KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1052299

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 1019
Address 2:
City: HAYS State: KS Zip: 67601 + 0372
Contact Person: Michele Meier
Phone: (785) 621-2610
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Ron Nelson
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 #:

01/31/2011	02/10/2011	02/11/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-195-22697-00-00
Spot Description:
SW - NE - SW - NW Sec. 16 Twp. 13 S. R. 22 ☐ East ☐ West
1710 Feet from ☐ North / ☐ South Line of Section
960 Feet from ☐ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☐ SW
County: Trego
Lease Name: Crossland Well #: 1-16
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 2306 Kelly Bushing: 2314
Total Depth: 4117 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 224 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: 240 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:** 03/16/2011

Side Two

1052299

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Crossland Well #: 1-16

Sec. 16 Twp. 13 S. R. 22 ☐ East ☐ West County: Trego

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:
Attached

☑ 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	8.25	8.625	23	223.61	Common	150	2% Gel & 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

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Crossland 1-16
Doc ID	1052299

All Electric Logs Run

Micro
Sonic
Dual Induction
Density/Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Crossland 1-16
Doc ID	1052299

Tops

Name	Top	Datum
Top Anhydrite	1780	+534
Base Anhydrite	1826	+488
Topeka	3483	-1119
Heebner	3660	-1346
Toronto	3680	-1366
LKC	3694	-1380
BKC	3946	-1632
Marmaton	4051	-1737
Cherokee Shale	4103	-1789
Cherokee Sand	4148	-1834

RON NELSON

CONSULTING PETROLEUM GEOLOGIST
3322 LINCOLN DRIVE
HAYS, KANSAS 67601
PHONE: 785-628-3449

GEOLOGIC REPORT LOG

COMPANY Downing-Nelson Oil Co. Inc

WELL Crosslands #1-16

FIELD Wildcat

LOCATION 1710'FNL & 960'FWL

SEC 16 TWP. 13S RGE 22W

COUNTY Trego

STATE Kansas

OPERATOR DNOC

CONTRACTOR Discovery Drilling Rig #1

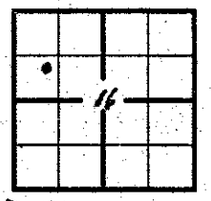
COMM: 1-31-11 COMP: 2-11-11

CASING RECORD

SURF: 8⅝"@223' PROD: 5½" None

TOTAL DEPTH DRILLERS: 4243'

TOTAL DEPTH LOG 4244'



PRODUCTION Oil

ELEVATION KB 2314'
DF
GL 2306'

Drilling Measured From: KB

Samples Saved From 3600 To: TD

Drilling Time From 3300 To: TD

Samples Examined From: 3600 To: TD

Geological Supervision From 3600 To Total Depth

Wellsite Geologist Ron Nelson

Electrical Surveys Superior Well Svc.
Dual Induction
Density-Neutron
Micro
Sonic

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB--SEA DATUM	STRUCTURAL POSITION
TOP ANHYDRITE	1780	1780	+534	+7
BASE ANHYDRITE	1826	1826	+488	+7
TOPEKA	3424	3423	-1119	+5
HEEBNER	3667	3660	-1346	+10
TORONTO	3681	3680	-1366	+8
LKC	3694	3694	-1380	+11
BKC	3943	3946	-1632	+10
MARMATON	4054	4051	-1737	+16
CHEROKEE SHALE	4105	4103	-1789	+14
CHEROKEE SAND	4149	4148	-1834	+12

REFERENCE WELL FOR STRUCTURE Mid-America Minerals #1 Dietz.
dry hole @ E/2-E/2-NW/4 16-13S-22W

DAILY PENETRATION

DATE	DEPTH

BIT RECORD

NO	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS

FORMATION	INTERVAL	DESCRIPTION OF SHOW	LOG ANALYSIS O	I	S W

DRILL STEM TESTS

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

REMARKS AND RECOMMENDATIONS WELL RAN AS SEISMIC EXPECTED, BUT NO DEVELOPMENT IN LKC & SAND. PLUGGED.

Ron Nelson

LEGEND

- Dolomite
- Chert
- Ool. Lime
- Limestone
- Carb sh
- Shale
- Sandstone
- Salt
- Anhydrite

REMARKS

OIL SHOWS

SAMPLE DESCRIPTIONS

LITHOLOGY

DEPTH 1750 1800

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Decreases
5" 10" 15" 20" 25"

TOP ANHYDRITE +634
LOG +537

NELSON-8

BASE ANHYDRITE +1182
Log +1188

1850

3300

50

3400

TOPEKA -1120
Log -1119

50

3500

50

3600

chky tan foss chky LS. NS. friable, gd ixyl & foss Ø

tan tot foss & chky Brn LS vgd Ø

DNS Brn fn xyln LS

mst md xyln mod DNS LS thin wh Brn pack LS

50

aa

Mississippian -1348
Log -1346

SH Blk carb

SH Brn, gry

Fr Conglo -1368
Log -1366

DNS wh mic xyln LS, pr ixyl Ø NS.

LKC -1380
Log -1380

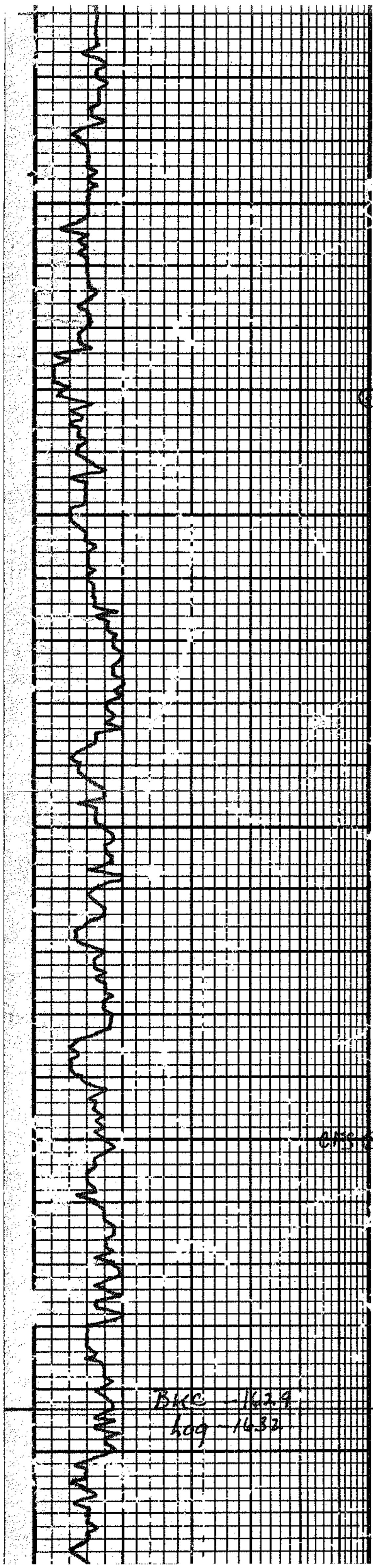
DK gry SH

3700

LS tan sandy foss chky in pt, gd int foss Ø, NS tan vfn xyln DNS pr ixyl Ø sm chky LS on top wh opckt

LS wh-tan mic xyln v dns

DST #3
STRADDLE
3720'-3761'



50

3800

50

CHS 3900

BKC -1629
Log -1632

50

Sh BLK CARB

v dk gry & grysh

Ls Brn-tan, sm v foss w/ gd int foss Ø stn, fr-gd, smt w/ ter xyln mod wh fn xyl Ø, sfo, od, fr sat, mst friable, sm blk hvy oil w/ rainbow shine

Shs gry Brn

Ls tan-lt gry v foss, oo l w/ gd int ool Ø, fr sfo, fr o d, fr Blk-Brn

Dk grysh

Ls tan-wh v foss in mosaic mod w/ gd int foss & int xyln Ø vg sfo, abdnt Brn stn fr-gd od, friable

Sh dk gry

Dolo wh-tan, chky in pt, sm foss w/ fr int foss & blk OD gd stn

Stn NSfo

Sh v dk gry

Dolo tan wh mosaic xyln, & dolo Ls fr ixyl Ø friable NS

Ls wh tan mic xyln v v dns pr Ø NS. wh-tan

mic xyl fos v v dns wh tan w/ op tan sh p cht

Sh BLK CARB

Sh v dk gry, Br, Brn

Ls tan 1-2 pcs s/foss mst fn xyln pr ixyl Ø NS.

Sh Blk CARB

Sh v dk gry

1-2 pcs chky tan Ls sctd foss NS. msh

Ls wh tan mic xyln v dns no app Ø NS

Sh BLK CARB v dk gry

Few pcs Ls tan tot ooc w/ gd ooc Ø, gd friable, sfo, no od, Blk ooc stn

trng mic xyln dns v pr Ø NS

Sh v dk gry

Ls tan 1-2 pcs w foss & fr-pr int foss Ø 1-2 pcs sctd spt Blk int foss stn NSfo no od

Sh BLK CARB

Ls tan-gry fn xyln pcs pr ixyl Ø

trng mic xyln & v dns

Sh BLK carb

Brn & grysh

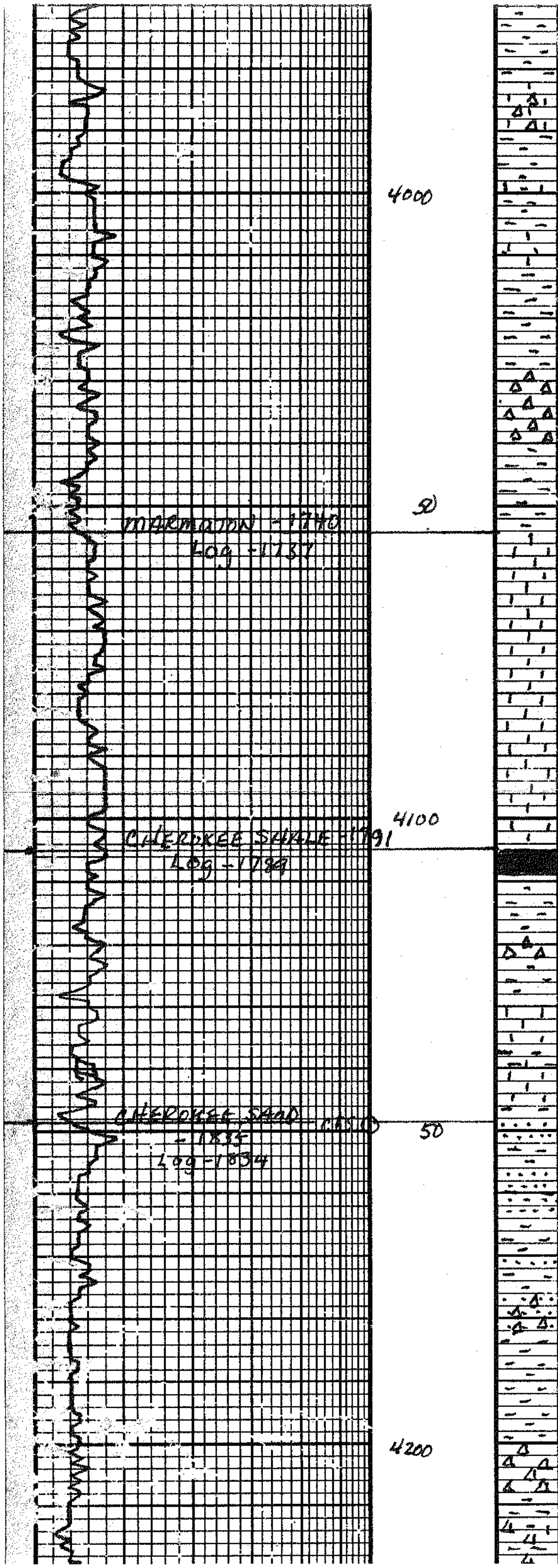
chky tan Ls NS.

Rd, gry, grnsh

DST #3
1st op 2 1/4" Blow
2nd op Dead
IFP 25-69
FFP 33-37
SIP 1174-1128
HP 1908-1753
Rec 45' VSOCM
2% oil 98% mud

DST #1
DST #1
3768'-3781'
45"-45"-45"-45"
1st op BOB 32"
2nd op 5 1/2" Blow
IFP 23-69
FFP 72-108
SIP 845-780
HP 1794-1750
Rec: 1' clean oil
189' mcw

DST #2
DST #2
3877'-3900'
45"-45"-45"-45"
1st op 6 1/2" Blow
2nd op 5" Blow
IFP 14-35
FFP 33-46
SIP 1127-1100
HP 1902-1841
Rec 65' VSOCMW
5% oil
20% mud
75% water



RD & Brn & gry sh

LS Brn-tan vfn xyln prixyl DNS w/ few pcs tan wh cht

RD sh

Smckky traces

gry & Brn sh

DNS tan micxyln LS pr Ø NS

RD & Brn sh

Sft gummy

orange cht

orange, tan cht

sh s v Dk gry gry Brn

LS tan micxyln/vuu DNS v pr Ø NS

LS a a NS.

LS a a w/ cht wh tan op orng shp frsh

Sm dolm tan LS w/ fn xyl Ø m/ v DNS tan-Brn LS & wh. op tan cht in

aa

Sh BLK CARB

Sh v Dk gry, Brn

w/ cht tan, Brn, orng

Sh BLU gry

LS gry Brn micxyln DNS pr Ø NS

Sh v Dk gry

LS Brn gry tan micxyln/vu DNS prixyl DNS

SS clstrs, loose, v fn grn tight pr intgrn Ø NS w/ gry sh

Sdy/ly gry SS, sm clr gtz grns clstrs w/ srtd, fn grn tight pr Ø NS.

Sh gry RD

glauconite fn grn SS clstrs Brn sh

tn-op cht w/o fn grn pr srtd SS clstrs sm fn mo unconsolidated clstrs ALL NS. NO OO NO Stn

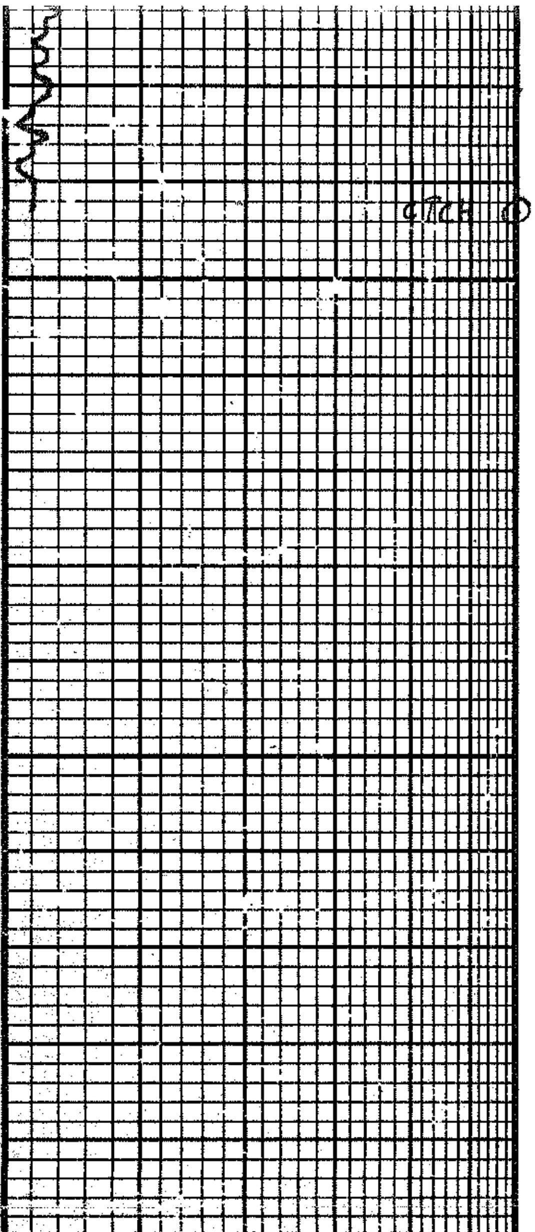
Sh S BLK CARB

v Dk gry

BRN

cht tan wh gry shp frsh NS.

w/ intbd shs gry Brn, RD



Depth	Sample Descriptions	Oil Shows	Remarks
	... BRN ALL NS.		
	aa most tan, ylwsh cht fw wh opaques.		
50			
	Ron Nelson		
4300			

DRILLING TIME Minutes/Foot — 5" 10" 15" 20" 25" — Rate of Penetration Decreases

DEPTH | LITHOLOGY | SAMPLE DESCRIPTIONS | OIL SHOWS | REMARKS

OPERATOR DNOCI
LEASE CROSSLAND #1-16 IP D&A
ELEVATION 2314'KB RTD 4243'

LOCATION 1710' FNL & 960' FWL
SEC 16 TWP 13S RNG 22W
COUNTY TREGO STATE KANSAS

DRILL STEM TEST REPORT

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41915 **DST#: 1**

Test Start: 2011.02.07 @ 21:30:50

GENERAL INFORMATION:

Formation: **KC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:44:20
Time Test Ended: 05:49:50

Test Type: Conventional Bottom Hole
Tester: Brett Dickinson
Unit No: 47

Interval: 3760.00 ft (KB) To 3781.00 ft (KB) (TVD)
Total Depth: 3781.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

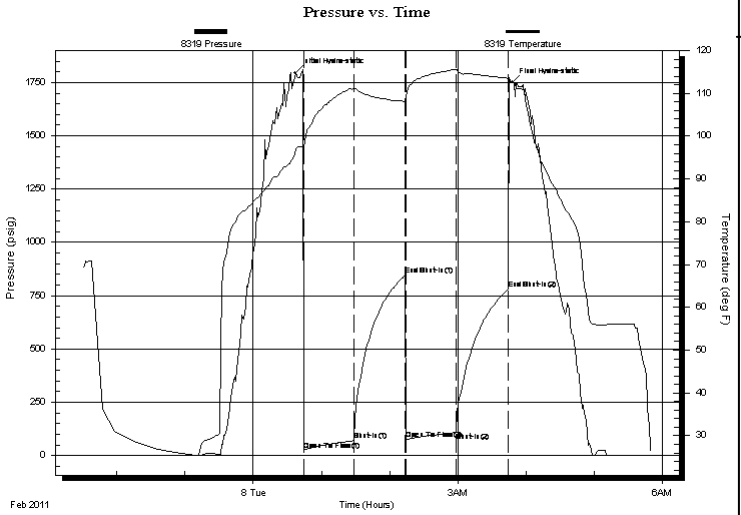
Reference Elevations: 2318.00 ft (KB)
2308.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8319 **Inside**

Press@RunDepth: 108.57 psig @ 3764.00 ft (KB)
Start Date: 2011.02.07 End Date: 2011.02.08
Start Time: 21:30:55 End Time: 05:49:49

Capacity: 8000.00 psig
Last Calib.: 2011.02.08
Time On Btm: 2011.02.08 @ 00:37:20
Time Off Btm: 2011.02.08 @ 03:47:50

TEST COMMENT: IF-BOB in 32min
ISI-No blow
FF-5.5in blow
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1794.71	96.80	Initial Hydro-static
7	23.21	97.40	Open To Flow (1)
51	69.89	111.16	Shut-In(1)
96	845.06	108.14	End Shut-In(1)
97	74.24	108.96	Open To Flow (2)
141	108.57	115.61	Shut-In(2)
187	780.69	113.53	End Shut-In(2)
191	1750.90	112.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	MCW 20%M 80%W	2.38
1.00	Free Oil	0.01

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41915 **DST#: 1**

Test Start: 2011.02.07 @ 21:30:50

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:	120000 ppm
Viscosity:	69.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.60 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

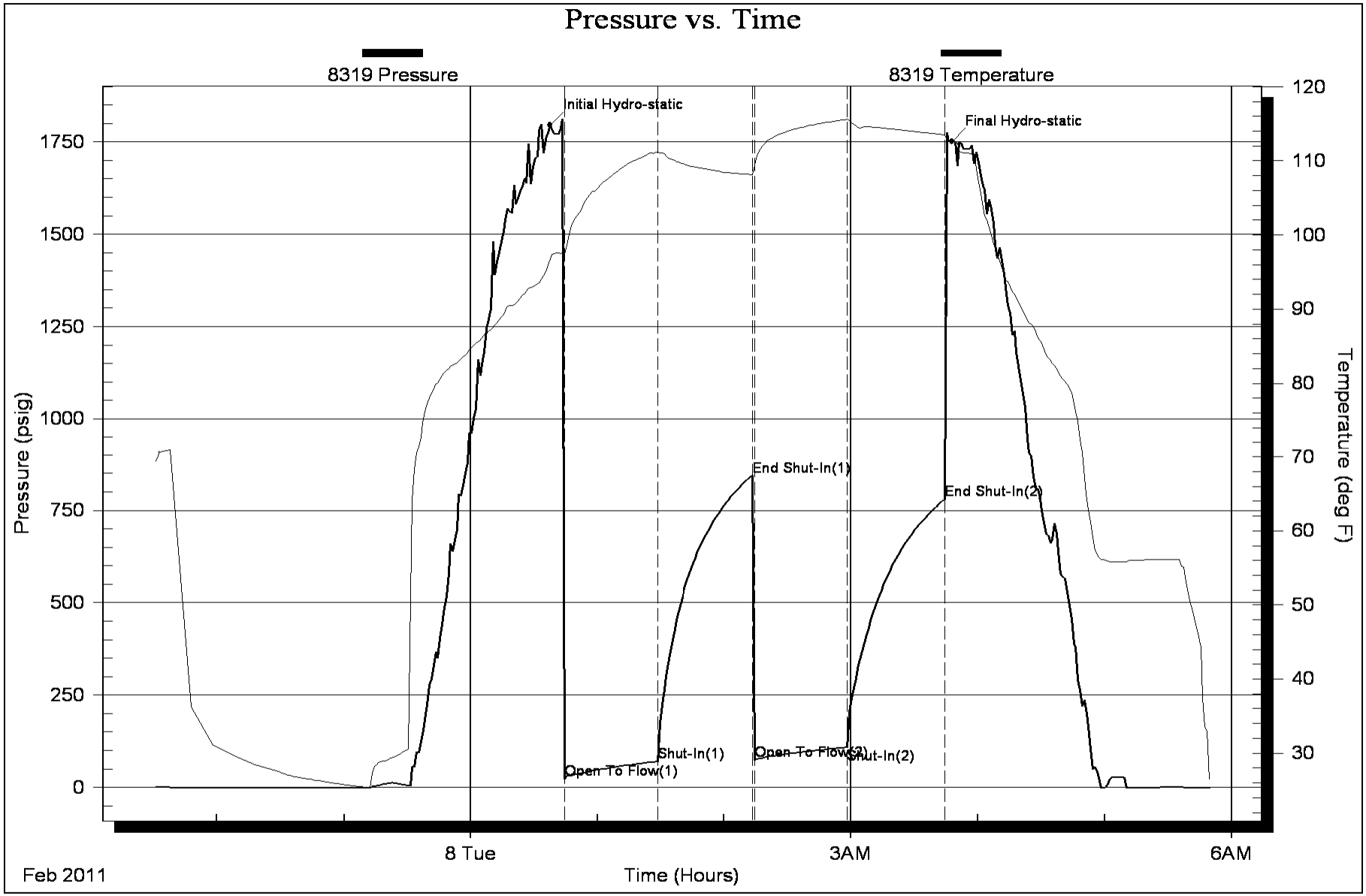
Length ft	Description	Volume bbl
189.00	MCW 20%M 80%W	2.378
1.00	Free Oil	0.014

Total Length: 190.00 ft Total Volume: 2.392 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
8319 Pressure
8319 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
120
110
100
90
80
70
60
50
40
30
8 Tue
3AM
6AM
Feb 2011
Time (Hours)

DRILL STEM TEST REPORT

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41916 **DST#: 2**

Test Start: 2011.02.08 @ 19:00:01

GENERAL INFORMATION:

Formation: **KC"K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:40:01
Time Test Ended: 02:47:01

Test Type: Conventional Bottom Hole
Tester: Brett Dickinson
Unit No: 47

Interval: 3877.00 ft (KB) To 3900.00 ft (KB) (TVD)
Total Depth: 3900.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

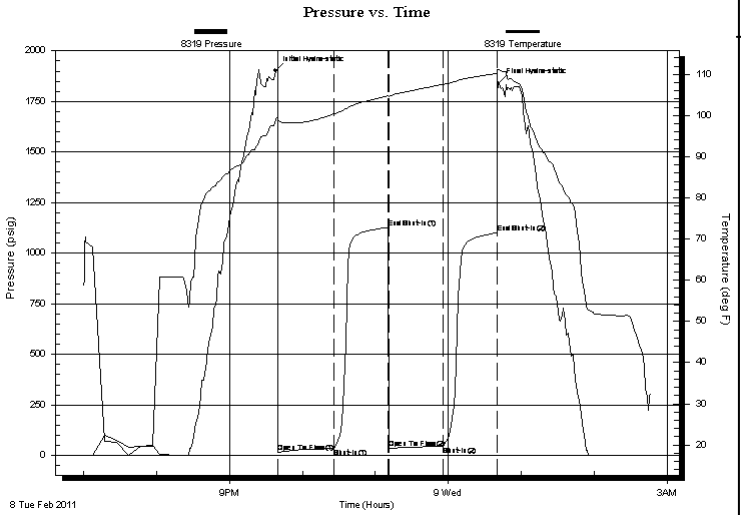
Reference Elevations: 2318.00 ft (KB)
2308.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8319 **Inside**

Press@RunDepth: 46.53 psig @ 3883.00 ft (KB)
Start Date: 2011.02.08 End Date: 2011.02.09
Start Time: 19:00:06 End Time: 02:47:00

Capacity: 8000.00 psig
Last Calib.: 2011.02.09
Time On Btm: 2011.02.08 @ 21:38:01
Time Off Btm: 2011.02.09 @ 00:41:31

TEST COMMENT: IF-6.5in blow
ISI-No blow
FF-5in blow
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1902.41	99.02	Initial Hydro-static
2	14.45	98.89	Open To Flow (1)
48	35.63	100.34	Shut-In(1)
93	1127.14	104.81	End Shut-In(1)
94	33.96	104.63	Open To Flow (2)
138	46.53	107.56	Shut-In(2)
182	1100.45	110.16	End Shut-In(2)
184	1841.88	111.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	VSOMCW 5%O 20%M 75%W	0.64

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41916 **DST#: 2**

Test Start: 2011.02.08 @ 19:00:01

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:	69.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.60 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

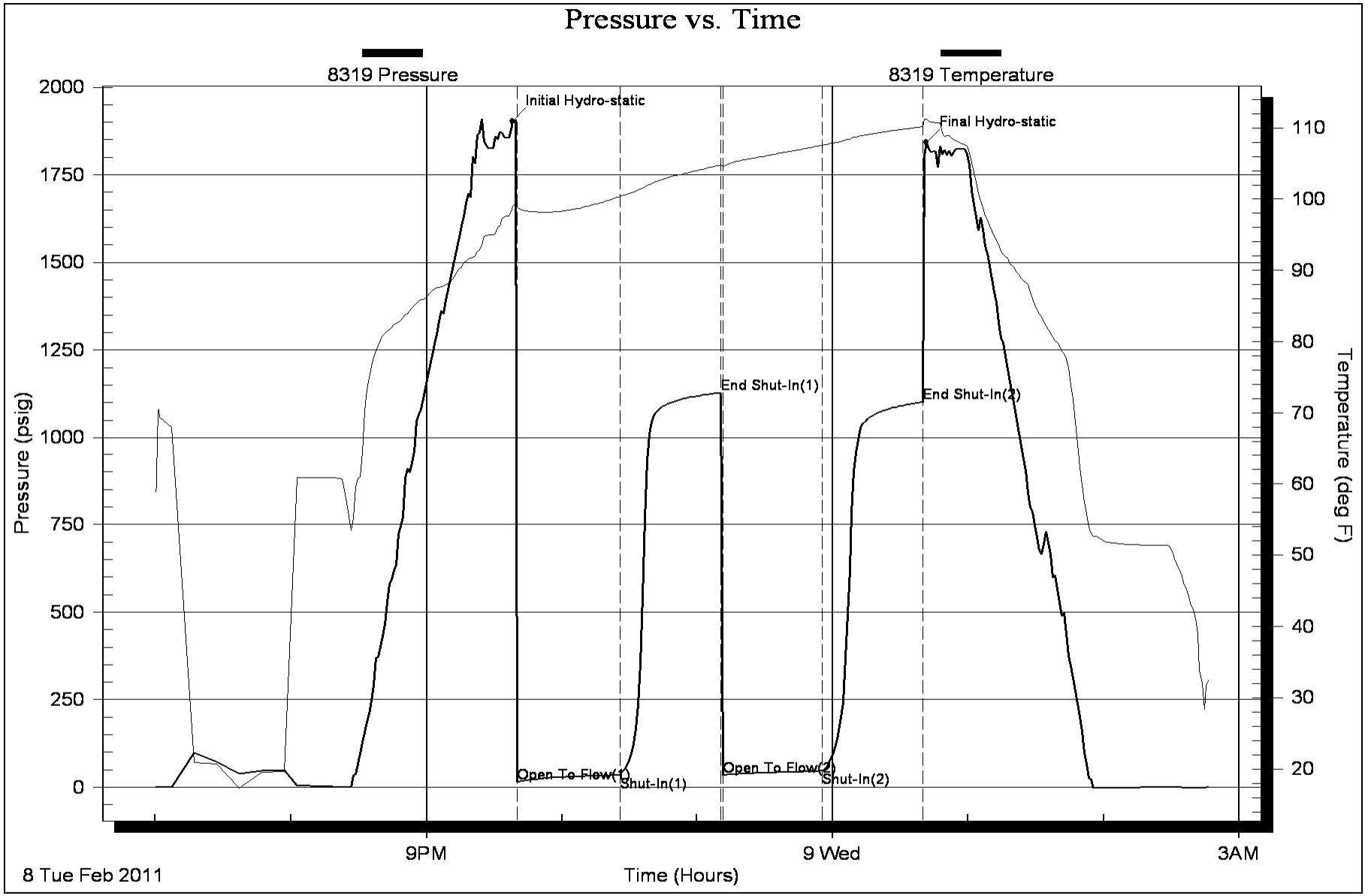
Length ft	Description	Volume bbl
65.00	VSOMCW 5%O 20%M 75%W	0.638

Total Length: 65.00 ft Total Volume: 0.638 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
8319 Pressure
8319 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
100
90
80
70
60
50
40
30
20
9PM
9 Wed
3AM
8 Tue Feb 2011
Time (Hours)

DRILL STEM TEST REPORT

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41917 **DST#: 3**

Test Start: 2011.02.10 @ 11:55:53

GENERAL INFORMATION:

Formation: **KC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:06:53
Time Test Ended: 18:44:23

Test Type: Conventional Straddle
Tester: Brett Dickinson
Unit No: 47

Interval: 3720.00 ft (KB) To 3761.00 ft (KB) (TVD)
Total Depth: 4244.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

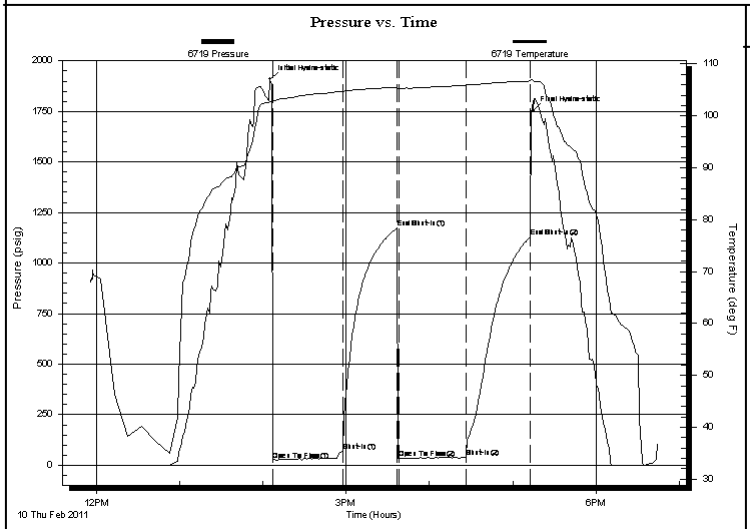
Reference Elevations: 2318.00 ft (KB)
2308.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6719 **Outside**

Press@RunDepth: 37.78 psig @ 3721.00 ft (KB)
Start Date: 2011.02.10 End Date: 2011.02.10
Start Time: 11:55:58 End Time: 18:44:22

Capacity: 8000.00 psig
Last Calib.: 2011.02.10
Time On Btm: 2011.02.10 @ 14:05:23
Time Off Btm: 2011.02.10 @ 17:14:53

TEST COMMENT: IF-2.25in blow died back to 2in
ISI-No blow
FF-surfaceblow died in 2min Flushtool surface blow died in 6min
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1908.52	102.73	Initial Hydro-static
2	25.25	102.54	Open To Flow (1)
53	69.85	104.71	Shut-In(1)
92	1174.70	105.53	End Shut-In(1)
93	33.51	105.25	Open To Flow (2)
141	37.78	105.90	Shut-In(2)
187	1128.54	106.73	End Shut-In(2)
190	1753.37	106.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	VSOCM 2%O 98%M	0.36

Gas Rates

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

DRILL STEM TEST REPORT

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41917 **DST#: 3**

Test Start: 2011.02.10 @ 11:55:53

GENERAL INFORMATION:

Formation: **KC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:06:53
Time Test Ended: 18:44:23

Test Type: Conventional Straddle
Tester: Brett Dickinson
Unit No: 47

Interval: 3720.00 ft (KB) To 3761.00 ft (KB) (TVD)
Total Depth: 4244.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

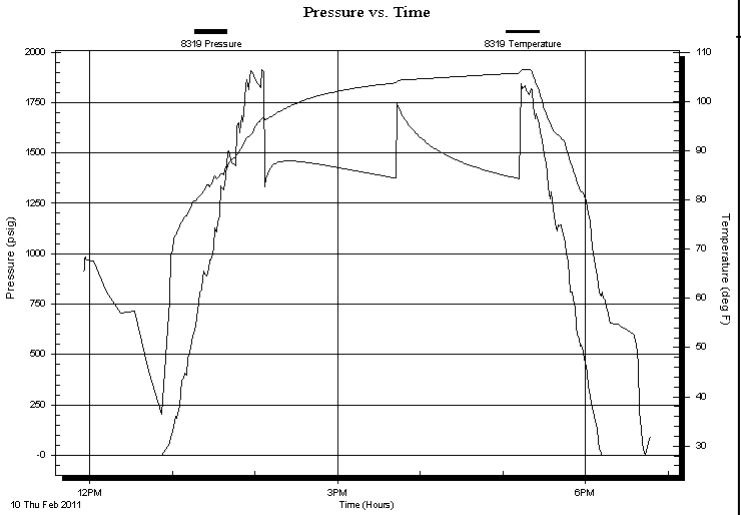
Reference Elevations: 2318.00 ft (KB)
2308.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8319 **Below (Straddle)**

Press@RunDepth: psig @ 3766.00 ft (KB)
Start Date: 2011.02.10 End Date: 2011.02.10
Start Time: 11:55:41 End Time: 18:47:05

Capacity: 8000.00 psig
Last Calib.: 2011.02.10
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-2.25in blow died back to 2in
ISI-No blow
FF-surfaceblow died in 2min Flushtool surface blow died in 6min
FSI-No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	VSOCM 2%O 98%M	0.36

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC Oil CO. Inc.

PO Box 372
Hays Ks 67601

ATTN:

Crossland 1-16

16-13-22,Trego, Ks

Job Ticket: 41917 **DST#: 3**

Test Start: 2011.02.10 @ 11:55:53

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:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

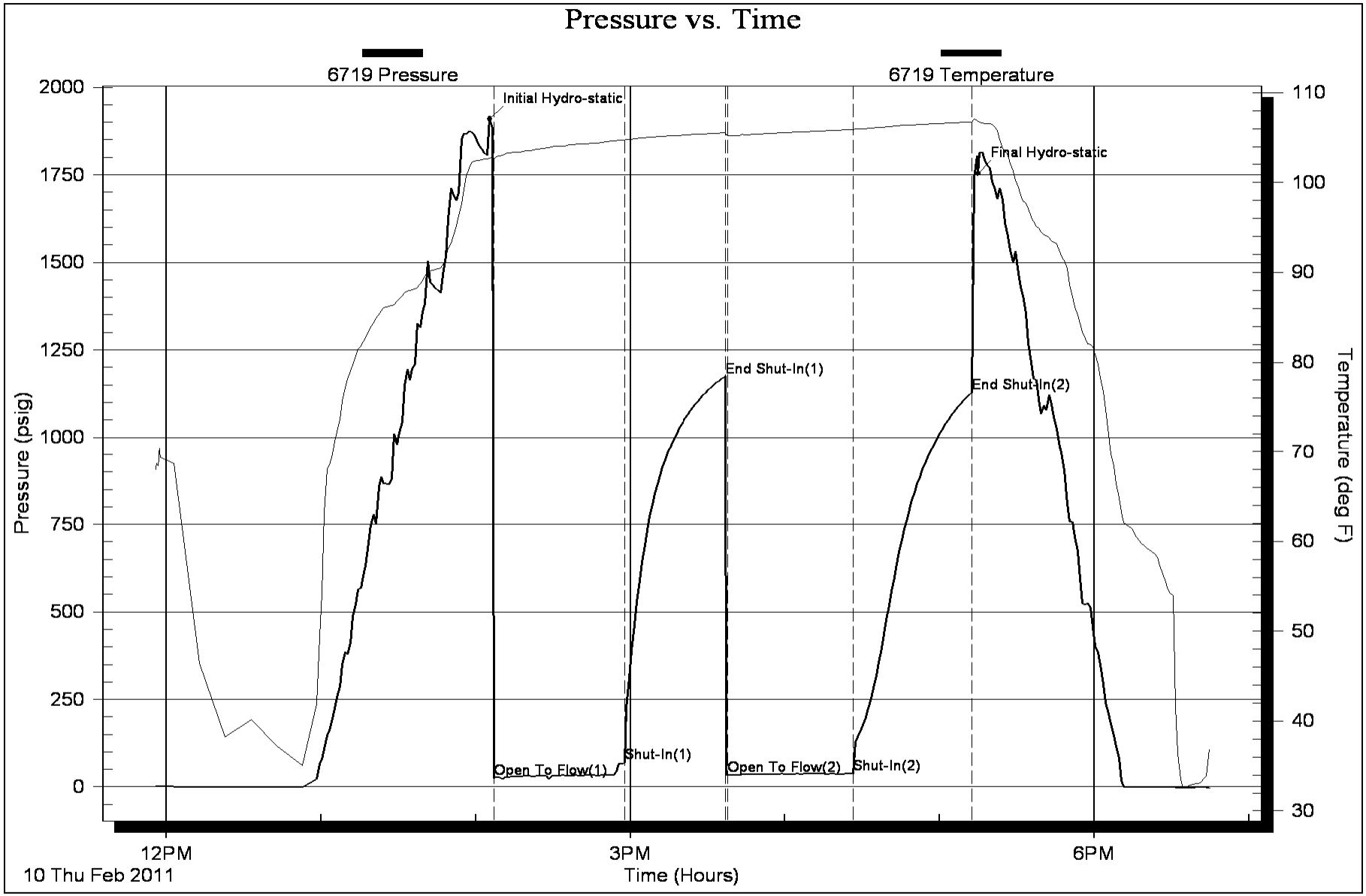
Length ft	Description	Volume bbl
45.00	VSOCM 2%O 98%M	0.358

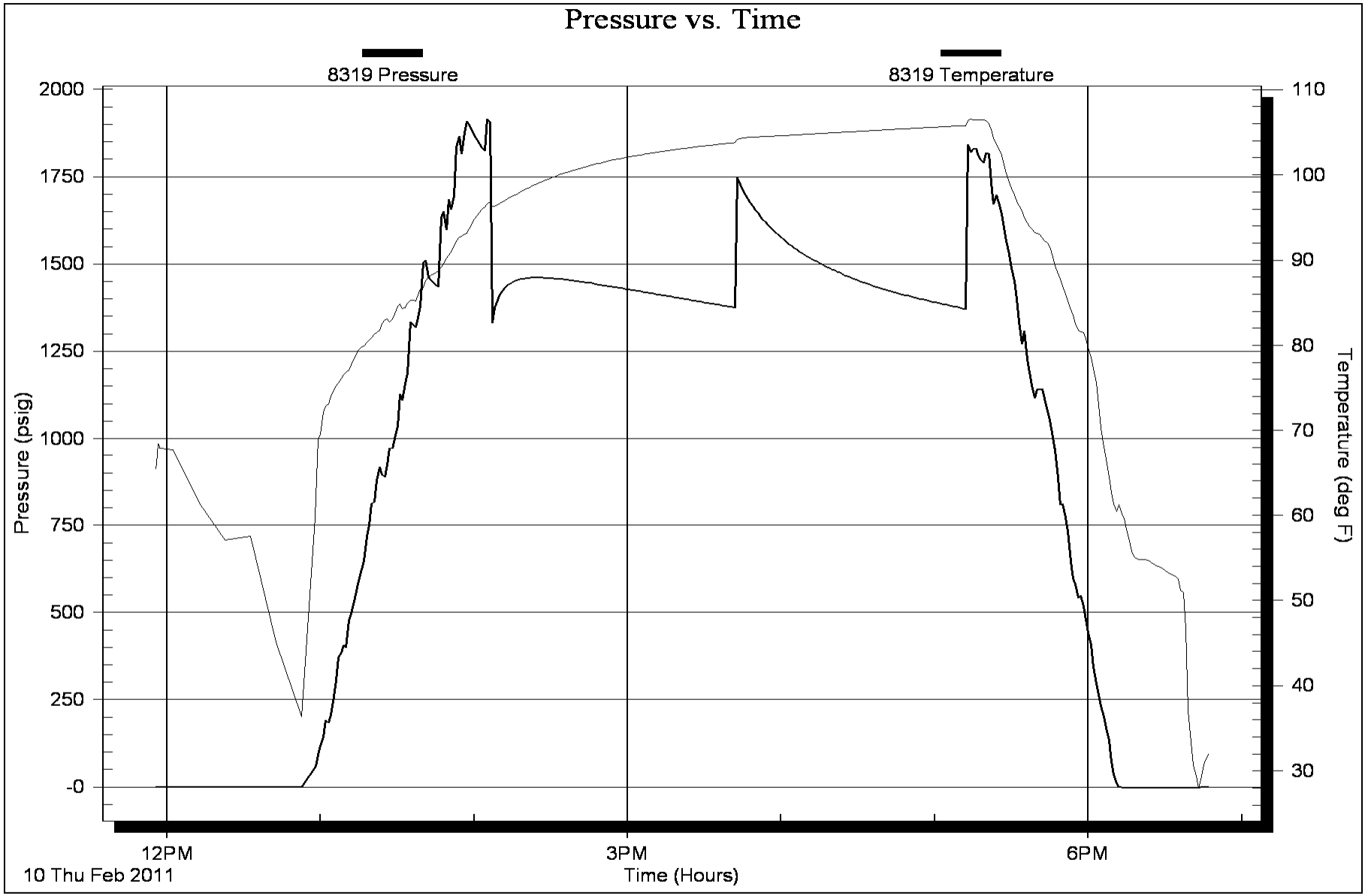
Total Length: 45.00 ft Total Volume: 0.358 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6719 Pressure
6719 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
100
90
80
70
60
50
40
30
12PM
3PM
6PM
10 Thu Feb 2011
Time (Hours)


Pressure vs. Time
8319 Pressure
8319 Temperature
2000
1750
1500
1250
1000
750
500
250
-0
Pressure (psig)
110
100
90
80
70
60
50
40
30
Temperature (deg F)
12PM
3PM
6PM
10 Thu Feb 2011
Time (Hours)

ALLIED CEMENTING CO., LLC. 034089

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Russell KS.

DATE 1-31-2011	SEC. 16	TWP. 13	RANGE 22	CALLED OUT	ON LOCATION	JOB START 9:00 PM	JOB FINISH 9:30 PM
LEASE CROSSLAND	WELL # 1-16		LOCATION OGALLAH KS. 3S 2W 1 3/4S 1/4E			COUNTY Trego	STATE KANSAS
OLD OR (NEW) (Circle one)							

CONTRACTOR Discovery DRLG Rig #1
TYPE OF JOB SURFACE
HOLE SIZE 12 1/4 T.D. 224'
CASING SIZE 8 5/8 NEW DEPTH 224
TUBING SIZE 23 #CSG DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT 13 1/4 /BBL

OWNER

CEMENT
AMOUNT ORDERED 150sx Com.
2% Gel
3% CC

EQUIPMENT

PUMP TRUCK CEMENTER Glenn
417 HELPER Ron
BULK TRUCK
410 DRIVER Woody - Nick
BULK TRUCK
DRIVER

COMMON	150	@ 13.50	2025.00
POZMIX		@	
GEL	3	@ 20.25	60.75
CHLORIDE	5	@ 51.50	252.50
ASC		@	
HANDLING	158	@ 2.25	337.50
MILEAGE	10/sk/mile		450.00
		TOTAL	3130.25

REMARKS:

Ran 5 JT's 23 #CSG. Set @ 224
Cement w/ 150 sx Com 3% 2, Displace 13 1/4 BBL H2O. & Shut IN @ 300#
Cement Did Circulate To Surface!
THANK'S

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			991.00
EXTRA FOOTAGE		@	
MILEAGE	30	@ 7.00	210.00
MANIFOLD		@	
		@	
		@	
		TOTAL	1201.00

CHARGE TO: Downing & Nelson Oil
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or

ALLIED CEMENTING CO., LLC. 038691

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Great Bend KS

DATE 2-10-11 (2-11-11?)	SEC. 16	TWP. 13	RANGE 22 W	CALLED OUT	ON LOCATION	JOB START 2:15 AM	JOB FINISH 3:15 AM
LEASE Crossland	WELL # 1-16		LOCATION Osgall 3 South 2 West			COUNTY T-ego	STATE KS
OLD OR NEW (Circle one)			1 3/4 South ~~West~~ East into				

CONTRACTOR Discovery Rig 1
TYPE OF JOB Rotary Plug
HOLE SIZE 7 3/8 T.D. ~~4600~~ 4243
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH 1800
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT 1

OWNER Downing & Nelson Oil Co

CEMENT

AMOUNT ORDERED 220 SX 60/40 4% Gel
1/4 # Flo Seal

EQUIPMENT

PUMP TRUCK CEMENTER Wayne - D
366 HELPER Bob - Gary
BULK TRUCK
341 DRIVER Kevin -
BULK TRUCK
DRIVER

COMMON	132	@ 13.50	1782.00
POZMIX	88	@ 7.55	664.40
GEL	8	@ 20.25	162.00
CHLORIDE		@	
ASC		@	
Flo Seal	55#	@ 2.45	134.75
HANDLING	220	@ 2.25	495.00
MILEAGE	220 x 30 x .10		660.00
		TOTAL	3898.15

REMARKS:

1st Plug 1800 mix 25 SX
2nd plug 900 mix 100 SX
3-d plug 275 mix 40 SX
4th plug 40 mix 10 SX
Rat mix 30 SX
Mouse mix 15 SX

SERVICE

DEPTH OF JOB 1800
PUMP TRUCK CHARGE 991.00
EXTRA FOOTAGE @
MILEAGE 30 @ 7.00 210.00
MANIFOLD @
@
@

TOTAL 1201.00

CHARGE TO: Downing + Nelson Oil Co.
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@
@
@
@
@

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or