KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1052301

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 # 30717
Name: Downing-Nelson Oil Co Inc
Address 1: PO BOX 372
Address 2:
City: HAYS State: KS Zip: 67601 + 0372
Contact Person: Michcle Meier
Phone: (785) 621-2610
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Marc Downing
Purchaser: None

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
☐ Conv. to GSW
☐ Plug Back: Plug Back Total Depth
☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

02/18/2011	02/23/2011	02/24/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-135-25217-00-00
Spot Description:
SE - NE - NE - NW Sec. 24 Twp. 16 S. R. 23 ☐ East ☐ West
490 Feet from ☐ North / ☐ South Line of Section
2610 Feet from ☐ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☐ SW
County: Ness
Lease Name: Pfaff-Toedman Well #: 1-24
Field Name:
Producing Formation: None
Elevation: Ground: 2438 Kelly Bushing: 2446
Total Depth: 4550 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 223 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: 16000 ppm Fluid volume: 320 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

☐ **Letter of Confidentiality Received**
Date:
☐ **Confidential Release Date:**
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ **I** ☐ **II** ☐ **III** **Approved by:** Deanna Garrison **Date:** 03/31/2011

Side Two

1052301

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Pfaff-Toedman Well #: 1-24

Sec. 24 Twp. 16 S. R. 23 ☐ East ☐ West County: Ness

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:

Micro
Compensated Density Neutron
Dual Induction

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

Name	Top	Datum
Attached	Attached	Attached

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 Pipe	12.25	8.625	23	223	Common	150	2% Gel & 3% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
____ Perforate ____ Protect Casing ____ Plug Back TD ____ Plug Off Zone	-			
	-			

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

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Pfaff-Toedman 1-24
Doc ID	1052301

Tops

Name	Top	Datum
Top Anhydrite	1789	+658
Base Anhydrite	1824	+623
Heebner	3838	-1391
Toronto	3858	-1411
LKC	3872	-1425
BKC	1411	-1697
Pawnee	4247	-1800
Fort Scott	4340	-1893
Cherokee Shale	4363	-1916
Cherokee Sand	4428	-1981
Mississippi	4458	-2011

Marc Downing

Consulting Petroleum Geologist
1411 Washington Circle
Hays, Ks 67601
Phone: 620-428-1356 (cell) 785-621-2286

GEOLOGIC REPORT LOG

COMPANY Downing-Nelson Oil Co, Inc.

WELL Pfaff-Toedman # 1-24

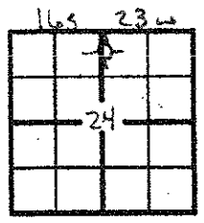
FIELD Wildcat

LOCATION 490' FNL & 2610' FEL

SEC. 24 TWP. 16s RGE. 23w

COUNTY Ness

STATE Kansas



PRODUCTION D&A

OPERATOR DNOCI

CONTRACTOR Discovery Drilling, Rig #3

COMM: 2-19-11 COMP: 2-24-11

CASING RECORD

SURF: 8 5/8" @ 223' PROD: None

TOTAL DEPTH DRILLERS: 4550'

TOTAL DEPTH LOG 4552'

ELEVATION KB 2447
DF
GL 2439

Drilling Measured From: KB

Samples Saved From 4100 To: TD

Drilling Time From 3700 To: TD

Samples Examined From: 4100 To: TD

Geological Supervision From 3700 To Total Depth

Wellsite Geologist Marc Downing

Electrical Surveys Superior
CNL/CDL
DIL
MEL

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
Top Anhydrite	1789	1789	+658	-3
Base Anhydrite	1825	1824	+623	-2
Heebner	3838	3838	-1391	+1
Toronto	3858	3858	-1411	+1
LKC	3872	3872	-1425	+3
BKC	4147	4144	-1697	+2
Pawnee	4247	4247	-1800	FL
Ft Scott	4340	4340	-1893	+4
Cherokee Sh.	4362	4363	-1916	FL
Cherokee Sand	4427	4428	-1981	-6
Miss	4458	4458	-2011	FL

REFERENCE WELL FOR STRUCTURE Mull Drilling Co
Toedman # 1-24 592' FNL & 2268' FWL Sec. 24-16s-23w

DAILY PENETRATION

DATE	DEPTH

BIT RECORD

NO	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS

FORMATION	INTERVAL	DESCRIPTION OF SHOW	LOG ANALYSIS B	LOG ANALYSIS S W

DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IHH-FHH	RECOVERY

REMARKS AND RECOMMENDATIONS _____

7515

LEGEND

LOG 7710

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Decreases

5" 10" 15" 20" 25"

DEPTH

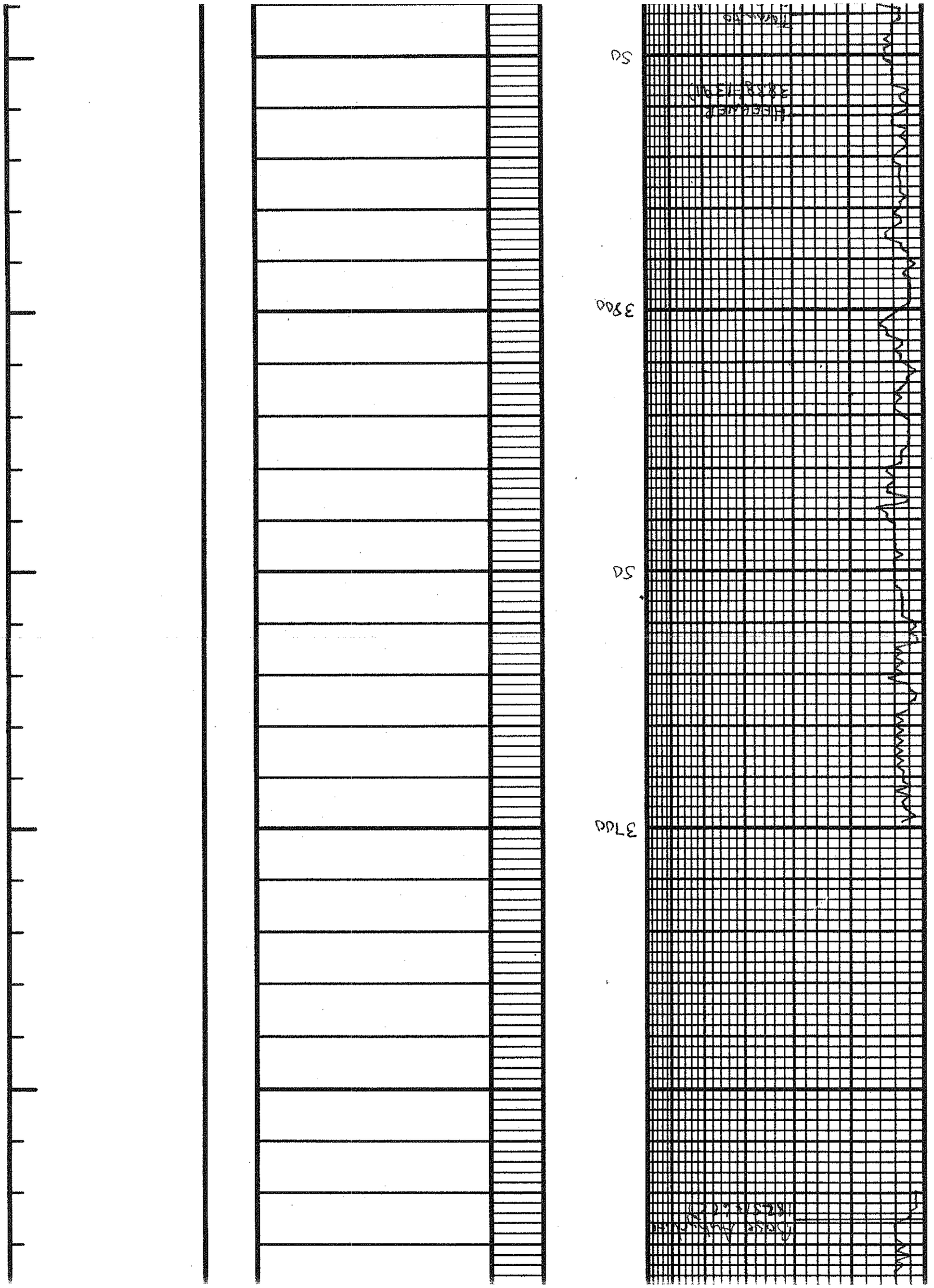
LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

1800


3800
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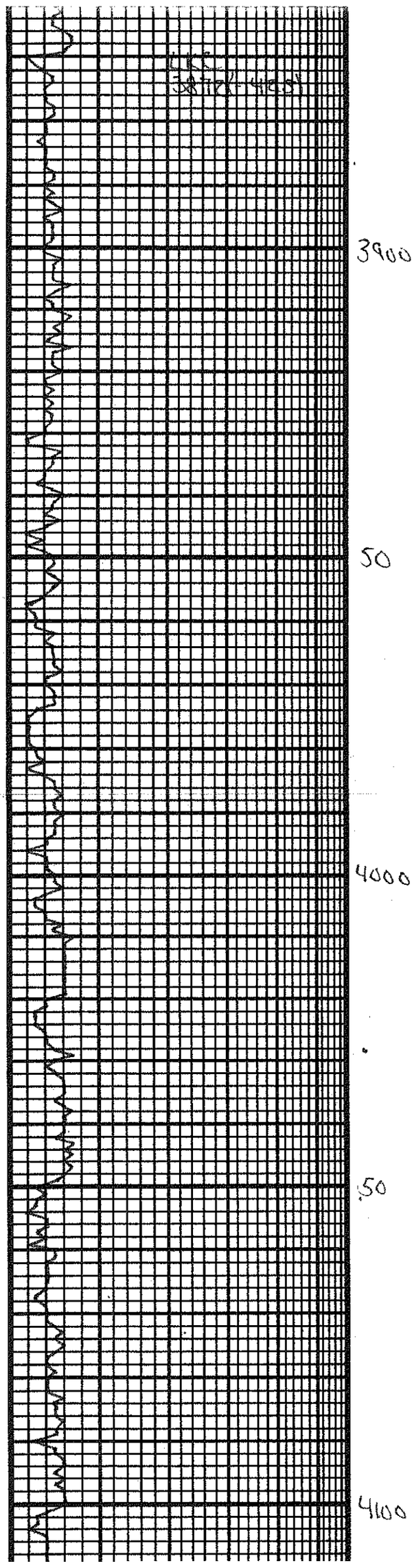
DS
DS


3900
50
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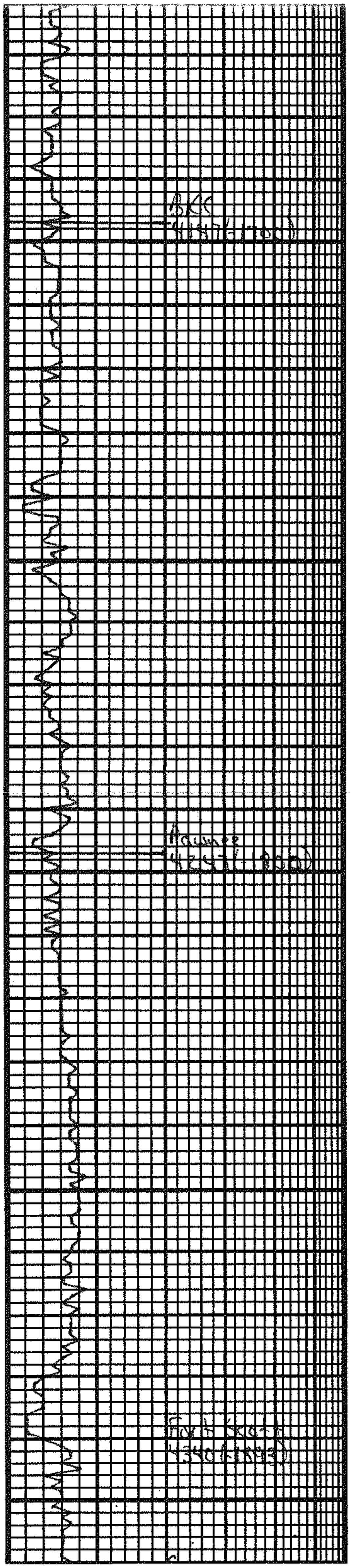
50
4100



50

Sh: gry

LS: wht, fn-md xln, Foss, trng fr amt brn sh. Rx dns, pr ø

Sh: brn w/ gry

LS: tan-wht, md xln, Scat Foss, pr ø.

Sh: brn w/ red, Arg in prt.

4200

LS: wht-tan, fn-md xln, trng mtld. All v pr ø, NS.

Sh: gry w/ scat brn

LS: wht-lt tan, fn xln, v dns, w/ No vis ø. Tan frg chrt

Sh: drk gry

50

LS: wht-crm, fn xln, few sub xln rx. Trng tan-brn, fn-v fn xln, v dns, No vis ø, NS. Scat arg & tan chrt.

LS: Mostly AIA, tan, v fn xln, v dns, No vis ø, NS. Scat chrt & AIA.

4300

LS: AIA w/ drk gry Sh int/beds.

Sh: Black Carb

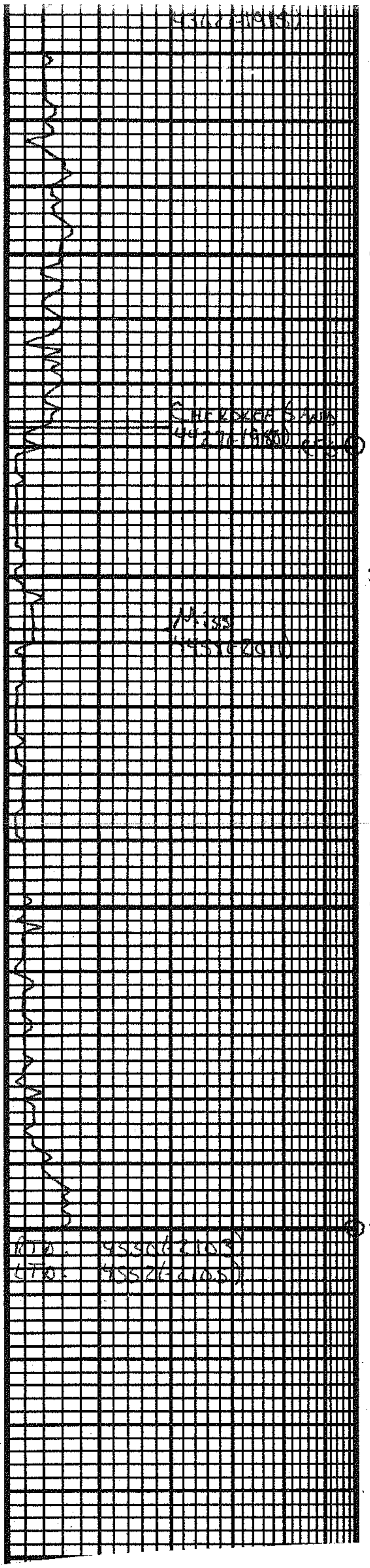
LS: tan-wht, fn xln, Scat pr pp ø w/ spttd

50

Stn, NSFO, No od. Mostly tite & dns. Scat sub xln.

Vis: 55 Wt: 9.4

DST #1
4387-4430



4400

50

4500

50

DST #1

DST #2

Sh: brn-red.

Sh: AIA
LS: tan-wht, ool, prø

Sh: brn-gry
LS: tan-wht, fn-md xln, dns.

Sh: gry w/ brn

LS: tan, md xln, ool.

Sh: gry
SS: Clr, md-crs qtz clust. pr sort, v Ang, Fr 20ø, Frly friable. Slt glauc, scat spttd SFO, mostly barren. No Od, No Fluor.

SS: Same AIA, mush Chts, tan-yel SS tny fn-md grn, well sort, ang. Fr 26ø w/ Fr-gd sat gd SFO, Prod in prt. No Od, No Fluor.

Sh: gry

Chts: wht-tan, shp + fresh w/ Fr amt weath. Foss w/ trip in prt. 1-2 pcs w/ resid edge stn. gd Fracø, NSFO, No Od. yel chts.

Cht: Tny bone wht, Fresh + shp gd Fracø, All NS.

Cht: Fr amt AIA tny tan-yel Foss + trip shp, Fracø. Rx tot barren w/ No od.

Sh: brn-red w/ gry

Mar Ceri

I.F. - BoB 5 min
F.F. - BoB 9 min
IFP: 93-220
FFP: 232-333
SIP: 1022-962
HP: 2276-2170
Rec:
315' WM 16%w
330' MW 95%w
10' M
BHT: 130° Chlor: 32K

DST #2 (Straddle)
4443-4460
45-45-45-45
I.F. - 7"
F.F. - 5½"
IFP: 25-62
FFP: 67-95
SIP: 1288-1267
HP: 2361-2180
Rec:
155' MW 95%w
BHT: 128° Chlor: 41K

ALLIED CEMENTING CO., LLC. 038699

Federal Tax I.D.# 20-5975804

BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Great Bend KS

DATE 2-18-11 Pd 22	SEC. 11	TWP. 14S	RANGE 20 W	CALLED OUT	ON LOCATION	JOB START 700PM	JOB FINISH 730 PM
LEASE Toedman	WELL # 1-24		LOCATION Brownell west TO X RD			COUNTY Ness	STATE KS
OLD OR NEW (Circle one)			½ North west into				

CONTRACTOR Discovery 4
TYPE OF JOB Surface
HOLE SIZE 12 ¼ T.D. 223
CASING SIZE 8 5/8 DEPTH 223
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15
PERFS.
DISPLACEMENT 13.25 BBLS

OWNER Downing & Nelson

CEMENT

AMOUNT ORDERED 150 SX Class A + 3%cc + 2% Gel

EQUIPMENT

PUMP TRUCK CEMENTER Wayne
366 HELPER Bob-R
BULK TRUCK
341 DRIVER Bill
BULK TRUCK
DRIVER

COMMON	150	@ 13.50	2025.00
POZMIX		@	
GEL	3	@ 20.25	60.75
CHLORIDE	5	@ 51.50	257.50
ASC		@	
HANDLING	150	@ 2.25	337.50
MILEAGE	150 x 16 x .10		300.00
		TOTAL	2,980.75

REMARKS:

Pipe on Bottom Break circulation with Rig mud Shut down Hookup To Cement line Mix 150 SX Class A 3%cc + 2% Gel Displace 13.25 BBLS fresh water Shut in. Cement did circulate Rig Down

SERVICE

DEPTH OF JOB 223
PUMP TRUCK CHARGE 991.00
EXTRA FOOTAGE @
MILEAGE 16 @ 7.00 112.00
MANIFOLD @
@
@

TOTAL 1103.00

CHARGE TO: Downing + Nelson
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@
@
@
@

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment

ALLIED CEMENTING CO., LLC. 038709

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Great Bend KS

DATE 2-24-11	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START 430 PM	JOB FINISH 530 PM
LEASE Toedman pratt	WELL # 1-24		LOCATION Brownell KS west			COUNTY Ness	STATE KS
OLD OR NEW (Circle one)			To XRD 1 North west into				

CONTRACTOR Discovery Rig 3
TYPE OF JOB Rotary Plug
HOLE SIZE 7 7/8 T.D. 4550
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH 1860
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT

OWNER Downing + Nelson

CEMENT

AMOUNT ORDERED 290 SX 60/40 4% Gel
4 #/sk Seal

EQUIPMENT

PUMP TRUCK CEMENTER Wayne-D
366 HELPER Bob-R
BULK TRUCK
344 DRIVER Greg
BULK TRUCK
DRIVER

COMMON	174	@ 13.50	2,349.00
POZMIX	116	@ 7.55	875.80
GEL	10	@ 20.25	202.50
CHLORIDE		@	
ASC		@	
4 #/sk seal	72 #	@ 2.45	176.40
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	290	@ 2.25	652.50
MILEAGE	290 x 18 x .10		522.00
		TOTAL	4778.20

REMARKS:

1st Plug 1860 mix 50 SX
2nd Plug 1080 mix 80 SX
3rd Plug 650 mix 50 SX
4th Plug 250 mix 40 SX
5th Plug 60 mix 20 SX
Rathole 30 SX
mouse 20 SX

SERVICE

DEPTH OF JOB 1860
PUMP TRUCK CHARGE 991.00
EXTRA FOOTAGE @
MILEAGE 18 @ 7.00 126.00
MANIFOLD @
@
@
TOTAL 1117.00

CHARGE TO: Downing - Nelson
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@
@
@
@
@

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment

DRILL STEM TEST REPORT

DNOC

PO Box 372
Hays, Ks
67601
ATTN: Marc Dow ning

Pfaff-Toedman 1-24

24-16-23/Ness

Job Ticket: 41785 **DST#: 1**

Test Start: 2011.02.23 @ 05:05:54

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:44:23
Time Test Ended: 12:31:23

Test Type: Conventional Bottom Hole
Tester: Brian Fairbank
Unit No: 41

Interval: 4387.00 ft (KB) To 4430.00 ft (KB) (TVD)
Total Depth: 4430.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

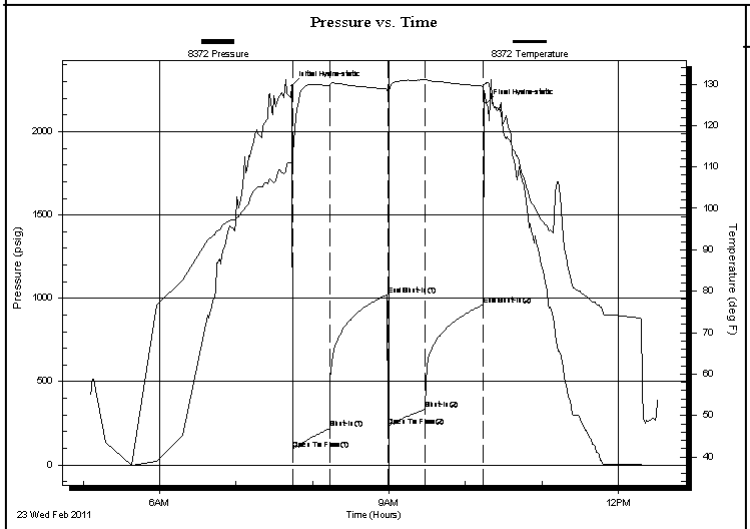
Reference Elevations: 2447.00 ft (KB)
2439.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8372 **Inside**

Press@RunDepth: 333.14 psig @ 4390.00 ft (KB)
Start Date: 2011.02.23 End Date: 2011.02.23
Start Time: 05:05:54 End Time: 12:31:23

Capacity: 8000.00 psig
Last Calib.: 2011.02.23
Time On Btm: 2011.02.23 @ 07:43:53
Time Off Btm: 2011.02.23 @ 10:16:23

TEST COMMENT: IFP - BOB 5 min
ISI - no blow back
FFP - BOB 9 min
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2275.72	110.90	Initial Hydro-static
1	93.11	109.48	Open To Flow (1)
30	219.92	129.74	Shut-In(1)
75	1022.15	128.76	End Shut-In(1)
76	231.62	128.32	Open To Flow (2)
105	333.14	131.05	Shut-In(2)
150	961.82	129.48	End Shut-In(2)
153	2169.76	130.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%	0.05
330.00	MW 95%W, 5%M	4.43
315.00	WM 10%W, 90%M	4.42

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

PO Box 372
Hays, Ks
67601
ATTN: Marc Dow ning

Pfaff-Toedman 1-24

24-16-23/Ness

Job Ticket: 41785 **DST#: 1**

Test Start: 2011.02.23 @ 05:05:54

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:	32000 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

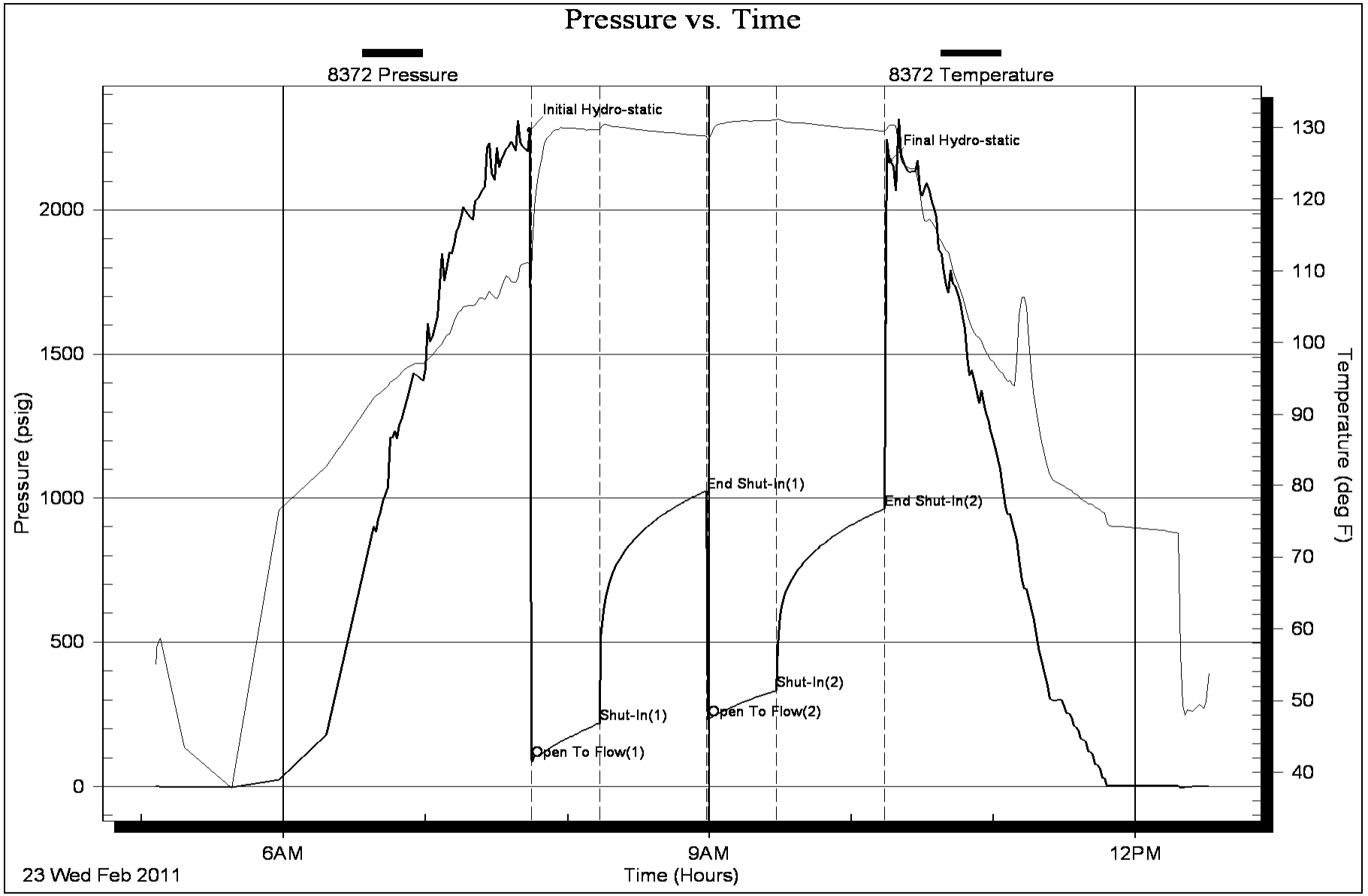
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD 100%	0.049
330.00	MW 95%W, 5%M	4.429
315.00	WM 10%W, 90%M	4.419

Total Length: 655.00 ft Total Volume: 8.897 bbl

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


Pressure vs. Time
8372 Pressure
8372 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2000
1500
1000
500
0
130
120
110
100
90
80
70
60
50
40
6AM
9AM
12PM
23 Wed Feb 2011
Time (Hours)

DRILL STEM TEST REPORT

DNOC

PO Box 372
Hays, Ks
67601
ATTN: Marc Dow ning

Pfaff-Toedman 1-24

24-16-23/Ness

Job Ticket: 41786 **DST#: 2**

Test Start: 2011.02.24 @ 01:46:51

GENERAL INFORMATION:

Formation: **Cong Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:57:50
Time Test Ended: 09:20:20

Test Type: Conventional Straddle
Tester: Brian Fairbank
Unit No: 41

Interval: 4443.00 ft (KB) To 4460.00 ft (KB) (TVD)
Total Depth: 4551.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

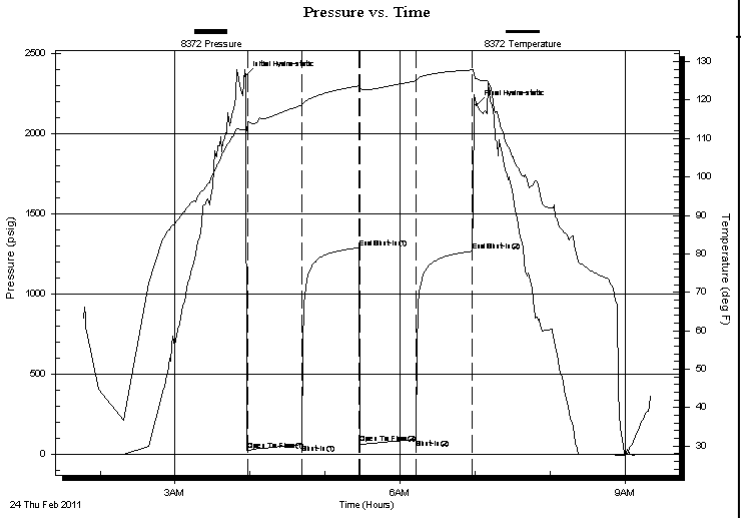
Reference Elevations: 2447.00 ft (KB)
2439.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8372 **Inside**

Press@RunDepth: 94.82 psig @ 4445.00 ft (KB)
Start Date: 2011.02.24 End Date: 2011.02.24
Start Time: 01:46:51 End Time: 09:20:20

Capacity: 8000.00 psig
Last Calib.: 2011.02.24
Time On Btm: 2011.02.24 @ 03:56:20
Time Off Btm: 2011.02.24 @ 07:01:20

TEST COMMENT: IFP - w eak to good blow - 1/2" - 7"
ISI - no blow back
FFP - w eak to fair blow sur - 5 1/2"
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2360.73	112.15	Initial Hydro-static
2	25.47	114.31	Open To Flow (1)
45	62.37	118.78	Shut-In(1)
91	1288.11	123.72	End Shut-In(1)
92	67.50	123.08	Open To Flow (2)
136	94.82	125.00	Shut-In(2)
182	1266.73	127.85	End Shut-In(2)
185	2180.19	125.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
155.00	MW 90%W, 10%M	1.88

Gas Rates

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

DRILL STEM TEST REPORT

DNOC

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Hays, Ks
67601
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Pfaff-Toedman 1-24

24-16-23/Ness

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Interval: 4443.00 ft (KB) To 4460.00 ft (KB) (TVD)
Total Depth: 4551.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

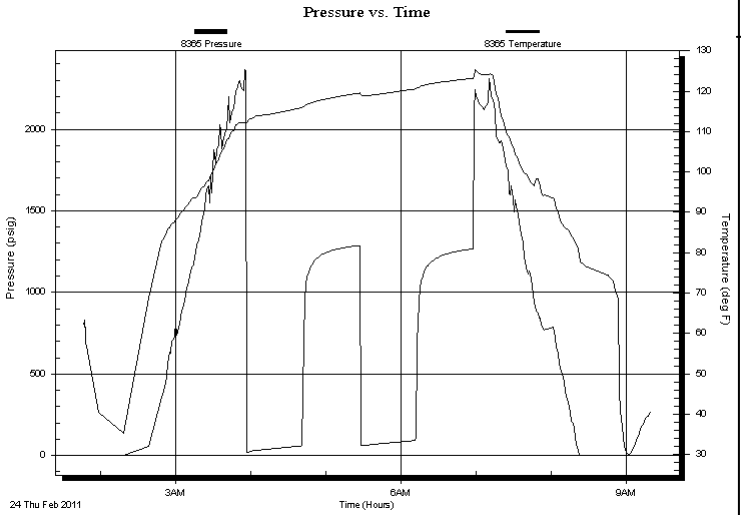
Reference Elevations: 2447.00 ft (KB)
2439.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8365 **Outside**

Press@RunDepth: psig @ 4445.00 ft (KB)
Start Date: 2011.02.24 End Date: 2011.02.24
Start Time: 01:46:45 End Time: 09:19:44

Capacity: 8000.00 psig
Last Calib.: 2011.02.24
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP - w eak to good blow - 1/2" - 7"
ISI - no blow back
FFP - w eak to fair blow sur - 5 1/2"
FSI - no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
155.00	MW 90%W, 10%M	1.88

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

PO Box 372
Hays, Ks
67601
ATTN: Marc Dow ning

Pfaff-Toedman 1-24

24-16-23/Ness

Job Ticket: 41786 **DST#: 2**

Test Start: 2011.02.24 @ 01:46:51

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	41000 ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.38 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

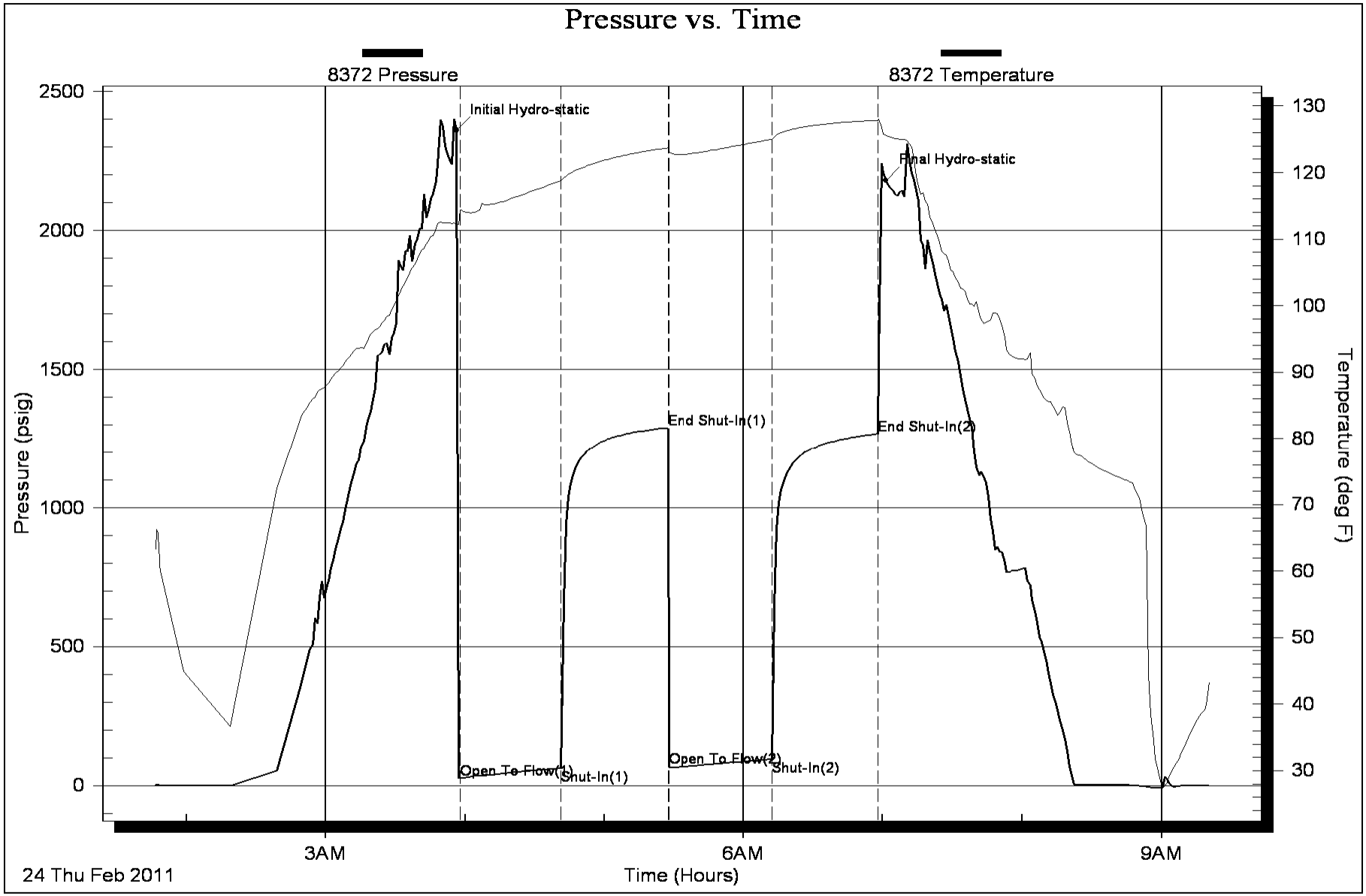
Recovery Information

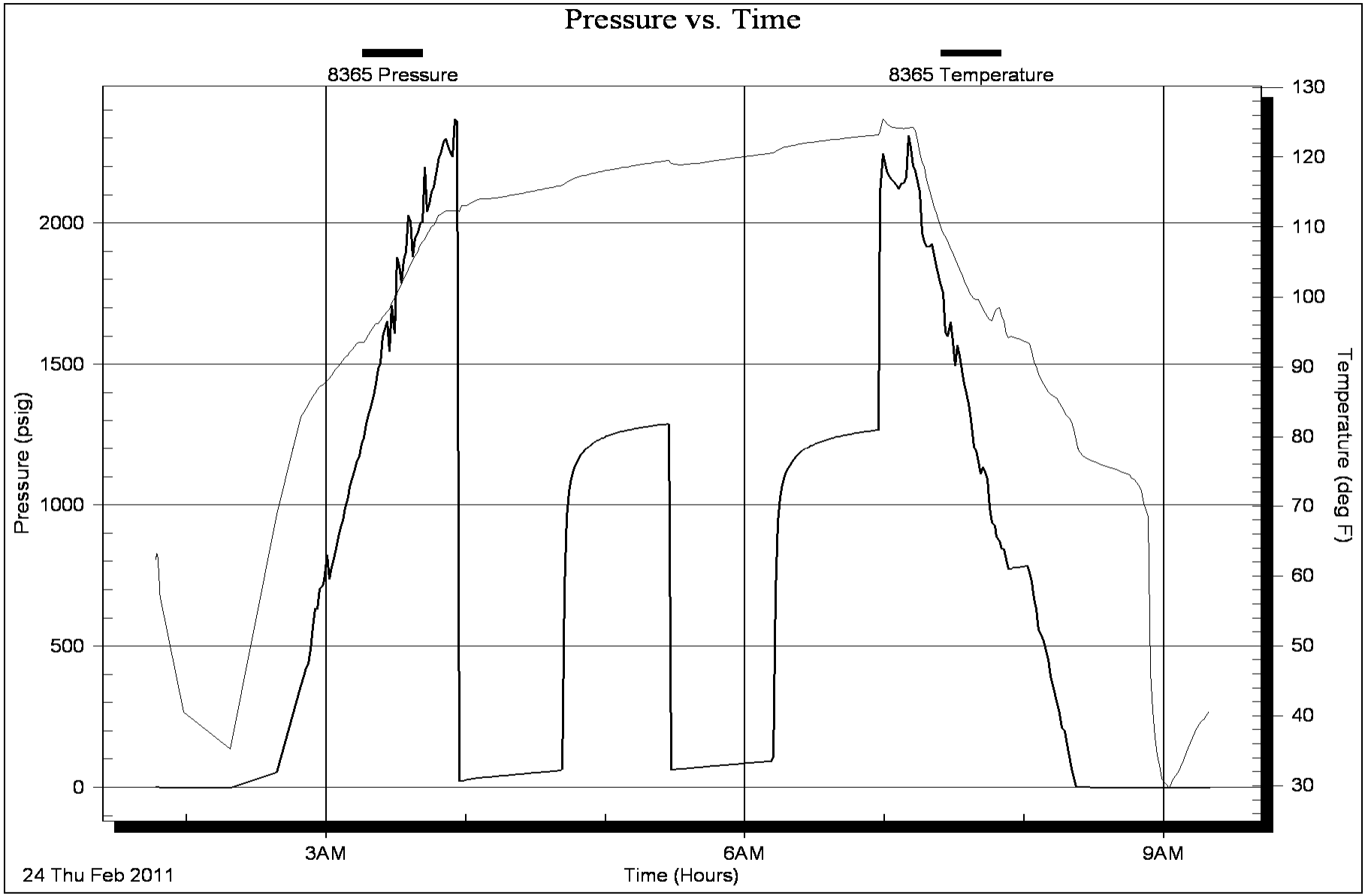
Recovery Table

Length ft	Description	Volume bbl
155.00	MW 90%W, 10%M	1.883

Total Length: 155.00 ft Total Volume: 1.883 bbl

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


Pressure vs. Time
8372 Pressure
8372 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)
2500
2000
1500
1000
500
0
130
120
110
100
90
80
70
60
50
40
30
3AM
6AM
9AM
24 Thu Feb 2011
Time (Hours)


Pressure vs. Time
8365 Pressure
8365 Temperature
Pressure (psig)
Temperature (deg F)
2000
1500
1000
500
0
130
120
110
100
90
80
70
60
50
40
30
3AM
6AM
9AM
24 Thu Feb 2011
Time (Hours)