KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1055884

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 30606
Name: Murfin Drilling Co., Inc.
Address 1: 250 N WATER STE 300
Address 2:
City: WICHITA State: KS Zip: 67202 + 1216
Contact Person: Leon Rodak
Phone: (316) 267-3241
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Bob Peterson
Purchaser:

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [x] 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
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

01/18/2011	01/29/2011	01/29/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-051-26080-00-00
Spot Description:
S2 - NE - NE - SW Sec. 13 Twp. 12 S. R. 20 [ ] East [x] West
2050 Feet from [ ] North / [x] South Line of Section
2310 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [ ] SE [x] SW
County: Ellis
Lease Name: Freida Well #: 1-13
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 2260 Kelly Bushing: 2265
Total Depth: 4025 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 214 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] 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: 8800 ppm Fluid volume: 1100 bbls
Dewatering method used: Evaporated
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

- [x] **Letter of Confidentiality Received**
  Date: 05/16/2011
- [x] **Confidential Release Date:** 05/15/2013
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [ ] I [x] II [ ] III **Approved by:** NAOMI JAMES **Date:** 05/17/2011

Side Two

1055884

Operator Name: Murfin Drilling Co., Inc. Lease Name: Freida Well #: 1-13

Sec. 13 Twp. 12 S. R. 20 ☐ East ☑ West County: Ellis

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:

Dual Induction
Compensated Porosity
Microresistivity

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name Top Datum

See Attactment

CASING RECORD ☑ New ☐ 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
Surface	12.2500	8.625	24	214	Common	190	3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

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

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

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

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

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

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

Kansas
Corporation Commission

phone: 316-337-6200
fax: 316-337-6211
http://kcc.ks.gov/

Thomas E. Wright, Chairman
Ward Loyd, Commissioner

Sam Brownback, Governor

May 16, 2011

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

Re: ACO1
API 15-051-26080-00-00
Freida 1-13
SW/4 Sec.13-12S-20W
Ellis 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

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

MURFIN DRILLING CO., INC.

WELL: FREIDA #1-13

LOC.: 2050' FSL & 2310' FWL
SEC. 13-12-20W
ELLIS COUNTY, KANSAS
API: 15-051-26080-00-00

DRILLING CONTR.: MURFIN RIG #8
SPUD: 01-18-11 COMP: 01-29-11
MUD UP: 2771' TYPE MUD: CHEM.
FIVE FT. DRILL TIME: BSP-3200'
ONE FT. DRILL TIME: 3200-RTD
RTD: 4025' LTD: 4028'
SAMPLES SAVED: 3150'-RTD
GEOLOGIST: ROBERT J. PETERSEN

ELEVATION
KB: 2265'
GL: 2260'
LOG MEASURED FROM: KB

SURFACE CASING
8 5/8" CASING SET @214' W/190SX

PRODUCTION CASING
Plugged & Abandoned

WELL LOG SURVEYS
CDL/DIL/SONIC/MICRO

ELECTRIC LOG TOPS

Formation	Depth	Datum	Pos. A	Pos. B
Anh	1635	+630	+1	+3
BA	1684	+581	-2	-6
Topeka	3307	-1042	+2	+2
Heebner	3536	-1271	+1	+2
Toronto	3560	-1295	+1	+2
LKC	3580	-1315	+2	FLAT
BKC	3818	-1553	+10	+10
Marm	3831	-1566	+12	+12
Arbuckle	3955	-1690	N/A	-54

13
Subject Well

REFERENCE WELL:

Murfin Drilling Co.
Hagen #1-13
SW NE SW
13-12-20W
2217 KB

Murfin Drilling Co.
Homburg #1-18
1150' FSL/700' FWL
18-12-19W
2231 KB

REMARKS AND RECOMMENDATIONS

Due to the negative drill stem results this well was plugged and abandoned by the operator.

Respectfully Submitted,

Robert J Petersen

Robert Petersen 1-31-11

DAILY REPORT @7:00 A.M.

1-18-11		MIRT
1-19-11	450'	DRILLING
1-20-11	2010'	DRILLING
1-21-11	2570'	DRILLING
1-22-11	3040'	DRILLING
1-23-11	3510'	CFS
1-24-11	3600'	DST#1
1-25-11	3668'	DST#3
1-26-11	3694'	TIH
1-27-11	3800'	Drilling
1-28-11	3919'	Drilling
1-29-11	4025'	TOH for Log

SAMPLE DESCRIPTION

LS; Tan/cream, fine crystalline to dense + LS; Gray, dense, arg. + SH; Dark gray (3200)

LS; Gray/tan, dense, foss, subgranular in part, chalky + SH; Gray (10)

LS; Tan/gray, dense, foss + SH; Gray/green, silty-sandy (20)

LS; Cream/gray/tan, dense, foss, chalky + SH; Gray, trace LS; Brown/tan, chalky, mealy w/tracedead stain (30)

Decrease SH (40)

SH; Gray, silty (50)

LS; Tan/cream, fine crystalline to dense, sl foss, chalky (50)

LS; Cream/gray, dense, foss, mottled, chalky (60)

SH; Gray, silty, sandy (60)

LS; Lt gray, dense, foss, chalky, blocky (70-80)

SH; Dark gray, silty-sandy (80)

SH; Gray, silty-sandy + SS; Gray, fine grained, angualr, friable, micaceous (90)

SH; Gray/dark gray, silty (3300)

SH; Brown/gray, silty, sandy, gummy (3310)

LS; Cream/gray, dense, foss, chalky (3310)

SH; Black + SH; Red/gray, silty (20)

LS; Gray w/cream fossil mottle, very foss, dense (20)

LS; Cream/tan/gray, fine crystalline to dense, sl foss, chalky, trace stain (30-40)

SH; Dark gray + SH; Gray, silty (45/20")
LS; Cream, fine crystalline, foss, chalky, trace poor fossil-cast por + LS; Tan/gray, dense (45/20")

LS; Tan, fine crystalline, foss, chalky, slightly dolomitic, trace poor foss-cast por (45/40")

LS; Tan/gray, dense, foss (45/60")
SH; Black (60)

LS; Gray/cream, fine crystalline, foss, chalky, sl dolo + SH; Gray, silty (60)

LS; Tan, fine crystalline, foss, dolo, poor vug por, trace min stain (70)
LS: Cream/gray, fine crystalline to dense, foss w/poor vug por, sl dolo, chalky, mealy, cherty, tr dead stain + SH; Gray, sandy (80-90)

LS; Cream, fine crystalline, very chalky, mealy + SH; Dark gray (3400)

LS: Tan, fine crystalline to dense, foss, chaly (10)

LS: Gray/cream, fine crystalline, chalky, trace dead stain + SH; Dark gray (20-30)

LS; Tan/cream, fine crystalline to dense, foss, chalky, dolo + SH; Black/SH; Gray, sandy (40)

LS; Gray/cream/tan, fine crystalline to dense, foss, chalky (50)

SH; Gray (60)

LS; Cream/gray, fine crystalline, foss, chalky, sl cherty (60)

LS; Tan/cream, fine crystalline, chalky, sl cherty (70)

DST #1
3485-3600'
30-60-30-60"
IF: Weak blow 1 inch
FF: Weak blow 1 inch
Recovered:
560' GIP
60' Mud w/oil specks in tool
SIP: 1165-1115#
FP: 25-35/38-46#
HP: 1746-1724#
BHT: 103 F

SH; Black (80)
SH; Gray, silty (80)

LS: Cream/tan, fine crystalline to dense, chalky, cherty (80)

LS; Cream/tan, fine crystalline to dense, chalky, soft (90)

LS; Gray, fine crystalline, foss w/tr poor intercrystalline por, patchy, stain, ssfo (heavy-tarry) (3500-10)

LS; Cream/gray, fine crystalline, foss, chalky, sl dolo, cherty + SH; Gray (10)

+ SH; Red/gray (10/20")

LS; Cream/white, fine crystalline to dense, sl foss, cherty(foss-chert), chalky (10/40-60")

LS; Tan/cream, fine crystalline, fos, chalky w/patchy stain(dead), trace dead oil flakes (20-30)

LS; Tan/cream, fine crystalline to dense, foss (40)

DST#2
3597-3642'
30-60-60-90"
IF: Weak ½ inch blow
FF: Weak ½ inch blow
Recovered: 30' SOSM
SIP: 939-895#
FP: 20-24/24-28#
HP: 1789-1768#
BHT: 102 F

SH; Black, carb (50)
LS; Gray/tab, dense, fosss (50)
SH; Red/gray, + SS; Gray, fine grained, friable, micaceous(60)

SH; Gray + SS; Gray/tan, very fine to fine grained, friable to well-cem (70)

LS; Cream/white, fine crystalline to dense, chalky, sl cherty (70)

LS; Tan, fine crystalline, foss w/trace poor ppt por, trace stain, vssfo (70/15")
LS; Tan, fine crystalline, very foss, poor ppt porm cherty, lt stain, trace dead oil flakes (70/30') vssfo (70/45")
SH; Black/green + SH; Red/gray, silty (40/45")
SH; Green/gray, silty-sandy (80)
SH; Gray, silty-sandy + SH; Black, sandy (90)
LS; Cream/white, fine crystalline, foss, cherty w/chert inclusions,w/fair fossil-cast por, patchy stain, sfo (90)
LS; Cream, fine to medium crystalline, sl dolo, cherty, foss w/fair intercrystalline por, trace dark stain, sfo (3600)

DST#3
3640-3668'
30-60-60-90"
Recovered: 10' Mud
SIP: 801-763#
FP: 16-18/19-21#
HP: 1806-1770#
BHT: 103F

LS; Cream/tan/gray, fine crystalline to dense, sl dol, cherty, no vis por (00/30")

SH; Gray, silty-sandy (10)

SH; Green-gray, silty-sandy (20)
LS; Cream/tan, dense, cherty + LS; Tan, fine crystalline, sl foss (20)
LS; Cream/gray, fine crystalline to dense, foss w/trace poor vug por, sfo (25)
LS; Cream, fine crystalline, foss, granular w/poor to fair intergranular por, sfo, good odor, med brown to dark stain on dry + LS; Tan, dense, slightly dolomitic w/poor vug por, sfo (25/30")
LS; Graym dense, foss, blocky (30)

Added Premix

SH; Dark gray silty-sandy +SH; Black (30)
LS; Tan, fine crystalline to dense, dolomitic, cherty + chert inclusions w/fair vug por, sfo, odor +
LS; Cream, fine crystalline, foss - subgranular, chalky (40)
LS; Cream/white, fine crystalline, foss-granular in part, w/fair intercrystalline + vug por, sfo, increase odor, full medium brown stain on dry (42/30") increase dolo (42/45')
LS; Gray, fine crystalline to dense, foss, blocky (42/60")

LS; Cream, fine crystalline, sl foss, dolo w/poor interfoss por, patchy stain + SH; Red/gray (50)

SH; Black + LS; Cream, fine crystalline, ool, dolo, chalky-gummy (60)

LS; Cream/gray, fine crystalline, foss, chalky, gummy, tr ppt por, vssfo (60/20")
LS; Cream/tan/gray, fine crystalline, chalky, cherty, dolo w/poor intercrystalline por, vssfo, odor, lt even stain on dry (60 40-60")
SH; Black (68)
LS; Cream/lt gray, fine crystalline, foss, chalky w/chert inclusions, fair ppt por, gsfo, odor, med brown stain on dry (68/20") sl dolo, foss, subgran w/poor to fair intergranular por, sfo, good odor, patchy to full sat on dry + SH; Black (68/40-60")
SH; Black (68/60" flood 3680)
LS; Cream, fine crystalline to dense, foss, chalky (80)

Vis 54/Wt 9.3

LS; Cream, fine crystalline to dense, foss-granular in part, dolomitic w/fair intercrystalline por, sfo, odor, light to medium brown stain on dry (90)
LS; Lt gray/cream, dense w/trace frac por, ssfo, odor + LS; Lt gray, fine crystalline, foss, chalky + SH; Black/green (94/20")

Vis 62/Wt 9.3

LS; Cream/dense, chalky-cherty + SH; Black (94/40") flood black shale (94/60")

DST#4
3666-3694'
30-60-30-60"
IF: Weak ½ inch blow
FF: Weak ½ inch blow
Recovered: 5' Mud
SIP: 987-966#
FP: 16-21/22-26#
HP: 1830-1798#
BHT: 103F

LS; White, fine crystalline, sl ool, chalky, cherty + SH; Red/gray (3710)

SH; Red/gray + LS; Cream, fine crystalline, ool (20)

LS; Cream/white, fine crystalline, foss, chalky, cherty, trace fracture por, trace stain (30)

DST #5
3724-3800'
30-60-30-60"
IF: 2 inch blow
FF: 1 ½ inch blow
Recovered: 10' Mud
SIP: 1161-1110#
FP: 20-30/33-41#
HP: 1865-1833#
BHT: 104F

LS; Cream/gray, fine crystalline, foss, cherty + SH; Black(40)

SH; Red/green (50)

LS; Cream/white, fine crystalline, foss, chalky, trace stain (50)

LS; Cream/tan, fine crystalline to dense, foss, w/trace ppt/fracture por, patchy stain, vssfo (50/20")
LS; Cream/tan, predominately dense (60)

SH; Gray (70)

LS; Cream, fine crystalline to dense, foss, cherty, dolomitic w/trace ppt por, ssfo, lt stain (70)

LS; Cream/tan, fine crystalline to dense, sl ool, decrease in stain/sfo (74/20")

LS; Cream/lt gray, dense, w/trace poor vug por, ssfo, trace stain (73/40"-3780)
SH; Black, carb(80)

LS; Cream/lt gray, fine crystalline to dense, sl foss, cherty, trace poor vug por, ssfo, patchy medium brown stain on dry (3790)

LS; Cream/tan, fine crystalline to dense, ool, chalky w/trace poor moldic/inter-crystalline por, scattered stain, vssfo (3800)
LS; Cream, fine crystalline, ool, chalky, sl dolo (3800/20')

Vis 59/Wt 9.3/LCM 1.5#

LS; Tan, fine crystalline, dolo , cherty (00/40")
SH; Black/green (00/40" + SS; Gray, fine to med, subrounded, glauconitic (00/60"
SH; Gray, sandy, pyritic

LS; Cream, fine crystalline, ool, chalky, trace ppt por, trace stain + LS; Gray/dark gray, fine crystalline, fossil-mottled (20)

LS; Cream/tan, fine crystalline, foss/ool-in part, chalky (25/15")
SH; Black (25/15")

DST #6
3817-3884'
30-60-30-60"
IF: Weak 1 inch
FF: None
Recovered: 3' Mud
SIP: 71-46#
FP: 21-23/27-46#
HP: 1926-1895#
BHT: 105F

SH; Red, silty-sandy +SH; Gray (40)

SH; Maroon/gray, sandy (50)

LS; Cream, fine crystalline to dense, sl dol, chalky (50)

SH; Red/gray, silty (60)

LS; Cream/white, fine crystalline, ool, chalky (60)

LS; Cream/white, fine crystalline, ool, chalky, cherty (orange/white, foss., blocky to ang), fair intercrystalline por, bleeding gas, sfo, odor, amber to med brown stain on dry (70)

LS; Cream, fine crystalline to dense, ool/chaly/cherty + LS; Gray, dense, arg, blocky (74/20")

LS; Lt gray, fine crystalline to dense, sl dolo w/chert inclusiond (80)
LS; gray/lt brown, fine crystalline to dense, arg, foss + Chert; Orange/brown/yellow, foss, + SH; Red, silty, sandy + SH; Gray (84/20") +Dolo; Gray; dense (84/40")
Chert; Orange/cream/cream, foss, blocky chert + LS; Cream/white, fine to med crystalline w/poor intercrystalline por, lt stain, vssfo (84/60")

LS; Cream/white, fine crystalline, foss, trace sand + SH; Dark gray (95)

LS: Gray, dense,sl glauc/dolomitic w/poor frac por, trace stain(95/20")
LS; Cream/gray, fine crystalline, desne, cherty, sl dol, chalky + SH; Green, Chert; Blocky (95/40-60')
LS; Cream/white, fine crystalline to dense, cherty orange/white, blokcy + Green/black, blocky, brittle, trace SH; Brown, sandy (05/20')
FLOOD SH; Green/black, trace sand, trace Sand; Clear, coarse,/Chert; Orannge (06/40-60")
LS; Cream/lt gray,fine crystalline, to dense, + Chert; White, blocky +SH; Black/red/gray (3918)
+ tr reworked LS; (pebbly) gray, dense, trace stain + LS; Tan; dense, sandy (18/20')

Chert; White/cream/cream, blocky + SH; gray, sandy + SS; Graym fine grained, silty, glauc (18/40")
LS; Cream/white, fine crystalline to dense, chalky + SH; Red/green/black, abudant Chert; White/yellow/translucent, SS; Amber, finegrained,well-cem (18/60'-30)

SH; Black/green/red +Chert; White,yellow, angualr
+ SH; gray, sandy + Sand; Clear, med-cse (38-38/20")

DST #7
3865-3965'
30-60-30-60"
IF: 2 inch blow
FF: ½ inch blow
Recovered: 65' Mud
SIP: 1192-1183#
FP: 23-40/42-60#
HP: 1976-1967#
BHT: 104F

increase SH; Black/green (38/40")

SH; Red, silty + Sand; Clear, coarse, loose
+ SS; Clear/gray, fg, well-cem, fe stain
+ Chert; Tan/cream/orange, sharp to blocky (50-60)

LS; White, chalky, cherty, trace stain,
trace Dolo; Tan/gray, coarse crystalline
w/poor intercrystalline por, vssfo (60)
Dolo; Gray, coarse crystalline, sucrosic + Chert; Gray, blocky, ool (first ool chert) (65/40")

Dolo; Cream/gray, med-coarse crystalline, por vug por, vssfo (65/60")

Dolo; Cream, coarse crystalline, suc/Chert; Gray, ool + SH; Black/green/maroon (75/20")

Dolo; Cream/gray, fine to coarse crystalline, su + SH; Green/gray + Chert; Red/white + SH; Gray, hem nods, SH; Green, sandy (75/40")
Dolo; Cream/tan, fine to coarse crystalline, sl pyritic, chalky + SH; Gray/black (75/60")

Dolo; Lt gray/tan, coarse crystalline, sandy, + Chert; Whte + Dolo; White, dense, chalky (90)

Dolo; Tan, coarse crystalline, pyrite (4000)

Dolo; Pink/yellow/gray, coarse crystalline + Chert; White, blocky/translucent-ool + SH; Gray, blocky, hematite nods (10)

Dolo; Tan/brown, coarse crystalline, ool w/good oomoldic por (barren), ool chert (20)

Dolo; Lt gray, fine crystalline to dense, chalky (25/30")

DRIFT SURVEY
½° @214'
1[illegible] @2126'
1½° @2380'
1¼° @2538'
1° @3014'
[illegible] @3600'
2° @3800'
[illegible] @4025'

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Peterson

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041536 **DST#: 1**

Test Start: 2011.01.24 @ 00:03:00

GENERAL INFORMATION:

Formation: **ORead/Tor/LKC"A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:12:00
Time Test Ended: 08:35:19

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3485.00 ft (KB) To 3600.00 ft (KB) (TVD)
Total Depth: 3600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

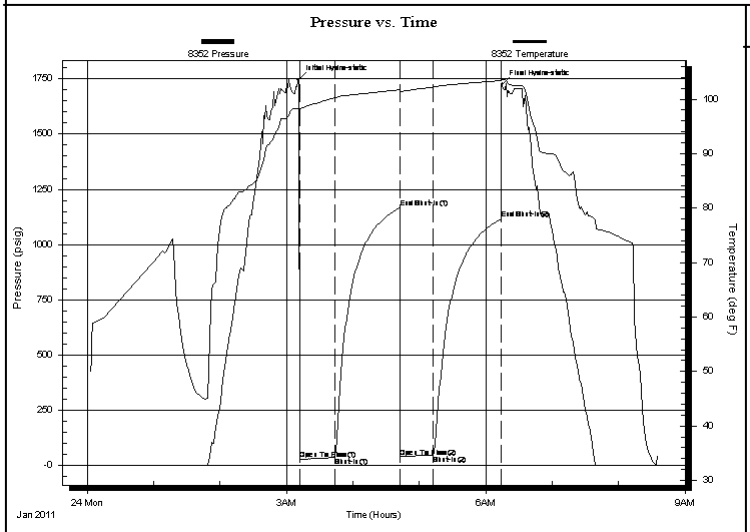
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 46.69 psig @ 3492.00 ft (KB)
Start Date: 2011.01.24 End Date: 2011.01.24
Start Time: 00:03:05 End Time: 08:35:20

Capacity: 8000.00 psig
Last Calib.: 2011.01.24
Time On Btm: 2011.01.24 @ 03:11:00
Time Off Btm: 2011.01.24 @ 06:15:00

TEST COMMENT: IF: Weak blow , 1"
IS; No Return
FF: Weak blow , 1"
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1746.53	98.45	Initial Hydro-static
1	25.68	97.72	Open To Flow (1)
33	35.30	100.23	Shut-In(1)
91	1165.19	101.71	End Shut-In(1)
92	38.49	101.15	Open To Flow (2)
122	46.69	102.18	Shut-In(2)
183	1115.56	103.42	End Shut-In(2)
184	1724.68	103.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud w / oil specks in tool	0.30
0.00	GIP=560ft	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Peterson

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041536 **DST#: 1**

Test Start: 2011.01.24 @ 00:03:00

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

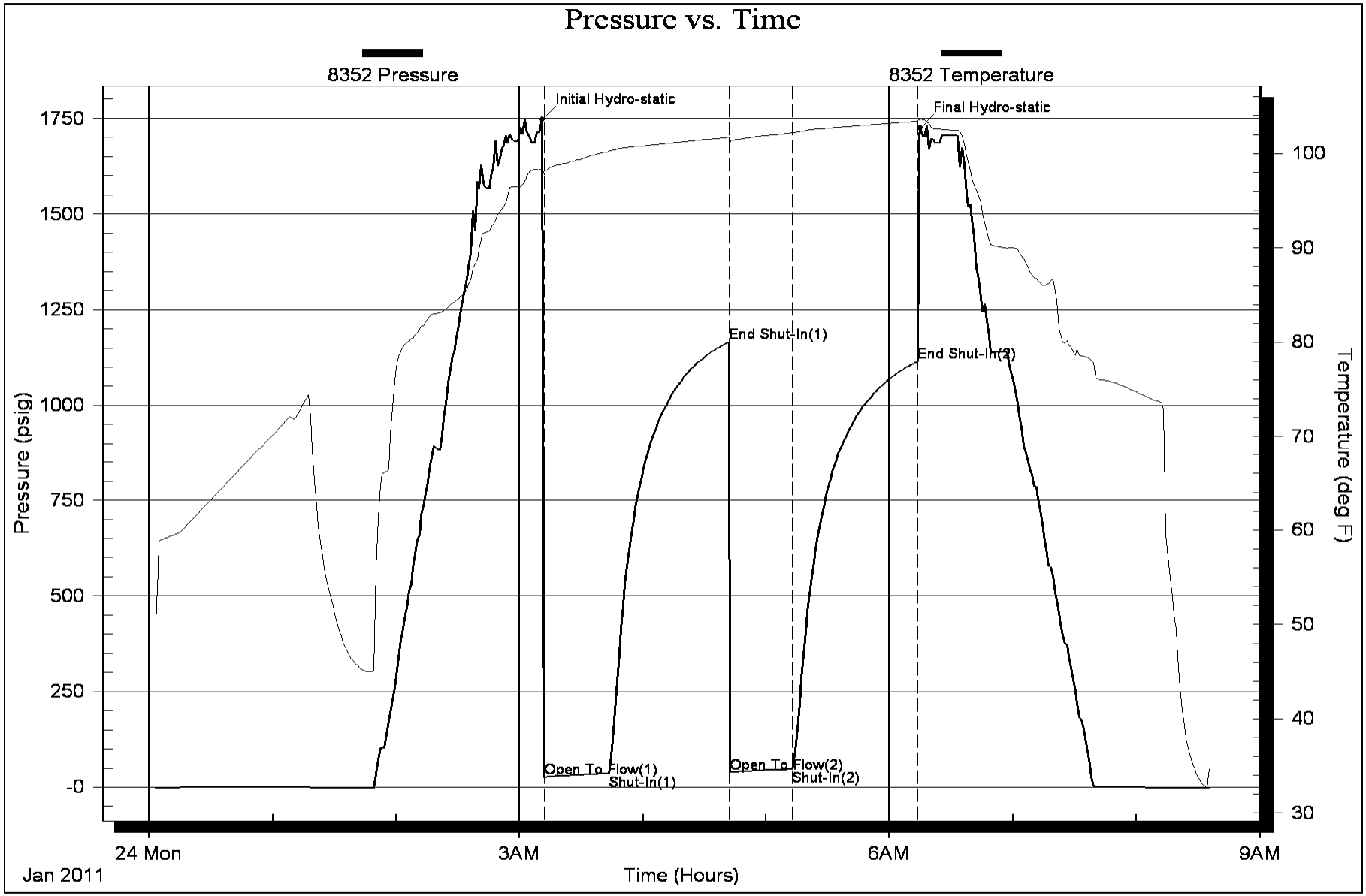
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Mud w / oil specks in tool	0.295
0.00	GIP=560ft	0.000

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
-0
100
90
80
70
60
50
40
30
24 Mon
Jan 2011
3AM
6AM
9AM
Time (Hours)

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Peterson

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041537 **DST#: 2**

Test Start: 2011.01.24 @ 16:49:05

GENERAL INFORMATION:

Formation: **LKC"B-D"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:27:40
Time Test Ended: 00:28:50

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3597.00 ft (KB) To 3642.00 ft (KB) (TVD)
Total Depth: 3642.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

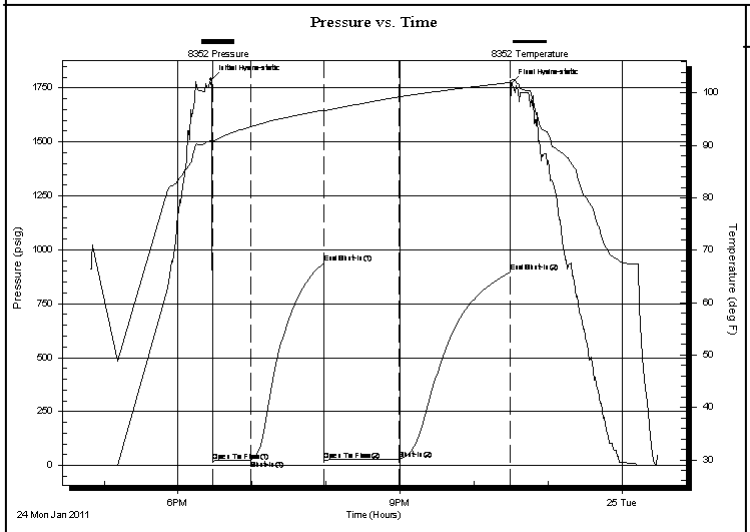
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 28.90 psig @ 3604.00 ft (KB)
Start Date: 2011.01.24 End Date: 2011.01.25
Start Time: 16:49:05 End Time: 00:28:50

Capacity: 8000.00 psig
Last Calib.: 2011.01.25
Time On Btm: 2011.01.24 @ 18:26:50
Time Off Btm: 2011.01.24 @ 22:30:09

TEST COMMENT: IF: Weak, Half inch blow
IS: No Return
FF: Weak, Half inch blow
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1789.00	90.99	Initial Hydro-static
1	20.73	90.05	Open To Flow (1)
32	24.85	93.58	Shut-In(1)
92	939.51	96.77	End Shut-In(1)
92	24.83	96.26	Open To Flow (2)
153	28.90	99.28	Shut-In(2)
243	895.77	102.02	End Shut-In(2)
244	1768.97	102.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Slightly Oil spotted Mud	0.15

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Peterson

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041537 **DST#: 2**

Test Start: 2011.01.24 @ 16:49:05

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

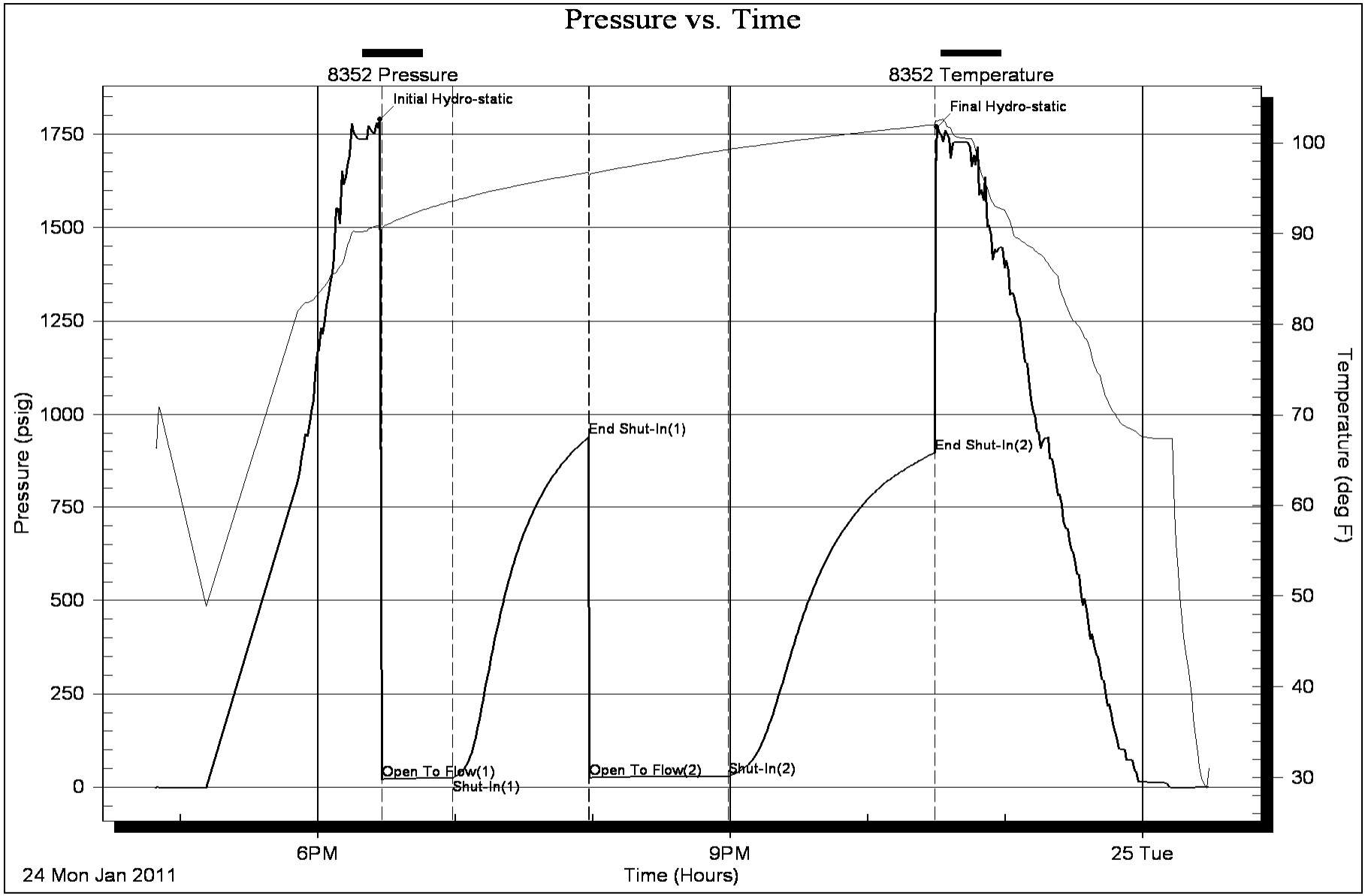
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Slightly Oil spotted Mud	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
100
90
80
70
60
50
40
30
6PM
9PM
25 Tue
24 Mon Jan 2011
Time (Hours)

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita KS 67202+1216
ATTN: Robert Peterson

Freida #1-13

13-12s-20w Ellis KS

Job Ticket: 041538 **DST#: 3**

Test Start: 2011.01.25 @ 07:55:05

GENERAL INFORMATION:

Formation: **LKC"E&F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:00:50
Time Test Ended: 15:40:20

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3640.00 ft (KB) To 3668.00 ft (KB) (TVD)
Total Depth: 3668.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

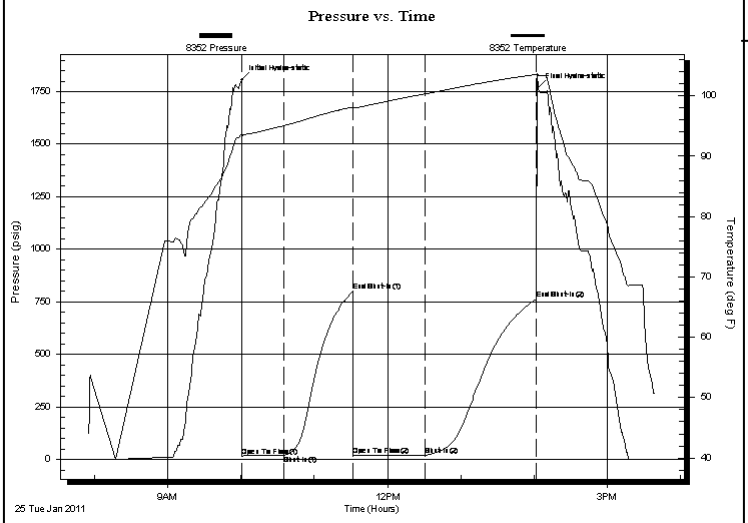
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 21.80 psig @ 3665.00 ft (KB)
Start Date: 2011.01.25 End Date: 2011.01.25
Start Time: 07:55:05 End Time: 15:40:20

Capacity: 8000.00 psig
Last Calib.: 2011.01.25
Time On Btm: 2011.01.25 @ 10:00:40
Time Off Btm: 2011.01.25 @ 14:03:09

TEST COMMENT: IF: Weak, One & one half inch blow .
IS: No Return
FF: Weak, One inch blow .
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1806.87	93.71	Initial Hydro-static
1	16.61	93.01	Open To Flow (1)
35	18.40	95.07	Shut-In(1)
91	801.56	98.17	End Shut-In(1)
92	19.55	97.78	Open To Flow (2)
150	21.80	100.33	Shut-In(2)
242	763.36	103.57	End Shut-In(2)
243	1770.41	103.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita KS 67202+1216

ATTN: Robert Peterson

Freida #1-13

13-12s-20w Ellis KS

Job Ticket: 041538 **DST#: 3**

Test Start: 2011.01.25 @ 07:55:05

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	inches				

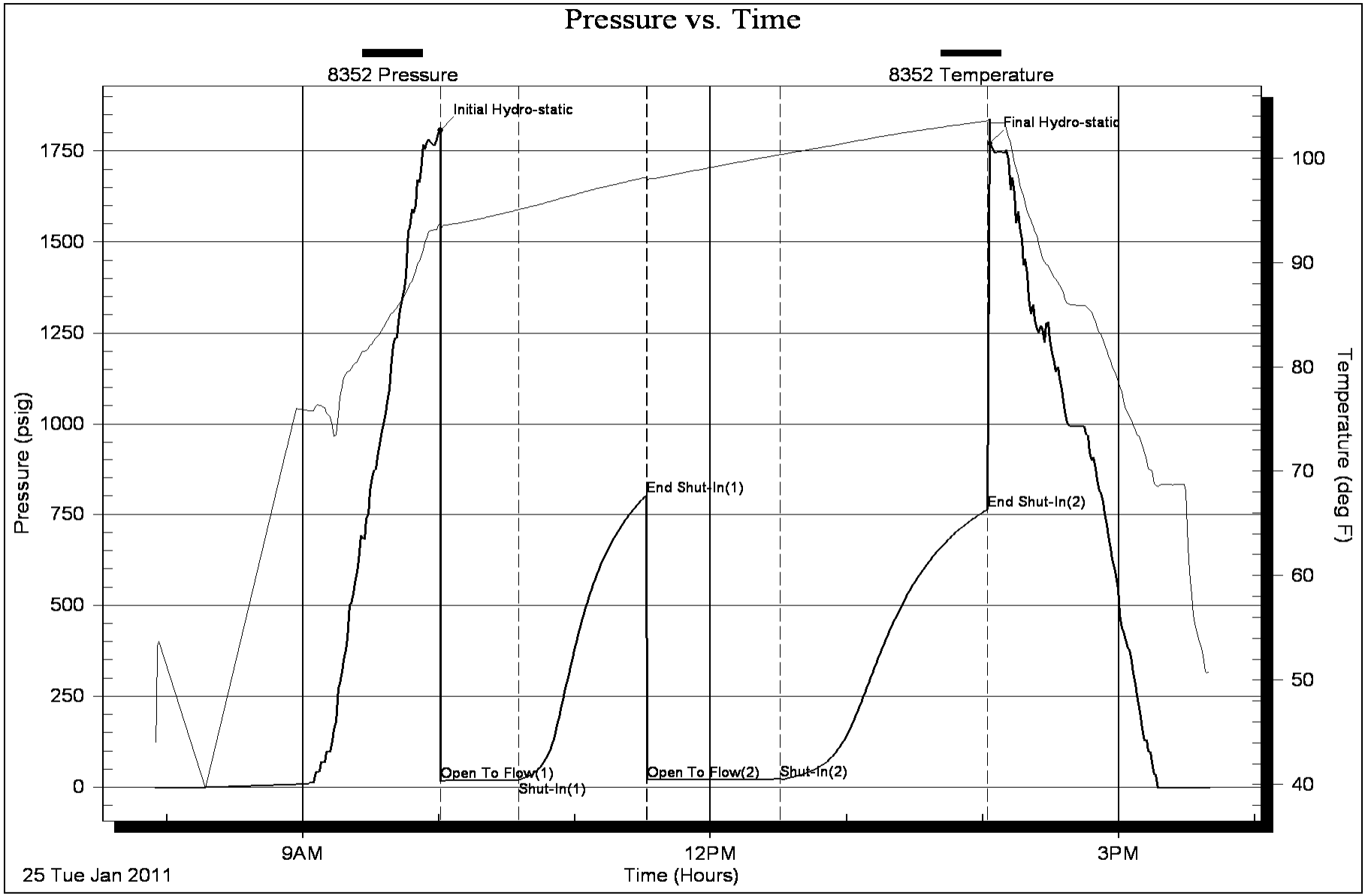
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
100
90
80
70
60
50
40
9AM
12PM
3PM
25 Tue Jan 2011
Time (Hours)

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis KS

Job Ticket: 041539 **DST#: 4**

Test Start: 2011.01.25 @ 23:00:05

GENERAL INFORMATION:

Formation: **LKC"G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:14:00
Time Test Ended: 06:08:29

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3666.00 ft (KB) To 3694.00 ft (KB) (TVD)
Total Depth: 3694.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

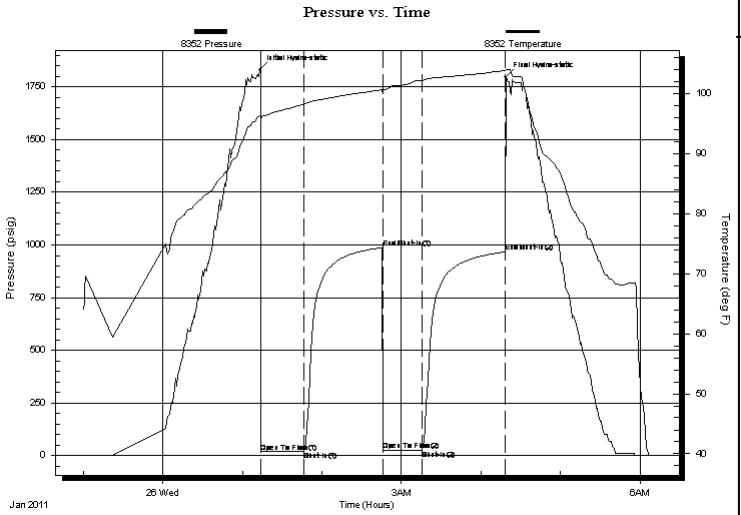
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 26.34 psig @ 3667.00 ft (KB)
Start Date: 2011.01.25 End Date: 2011.01.26
Start Time: 23:00:05 End Time: 06:08:29

Capacity: 8000.00 psig
Last Calib.: 2011.01.26
Time On Btm: 2011.01.26 @ 01:13:20
Time Off Btm: 2011.01.26 @ 04:18:39

TEST COMMENT: IF: Weak, half inch.
IS: No Return
FF: Weak, half inch
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1830.70	96.26	Initial Hydro-static
1	16.62	95.64	Open To Flow (1)
33	21.26	98.23	Shut-In(1)
93	987.08	100.62	End Shut-In(1)
93	22.39	100.02	Open To Flow (2)
122	26.34	102.15	Shut-In(2)
185	966.67	103.79	End Shut-In(2)
186	1798.75	103.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis KS

Job Ticket: 041539 **DST#: 4**

Test Start: 2011.01.25 @ 23:00:05

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	inches				

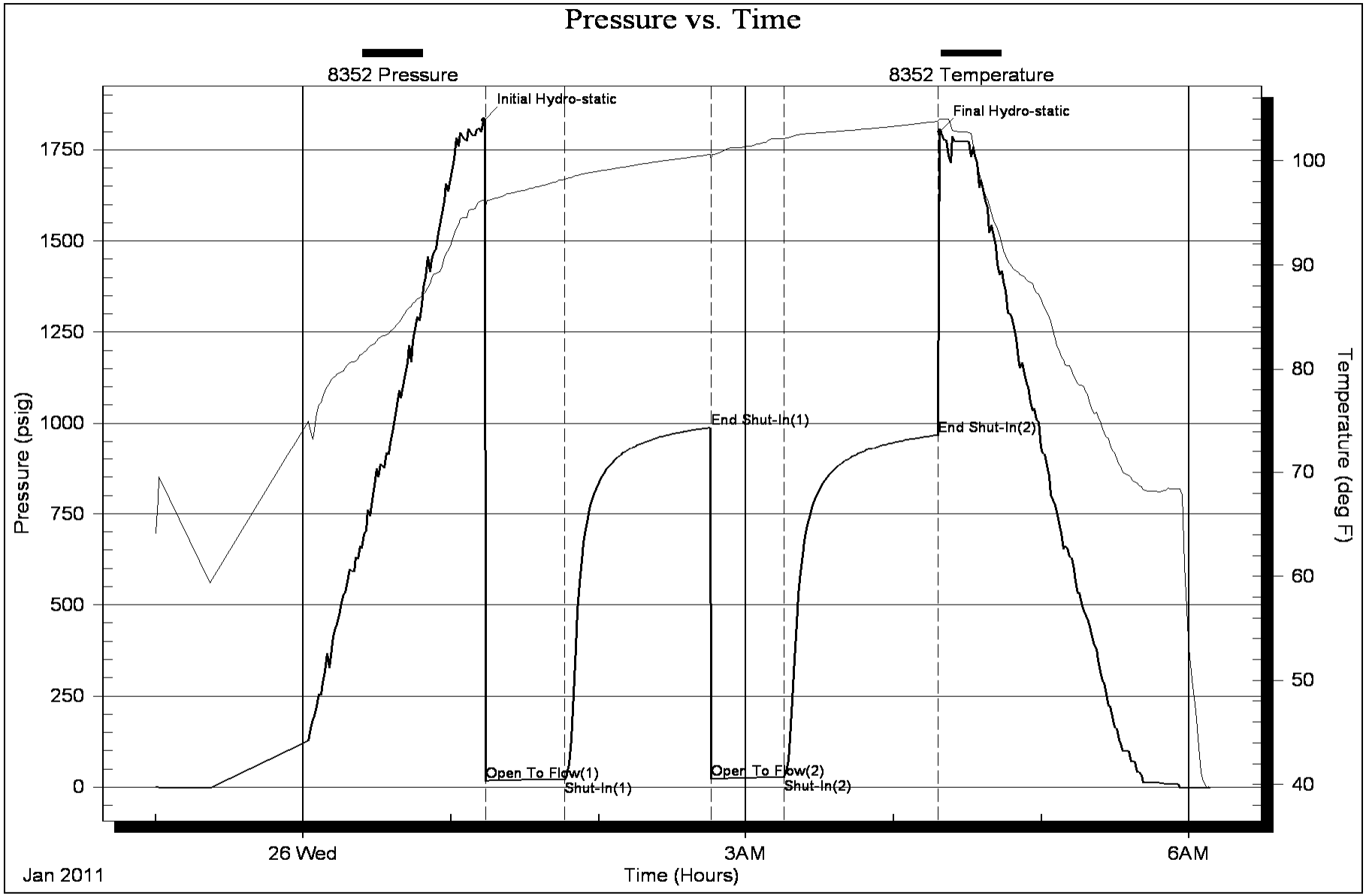
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
100
90
80
70
60
50
40
26 Wed
3AM
6AM
Jan 2011
Time (Hours)

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis KS

Job Ticket: 041540 **DST#: 5**

Test Start: 2011.01.26 @ 21:31:05

GENERAL INFORMATION:

Formation: **LKC"I,J,K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:02:40
Time Test Ended: 05:09:20

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3724.00 ft (KB) To 3800.00 ft (KB) (TVD)
Total Depth: 3800.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

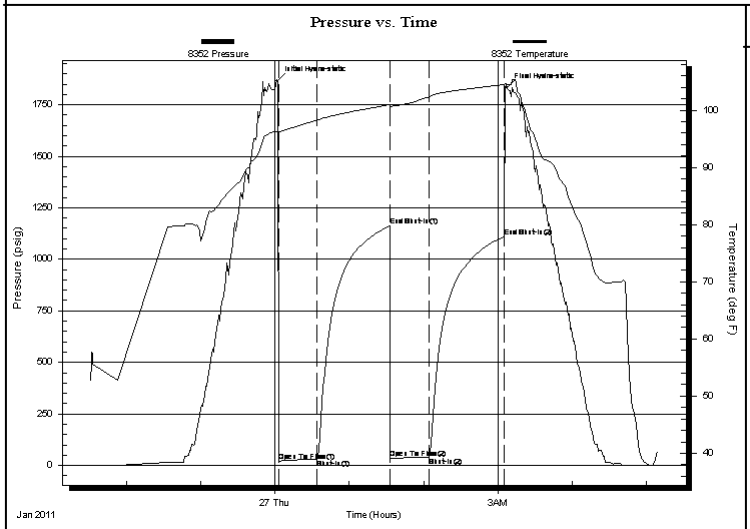
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 41.19 psig @ 3729.00 ft (KB)
Start Date: 2011.01.26 End Date: 2011.01.27
Start Time: 21:31:05 End Time: 05:09:20

Capacity: 8000.00 psig
Last Calib.: 2011.01.27
Time On Btm: 2011.01.27 @ 00:02:00
Time Off Btm: 2011.01.27 @ 03:07:20

TEST COMMENT: IF: 2 inch blow
IS: No Return
FF: 1&1/2 inch blow
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1865.38	96.49	Initial Hydro-static
1	20.78	95.96	Open To Flow (1)
33	30.94	98.24	Shut-In(1)
91	1161.31	100.98	End Shut-In(1)
92	33.14	100.31	Open To Flow (2)
122	41.19	102.36	Shut-In(2)
184	1110.31	104.51	End Shut-In(2)
186	1833.89	104.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis KS

Job Ticket: 041540 **DST#: 5**

Test Start: 2011.01.26 @ 21:31:05

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:	59.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2600.00 ppm				
Filter Cake:	inches				

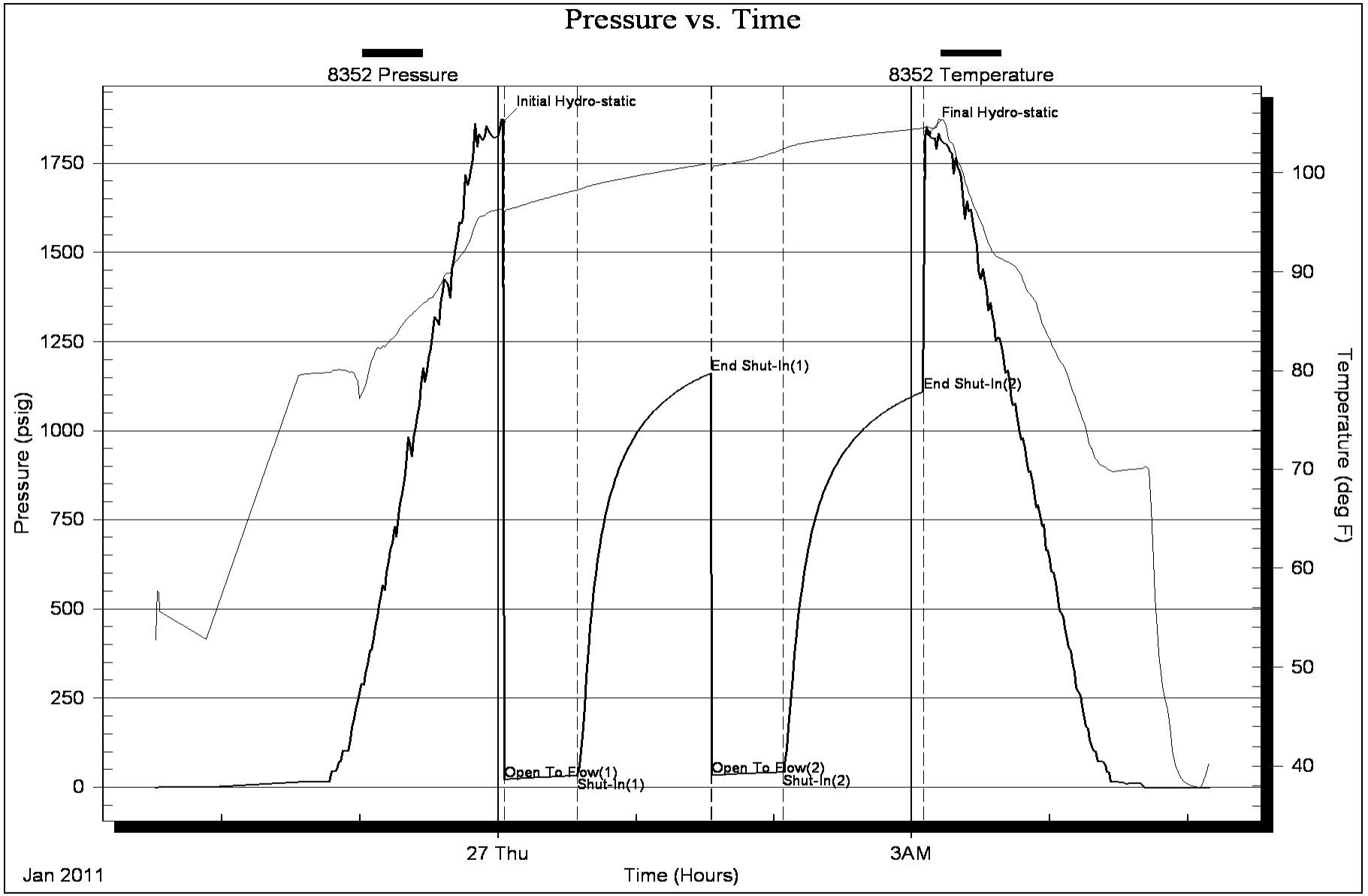
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
100
90
80
70
60
50
40
27 Thu
3AM
Jan 2011
Time (Hours)

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041541 **DST#: 6**

Test Start: 2011.01.27 @ 16:50:05

GENERAL INFORMATION:

Formation: **Lower Pawnee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:37:50
Time Test Ended: 23:29:59

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3817.00 ft (KB) To 3884.00 ft (KB) (TVD)
Total Depth: 3884.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

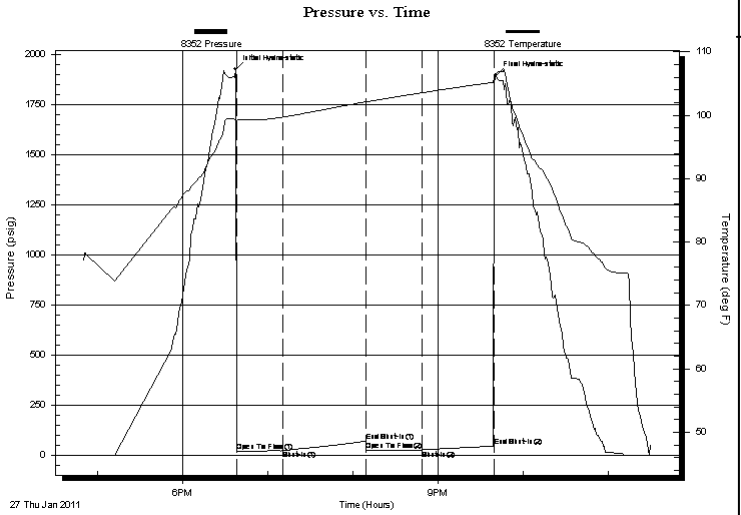
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 27.92 psig @ 3823.00 ft (KB)
Start Date: 2011.01.27 End Date: 2011.01.27
Start Time: 16:50:05 End Time: 23:29:59

Capacity: 8000.00 psig
Last Calib.: 2011.01.27
Time On Btm: 2011.01.27 @ 18:37:00
Time Off Btm: 2011.01.27 @ 21:40:29

TEST COMMENT: IF: Weak, 1 inch
IS: No Return
FF: No Blow
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1926.16	99.47	Initial Hydro-static
1	21.01	98.95	Open To Flow (1)
34	23.83	99.73	Shut-In(1)
92	71.00	102.14	End Shut-In(1)
93	23.65	102.12	Open To Flow (2)
132	27.92	103.56	Shut-In(2)
183	46.58	105.22	End Shut-In(2)
184	1895.69	106.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Mud	0.01

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041541 **DST#: 6**

Test Start: 2011.01.27 @ 16:50:05

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:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	inches				

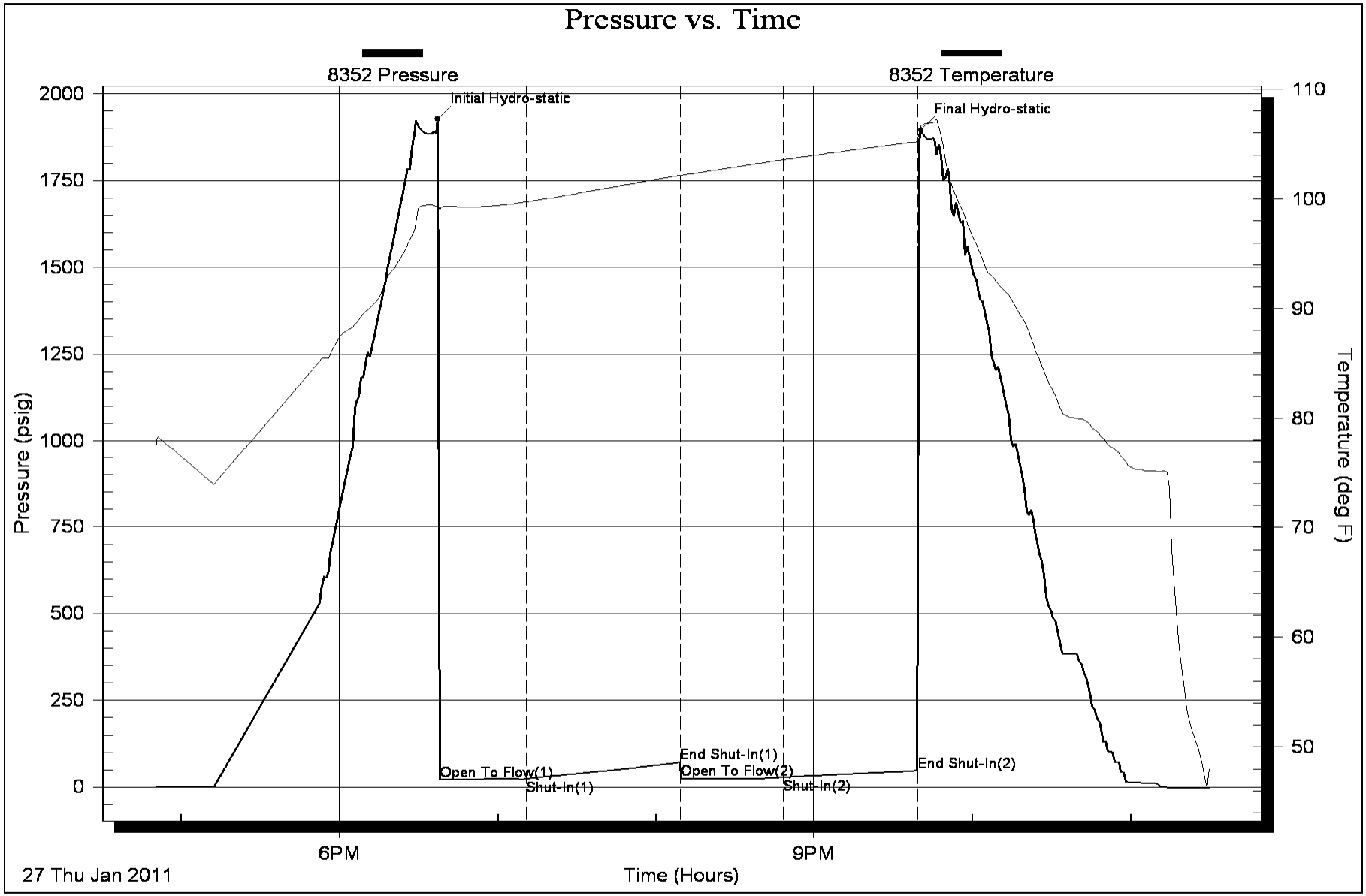
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	Mud	0.015

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
Open To Flow(1)
Shut-In(1)
End Shut-In(1)
Open To Flow(2)
Shut-In(2)
End Shut-In(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
110
100
90
80
70
60
50
6PM
9PM
27 Thu Jan 2011
Time (Hours)

DRILL STEM TEST REPORT

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041542 **DST#: 7**

Test Start: 2011.01.28 @ 12:22:05

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:52:30
Time Test Ended: 19:43:20

Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Interval: 3865.00 ft (KB) To 3965.00 ft (KB) (TVD)
Total Depth: 3965.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

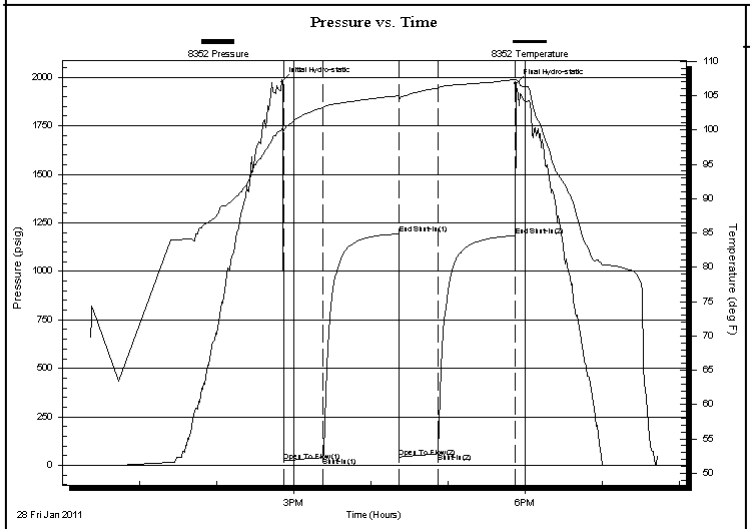
Reference Elevations: 2265.00 ft (KB)
2260.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**

Press@RunDepth: 60.88 psig @ 3871.00 ft (KB)
Start Date: 2011.01.28 End Date: 2011.01.28
Start Time: 12:22:05 End Time: 19:43:20

Capacity: 8000.00 psig
Last Calib.: 2011.01.28
Time On Btm: 2011.01.28 @ 14:51:10
Time Off Btm: 2011.01.28 @ 17:53:09

TEST COMMENT: IF: 2 inch blow
IS: No Return
FF: Half inch blow
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1976.76	100.18	Initial Hydro-static
2	23.10	99.85	Open To Flow (1)
32	40.40	103.27	Shut-In(1)
91	1192.35	104.98	End Shut-In(1)
92	42.49	104.26	Open To Flow (2)
122	60.88	106.12	Shut-In(2)
182	1183.58	107.35	End Shut-In(2)
182	1967.43	107.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud	0.32

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co

250 N. Water
STE. 300
Wichita Ks. 67202+1216
ATTN: Robert Petersen

Freida #1-13

13-12s-20w Ellis co.

Job Ticket: 041542 **DST#: 7**

Test Start: 2011.01.28 @ 12:22:05

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:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	inches				

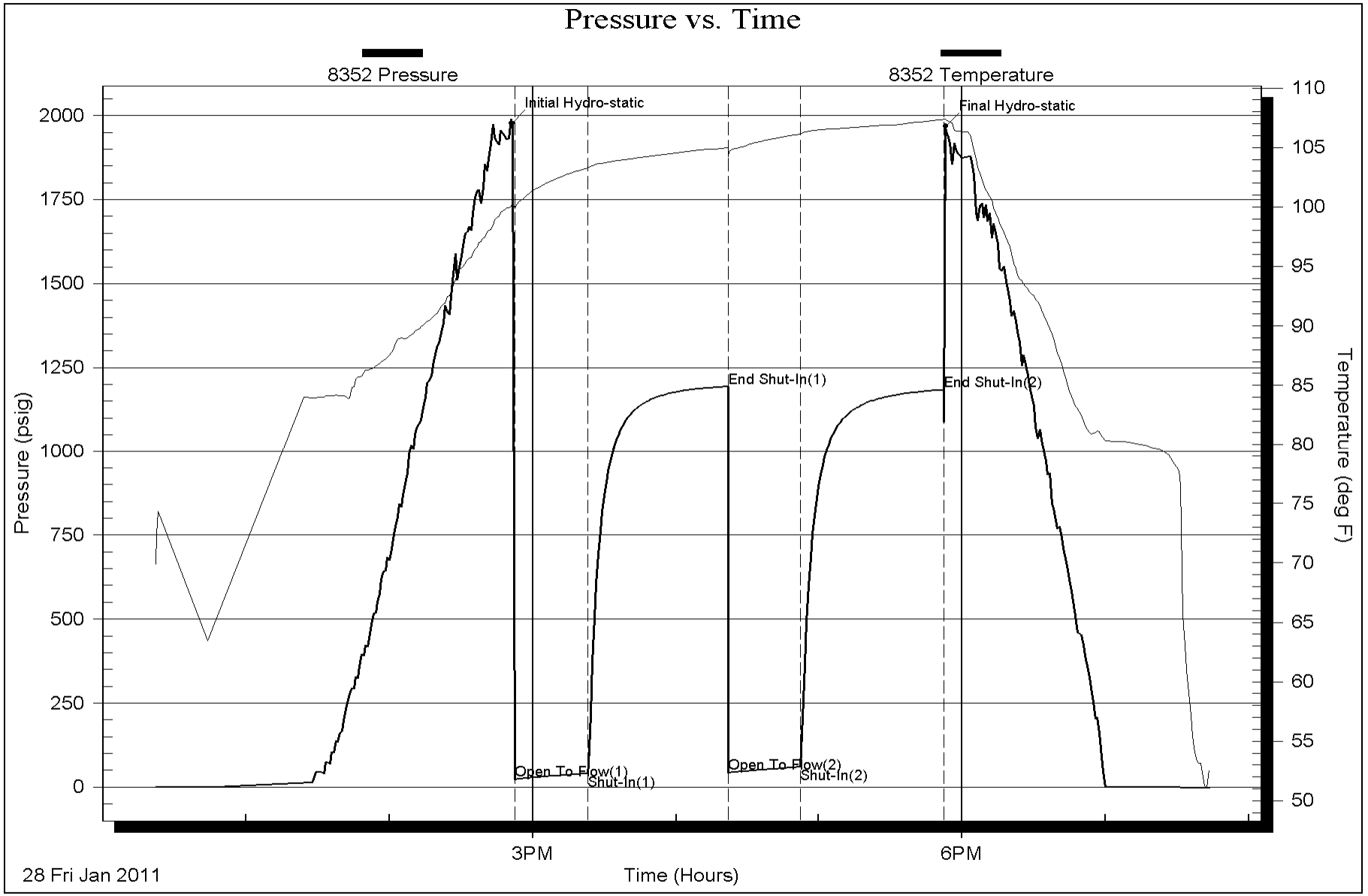
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8352 Pressure
8352 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
110
105
100
95
90
85
80
75
70
65
60
55
50
3PM
6PM
28 Fri Jan 2011
Time (Hours)

ALLIED CEMENTING CO., LLC
Cementing & Acidizing Services

PO BOX 31 Russell, KS 67665

Voice: (785) 483-3887
Fax: (785) 483-5566

INVOICE

Fiz aadt

Invoice Number: 125960
Invoice Date: Jan 18, 2011
Page: 1

PROD COPY

Federal Tax I.D.#: 20-5975804

oprrator Pay
MDC
Bn

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

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Murfin	Freida #1-13	Net 30 Days	
Job Location	**Camp Location**	**Service Date**	**Due Date**
KS2-01	Oakley	Jan 18, 2011	2/17/11

Quantity	Item	Description	Unit Price	Amount
190.00	MAT	Class A Common	13.50	2,565.00
7.00	MAT	Chloride	51.50	360.50
197.00	SER	Handling	2.25	443.25
20.00	SER	Mileage 197 sx @.10 per sk per mi	19.70	394.00
1.00	SER	Surface	991.00	991.00
20.00	SER	Pump Truck Mileage	7.00	140.00

Account					Description
03000	008	00	3842	5078.06 (1712.81)	Cement S. Csg.

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

$ 1712.81

ONLY IF PAID ON OR BEFORE
Feb 12, 2011

Subtotal	4,893.75
Sales Tax	184.31
Total Invoice Amount	5,078.06
Payment/Credit Applied	
TOTAL	**5,078.06**

- 1712.81
3365.25

ALLIED CEMENTING CO., LLC. 040979

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Oakley

DATE 1-18-11	SEC 13	TWP 12S	RANGE 20W	CALLED OUT	ON LOCATION	JOB START 6:00PM	JOB FINISH 6:30P.M.
LEASE Freida	WELL # 1-13		LOCATION Ellis 3N 1/2E IN 2 1/2 E Ninto			COUNTY Ellis	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR Murfin Drilling Rig 8
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 214'
CASING SIZE 8 5/8 DEPTH 214'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 12.67 BBL

OWNER same

EQUIPMENT

PUMP TRUCK # 423-281 CEMENTER Andrew
HELPER Larene
BULK TRUCK # 396 DRIVER Jerry
BULK TRUCK # DRIVER

REMARKS:

Circ 12 bbls
cement did circulate
Thank you

CHARGE TO: Murfin
STREET
CITY STATE ZIP

To 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

SIGNATURE

CEMENT

AMOUNT ORDERED 190 sks com 3% cc

COMMON	190 sks	@ 13.50	2565.00
POZMIX		@	
GEL		@	
CHLORIDE	7 sks	@ 51.50	360.50
ASC		@	
HANDLING	197 sks	@ 2.25	443.25
MILEAGE	104 sk/mile		394.00
		TOTAL	3762.25

SERVICE

DEPTH OF JOB	214'		
PUMP TRUCK CHARGE			991.00
EXTRA FOOTAGE		@	
MILEAGE	20 miles	@ 7.00	140.00
MANIFOLD		@	
		@	
		@	
		TOTAL	1131.00

PLUG & FLOAT EQUIPMENT

		@	
		@	
		@	
		@	
		@	
		TOTAL	

SALES TAX (If Any)
TOTAL CHARGES
DISCOUNT IF PAID IN 30 DAYS

ALLIED
CEMENTING CO., LLC
Cementing & Acidizing Services
PO BOX 31 Russell, KS 67665

Voice: (785) 483-3887
Fax: (785) 483-5566

INVOICE

Invoice Number: 126058
Invoice Date: Jan 29, 2011
Page: 1

PROD COPY

Federal Tax I.D.#: 20-5975804

operator pay
MDC
BM

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

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Frieda #1-13	Net 30 Days	
Job Location	**Camp Location**	**Service Date**	**Due Date**
KS2-03	Oakley	Jan 29, 2011	2/28/11

Quantity	Item	Description	Unit Price	Amount
147.00	MAT	Class A Common	13.50	1,984.50
98.00	MAT	Pozmix	7.55	739.90
8.00	MAT	Gel	20.25	162.00
61.00	MAT	Flo Seal	2.45	149.45
255.00	SER	Handling	2.25	573.75
20.00	SER	Mileage 255 sx @.10 per sk per mi	25.50	510.00
1.00	SER	Plug to Abandon	1,159.00	1,159.00
20.00	SER	Pump Truck Mileage	7.00	140.00
1.00	EQP	Dry Hole Plug	39.00	39.00

Account	Amount	Description
03000008 20 3842	5801.43 (1910.16)	PYA

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

$ 1910.16

ONLY IF PAID ON OR BEFORE
Feb 23, 2011

Subtotal	5,457.60
Sales Tax	343.83
Total Invoice Amount	5,801.43
Payment/Credit Applied	
TOTAL	**5,801.43**

-1910.16
3891.27

ALLIED CEMENTING CO., LLC. 040824

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Oakley KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
1-29-11	13	12S	20W		10:30 AM	8:00 PM	8:30 PM

LEASE	WELL #	LOCATION	COUNTY	STATE
Friend A	1-13	Ellis 4W · 2½E N S	Ellis	KS

OLD OR NEW (Circle one)

CONTRACTOR Murfin #8
TYPE OF JOB PTA
HOLE SIZE 7 7/8 T.D. 4025'
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH 3870'
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT

OWNER

EQUIPMENT

PUMP TRUCK CEMENTER Fuzza
431 HELPER Darren
BULK TRUCK
481 DRIVER Mark (P)
BULK TRUCK
DRIVER

CEMENT

AMOUNT ORDERED 245 60/40 4% gel 1/4# Flosel

COMMON	147	@ 13.50	1984.50
POZMIX	98	@ 7.55	739.90
GEL	8	@ 20.25	162.00
CHLORIDE		@	
ASC		@	
Flosel 61#		@ 2.45	149.45
		@	
		@	
		@	
		@	
		@	
HANDLING	255	@ 2.25	573.75
MILEAGE	10 x 51 x m.		510.00
		TOTAL	4119.60

REMARKS:

25 sks @ 3850' 20' above Arbuckle
25 sks @ 1650'
100 sks @ 915'
40 sks @ 265'
10 sks @ 40'
15 mh
30 RH
Job complete @ 5:00 pm
Thanks Fuzza crew

SERVICE

DEPTH OF JOB			3870'
PUMP TRUCK CHARGE			1159.00
EXTRA FOOTAGE		@	
MILEAGE	20	@ 7.00	140.00
MANIFOLD		@	
		@	
		@	
		TOTAL	1299.00

CHARGE TO: Murfin Drlg
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

1 - Dry hole plug		@	39.00
		@	
		@	
		@	
		@	
		TOTAL	39.00

SALES TAX (If Any)
TOTAL CHARGES
DISCOUNT IF PAID IN 30 DAYS

To 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

SIGNATURE

	MDCI Freida #1-13 2050' FSL 2310' FWL Sec. 13-T12S-R20W 2265' KB						MDCI Homburg #1-18 1150' FSL 700' FWL Sec. 18-T12S-R19W 2231' KB	
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	1636	+629	-4	1635	+630	-3	1598	+633
B/Anhydrite	1679	+586	-3	1684	+581	-8	1642	+589
Topeka	3304	-1039	+5	3308	-1042	+2	3275	-1044
Deer Creek	3357	-1092	+6	3361	-1096	+2	3329	-1098
Lecompton	3421	-1156	+5	3425	-1160	+1	3392	-1161
Heebner	3533	-1268	+5	3536	-1271	+2	3504	-1273
Lansing	3577	-1312	+3	3580	-1315	Flat	3546	-1315
BKC	3819	-1554	+9	3818	-1553	+10	3794	-1563
Marmaton	3837	-1572	+6	3832	-1567	+11	3809	-1578
Pawnee	3853	-1588	+9	3854	-1589	+8	3828	-1597
Arbuckle	3950	-1685	-48	3956	-1691	-56	3868	-1637
RTD	4025	-1760					3975	-1744
LTD				4028	-1763		3988	-1757