

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1251341
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: _____

1251341

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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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Schmidt-Vap 2-26
Doc ID	1251341

All Electric Logs Run

DIL
DUCP
MEL
BHCS
CBL

OPERATOR

Company: Murfin Drilling Company
 Address: 250 N. Water
 Suite 300
 Wichita, KS 67202
 Contact Geologist: Shauna Gunzelman
 Contact Phone Nbr: 316-267-3241
 Well Name: Schmidt - Vap #2-26
 Location: Sec. 26 - T4S - R31W
 API: 15-153-21119-0000
 Pool: State: Kansas
 Field: un-named
 Country: USA



Scale 1:240 Imperial

Well Name: Schmidt - Vap #2-26
 Surface Location: Sec. 26 - T4S - R31W
 Bottom Location:
 API: 15-153-21119-0000
 License Number: 30606
 Spud Date: 3/3/2015 Time: 1:00 PM
 Region: Rawlins
 Drilling Completed: 3/9/2015 Time: 7:15 AM
 Surface Coordinates: 2310' FSL & 380' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2877.00ft
 K.B. Elevation: 2882.00ft
 Logged Interval: 3600.00ft To: 4450.00ft
 Total Depth: 4450.00ft
 Formation: Cherokee
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude:
 Latitude:
 N/S Co-ord: 2310' FSL
 E/W Co-ord: 380' FWL

LOGGED BY

Keith Reavis
Consulting Geologist

Company: Keith Reavis, Inc.
 Address: 3420 22nd Street
 Great Bend, KS 67530

Phone Nbr: 620-617-4091
 Logged By: KLG #136 Name: Keith Reavis

CONTRACTOR

Contractor: Murfin Drilling Company
 Rig #: 7
 Rig Type: mud rotary
 Spud Date: 3/3/2015 Time: 1:00 PM
 TD Date: 3/9/2015 Time: 7:15 AM
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 2882.00ft
K.B. to Ground: 5.00ft

Ground Elevation: 2877.00ft

NOTES

Due to positive drill stem tests and electrical log analysis, the operator elected to set and cement 5 1/2" production casing and further test several Lansing/KC zones through perforations and stimulation.

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

Respectfully submitted,
Keith Reavis

Murfin Drilling Company

daily drilling report

DATE	7:00 AM DEPTH	REMARKS
03/05/2015		Geologists Keith Reavis on location @ 1315 hrs, 3545 ft., running bit trip, lost circ. At 1800 ft going in hole with button bit, get returns, finish trip in hole, resume drilling
03/06/2015	3908	drilling, Topeka, Oread, Heebner, Toronto, Lansing, show in Toronto, A & B warrants test, short trip, TOH w/bit, conduct and complete DST #1, successful test, TIH w/bit
03/07/2015	4010	resume drilling, show in F and G warrant test, TOH w/bit, conducting DST #2, complete DST #2, successful test, TIH w/bit, resume drilling
03/08/2015	4076	shows in H & J warrant test, TOH w/bit, in w/tools, conducting DST #3, complete DST #3, successful test, TIH w/bit, resume drilling, BKC, Marmaton
03/09/2015	4450	drilling ahead Pawnee, Cherokee, TD @ 0715 hrs, short trip, ctch, TOH for logs, conduct and complete logging operations, geologist off loc.1720 hrs

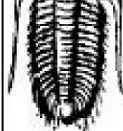
Murfin Drilling Company

well comparison sheet

DRILLING WELL					COMPARISON WELL				
MDC - Schmidt-Vap #2-26 2310' FSL' & 380' FWL Sec 26-T4S-R31W					MDC - Schmidt-Vap #1-26 1545' FSL & 880' FSL Sec 26-T4S-R31W				
2882 KB					2911 KB			Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	
Topeka	3694	-812	3696	-814	3721	-810	-2	-4	
Heebner	3856	-974	3852	-970	3884	-973	-1	3	
Lansing	3908	-1026	3903	-1021	3937	-1026	0	5	
Stark	4076	-1194	4068	-1186	4103	-1192	-2	6	
BKC	4127	-1245	4124	-1242	4159	-1248	3	6	
Pawnee	4233	-1351	4230	-1348	4267	-1356	5	8	
Cherokee	4314	-1432	4311	-1429	4351	-1440	8	11	
Mississippian	4424	-1542	4424	-1542	4474	-1563	21	21	
Total Depth	4450	-1568	4452	-1570	4542	-1631	63	61	

Drill Stem Test #1

	DRILL STEM TEST REPORT	
	Murfin Drilling CO INC	26 4S 31W Rawlins KS



TESTING, INC

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Schmidt Vap 2-26

Job Ticket: 60818

DST#: 1

Test Start: 2015.03.06 @ 13:55:00

GENERAL INFORMATION:

Formation: Toronto---LKC "B"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:03:30

Time Test Ended: 22:40:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Robert Zodrow

Unit No: 66

Interval: 3856.00 ft (KB) To 3942.00 ft (KB) (TVD)

Total Depth: 3942.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches -hole Condition: Fair

Reference Elevations: 2882.00 ft (KB)

2877.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8959

Inside

Press@RunDepth: 864.53 psig @ 3857.00 ft (KB)

Start Date: 2015.03.06

End Date: 2015.03.06

Start Time: 13:55:05

End Time: 22:40:00

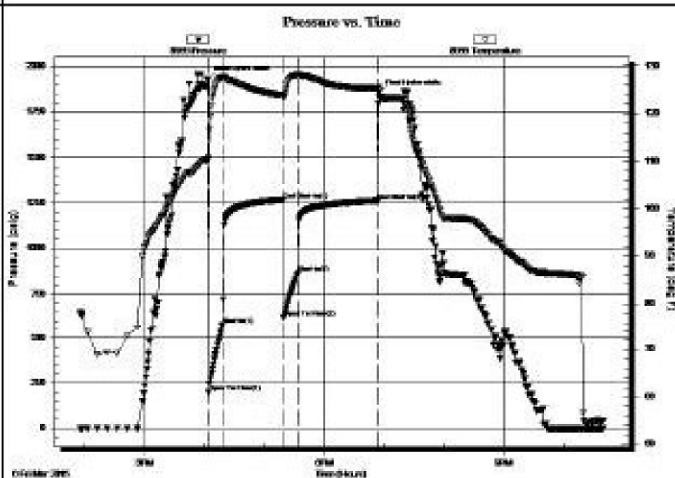
Capacity: 8000.00 psig

Last Calib.: 2015.03.06

Time On Btm: 2015.03.06 @ 16:03:00

Time Off Btm: 2015.03.06 @ 18:55:00

TEST COMMENT: 15-F- Bob in 1 min
60-IS- Return built to weak surface blow
15-FF- Bob in 2 mins
60-FSI- Return built to 1/2'



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1927.92	110.33	Initial Hydro-static
1	199.60	110.81	Open To Flow (1)
15	581.69	127.70	Shut-In (1)
76	1266.30	123.88	End Shut-In (1)
76	620.10	123.45	Open To Flow (2)
91	864.53	126.13	Shut-In (2)
171	1262.70	125.20	End Shut-In (2)
172	1855.76	124.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1115.00	GOCW 15%G 15%O 70%W	14.50
500.00	GOCWM 7%G 10%O 35%W 48%M	7.31
30.00	VMCO 5%W 10%M 85%O	0.44

Gas Rates

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

Drill Stem Test #2



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling CO INC

26 4S 31W Rawlins KS

250 N Water STE 300
Wichita KS 67202

Schmidt Vap 2-26

Job Ticket: 60819

DST#: 2

ATTN: Keith Reavis

Test Start: 2015.03.07 @ 08:50:00

GENERAL INFORMATION:

Formation: LKC "F-G"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:52:00

Time Test Ended: 17:17:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 66

Interval: 3962.00 ft (KB) To 4010.00 ft (KB) (TVD)
 Total Depth: 4010.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches -hole Condition: Fair

Reference Elevations: 2862.00 ft (KB)
 2877.00 ft (CF)
 KB to GR/CF: 5.00 ft

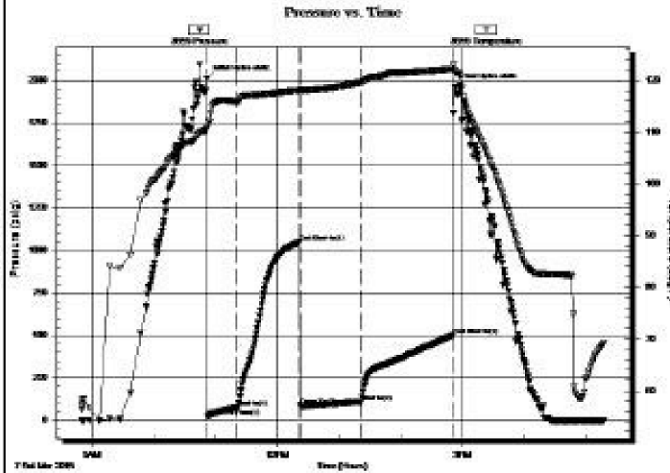
Serial #: 8959

Inside

Press@RunDepth: 110.86 psig @ 3963.00 ft (KB)
 Start Date: 2015.03.07 End Date: 2015.03.07
 Start Time: 08:50:05 End Time: 17:17:29

Capacity: 8000.00 psig
 Last Calib.: 2015.03.07
 Time On Btm: 2015.03.07 @ 10:51:30
 Time Off Btm: 2015.03.07 @ 14:52:30

TEST COMMENT: 30-F- Bob in 15 mins
 60-IS- Return built to 1/2"
 60-FF- Bob in 16 mins
 90-FS- Return built to 2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2009.97	110.63	Initial Hydro-static
1	25.07	111.09	Open To Flow(1)
30	77.65	115.82	Shut-In(1)
90	1046.98	117.99	End Shut-In(1)
91	67.35	117.86	Open To Flow(2)
150	110.86	119.57	Shut-In(2)
240	500.20	122.13	End Shut-In(2)
241	1957.18	121.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
220.00	GMCO 15%G 25%M 60%O	1.41
30.00	GO 10%G 90%O	0.44
0.00	GIP 300'	0.00

Gas Rates

Choke (Inches)	Pressure (psig)	Gas Rate (M dfl)

* Recovery from multiple tests

Drill Stem Test #3



DRILL STEM TEST REPORT

Murfin Drilling CO INC
 250 N Water STE 300
 Wichita KS 67202
 ATTN: Keith Reavis

26 4S 31W Rawlins KS
 Schmidt Vap 2-26
 Job Ticket: 60620 DST#:3
 Test Start: 2015.03.08 @ 04:15:00

GENERAL INFORMATION:

Formation: LKC "H-J"
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:41:00
 Time Test Ended: 11:53:00

Test Type: Conventional Bottom Hole (Reset)
 Tester: Robert Zodrow
 Unit No: 66

Interval: 4004.00 ft (KB) To 4076.00 ft (KB) (TVD)
 Total Depth: 4076.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches -hole Condition: Fair

Reference Elevations: 2862.00 ft (KB)
 2877.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8959

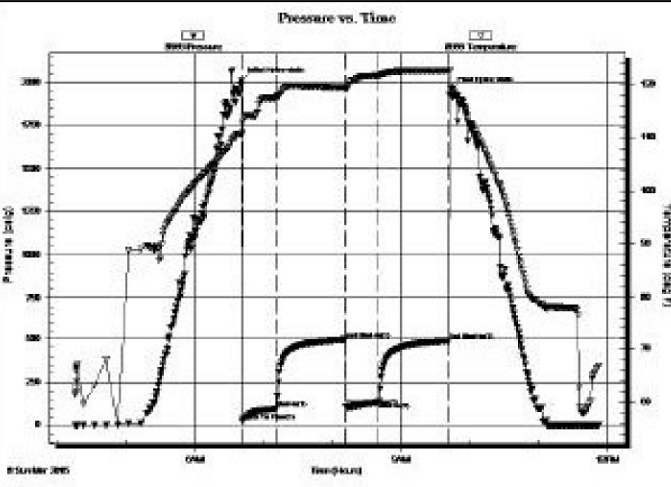
Inside

Press@RunDepth: 135.35 psig @ 4005.00 ft (KB)
 Start Date: 2015.03.08 End Date: 2015.03.08
 Start Time: 04:15:05 End Time: 11:52:59

Capacity: 8000.00 psig
 Last Calib.: 2015.03.08
 Time On Btm: 2015.03.08 @ 06:40:30
 Time Off Btm: 2015.03.08 @ 09:43:30

TEST COMMENT: 30-F- Blow built to 3"

TEST COMMENT: 60-FSI- No return
 30-FF-Blow built to 1/4"
 60-FSI- No return



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.69	110.47	Initial Hydro-static
1	24.54	110.85	Open To Flow(1)
30	95.64	117.45	Shut-In(1)
91	497.66	119.35	End Shut-In(1)
91	109.04	118.90	Open To Flow(2)
120	135.35	121.64	Shut-In(2)
181	491.44	122.55	End Shut-In(2)
183	1957.50	119.58	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
250.00	GMCO 20%G 30%M 50%O	1.85
70.00	GO 10%G 90%O	1.02
0.00	GIP 200'	0.00

* Recovery from multiple tests

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

ROCK TYPES

Cht	Lmst fw<7	Carbon Sh	Ss
Cht vari	shale, grn	shale, red	Siltst
sdy lmst	shale, gry	Shcol	

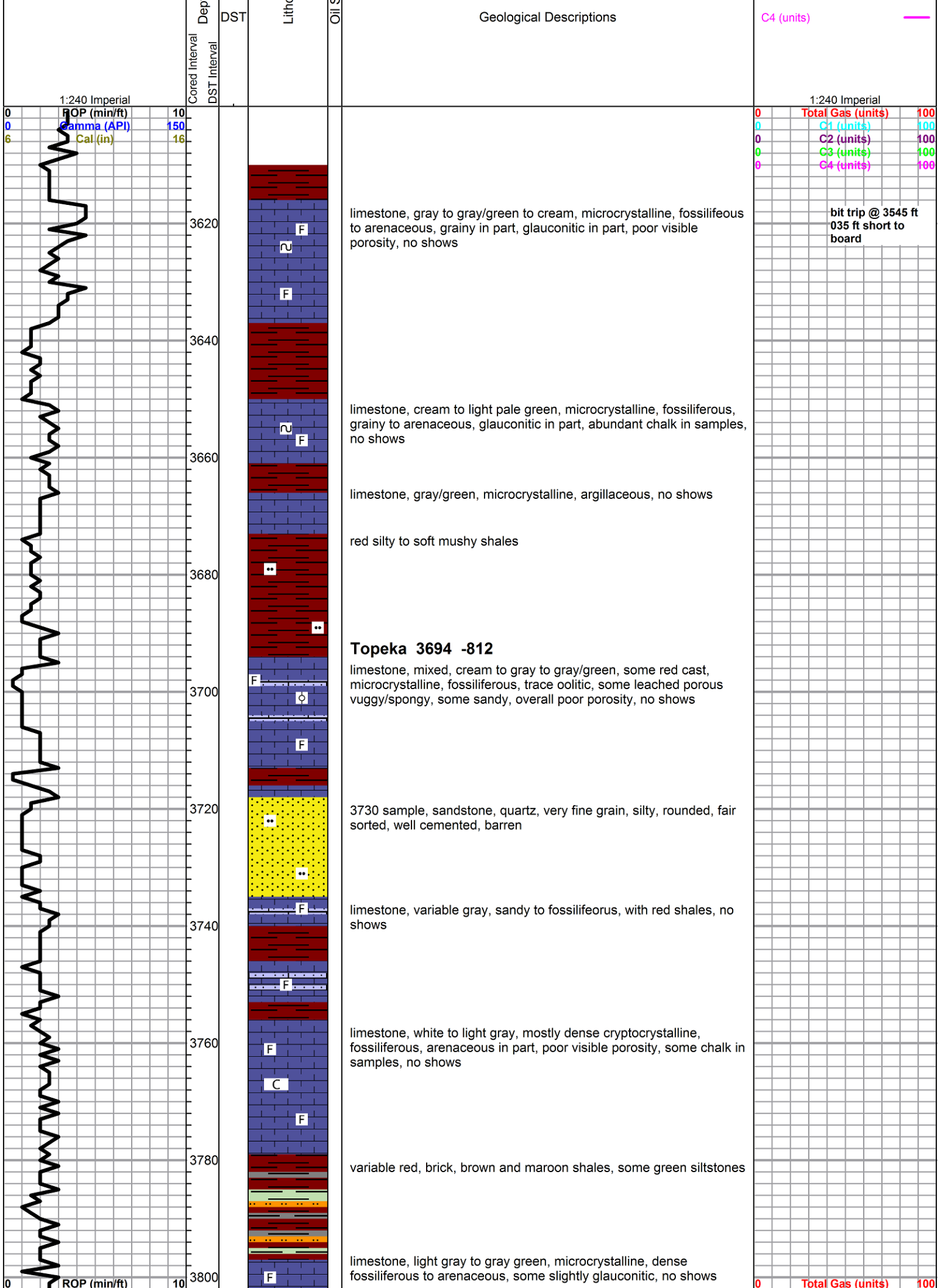
ACCESSORIES

MINERAL Chert, dark Glauconite Mineral Crystals Silty Chert White	FOSSIL Bioclastic or Fragments Fossils < 20% Oolite Pellets	STRINGER Sandstone Siltstone	TEXTURE Chalky Cryptocrystalline Lithogr
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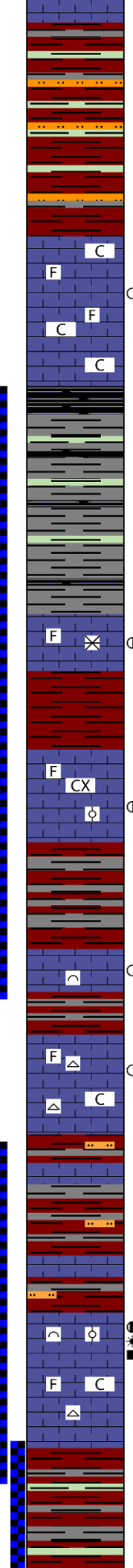
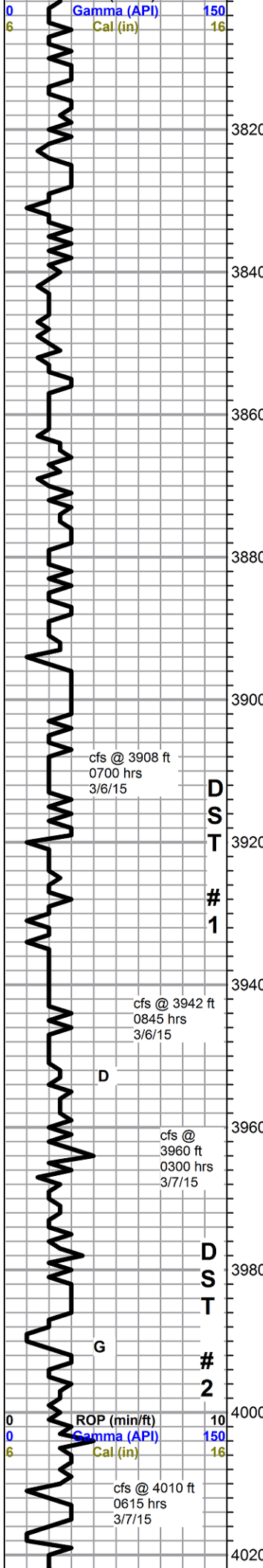
OTHER SYMBOLS

MISC Daily Report Digital Photo Document Folder Link Vertical Log File Horizontal Log File Core Log File Drill Cuttings Rpt	Oil Show Good Show Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas	DST DST Int DST alt Core tail pipe
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Curve Track #1	ROP (min/ft)		th Intervals	bology	Show	TG, C1 - C5	Total Gas (units)	
	Gamma (API)					C1 (units)		
	Cal (in)					C2 (units)		
						C3 (units)		



bit trip @ 3545 ft
035 ft short to board



Oread

limestone, cream to light gray, microcrystalline, fossiliferous, some vuggy, trace pyritic, scattered spotty to slight saturated stain, streaming sheen in tray, slight show free oil as warms in tray, no odor, fair fluorescence, fair slow streaming cut, flood chalk in lower portion

Heebner 3856 -974

abundant black carbonaceous shale with gray and green

Toronto

limestone, white to gray, microcrystalline, slightly fossiliferous, fair surface etching, to pinpoint porosity and small solution vugs, some secondary calcite xtals, fair black to brown staining, good streaming sheen, slight show bleeding free oil, faint to fair odor, fair fluorescence, good slow streaming cut

flood red sticky shale in 3908 sample

Lansing 3908 -1026

limestone, light gray, cryptocrystalline, slightly fossiliferous, trace oolitic, large wormy stained solution vug, crystal lined, some slight oil bleeding, some white weathered chalky limestone, small solution vugs, fair stain, good streaming sheen in tray, slight show free oil, faint odor in cup, good odor under lamp, fair fluorescence, good white milky cut

Murfin Schmidt Vap 2-26 dst 1.pdf

limestone, light gray to gray, grainy bioclastic, some good pinpoint interclast porosity, dark brown to black mostly saturated stain, sheen in tray, slight bleeding, faint odor, faint fluorescence, milky slow cut

limestone, light gray, cryptocrystalline, slight re-crystallized fossiliferous, cherty, some scattered stained solution vugs, light gray chalky fossiliferous limestone, light gray cherts with black speckles, sheen in tray, no free oil, no odor, poor fluorescence, very slight cut

mostly red soft shales, with limestone a.a. some scattered siltstones and glauconitic dirty greenish sandstones, abundant chert a.a., few scattered pieces of white to gray chalky limestone with slight staining, some sheen in tray, (sluff from above?), no free oil or odor

Murfin Schmidt Vap 2-26 dst 2.pdf

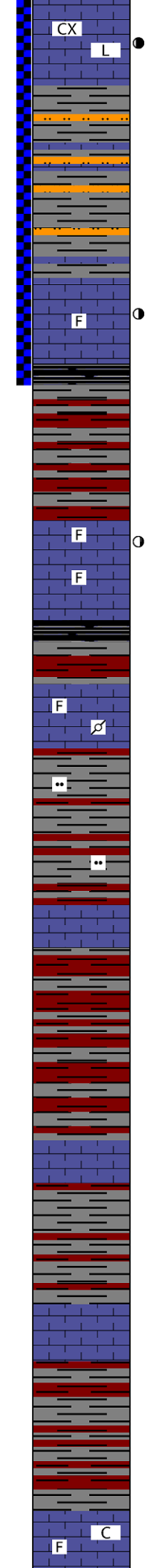
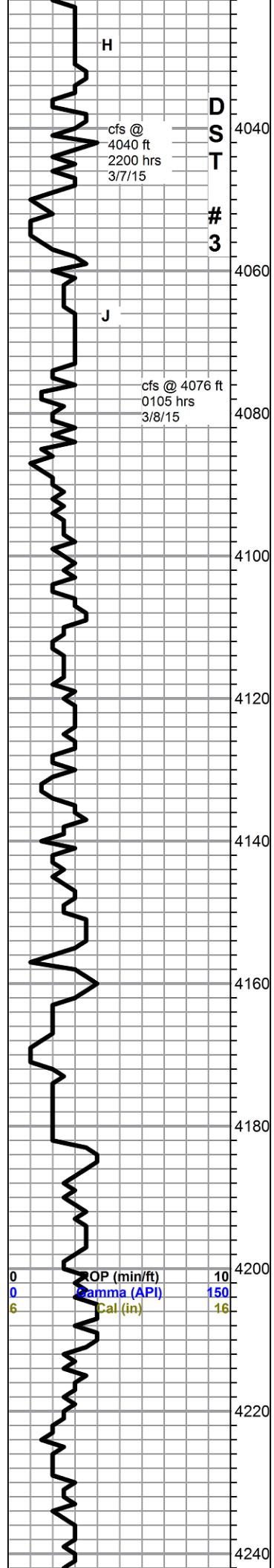
limestone, light gray, bioclastic to sub-oolitic, good interclast porosity with some fair framework, light brown stain, gassy, bleeding some oil, good show oil on break, no odor, poor fluorescence, good cut, grades to white to light gray limestone, mostly cryptocrystalline, slightly fossiliferous, dense to chalky, trace white chert, abundant chalk

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

Morgan Mud chk @ 3942 ft.		
1110 hrs.	3/6/15	
Vis.	71 Wt. 9.0	
PV	28 YP 25	
WL	5.2	
Cake	2/32,	
pH	10.0	
CHL	1600 ppm	
Ca	10 ppm	
Sol	5.0 LCM 8#	
DMC	\$2772.00	
CMC	\$18893.00	

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

Morgan Mud chk @ 4010 ft.		
0805 hrs.	3/7/15	
Vis.	65 Wt. 9.1	



limestone, white, cryptocrystalline, mostly smooth compact lithographic, some recrystallized fossiliferous, with some stained surface etching and small wormy stained solution vugs, bleeding some gassy free oil, good sheen in tray, fair odor in wet cup, no fluorescence, good but slow streaming cut - grades to light gray microcrystalline fossiliferous, slightly grainy, no show

mostly gray shale and silty shale and siltstone, with upper stringer of brown microcrystalline limestone, fossiliferous, then lower stringer of light and dark gray mottled fossiliferous, chalky, large clasts, no shows

Murfin Schmidt Vap 2-26 dst 3.pdf

limestone, light gray to tan, microcrystalline, fossiliferous, some recrystallized, some fair interclast porosity, fair light staining, good streaming sheen in tray, slight show oil on break, no odor, fair even fluorescence, poor cut

Stark Shale 4076 -1194

limestone, white to light gray and pale green, microcrystalline, fossiliferous, chalky in part, found couple specimens with slight etching and light stain, scaley sheen of oil on break, no odor, poor cut, otherwise barren, some chalk

limestones a.a., with some gray grainy sub-pelletal, pyritic, no shows

Base KC 4127 -1245

soft gray silty shales, some red and olive

limestone, gray to gray green, grainy to arenaceous, some lithographic, dense, no shows

shales, mixed, mostly soft red

limestone, white to gray, micorcrystalline, grainy fossiliferous, poor visible porosity, some chalky, no shows

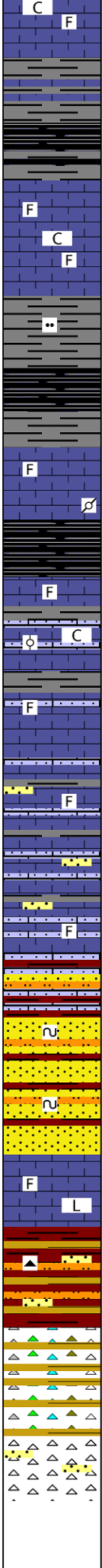
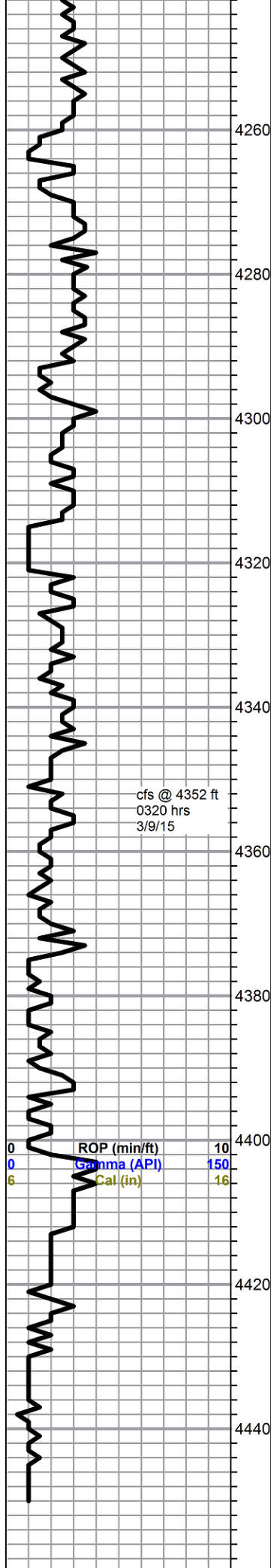
limestone a.a. with some soft very chalky amorphous limestone

shale, red, gray, brown and lavender

Pawnee 4233 -1351

limestone, white to cream, microcrystalline, fossiliferous, poor visible porosity, fairly dense, no shows, abundant chalk

PV 21 YP 24	WL 6.0	Cake 2/32,	pH 9.5	CHL 2100 ppm	Ca 10 ppm	Sol 5.7 LCM 7#	DMC \$0.00	CMC \$18893.00
Morgan Mud chk @ 4076 ft.	1155 hrs. 3/8/15	Vis. 52 Wt. 9.1	PV 17 YP 18	WL 6.0	Cake 2/32,	pH 9.5	CHL 2400 ppm	Ca 10 ppm
Sol 5.7 LCM 9#	DMC \$1614.00	CMC \$20507.00						
0	Total Gas (units)	100	0	C1 (units)	100	0	C2 (units)	100
0	C3 (units)	100	0	C4 (units)	100	0		



4270 sample, limestone a.a. with abundant soft gray silty shale

4280 sample, flood black shales

limestone, white to cream and light gray, micro-cryptocrystalline, fossiliferous, some grainy and chalky, poor visible porosity, no shows, very faint fluorescence

shale, black carbonaceous with abundant light gray silty shale

limestone, cream to gray, mostly cryptocrystalline, fossiliferous, some pelletal, trace white grainy bioclastic, no shows

Cherokee 4314 -1432

black/brown carbonaceous shale

limestone, mixed, cream to gray, micor-cryptocrystalline, fossiliferous, oolitic, dense to chalky, poor visible porosity, no shows

4350 sample, a.a., influx gray to cream argillaceous limestones, no shows

cfs sample - a.a. with influx limestone, red cast, sandy with quartz/arkose., found 1 piece limestone from above with slight black dead stain, no other shows noted

4360-80 sample, mixed limestones a.a., predominantly white to cream dense fossiliferous limestone, scattered variable sandstones, very little shale in samples

4390 sample, a.a. with slight influx red shale and increase in red-cast sandy/arkosic limestone a.a.

4400 red arkosic and quartz sandstones, fine grain, round to sub-round, poorly sorted, glauconitic, well cemented, abundant red clays and siltstones, some yellow chert and ochre

some large qtz grains

limestone, white to cream and gray, cryptocrystalline, fossiliferous, some lithographic, dense, no shows

shaley conglomerate, red and yellow, some yellow chert, trashy red sandstones, red siltstone, heavy red wash in samples

Mississippian 4424 -1542

grades to chert, yellow, shale and ochre, yellow, with white fossiliferous cherts

30 min cfs sample, cherts white to yellow cast and tan, fossiliferous to white sub-tripolitic, some scattered sandstone, white, quartz, very fine grain, well rounded, well sorted, friable, no shows - 60 min, a.a. w/flood reddish fine grain sandstone

rotary TD @ 4450 ft - 0715 hrs 3/9/15
Pioneer Log TD 4452 ft

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

Morgan Mud chk
@ 4455 ft.
3/9/15
DMC \$2616.00
CMC \$23123.00

deviation survey 1 deg



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Schmidt-Vap #2-26

26-4s-31w Rawlins,KS

Start Date: 2015.03.06 @ 13:55:00

End Date: 2015.03.06 @ 22:40:00

Job Ticket #: 60818 DST #: 1

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

Printed: 2015.03.09 @ 14:52:15



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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

26-4s-31w Rawlins,KS

Schmidt-Vap #2-26

Job Ticket: 60818 **DST#: 1**
 Test Start: 2015.03.06 @ 13:55:00

GENERAL INFORMATION:

Formation: **Toronto - LKC "B"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 16:03:30
 Time Test Ended: 22:40:00
 Interval: **3856.00 ft (KB) To 3942.00 ft (KB) (TVD)**
 Total Depth: 3942.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Robert Zodrow
 Unit No: 66
 Reference Elevations: 2882.00 ft (KB)
 2877.00 ft (CF)
 KB to GR/CF: 5.00 ft

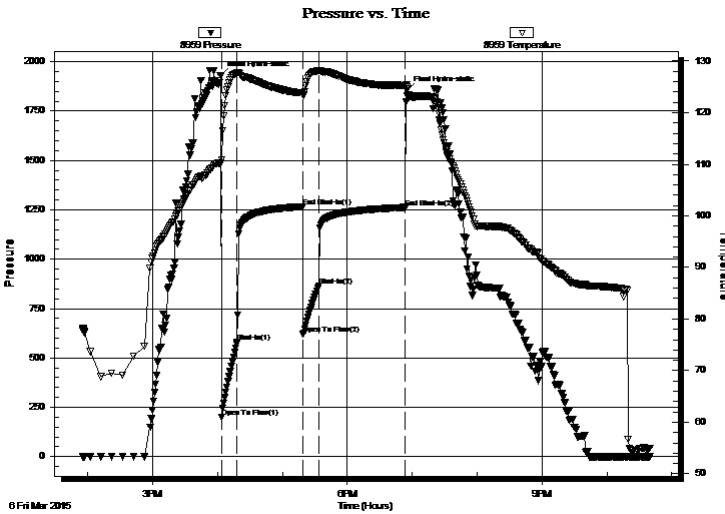
Serial #: 8959

Inside

Press@RunDepth: 864.53 psig @ 3857.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.03.06 End Date: 2015.03.06 Last Calib.: 2015.03.06
 Start Time: 13:55:05 End Time: 22:40:00 Time On Btm: 2015.03.06 @ 16:03:00
 Time Off Btm: 2015.03.06 @ 18:55:00

TEST COMMENT: 15-IF- Bob in 1 min
 60-ISI- Return built to weak surface blow
 15-FF- Bob in 2 mins
 60-FSI- Re-run built to 1/2"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1927.92	110.33	Initial Hydro-static
1	199.60	110.81	Open To Flow (1)
15	581.69	127.70	Shut-In(1)
76	1266.30	123.88	End Shut-In(1)
76	620.10	123.45	Open To Flow (2)
91	864.53	128.13	Shut-In(2)
171	1262.70	125.20	End Shut-In(2)
172	1855.76	124.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1115.00	GOCW 15%G 15%O 70%W	14.50
500.00	GOCWM 7%G 10%O 35%W 48%M	7.31
30.00	WMCO 5%W 10%M 85%O	0.44

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: Keith Reavis

26-4s-31w Rawlins,KS
Schmidt-Vap #2-26
Job Ticket: 60818 **DST#: 1**
Test Start: 2015.03.06 @ 13:55:00

GENERAL INFORMATION:

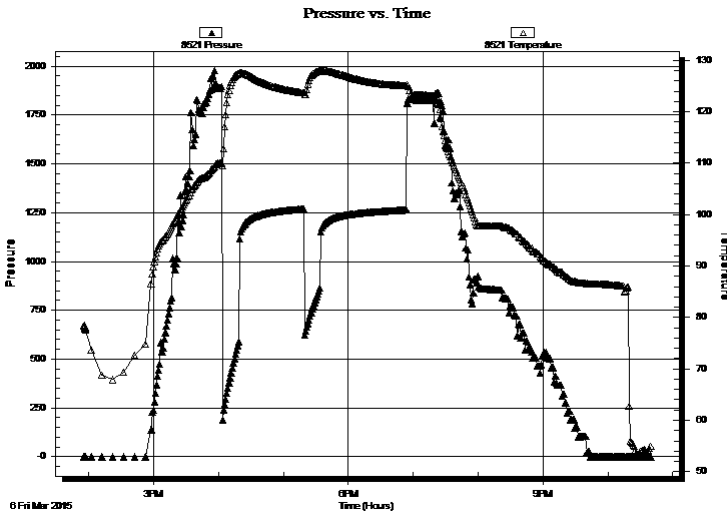
Formation: **Toronto - LKC "B"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:03:30
Time Test Ended: 22:40:00
Interval: **3856.00 ft (KB) To 3942.00 ft (KB) (TVD)**
Total Depth: 3942.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Robert Zodrow
Unit No: 66
Reference Elevations: 2882.00 ft (KB)
2877.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8521 Outside

Press@RunDepth: psig @ 3857.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2015.03.06 End Date: 2015.03.06 Last Calib.: 2015.03.06
Start Time: 13:55:05 End Time: 22:40:00 Time On Btm:
Time Off Btm:

TEST COMMENT: 15-IF- Bob in 1 min
60-ISI- Return built to weak surface blow
15-FF- Bob in 2 mins
60-FSI- Retrun built to 1/2"

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
1115.00	GOCW 15%G 15%O 70%W	14.50
500.00	GOCWM 7%G 10%O 35%W 48%M	7.31
30.00	WMCO 5%W 10%M 85%O	0.44

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

26-4s-31w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Schmidt-Vap #2-26

Job Ticket: 60818

DST#: 1

ATTN: Keith Reavis

Test Start: 2015.03.06 @ 13:55:00

Tool Information

Drill Pipe:	Length: 3673.00 ft	Diameter: 3.88 inches	Volume: 53.71 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	68000.00 lb
			<u>Total Volume: 54.62 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3856.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	86.00 ft				
Tool Length:	113.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3834.00	
Hydraulic tool	5.00			3839.00	
Jars	5.00			3844.00	
Safety Joint	3.00			3847.00	
Packer	5.00			3852.00	27.00 Bottom Of Top Packer
Packer	4.00			3856.00	
Stubb	1.00			3857.00	
Recorder	0.00	8959	Inside	3857.00	
Recorder	0.00	8521	Outside	3857.00	
Perforations	17.00			3874.00	
Change Over Sub	1.00			3875.00	
Drill Pipe	63.00			3938.00	
Change Over Sub	1.00			3939.00	
Bullnose	3.00			3942.00	86.00 Bottom Packers & Anchor

Total Tool Length: 113.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

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

26-4s-31w Rawlins,KS
Schmidt-Vap #2-26
Job Ticket: 60818 **DST#: 1**
Test Start: 2015.03.06 @ 13:55:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 41 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 38000 ppm
Viscosity: 71.00 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
1115.00	GOCW 15%G 15%O 70%W	14.501
500.00	GOCWM 7%G 10%O 35%W 48%M	7.312
30.00	WMCO 5%W 10%M 85%O	0.439

Total Length: 1645.00 ft Total Volume: 22.252 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .331@52.5Deg F = 38000

Serial #: 8959

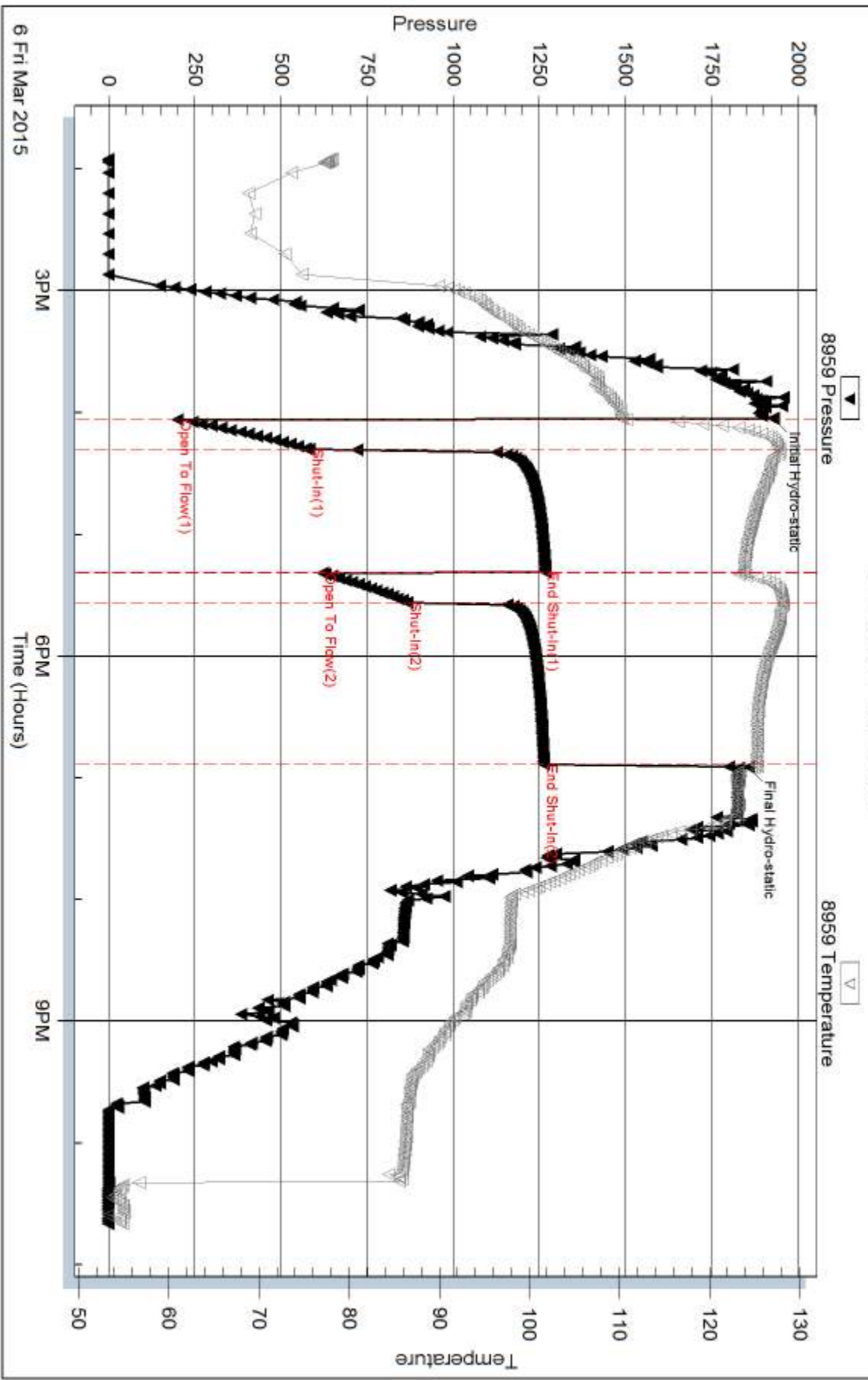
Inside

Murfin Drilling Co Inc

Schmidt-Vap #2-26

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 60818

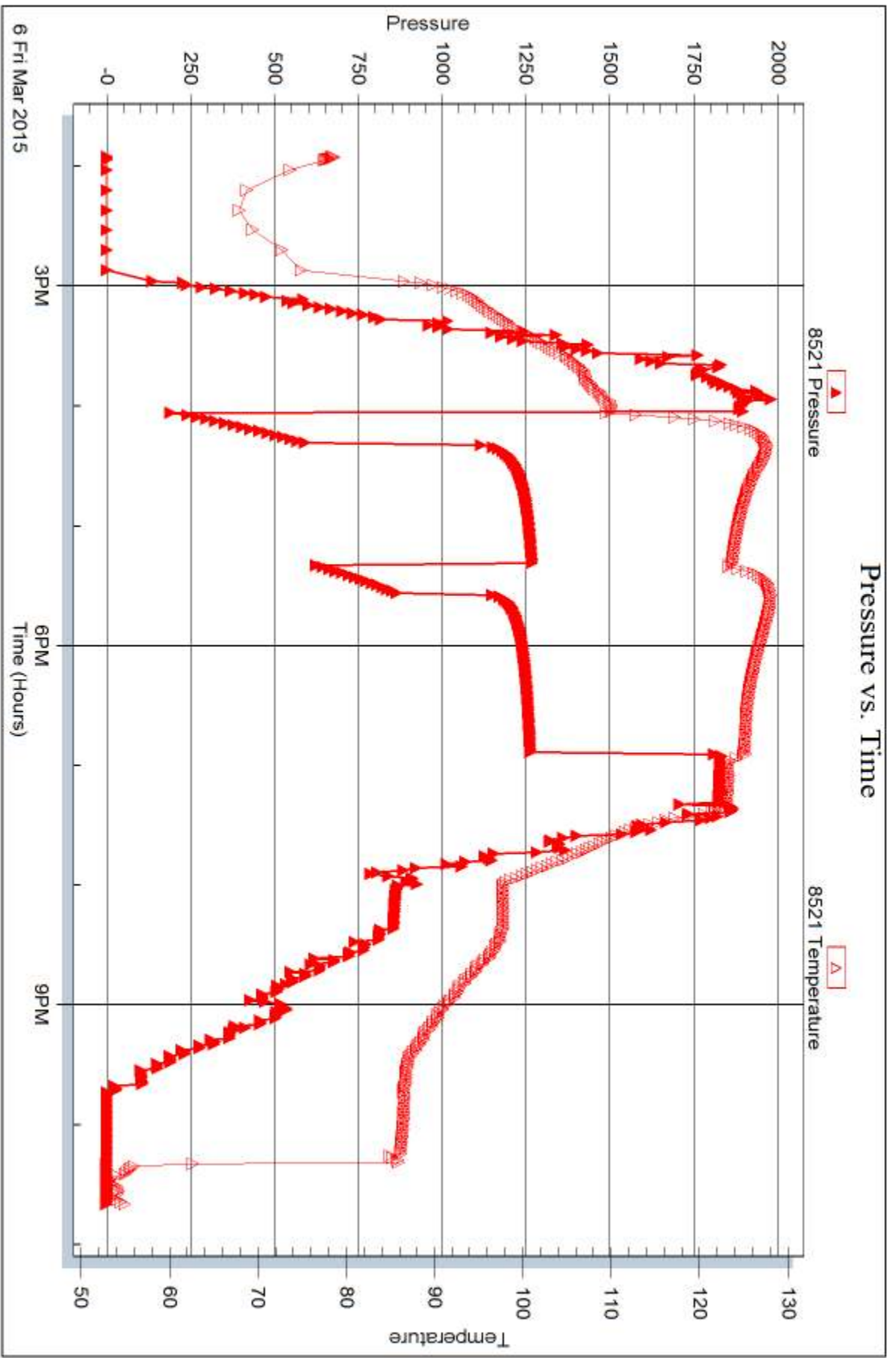
Printed: 2015.03.09 @ 14:52:17

Serial #: 8521

Outside Murfin Drilling Co Inc

Schmidt-Vap #2-26

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 60818

Printed: 2015.03.09 @ 14:52:17



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Schmidt-Vap #2-26

26-4s-31w Rawlins,KS

Start Date: 2015.03.07 @ 08:50:00

End Date: 2015.03.07 @ 17:17:30

Job Ticket #: 60819 DST #: 2

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

Printed: 2015.03.09 @ 14:51:52



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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

26-4s-31w Rawlins,KS

Schmidt-Vap #2-26

Job Ticket: 60819 **DST#: 2**
 Test Start: 2015.03.07 @ 08:50:00

GENERAL INFORMATION:

Formation: **LKC "F--G"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:52:00
 Time Test Ended: 17:17:30
 Interval: **3962.00 ft (KB) To 4010.00 ft (KB) (TVD)**
 Total Depth: 4010.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Robert Zodrow
 Unit No: 66
 Reference Elevations: 2882.00 ft (KB)
 2877.00 ft (CF)
 KB to GR/CF: 5.00 ft

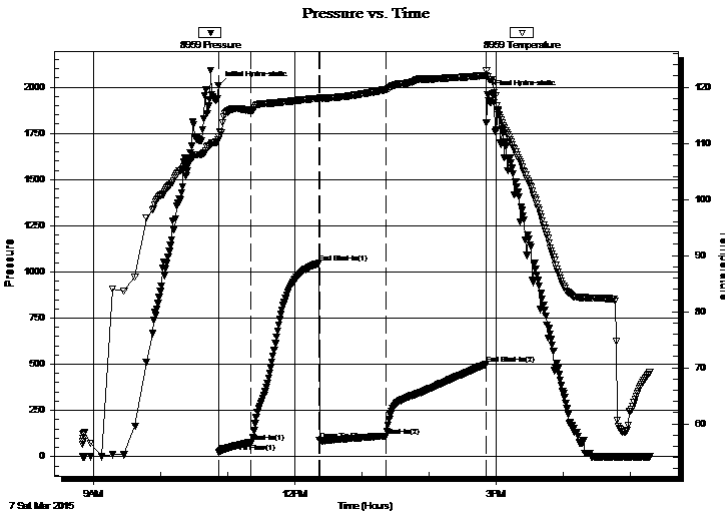
Serial #: 8959

Inside

Press@RunDepth: 110.86 psig @ 3963.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.03.07 End Date: 2015.03.07 Last Calib.: 2015.03.07
 Start Time: 08:50:05 End Time: 17:17:29 Time On Btm: 2015.03.07 @ 10:51:30
 Time Off Btm: 2015.03.07 @ 14:52:30

TEST COMMENT: 30-IF- Bob in 15 mins
 60-ISI- Return built to 1/2"
 60-FF- Bob in 16 mins
 90-FSI- Return built to 2"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2009.97	110.63	Initial Hydro-static
1	25.07	111.09	Open To Flow (1)
30	77.65	115.82	Shut-In(1)
90	1046.98	117.99	End Shut-In(1)
91	87.35	117.86	Open To Flow (2)
150	110.86	119.57	Shut-In(2)
240	500.20	122.13	End Shut-In(2)
241	1957.18	121.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
220.00	GMCO 15%G 25%M 60%O	1.41
30.00	GO 10%G 90%O	0.44
0.00	GIP 300'	0.00

* 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: Keith Reavis

26-4s-31w Rawlins,KS

Schmidt-Vap #2-26

Job Ticket: 60819

DST#: 2

Test Start: 2015.03.07 @ 08:50:00

GENERAL INFORMATION:

Formation: **LKC "F--G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:52:00

Time Test Ended: 17:17:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Robert Zodrow

Unit No: 66

Interval: 3962.00 ft (KB) To 4010.00 ft (KB) (TVD)

Reference Elevations: 2882.00 ft (KB)

Total Depth: 4010.00 ft (KB) (TVD)

2877.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8521 Outside

Press@RunDepth: psig @ 3963.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.03.07

End Date:

2015.03.07

Last Calib.:

2015.03.07

Start Time: 08:50:05

End Time:

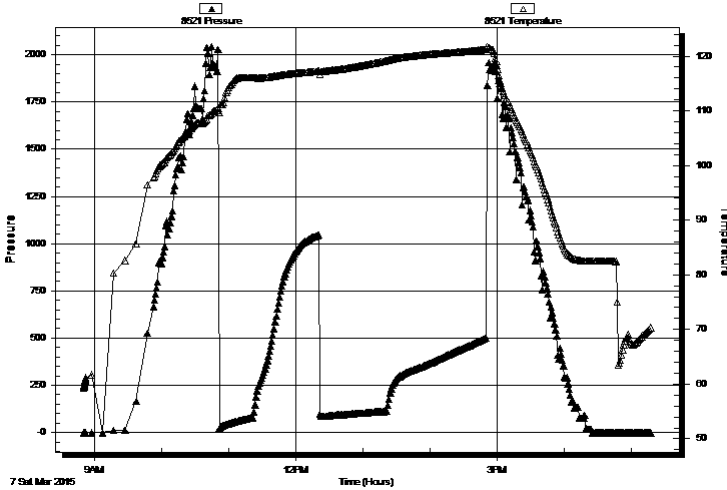
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Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF- Bob in 15 mins
60-ISI- Return built to 1/2"
60-FF- Bob in 16 mins
90-FSI- Return built to 2"

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
220.00	GMCO 15%G 25%M 60%O	1.41
30.00	GO 10%G 90%O	0.44
0.00	GIP 300'	0.00

	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

26-4s-31w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Schmidt-Vap #2-26

Job Ticket: 60819

DST#: 2

ATTN: Keith Reavis

Test Start: 2015.03.07 @ 08:50:00

Tool Information

Drill Pipe:	Length: 3771.00 ft	Diameter: 3.88 inches	Volume: 55.15 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	68000.00 lb
			<u>Total Volume: 56.06 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	3962.00 ft			Final	54000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	75.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3940.00	
Hydraulic tool	5.00			3945.00	
Jars	5.00			3950.00	
Safety Joint	3.00			3953.00	
Packer	5.00			3958.00	27.00 Bottom Of Top Packer
Packer	4.00			3962.00	
Stubb	1.00			3963.00	
Recorder	0.00	8959	Inside	3963.00	
Recorder	0.00	8521	Outside	3963.00	
Perforations	11.00			3974.00	
Change Over Sub	1.00			3975.00	
Drill Pipe	31.00			4006.00	
Change Over Sub	1.00			4007.00	
Bullnose	3.00			4010.00	48.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

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

26-4s-31w Rawlins,KS
Schmidt-Vap #2-26
Job Ticket: 60819 **DST#: 2**
Test Start: 2015.03.07 @ 08:50:00

Mud and Cushion Information

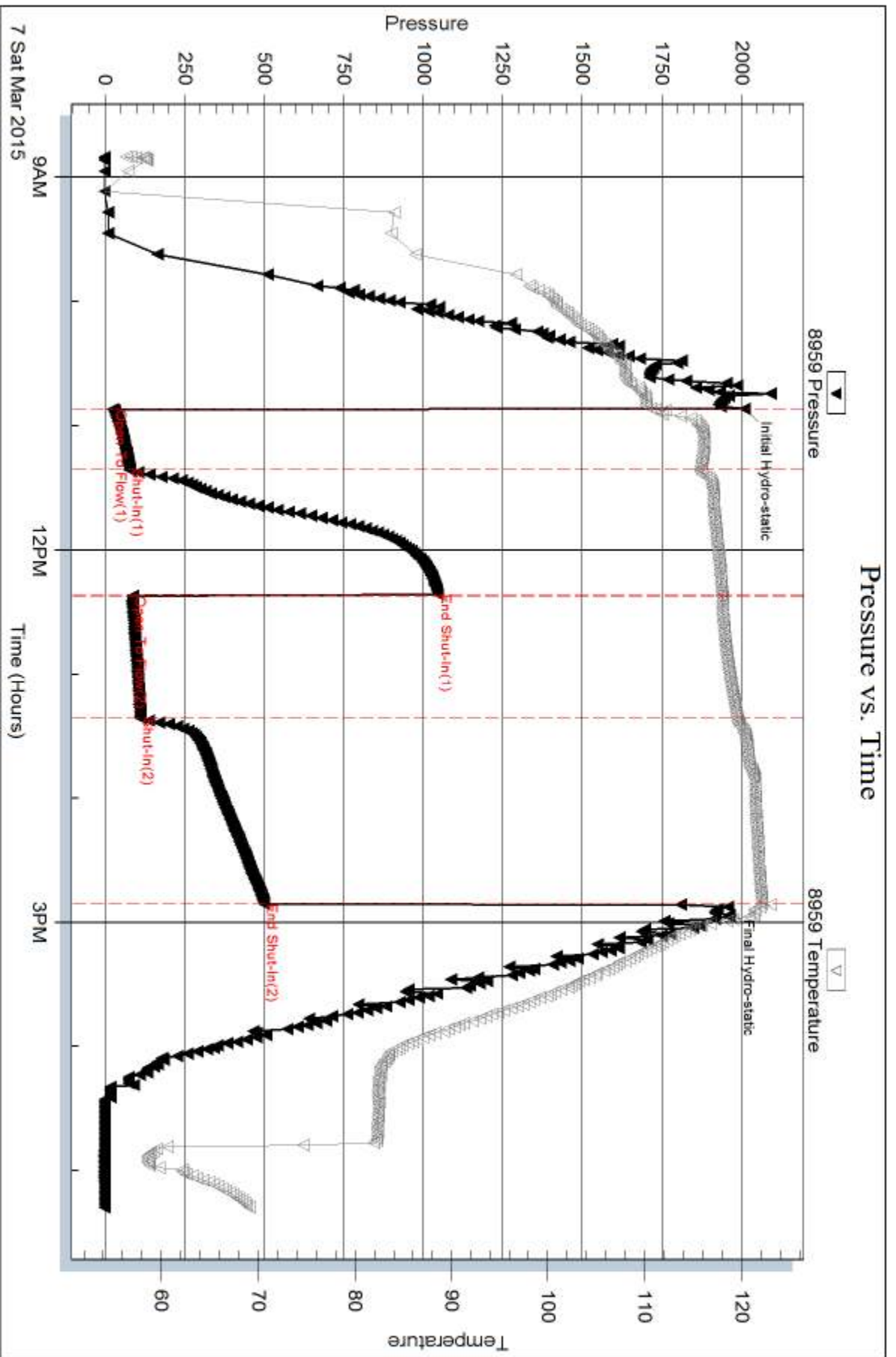
Mud Type: Gel Chem	Cushion Type:	Oil API: 38 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 65.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.99 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2100.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
220.00	GMCO 15%G 25%M 60%O	1.412
30.00	GO 10%G 90%O	0.439
0.00	GIP 300'	0.000

Total Length: 250.00 ft Total Volume: 1.851 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

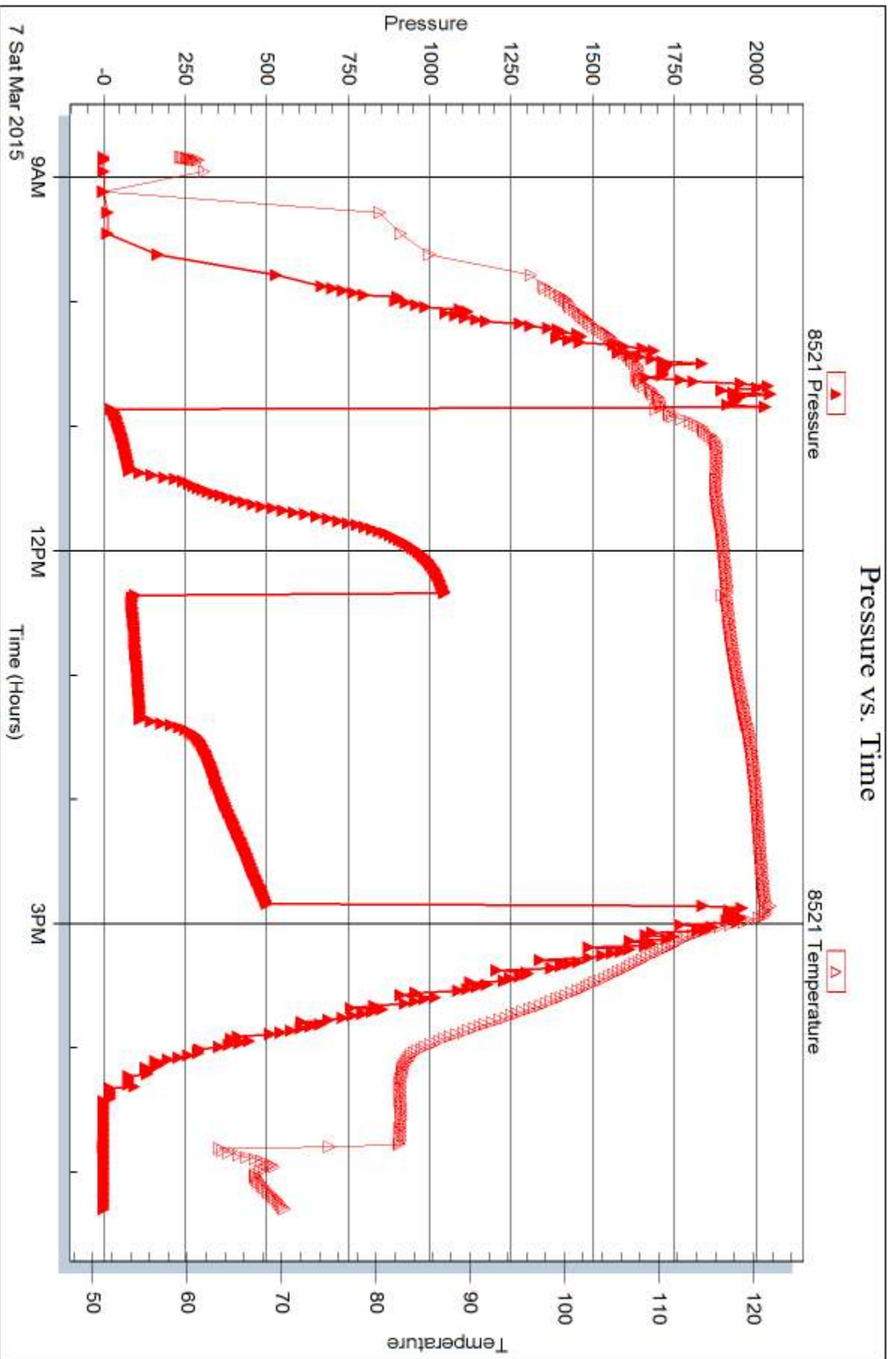


Serial #: 8521

Outside Murfin Drilling Co Inc

Schmidt-Vap #2-26

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water STE 300
Wichita KS 67202

ATTN: Keith Reavis

Schmidt-Vap #2-26

26-4s-31w Rawlins,KS

Start Date: 2015.03.08 @ 04:15:00

End Date: 2015.03.08 @ 11:53:00

Job Ticket #: 60820 DST #: 3

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

Printed: 2015.03.09 @ 14:50:10



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

26-4s-31w Rawlins,KS

Schmidt-Vap #2-26

Job Ticket: 60820 **DST#: 3**
 Test Start: 2015.03.08 @ 04:15:00

GENERAL INFORMATION:

Formation: **LKC "H--J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:41:00
 Time Test Ended: 11:53:00
 Interval: **4004.00 ft (KB) To 4076.00 ft (KB) (TVD)**
 Total Depth: 4076.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Robert Zodrow
 Unit No: 66
 Reference Elevations: 2882.00 ft (KB)
 2877.00 ft (CF)
 KB to GR/CF: 5.00 ft

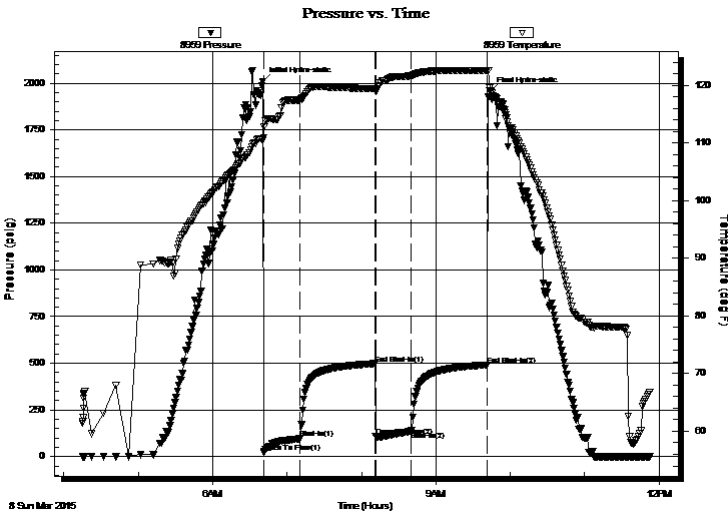
Serial #: 8959

Inside

Press@RunDepth: 135.35 psig @ 4005.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.03.08 End Date: 2015.03.08 Last Calib.: 2015.03.08
 Start Time: 04:15:05 End Time: 11:52:59 Time On Btm: 2015.03.08 @ 06:40:30
 Time Off Btm: 2015.03.08 @ 09:43:30

TEST COMMENT: 30-IF- Blow built to 3"
 60-ISI- No return
 30-FF-Blow built to 1/4"
 60-FSI- No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.69	110.47	Initial Hydro-static
1	24.54	110.85	Open To Flow (1)
30	95.64	117.45	Shut-In(1)
91	497.66	119.35	End Shut-In(1)
91	109.04	118.90	Open To Flow (2)
120	135.35	121.64	Shut-In(2)
181	491.44	122.55	End Shut-In(2)
183	1957.50	119.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GMCO 20%G 30%M 50%O	1.85
70.00	GO 10%G 90%O	1.02
0.00	GIP 200'	0.00

* 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: Keith Reavis

26-4s-31w Rawlins,KS

Schmidt-Vap #2-26

Job Ticket: 60820 **DST#: 3**

Test Start: 2015.03.08 @ 04:15:00

GENERAL INFORMATION:

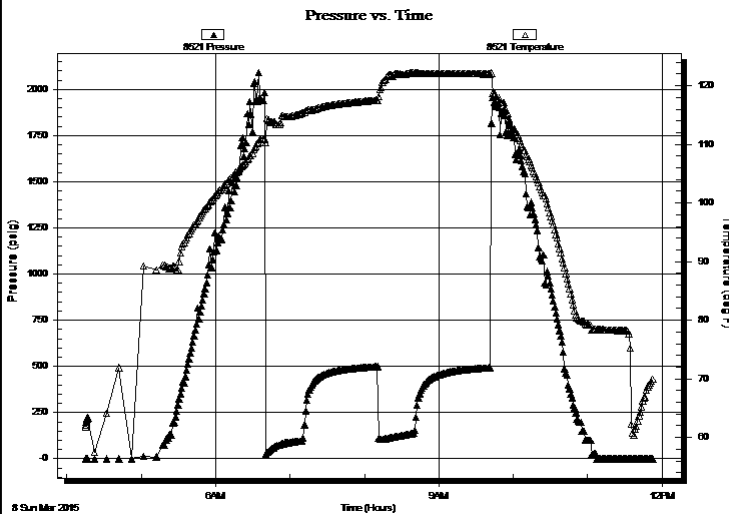
Formation: **LKC "H--J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:41:00
 Time Test Ended: 11:53:00
Interval: 4004.00 ft (KB) To 4076.00 ft (KB) (TVD)
 Total Depth: 4076.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Robert Zodrow
 Unit No: 66
 Reference Elevations: 2882.00 ft (KB)
 2877.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8521

Outside

Press@RunDepth: psig @ 4005.00 ft (KB)
 Start Date: 2015.03.08 End Date: 2015.03.08
 Start Time: 04:15:05 End Time: 11:52:59
 Capacity: 8000.00 psig
 Last Calib.: 2015.03.08
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IF- Blow built to 3"
 60-ISI- No return
 30-FF-Blow built to 1/4"
 60-FSI- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GMCO 20%G 30%M 50%O	1.85
70.00	GO 10%G 90%O	1.02
0.00	GIP 200'	0.00

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

26-4s-31w Rawlins,KS

250 N Water STE 300
Wichita KS 67202

Schmidt-Vap #2-26

Job Ticket: 60820

DST#: 3

ATTN: Keith Reavis

Test Start: 2015.03.08 @ 04:15:00

Tool Information

Drill Pipe:	Length: 3800.00 ft	Diameter: 3.88 inches	Volume: 55.57 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 56.48 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4004.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	72.00 ft				
Tool Length:	99.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3982.00	
Hydraulic tool	5.00			3987.00	
Jars	5.00			3992.00	
Safety Joint	3.00			3995.00	
Packer	5.00			4000.00	27.00 Bottom Of Top Packer
Packer	4.00			4004.00	
Stubb	1.00			4005.00	
Recorder	0.00	8959	Inside	4005.00	
Recorder	0.00	8521	Outside	4005.00	
Perforations	3.00			4008.00	
Change Over Sub	1.00			4009.00	
Drill Pipe	63.00			4072.00	
Change Over Sub	1.00			4073.00	
Bullnose	3.00			4076.00	72.00 Bottom Packers & Anchor

Total Tool Length: 99.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

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

26-4s-31w Rawlins,KS
Schmidt-Vap #2-26
Job Ticket: 60820 **DST#: 3**
Test Start: 2015.03.08 @ 04:15:00

Mud and Cushion Information

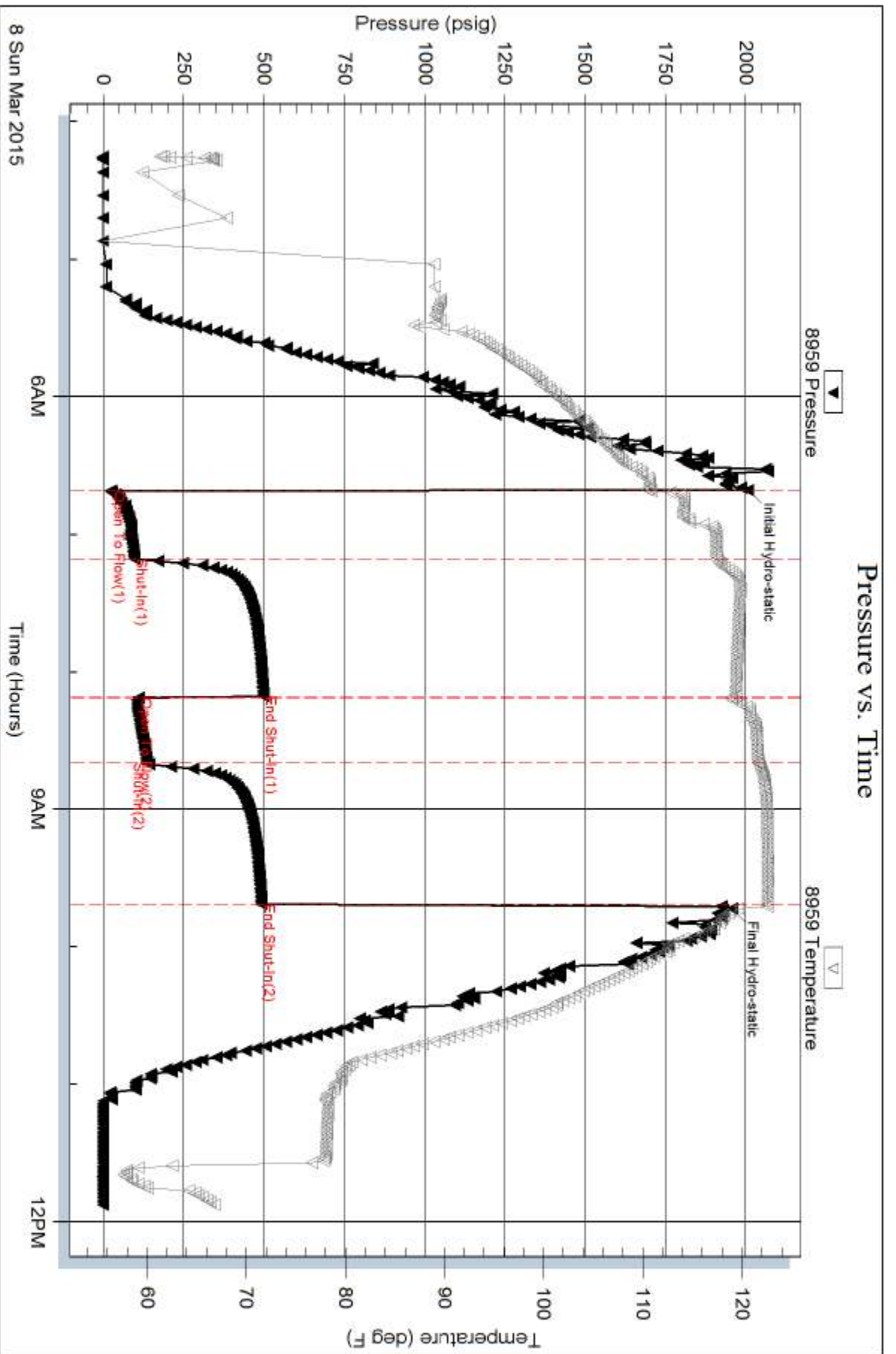
Mud Type: Gel Chem	Cushion Type:	Oil API: 31 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 61.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.99 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1900.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	GMCO 20%G 30%M 50%O	1.851
70.00	GO 10%G 90%O	1.024
0.00	GIP 200'	0.000

Total Length: 320.00 ft Total Volume: 2.875 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

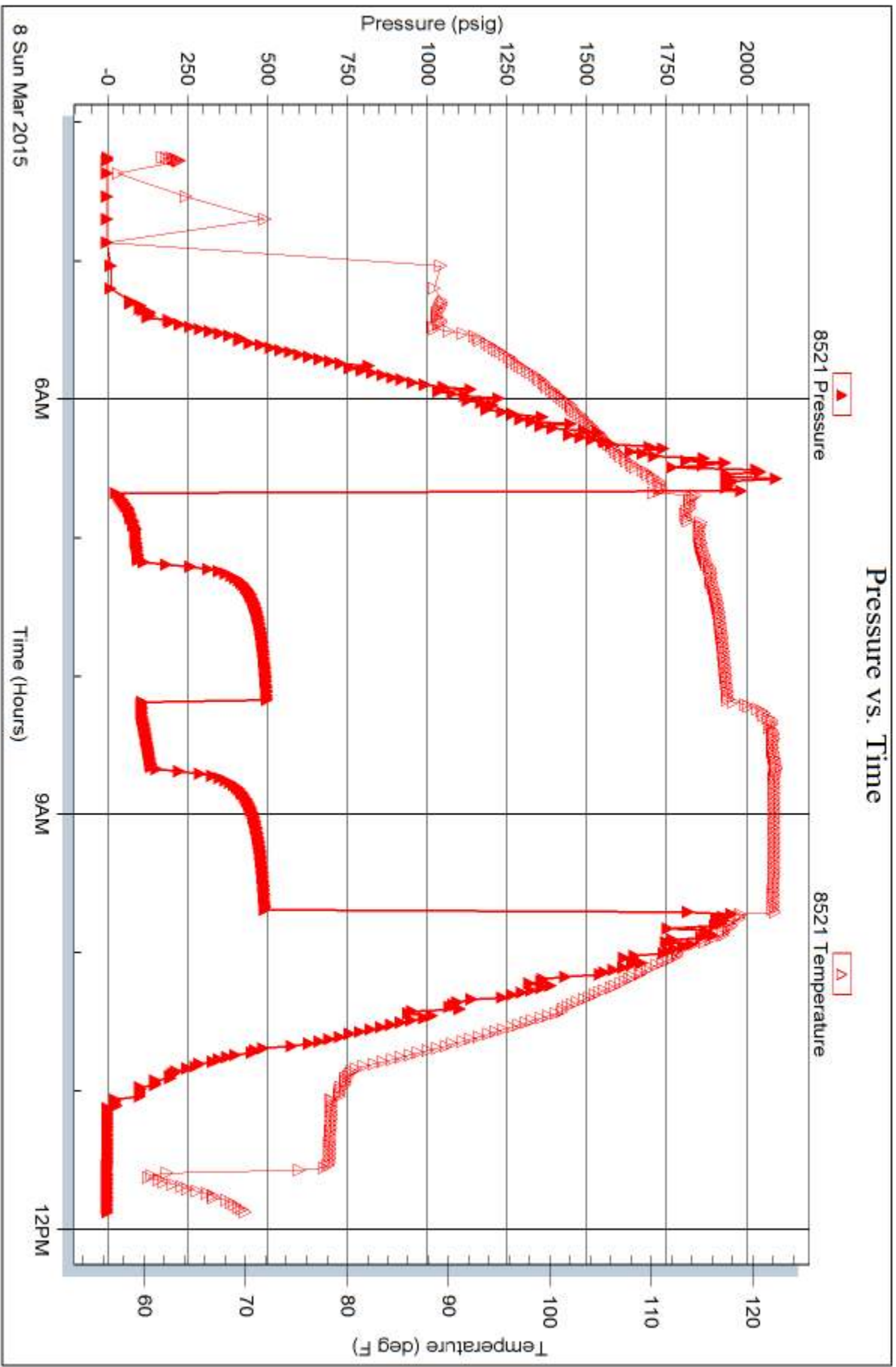


Serial #: 8521

Outside Murfin Drilling Co Inc

Schmidt-Vap #2-26

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **60818**

Well Name & No. ScHmidt - VAP #2-26 Test No. 1 Date 3-6-2015
 Company Murfin Drilling CO Inc Elevation 2882 KB 2877 GL
 Address 250 N Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin #7
 Location: Sec. 26 Twp. 4S Rge. 31W Co. Rawlins State KS

Interval Tested 3856 — 3942 Zone Tested Toronto - LK2" B"
 Anchor Length 86 Drill Pipe Run 3673 Mud Wt. 9.0
 Top Packer Depth 3852 Drill Collars Run 186 Vis 71
 Bottom Packer Depth 3856 Wt. Pipe Run 0 WL 5.2
 Total Depth 3942 Chlorides 1600 ppm System LCM 8.
 Blow Description IF - Bob in 1 min
ISI - Return built to weak surface blow
FF - Bob in 2 min
FSI - Return built to 1/2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>WMCO</u>	<u>85</u>	<u>5</u>	<u>10</u>	
<u>500</u>	<u>90CWM</u>	<u>7</u>	<u>10</u>	<u>35</u>	<u>48</u>
<u>1115</u>	<u>90CW</u>	<u>15</u>	<u>15</u>	<u>70</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1645 BHT 125 Gravity 41 API RW 1.331 @ 52.5 °F Chlorides 38,000 ppm
 (A) Initial Hydrostatic 1928 Test 1050 T-On Location 13:00 3-6
 (B) First Initial Flow 199 Jars 250 T-Started 13:55 3-6
 (C) First Final Flow 581 Safety Joint 75 T-Open 16:03 3-6
 (D) Initial Shut-In 1266 Circ Sub _____ T-Pulled 18:53 3-6
 (E) Second Initial Flow 620 Hourly Standby _____ T-Out 22:40 3-6
 (F) Second Final Flow 864 Mileage 48 RT 48 Comments FIX the oil pump chain on draw works
 (G) Final Shut-In 1262 Sampler _____ Ruined Shale Packer _____
 (H) Final Hydrostatic 1855 Straddle _____ Ruined Packer _____
 Initial Open 15 Shale Packer _____ Extra Copies _____
 Initial Shut-In 60 Extra Packer _____ Sub Total 0
 Final Flow 15 Extra Recorder _____ Total 1423
 Final Shut-In 60 Day Standby _____ MP/DST Disc't _____
 Accessibility _____
 Sub Total 1423

Approved By _____ Our Representative Robert Zeevaer

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. 60819

Well Name & No. SCHMIDT - VAP 2-26 Test No. 2 Date 3-7-2015
 Company Murfin Drilling CO Inc Elevation 2882 KB 2877 GL
 Address 250 N water STE 300 wichita ks, 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin #7
 Location: Sec. 26 Twp. 4S Rge. 31W Co. Rawlins State KS

Interval Tested 3962 — 4010 Zone Tested LKC "F-D"
 Anchor Length 48 Drill Pipe Run 3771 Mud Wt. 9.1
 Top Packer Depth 3958 Drill Collars Run 186 Vis 65
 Bottom Packer Depth 3962 Wt. Pipe Run 0 WL 6
 Total Depth 4010 Chlorides 2,100 ppm System LCM 7

Blow Description IF - Bob in 15 mins
ISI - Return built to 2"
FF - Bob in 16 mins
FSI - Return built to 2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>90</u>	<u>10</u>	<u>90</u>		
<u>220</u>	<u>9mco</u>	<u>15</u>	<u>60</u>	<u>25</u>	
<u> </u>	<u>HIP 300'</u>				
<u> </u>	<u> </u>				
<u> </u>	<u> </u>				

Rec Total 250 BHT 122 Gravity 38 API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2010 Test 1150 T-On Location 08:20 3-7
 (B) First Initial Flow 25 Jars 250 T-Started 08:50 3-7
 (C) First Final Flow 77 Safety Joint 75 T-Open 10:52 3-7
 (D) Initial Shut-In 1047 Circ Sub T-Pulled 14:51 3-7
 (E) Second Initial Flow 87 Hourly Standby T-Out 17:14 3-7
 (F) Second Final Flow 111 Mileage 48 RT 48
 (G) Final Shut-In 500 Sampler
 (H) Final Hydrostatic 1957 Straddle Ruined Shale Packer

Initial Open 30 Shale Packer Ruined Packer
 Initial Shut-In 60 Extra Packer Extra Copies
 Final Flow 60 Extra Recorder Sub Total 0
 Final Shut-In 90 Day Standby Total 1523
 Accessibility MP/DST Disc't
 Sub Total 1523

Approved By Our Representative Robert Zedew

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. **60820**

Well Name & No. SCHMIDT - VAP #2-26 Test No. 3 Date 3-8-2015
 Company Murfin Drilling CO Inc Elevation 2882 KB 2877 GL
 Address 250 N Water STE 300 Wichita KS, 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin #7
 Location: Sec. 26 Twp. 4S Rge. 31W Co. Rawlins State KS

Interval Tested 4004 — 4076 Zone Tested LKC "H-5"
 Anchor Length 72 Drill Pipe Run 3800 Mud Wt. 9.1
 Top Packer Depth 4000 Drill Collars Run 186 Vis 61
 Bottom Packer Depth 4004 Wt. Pipe Run 0 WL 6
 Total Depth 4076 Chlorides 1900 ppm System LCM 6
 Blow Description IF - Blow built to 3"
ISI - NO return
FF - Blow built to 1/4"
FSI - NO return

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>90</u>	<u>10</u>	<u>90</u>		
<u>250</u>	<u>9MCO</u>	<u>20</u>	<u>50</u>	<u>30</u>	
<u>41P 200</u>					

Rec Total 320 BHT 119 Gravity 31 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2007 Test 1150 T-On Location 03:30 3-8
 (B) First Initial Flow 24 Jars 250 T-Started 04:15 3-8
 (C) First Final Flow 95 Safety Joint 75 T-Open 06:41 3-8
 (D) Initial Shut-In 497 Circ Sub _____ T-Pulled 09:42 3-8
 (E) Second Initial Flow 109 Hourly Standby _____ T-Out 11:48 3-8
 (F) Second Final Flow 135 Mileage 48 RT X2 48
 (G) Final Shut-In 491 Sampler _____ 48
 (H) Final Hydrostatic 1957 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

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

Sub Total 1571
 Total 1571
 MP/DST Disc't _____

Comments loaded tool 03-09-15 at 08:30

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



PO Box 93999
Southlake, TX 76092

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

*uwx
Prod-MG*

INVOICE

Invoice Number: 148772
Invoice Date: Mar 3, 2015
Page: 1

Federal Tax I.D.#: 20-8651475

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	64663	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Mar 3, 2015	4/2/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Schmidt Vap #2-26		
200.00	CEMENT MATERIALS	Class A Common	17.90	3,580.00
564.00	CEMENT MATERIALS	Chloride	1.10	620.40
210.00	CEMENT SERVICE	Cubic Feet Charge	2.48	520.80
435.60	CEMENT SERVICE	Ton Mileage Charge	2.75	1,197.90
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
45.00	CEMENT SERVICE	Pump Truck Mileage	7.70	346.50
1.00	CEMENT SERVICE	Swedge Manifold Rental	275.00	275.00
45.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	198.00
1.00	CEMENT SUPERVISOR	LaRene Wentz		
1.00	EQUIPMENT OPERATOR	Wayne McGhghy		
1.00	OPERATOR ASSISTANT	George Grant		

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

\$ 3,712.88

ONLY IF PAID ON OR BEFORE
Apr 2, 2015

Subtotal	8,250.85
Sales Tax	331.83
Total Invoice Amount	8,582.68
Payment/Credit Applied	
TOTAL	8,582.68

*OK -3712.88
8,214.80*

ALLIED OIL & GAS SERVICES, LLC 064663

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Dakley, KS

DATE <u>3-3-15</u>	SEC <u>26</u>	TWP <u>4</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION <u>3:00 pm</u>	JOB START <u>5:00 pm</u>	JOB FINISH <u>5:30 pm</u>
LEASE <u>Schmidt Day</u>	WELL# <u>2-26</u>	LOCATION <u>Reeford Hts. Leasing, LLC</u>			COUNTY <u>Rochester</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)			<u>2N, 1/2 W, 6 N, 1 E, 1/2 S, ESE, 1/4, cmta</u>				

CONTRACTOR <u>Murfin ?</u>	OWNER <u>Same</u>
TYPE OF JOB <u>Surface</u>	
HOLE SIZE <u>12 1/4</u> TD. <u>2181</u>	CEMENT
CASING SIZE <u>8 7/8</u> DEPTH <u>21986'</u>	AMOUNT ORDERED <u>200 s/b com 390</u>
TUBING SIZE _____ DEPTH _____	
DRILL PIPE _____ DEPTH _____	
TOOL _____ DEPTH _____	
PRES. MAX _____ MINIMUM _____	COMMON <u>200 s/b</u> @ <u>12.90</u> <u>3580.00</u>
MEAS. LINE _____ SHOE JOINT _____	POZMIX _____ @ _____
CEMENT LEFT IN CSG. <u>151</u>	GEL _____ @ _____
PERFS. _____	CHLORIDE <u>564#</u> @ <u>1.10</u> <u>620.40</u>
DISPLACEMENT <u>1298 bbl</u>	ASC _____ @ _____

EQUIPMENT

PUMP TRUCK CEMENTER <u>LaRone & Wente</u>
<u>422</u> HELPER <u>Wayne McGlyby</u>
BULK TRUCK
<u>818/287</u> DRIVER <u>George Grant</u>
BULK TRUCK
_____ DRIVER _____

<u>Material total</u>	@	<u>4200.00</u>
<u>(1090.18/45#)</u>	@	
	@	
	@	
	@	
	@	
HANDLING <u>210 s/b</u>	@ <u>2.98</u>	<u>520.80</u>
MILEAGE <u>928 mi x 49 x 2.75</u>		<u>1197.80</u>
TOTAL _____		

REMARKS:
Mix 200 s/b cement
Displace with water
Cement did circulate
3661 to pit

Thank you

CHARGE TO: Murfin
STREET _____
CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB <u>21986'</u>	
PUMP TRUCK CHARGE _____	<u>1512.25</u>
EXTRA FOOTAGE _____ @ _____	
MILEAGE <u>MIW 45</u> @ <u>7.70</u>	<u>346.50</u>
MANIFOLD <u>5 ways</u> @ _____	<u>275.00</u>
<u>MIW 45</u> @ <u>4.40</u>	<u>198.00</u>
TOTAL _____	

(1822.70/45#) TOTAL 4050.45

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: Robert W. Hin
SIGNATURE: [Signature]

PLUG & FLOAT EQUIPMENT

_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL _____	

SALES TAX (if Any) _____
TOTAL CHARGES 8,250.85
DISCOUNT 3,712.88 (45%) IF PAID IN 30 DAYS
4,537.96 Net.



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



Invoice

DATE	INVOICE #
3/9/2015	27145

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#2-26	Schmidt-Vap	Rawlins	Company Tools	Oil	Development	Cement LongStri...	David E.

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	100	Miles	5.00	500.00
579D	Pump Charge - Top To Bottom LongString	1	Job	1,700.00	1,700.00
290	D-Air	6	Gallon(s)	42.00	252.00T
281	Mud Flush	500	Gallon(s)	1.25	625.00T
221	Liquid KCL (Clayfix)	4	Gallon(s)	25.00	100.00T
409-5	5 1/2" Turbolizer	15	Each	75.00	1,125.00T
403-5	5 1/2" Cement Basket	3	Each	250.00	750.00T
406-5	5 1/2" Latch Down Plug & Baffle	1	Each	225.00	225.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill	1	Each	300.00	300.00T
413-5	5 1/2" Roto Wall Scratcher	20	Each	35.00	700.00T
419-5	5 1/2" Rotating Head Rental	1	Each	200.00	200.00T
330	Swift Multi-Density Standard (MIDCON II)	350	Sacks	15.75	5,512.50T
325	Standard Cement	200	Sacks	12.25	2,450.00T
284	Calseal	10	Sack(s)	30.00	300.00T
283	Salt	1,082	Lb(s)	0.20	216.40T
285	CFR-1	94	Lb(s)	4.50	423.00T
276	Flocele	138	Lb(s)	2.25	310.50T
581D	Service Charge Cement	550	Sacks	1.50	825.00
583D	Drayage	2,790	Ton Miles	0.75	2,092.50
	Subtotal				18,606.90
	Sales Tax Rawlins County			7.90%	1,065.66

USED FOR IC 103
APPROVED JT FH

We Appreciate Your Business!	Total	\$19,672.56
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TICKET 27145

CHARGE TO: Murfin Drilling Co
 ADDRESS:
 CITY, STATE, ZIP CODE:

PAGE 1 OF 2

WELL PROJECT NO. 2-26 LEASE Schmidt - VAP COUNTY/PARISH Rawlins STATE KS CITY _____ DATE 3-9-15 OWNER _____
 SERVICE LOCATIONS: Hays KS CONTRACTOR Co Tools RIG NAME/NO. Rig 7 SHIPPED VIA _____ ORDER NO. _____
Ness City KS WELL CATEGORY Development JOB PURPOSE Cmt long string DELIVERED TO _____
 WELL TYPE Oil WELL LOCATION _____ WELL PERMIT NO. _____
 INVOICE INSTRUCTIONS _____

PRICE REFERENCE	SECONDARY REFERENCE/PART NUMBER	ACCOUNTING		DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT							
575		1			100	Mi			5.00	500.00
579		1		Pump Charge top to Bottom	1	EA			1700.00	1700.00
290		1		D-Air	6	GM			42.00	252.00
281		1		Mud Flush	500	Gal			1.25	625.00
221		1		liquid KCl	4	Gal			25.00	100.00
409		1		Coil Turbolizer	15	EA	5 1/2		75.00	1125.00
403		1		Cmt Basket	3	EA	5 1/2		250.00	750.00
406		1		latch down plug & baffle	1	EA	5 1/2		225.00	225.00
407		1		Insert float shoe w/ Auto fill	1	EA	5 1/2		300.00	300.00
413		1		Roto wall scratcher	20	EA	5 1/2		35.00	700.00
419		1		Rotating head rental	1	EA	5 1/2		200.00	200.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

DATE SIGNED: 3-10-15 TIME SIGNED: 6:40 A.M. P.M.

WELL OPERATOR: David Edgerston

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 1 6477 00
 Page 2 18329 90
 Total SUB 18806 90
 Rawlins TAX 17.9% 1005 66
 TOTAL 19,672 50

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket. APPROVAL

SWIFT OPERATOR David Edgerston

Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 27145

CUSTOMER
NurEn Drilling Co

WELL
Sandi4-vap

DATE 3-9-15 PAGE 8 OF 2

PRICE REFERENCE	SECONDARY REFERENCE PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				UNIT PRICE	AMOUNT		
		LOC	ACCT	DE			QTY	U/M	QTY	U/M				
330		2				Swift. Multi-Density	350	SKS			15	75	5812	50
325		2				Standard Cmt	200	SKS			12	25	2450	50
284		2				Cal seal	10	SKS			30	60	300	00
283		2				Salt	1082	SKS			0	20	216	40
285		2				CFR 1	94	SKS			4	50	423	00
276		2				Flocele	138	lbs			2	125	310	50
581						SERVICE CHARGE					1	50	825	00
583						MILEAGE CHARGE	55	TRUCK MILES	100	LOADED MILES	75	75	2092	50
CONTINUATION TOTAL													12729	90

JOB LOG

SWIFT Services, Inc.

DATE 3-9-15 PAGE NO. 1

CUSTOMER Murfin Drilling WELL NO. # 2-26 LEASE Schmidt-VAP JOB TYPE Long String TICKET NO. 27145

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1145							On location w/ Float Equipment 5 1/2 csg RTD - 4450 LTD - 4452 Total csg - 4442.90 Shoe Joint - 20.86 Cent - 1-6, 8-10, 12-14, 16, 43, 63 Bskt - 17, 44, 64
	110							Start running csg
	225							break circulation @ Joint #53
	255							Continue running csg
	400							break circulation on Bottom
	500							plug rat & mouse hole 30sks/20sks
	510	8.5	0					Start mudflush & KCL spacer
	520	5.5	32/0				100	Start Cmt
	555	5.5	215				400	End cmt
								Wash p&L
	600	5.5	0				0	Start Disp
	620	4.0	108				1000/1500	End Disp - Circulated 25 sks of CMT to pit
								Thanks David, Austin, Isaac, Tyler

Schmidt-Vap #2-26
 2310' FSL 380' FWL
 Sec. 26-4S-31W
 2882' KB

Formation	Sample top	Datum	Ref	Log tops	Datum	Ref
Anhydrite	2623	+259	+5	2618	+264	+10
B/Anhydrite	2657	+225	+2	2654	+228	+5
Topeka	3694	-812	-3	3686	-804	+5
Heebner	3856	-974	Flat	3852	-970	+4
Lansing	3908	-1026	Flat	3903	-1021	+5
Stark	4076	-1194	-1	4468	-1186	+7
BKC	4127	-1245	-5	4118	-1236	+4
Pawnee	4233	-1351	+5	4230	-1348	+8
Cherokee	4314	-1432	+9	4311	-1429	+12
Mississippi	NR			NR		
RTD	4450					
LTD				4452		