.07
Start Time: 11:53:20 End Time: 17:57:44 Time On Btm: Time Off Btm:

TEST COMMENT: IF- BOB in 1 min.
IS- Weak surface return started at 10 min. Built to 1/2"
FF- BOB in 1 1/2 min.
FS- No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
547.00	W 100W (Mud trace)	5.52
682.00	MW 95W 5M	9.57
434.00	MW 50M 50W	6.09

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 43100

DST#: 4

ATTN: Robert Hendrix

Test Start: 2012.02.07 @ 11:54:00

Tool Information

Drill Pipe:	Length: 3483.00 ft	Diameter: 3.80 inches	Volume: 48.86 bbl	Tool Weight: 2200.00 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: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 50.05 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3728.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	56.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Change Over Sub	1.00			3705.00	
Shut In Tool	5.00			3710.00	
Hydraulic tool	5.00			3715.00	
Safety Joint	3.00			3718.00	
Packer	5.00			3723.00	24.00 Bottom Of Top Packer
Packer	5.00			3728.00	
Stubb	1.00			3729.00	
Recorder	0.00	8648	Inside	3729.00	
Recorder	0.00	6799	Inside	3729.00	
Perforations	26.00			3755.00	
Bullnose	5.00			3760.00	32.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co. Inc.

12-2s-24w Norton, KS

250 N. Water Ste. 300
Wichita KS 67202

Schulze #1-12

Job Ticket: 43100

DST#: 4

ATTN: Robert Hendrix

Test Start: 2012.02.07 @ 11:54:00

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:

28500 ppm

Viscosity: 85.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud (Heavy) 100M	0.025
547.00	W 100W (Mud trace)	5.523
682.00	MW 95W 5M	9.567
434.00	MW 50M 50W	6.088

Total Length: 1668.00 ft Total Volume: 21.203 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .41 @ 43 deg. = 28,500 ppm

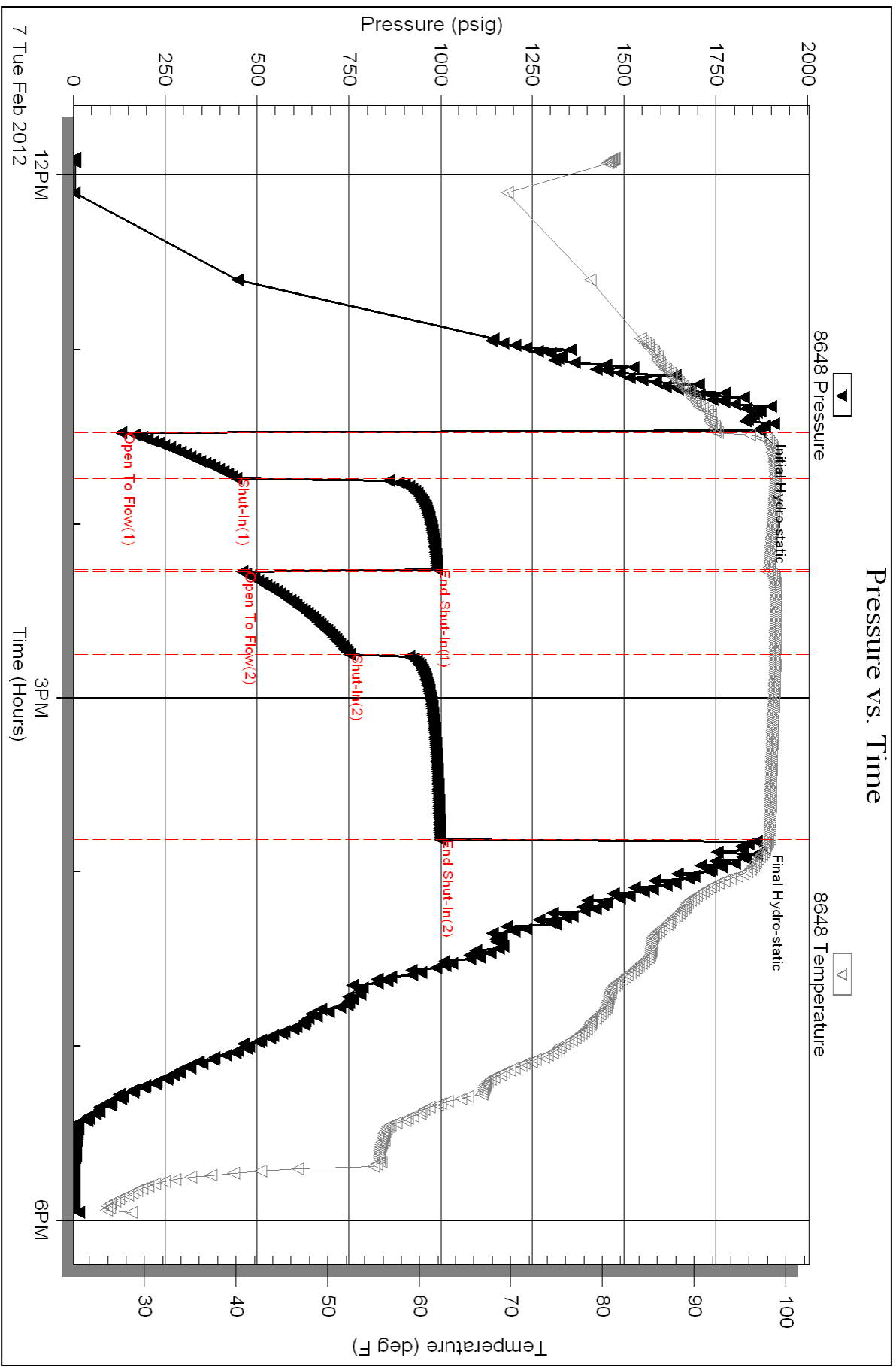
Serial #: 8648

Inside

Murfin Drilling Co. Inc.

Schulze #1-12

DST Test Number: 4



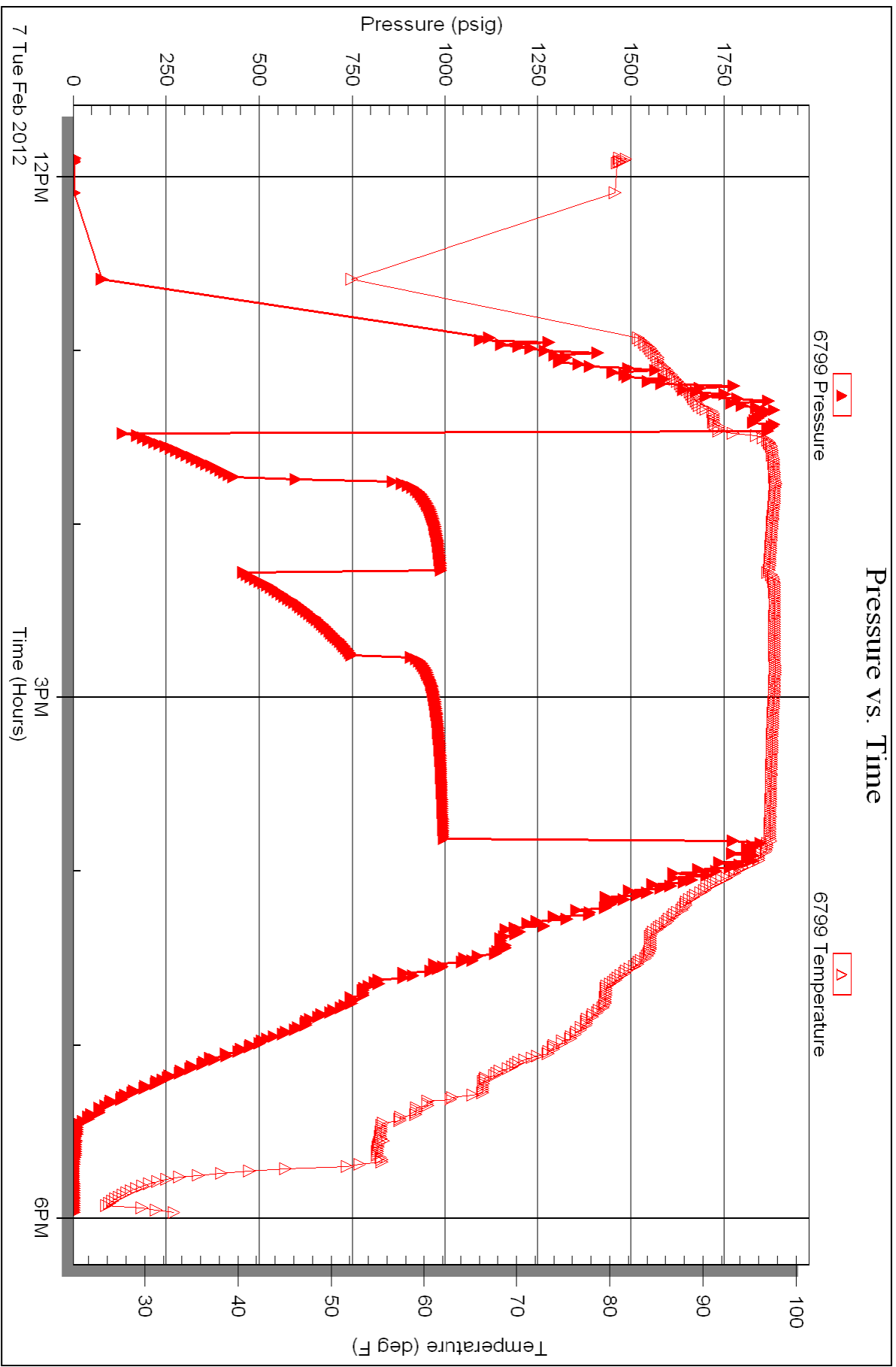
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Inside

Murfin Drilling Co. Inc.

Schulze #1-12

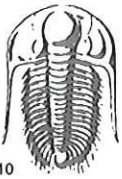
DST Test Number: 4



Triobite Testing, Inc

Ref. No: 43100

Printed: 2012.02.24 @ 14:27:38



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 07 2012

Test Ticket

NO. 042036

4/10

BY: _____

Well Name & No. Schulze #1-12 Test No. 1 Date 02-05-2012
 Company Murfin Drilling Co. Inc Elevation 2481 KB 2470 GL _____
 Address 250 N. Water Ste 300 Wichita Ks. 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #21
 Location: Sec. 12 Twp. 2S Rge. 24W Co. Norton State Ks

Interval Tested 3420 3570 Zone Tested tor-LKC
 Anchor Length 150 Drill Pipe Run _____ Mud Wt. 9.5
 Top Packer Depth 3415 Drill Collars Run 241 Vis 54
 Bottom Packer Depth 3420 Wt. Pipe Run 0 WL 7.2
 Total Depth 3570 Chlorides 1300 ppm System LCM 0#

Blow Description IF: weak blow, built to 3in over 30mins

ISI: No blow back over 60mins

FF: weak blow, built to 3in over 60mins

FSD: No blow back over 90mins

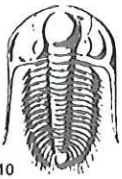
Rec	Feet of	%gas	%oil	%water	%mud
<u>271</u>	<u>WCM</u>		<u>20</u>	<u>80</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 271 BHT 93.8 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1775</u>	<input checked="" type="checkbox"/> Test <u>1125</u>	T-On Location <u>1:45</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2:40</u>
(C) First Final Flow <u>85</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>4:53</u>
(D) Initial Shut-In <u>1172</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>8:50</u>
(E) Second Initial Flow <u>90</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>10:38</u>
(F) Second Final Flow <u>146</u>	<input checked="" type="checkbox"/> Mileage <u>41x2 = 82x1.40 = 114.80</u>	Comments _____
(G) Final Shut-In <u>1155</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1698</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby _____	Total <u>1564.80</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1564.80</u>	

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 07 2012

Test Ticket

NO. 042037

4/10

BY: _____

Well Name & No. Schulze #1-12 Test No. 2 Date 02-05-2012
 Company Murfin Drilling Co Inc Elevation 2481 KB 2470 GL
 Address 250 N. Water Ste. 300 Wichita Ks 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #21
 Location: Sec. 12 Twp. 25 Rge. 24w Co. Norton State Ks

Interval Tested 3567 3650 Zone Tested LKc-H-K
 Anchor Length 83 Drill Pipe Run 3323 Mud Wt. 9.4
 Top Packer Depth 3562 Drill Collars Run 241 Vis 72
 Bottom Packer Depth 3567 Wt. Pipe Run -0- WL -6.4
 Total Depth 3650 Chlorides 1800 ppm System LCM 0#

Blow Description IF: weak blow, built to 5 in. over 30 mins
ISF: No blow back over 60 mins.
FF: weak blow ^{built} ~~back~~ to 5 in. over 60 mins
FSD: No blow back over 90 mins.

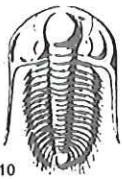
Rec	Feet of	%gas	%oil	%water	%mud
<u>202</u>	<u>mud</u>			<u>100</u>	
<u>121</u>	<u>wcm</u>		<u>20</u>	<u>80</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 323 BHT 93.4 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1753 Test 1125 T-On Location 22:49
 (B) First Initial Flow 31 Jars 250 T-Started 23:10
 (C) First Final Flow 129 Safety Joint 75 T-Open 00:45
 (D) Initial Shut-In 1028 Circ Sub _____ T-Pulled 4:40
 (E) Second Initial Flow 132 Hourly Standby _____ T-Out 6:33
 (F) Second Final Flow 184 Mileage 41x2 = 82x1.40 = 114.80 Comments _____
 (G) Final Shut-In 942 Sampler _____
 (H) Final Hydrostatic 1714 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1564.80
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 00 Sub Total 1564.80

Approved By _____ Our Representative Chad Kuyper

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.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 23 2012

Test Ticket

NO. 042038

BY: _____

Well Name & No. Schulze #1-12 Test No. 3 Date 02-06-2012
 Company Murfin Drilling Co. Inc. Elevation 2481 KB 2470 GL _____
 Address 250 N. Water Ste. 300 Wichita KS 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #21
 Location: Sec. 12 Twp. 25 Rge. 24W Co. Norton State Ks

Interval Tested 3681 3735 Zone Tested Arbuckle
 Anchor Length _____ 54 Drill Pipe Run 3424 Mud Wt. 9.1
 Top Packer Depth _____ 3676 Drill Collars Run 241 Vis 52
 Bottom Packer Depth _____ 3681 Wt. Pipe Run -0- WL 6.8
 Total Depth _____ 3735 Chlorides 1800 ppm System LCM 2#

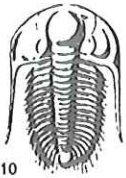
Blow Description IF: Weak blow, Built to surface over 30 mins.
ISI: No blow back over 60mins
FF: No blow over 30mins
FSI: No blow back over 60mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>62</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 62 BHT 95.1 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1887</u>	<input checked="" type="checkbox"/> Test <u>1125'</u>	T-On Location <u>18:56</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>19:20</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>21:01</u>
(D) Initial Shut-In <u>911</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>23:45</u>
(E) Second Initial Flow <u>33</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>01:41</u>
(F) Second Final Flow <u>47</u>	<input checked="" type="checkbox"/> Mileage <u>41x2 = 82x1.40</u>	Comments <u>114.80</u>
(G) Final Shut-In <u>843</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1785</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1564.80</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1564.80</u>	

Approved By _____ Our Representative Chad [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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 043100

RECEIVED
FEB 15 2012

Well Name & No. Schulze # 1-12 BY: _____ Test No. 4 Date 2-7-12
 Company Murfin Drilling Co. Inc Elevation 2481 KB 2470 GL _____
 Address 250 N. Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Robert Hendrix Rig Murfin #21
 Location: Sec. 12 Twp. 2S Rge. 24W Co. Norton State KS

Interval Tested ~~3681-3733~~ Zone Tested Reagan Sand
 Anchor Length 3728-3760³ 32' Drill Pipe Run _____ Mud Wt. 9.3
 Top Packer Depth 3724 Drill Collars Run 241' Vis 85
 Bottom Packer Depth 3728 Wt. Pipe Run Ø WL 6.0
 Total Depth 3760 Chlorides 2,000 ppm System LCM 2#

Blow Description IF-BoB in 1min
IS-Weak surface return started at 10 min. Built to 1/2"
FF-BoB in 1 1/2 min.
FS-No Return

Rec	Feet of	MW	%gas	%oil	%water	%mud
<u>434</u>		<u>MW</u>		<u>50</u>	<u>50</u>	
<u>682</u>		<u>MW</u>		<u>95</u>	<u>5</u>	
<u>547</u>		<u>W</u>		<u>100</u>	<u>TR</u>	
<u>5</u>					<u>600</u>	

Rec Total 1668 BHT 100 Gravity - API RW .41 @ 43 °F Chlorides 28,500 ppm
 (A) Initial Hydrostatic 1868 Test 1125' T-On Location 8:00 AM
 (B) First Initial Flow 130 Jars _____ T-Started 11:54 AM
 (C) First Final Flow 442 Safety Joint 75' T-Open 1:30 PM
 (D) Initial Shut-In 989 Circ Sub N/C T-Pulled 3:45 PM
 (E) Second Initial Flow 459 Hourly Standby 1hr 100' T-Out 6:00 PM
 (F) Second Final Flow 250 Mileage 82 RT 114.80 Comments Had to wait on
 (G) Final Shut-In 997 Sampler _____ car to clear lease
 (H) Final Hydrostatic 1860 Straddle _____ road.

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Initial Open 15
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 60
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility
 Sub Total 1414.80
 Total 1414.80
 MP/DST Disc't _____

Approved By _____ Our Representative

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PO Box 93999
Southlake, TX 76092

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

INVOICE

Invoice Number: 130000

Invoice Date: Jan 23, 2012

Page: 1

PROD COPY

*Fig #.
acct.*

Bill To:
Murfin Drlg. Co., Inc.
*PO BOX 661
COLBY, KS 67701*

Federal Tax I.D.#: 20-8651475

OPERATOR PAY MDC

LEASE: Schulze Unit #11
187

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Schulze #1-11	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jan 23, 2012	2/22/12

Quantity	Item	Description	Unit Price	Amount
200.00	MAT	Class A Common	16.25	3,250.00
7.00	MAT	Chloride	58.20	407.40
207.00	SER	Handling	2.25	465.75
80.00	SER	Mileage 207 sx @.11	22.77	1,821.60
1.00	SER	Surface	1,125.00	1,125.00
12.00	SER	Extra Footage	0.95	11.40
80.00	SER	Pump Truck Mileage	7.00	560.00
1.00	SER	Manifold Head Rental	200.00	200.00
80.00	SER	Light Vehicle Mileage	4.00	320.00
1.00	EQP	8.5/8 Top Wooden Plug	92.00	92.00
1.00	CEMENTER	Steve Heikkila		
1.00	CEMENTER	LaRene Wentz		
1.00	EQUIP OPER	Darren Racette		
1.00	OPER ASSIST	Dane Retzloff		

Account	Qty	Rate	Description
<i>ID203</i>		<i>5628.88</i>	<i>Cement S. Cg. #1-11</i>
	<i>3.</i>	<i>7459.0001</i>	

Subtotal	8,253.15
Sales Tax	264.33
Total Invoice Amount	8,517.48
Payment/Credit Applied	
TOTAL	8,517.48

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

\$2888.60

ONLY IF PAID ON OR BEFORE
Feb 17, 2012

- 2888.60

5628.88

OKM

ALLIED CEMENTING CO., LLC. 036166

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

DAKLEY, KS.

DATE <u>1/23/12</u>	SEC. <u>11</u>	TWP. <u>2</u>	RANGE <u>24</u>	CALLED OUT	ON LOCATION <u>2:00 PM</u>	JOB START <u>4:00</u>	JOB FINISH <u>4:30</u>
ASE <u>SCHULZE</u>		WELL# <u>1-11</u>	LOCATION <u>NORTON-6W, 5N-1/4E, S. INTO</u>			COUNTY <u>NORTON</u>	STATE <u>Ks.</u>
D OK <u>NEW</u> (Circle one)							

CONTRACTOR MURFIN 21

TYPE OF JOB SURFACE

PIPE SIZE 12 1/4 T.D. 314

CASING SIZE 8 5/8 DEPTH 312

DRILLING SIZE DEPTH

DRILL PIPE DEPTH

WELL DEPTH

DES. MAX MINIMUM

BASE LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

REFS.

PLACEMENT 19.0 BBL

OWNER SAME

CEMENT

AMOUNT ORDERED 200 SKS Com, 3% CC

COMMON	<u>200 SKS @ 16.26</u>	<u>3250.00</u>
POZMIX	@	
GEL	@	
CHLORIDE	<u>75 SKS @ 58.20</u>	<u>4365.00</u>
ASC	@	<u>407.40</u>
	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	<u>207 SKS @ 2.25</u>	<u>465.75</u>
MILEAGE	<u>114 SK/MILE</u>	<u>1821.60</u>
TOTAL		<u>5984.75</u>

EQUIPMENT

JMP TRUCK CEMENTER STEVE, LARENE

431 HELPER DARREN

JLK TRUCK

404 DRIVER DANE

JLK TRUCK DRIVER

REMARKS:

MIX 200 SKS CEMENT DOWN CASING.

DISPLACE WITH WATER

CEMENT DID CIRCULATE

THANK YOU!

CHARGE TO: MURFIN DRILLING Co.

REET

TY STATE ZIP

SERVICE

DEPTH OF JOB	<u>312</u>	
PUMP TRUCK CHARGE		<u>1125.20</u>
EXTRA FOOTAGE	<u>12 @ .95</u>	<u>11.40</u>
MILEAGE	<u>80 @ 7.00</u>	<u>560.00</u>
MANIFOLD	<u>HEAD @</u>	<u>200.00</u>
LV MILEAGE	<u>@ 4.00</u>	<u>320.00</u>
	@	
TOTAL		<u>2246.40</u>

PLUG & FLOAT EQUIPMENT

<u>1 1/2" WOODEN PLUG</u>	@	<u>92.00</u>
	@	
	@	
	@	
	@	
TOTAL		<u>92.00</u>

Allied Cementing Co., 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 ARTURO CABEZAS

SIGNATURE ARTURO CABEZAS

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS



PO Box 93999
Southlake, TX 76092

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

INVOICE

Invoice Number: 130000
Invoice Date: Jan 23, 2012
Page: 1

*Log #.
acct.*

Bill To:
Murfin Drlg. Co., Inc.

*PO BOX 661
COLBY, KS 67701*

Federal Tax I.D.#: 20-8651475

OPERATOR PAY MDC

LEASE: Schulze Unit #11
Tom

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Schulze #1-11	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jan 23, 2012	2/22/12

Quantity	Item	Description	Unit Price	Amount
200.00	MAT	Class A Common	16.25	3,250.00
7.00	MAT	Chloride	58.20	407.40
207.00	SER	Handling	2.25	465.75
80.00	SER	Mileage 207 sx @.11	22.77	1,821.60
1.00	SER	Surface	1,125.00	1,125.00
12.00	SER	Extra Footage	0.95	11.40
80.00	SER	Pump Truck Mileage	7.00	560.00
1.00	SER	Manifold Head Rental	200.00	200.00
80.00	SER	Light Vehicle Mileage	4.00	320.00
1.00	EQP	8.5/8 Top Wooden Plug	92.00	92.00
1.00	CEMENTER	Steve Heikkila		
1.00	CEMENTER	LaRene Wentz		
1.00	EQUIP OPER	Darren Racette		
1.00	OPER ASSIST	Dane Retzloff		

Subtotal	8,253.15
Sales Tax	264.33
Total Invoice Amount	8,517.48
Payment/Credit Applied	
TOTAL	8,517.48

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

\$2888.60

ONLY IF PAID ON OR BEFORE
Feb 17, 2012

- 2888.60

5620.88

QJM *MM*

ALLIED CEMENTING CO., LLC. 036166

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
DAKLEY, KS.

DATE <u>1/23/12</u>	SEC. <u>11</u>	TWP. <u>2</u>	RANGE <u>24</u>	CALLED OUT	ON LOCATION <u>2:00 PM</u>	JOB START <u>4:00</u>	JOB FINISH <u>7:30</u>
AGENT <u>SCHULZE</u>	WELL # <u>1-11</u>	LOCATION <u>NORTON-6W, 5N-1/4 E, S. INTO</u>			COUNTY <u>NORTON</u>	STATE <u>Ks.</u>	
D OR <u>NEW</u> (Circle one)							

CONTRACTOR MURFIN 21
TYPE OF JOB SURFACE
DLE SIZE 12 1/4 T.D. 314
CASING SIZE 8 5/8 DEPTH 312
PIPE SIZE DEPTH
DILL PIPE DEPTH
DOL DEPTH
DES. MAX MINIMUM
EAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
DRFS.
SPACEMENT 19.0 BBL

OWNER STAME
CEMENT
AMOUNT ORDERED 200 SKS Com, 3% CC

COMMON	<u>200 SKS @ 16.25</u>	<u>3250.00</u>
POZMIX	@	
GEL	@	
CHLORIDE	<u>75 SKS @ 58.20</u>	<u>40,740</u>
ASC	@	<u>407.40</u>
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	<u>207 SKS @ 2.25</u>	<u>465.75</u>
MILEAGE	<u>114 SK/MILE</u>	<u>1871.60</u>
TOTAL		<u>5984.75</u>

EQUIPMENT

JMP TRUCK CEMENTER STEVE, LARENE
431 HELPER DARREN
JLK TRUCK
404 DRIVER DANE
JLK TRUCK
DRIVER

REMARKS:

MIX 200 SKS CEMENT DOWN CASING.
DISPLACE WITH WATER

CEMENT DID CIRCULATE

THANK YOU!

CHARGE TO: MURFIN DRILLING Co.

REET

TY STATE ZIP

SERVICE

DEPTH OF JOB 312
PUMP TRUCK CHARGE 1125.20
EXTRA FOOTAGE 12 @ .95 11.40
MILEAGE 80 @ 7.00 560.00
MANIFOLD HEAD @ 200.00
LV MILEAGE @ 4.00 320.00

TOTAL 2266.40

PLUG & FLOAT EQUIPMENT

1 TOP WOODEN PLUG @ 92.00
@
@
@
@

TOTAL 92.00

Allied Cementing Co., 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
DISCOUNT IF PAID IN 30 DAYS

PRINTED NAME ARTURO CABEZAS

SIGNATURE ARTURO CABEZAS