KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1131539

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 + __ __ __ __
Contact Person: Ron Nelson
Phone: (785) 621-2610
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Marc Downing
Purchaser: Coffeyville Resources

Designate Type of Completion:

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

- [x] 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 #:

03/23/2013	03/29/2013	03/30/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-165-22008-00-00
Spot Description:
NW - NE - SW - SW Sec. 33 Twp. 17 S. R. 18 [ ] East [x] West
1075 Feet from [ ] North / [x] South Line of Section
725 Feet from [ ] East / [x] West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- [ ] NE
- [ ] NW
- [ ] SE
- [x] SW

County: Rush
Lease Name: Pivonka Trust Well #: 1-33
Field Name:
Producing Formation: LKC
Elevation: Ground: 2085 Kelly Bushing: 2093
Total Depth: 3911 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1259 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: 22000 ppm Fluid volume: 400 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:**
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] **I** [ ] **II** [ ] **III** **Approved by:** Deanna Garrison **Date:** 05/30/2013

Side Two

[redacted]

1131539

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Pivonka Trust Well #: 1-33

Sec. 33 Twp. 17 S. R. 18 ☐ East ☑ West County: Rush

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	12.25	8.625	23	1259	Common	450	2% Gel & 3% CC
Production casing	7.875	5.5	14	3907.05	EA/2	125	

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
4	3494' - 3499'	250 gallons 15% Mud Acid	3494' - 3499'
		500 gallons 20% Mud Acid	3494' - 3499'
		750 gallons 20% NE	3494' - 3499'

TUBING RECORD: Size: 2.375 Set At: 3874' Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 04/25/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	45	0	0		

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	Pivonka Trust 1-33
Doc ID	1131539

All Electric Logs Run

Micro
Sonic
Dual Indcution
Compensated Density Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Pivonka Trust 1-33
Doc ID	1131539

Tops

Name	Top	Datum
Top Anhydrite	1250'	+843
Base Anhydrite	1283'	+810
Topeka	3189'	-1096
Heebner	3422'	-1329
Toronto	3442'	-1349
LKC	3469'	-1376
BKC	3737'	-1644
Marmaton	3796'	-1703
Arbuckle	3868'	-1775

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 6595

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-24-13	33	17	18	Rush	KS		12:45 AM

Location Lacrosse 1W 3/4S E into

Lease Pivonka Well No. 1-33

Owner

Contractor Discovery 4

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job Surface

Hole Size 12 1/4 T.D. 1259

Csg. 8 5/8 Depth 1259

Charge To Downing - Nelson

Tbg. Size Depth

Street

Tool Depth

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 30 ft Shoe Joint 30 ft

Cement Amount Ordered 450 Com 3% CC 2% Gel

Meas Line Displace 78 1/4 BBL

Common 450

EQUIPMENT

Pumptrk 5 No. Cementer Matt
Helper

Bulktrk 12 No. Driver Brett
Driver

Bulktrk pu No. Driver Heath
Driver

Poz. Mix

Gel. 9

Calcium 16

JOB SERVICES & REMARKS

Hulls

Remarks:

Salt

Rat Hole

Flowseal

Mouse Hole

Kol-Seal

Centralizers

Mud CLR 48

Baskets

CFL-117 or CD110 CAF 38

D/V or Port Collar

Sand

Handling 475

Cement did Circulate

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Acid Washed Rotated Into Bottom

Baffle plate

Rubber plug

Pumptrk Charge Long Surface

Mileage 37

Tax

Discount

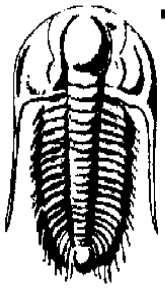
Total Charge

X Signature

JOB LOG — **SWIFT Services, Inc.** — DATE 3-30-13 — PAGE NO.

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
Downing Nelson	1-33	Pivonka	5½ Longstring	24035

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0530							on location
								TD 3911 SS 21
								TP 3907 Insert 3886
								5½ x 14#
								Centralizers 1, 3, 5, 7, 9, 11
								Basket 6
	0615							Start Casing
	0745							Drop Ball circulate Rotate
	0830		7/5					Play RH 30 SKS MH 20 SKS
	0845	5	12		✓		300	Start Mud Flush
		5	20		✓		300	Start KCL Flush
	0855	5	30		✓		200	Start Cement
	0909				✓			Drop Plug
								Wash out Pump + Lines
	0910	6			✓			Start Displacement
	0930		94.8		✓	~~700~~ 1500		Land Plug
								Release Psy
	0940							Wash up Rack up
	1015							Job Complete
								Thank You
								Josh, Brian, Rob



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co Inc**

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

Pivonka #1-33

33-17s-18w Rush,KS

Start Date: 2013.03.28 @ 07:25:45
End Date: 2013.03.28 @ 14:08:09
Job Ticket #: 52553 DST #: 1

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

Printed: 2013.04.02 @ 09:46:33

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

33-17s-18w Rush,KS

Pivonka #1-33

Job Ticket: 52553 **DST#: 1**

Test Start: 2013.03.28 @ 07:25:45

GENERAL INFORMATION:

Formation: **LKC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:34:25
Time Test Ended: 14:08:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schw ager
Unit No: 42

Interval: 3480.00 ft (KB) To 3508.00 ft (KB) (TVD)
Total Depth: 3508.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

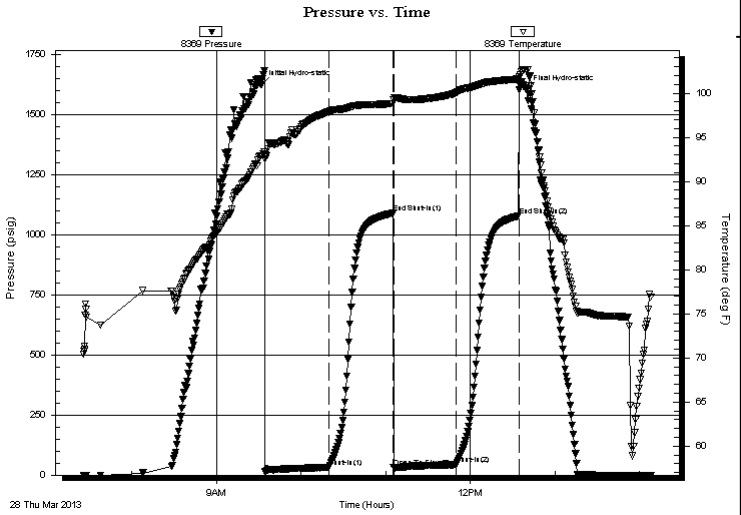
Reference Elevations: 2093.00 ft (KB)
2085.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Inside**

Press@RunDepth: 43.57 psig @ 3485.00 ft (KB)
Start Date: 2013.03.28 End Date: 2013.03.28
Start Time: 07:25:45 End Time: 14:08:09

Capacity: 8000.00 psig
Last Calib.: 2013.03.28
Time On Btm: 2013.03.28 @ 09:31:55
Time Off Btm: 2013.03.28 @ 12:39:39

TEST COMMENT: 45-IFP-w k to strg in 18 min, started 1/2" bl
45-ISIP-no bl bk
45-FFP-fr to strg in 11 min , started 4" bl
45-FSIP-very w k surface bl bk , end of shut-in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1623.23	92.90	Initial Hydro-static
3	13.57	92.53	Open To Flow (1)
48	32.34	97.92	Shut-In(1)
93	1088.81	98.84	End Shut-In(1)
94	32.99	99.24	Open To Flow (2)
138	43.57	100.05	Shut-In(2)
183	1076.48	101.61	End Shut-In(2)
188	1604.39	102.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	665'GIP	0.00
60.00	HO&GCM 20%G30%O50%M	0.57
20.00	CO	0.28

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

33-17s-18w Rush,KS

Pivonka #1-33

Job Ticket: 52553 **DST#: 1**

Test Start: 2013.03.28 @ 07:25:45

GENERAL INFORMATION:

Formation: **LKC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:34:25
Time Test Ended: 14:08:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schw ager
Unit No: 42

Interval: 3480.00 ft (KB) To 3508.00 ft (KB) (TVD)
Total Depth: 3508.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

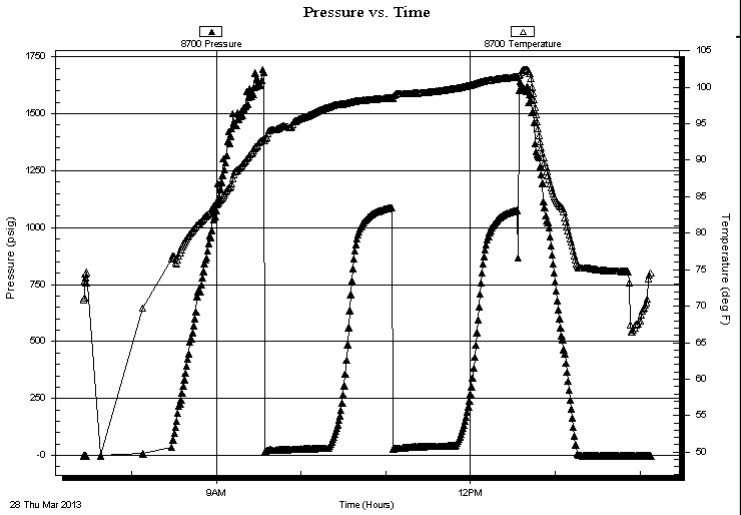
Reference Elevations: 2093.00 ft (KB)
2085.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3485.00 ft (KB)
Start Date: 2013.03.28 End Date: 2013.03.28
Start Time: 07:26:15 End Time: 14:07:24

Capacity: 8000.00 psig
Last Calib.: 2013.03.28
Time On Btm:
Time Off Btm:

TEST COMMENT: 45-IFP-w k to strg in 18 min, started 1/2" bl
45-ISIP-no bl bk
45-FFP-fr to strg in 11 min , started 4" bl
45-FSIP-very w k surface bl bk , end of shut-in



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	665'GIP	0.00
60.00	HO&GCM 20%G30%O50%M	0.57
20.00	CO	0.28

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

33-17s-18w Rush,KS

Pivonka #1-33

Job Ticket: 52553 **DST#: 1**

Test Start: 2013.03.28 @ 07:25:45

Tool Information

Drill Pipe:	Length:	3446.00 ft	Diameter:	3.80 inches	Volume:	48.34 bbl	Tool Weight:		2200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	48.49 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		17.00 ft					String Weight:	Initial	50000.00 lb
Depth to Top Packer:		3480.00 ft						Final	51000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		28.00 ft							
Tool Length:		49.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3460.00		
Shut In Tool	5.00			3465.00		
Hydraulic tool	5.00			3470.00		
Packer	5.00			3475.00	21.00	Bottom Of Top Packer
Packer	5.00			3480.00		
Stubb	1.00			3481.00		
Perforations	4.00			3485.00		
Recorder	0.00	8369	Inside	3485.00		
Recorder	0.00	8700	Outside	3485.00		
Perforations	20.00			3505.00		
Bullnose	3.00			3508.00	28.00	Bottom Packers & Anchor
Total Tool Length:	**49.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

33-17s-18w Rush,KS

Pivonka #1-33

Job Ticket: 52553 **DST#: 1**

Test Start: 2013.03.28 @ 07:25:45

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	38 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

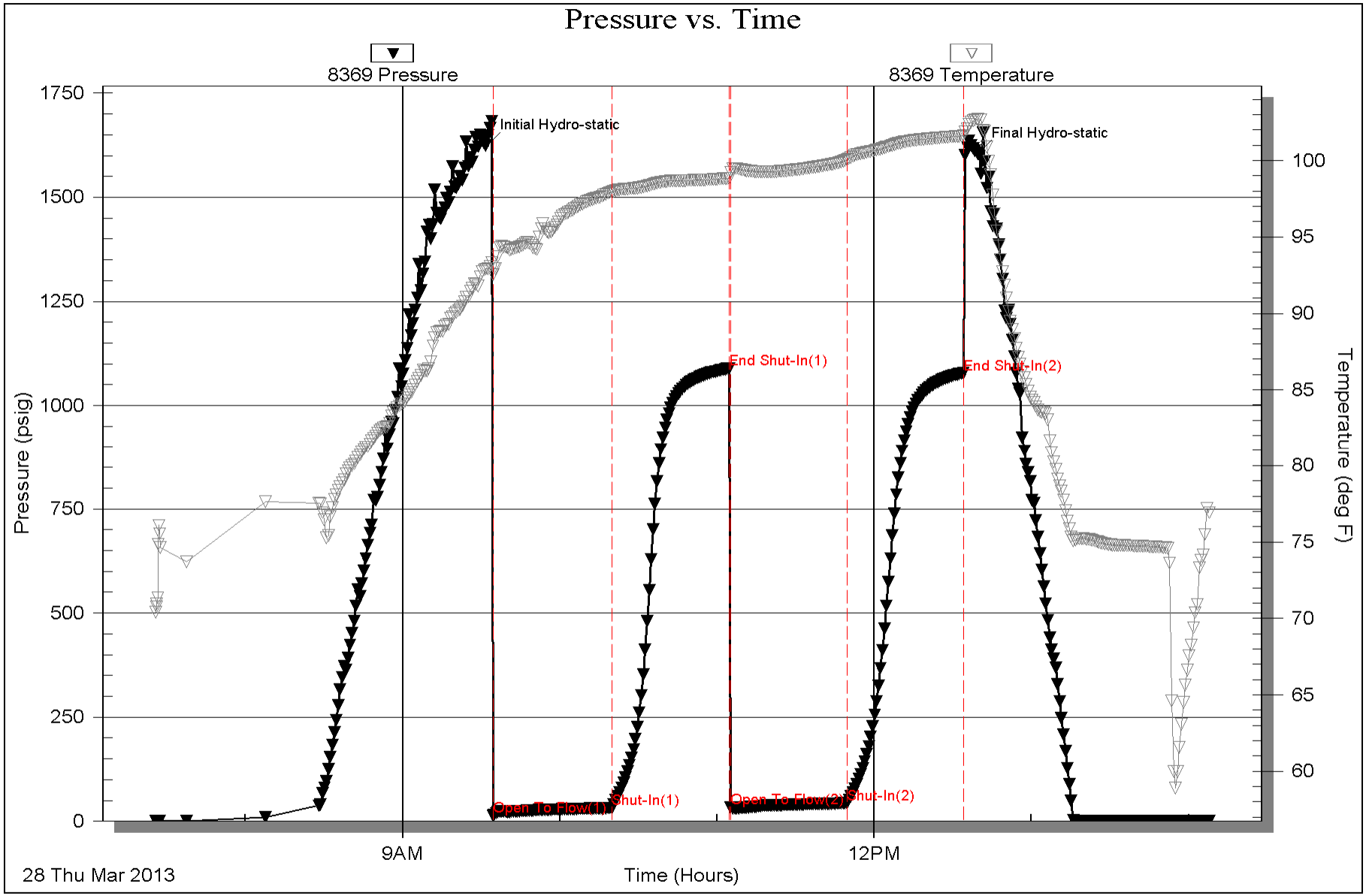
Recovery Table

Length ft	Description	Volume bbl
0.00	665'GIP	0.000
60.00	HO&GCM 20%G30%O50%M	0.568
20.00	CO	0.281

Total Length: 80.00 ft Total Volume: 0.849 bbl

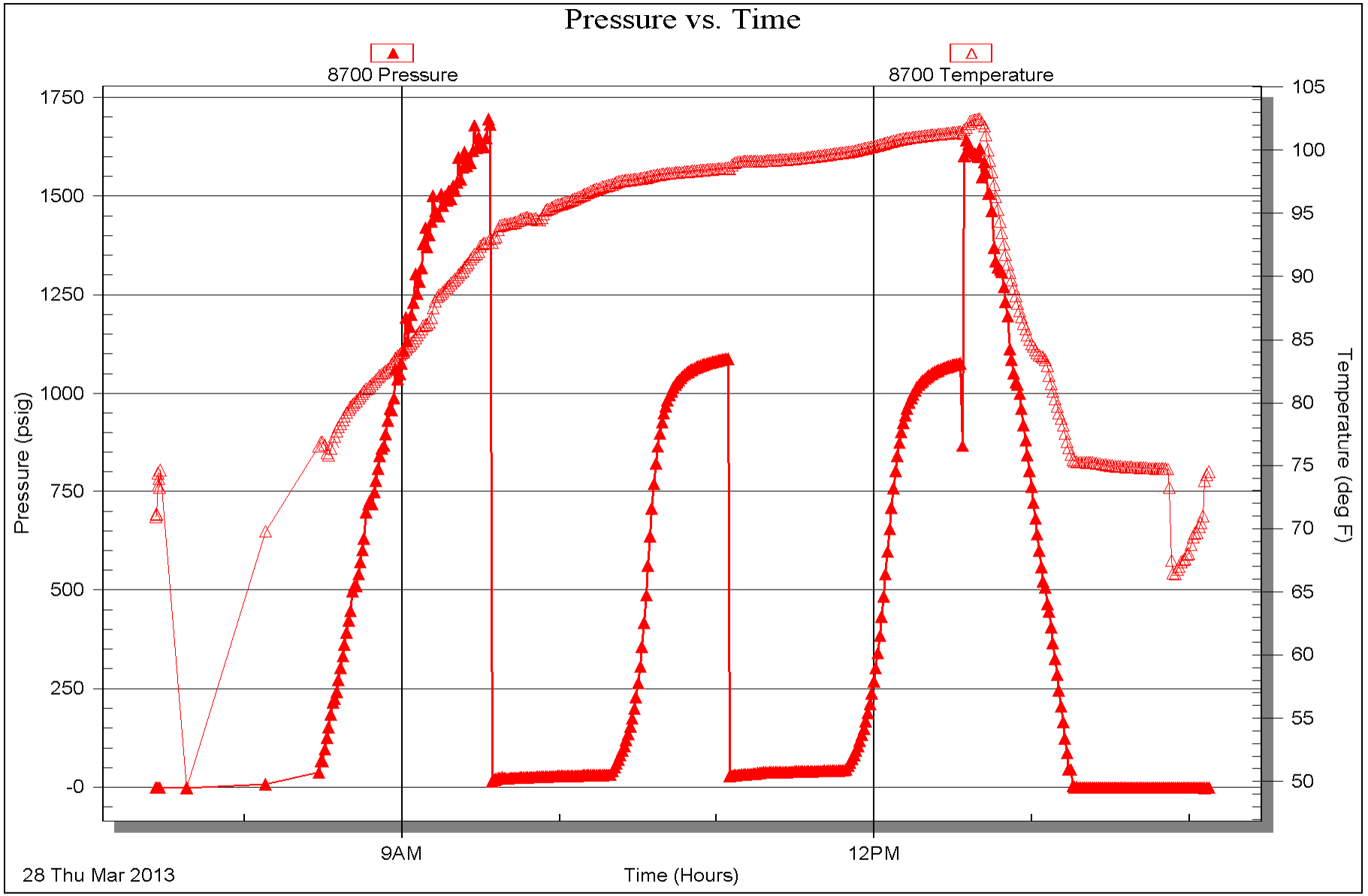
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369 **Inside** Dow ning-Nelson Oil Co Inc Pivonka #1-33 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 52553 Printed: 2013.04.02 @ 09:46:35

Serial #: 8700 **Outside** Dow ning-Nelson Oil Co Inc Pivonka #1-33 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 52553 Printed: 2013.04.02 @ 09:46:36

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52553

Well Name & No. Pivon KA #1-33 Test No. 1 Date 3-28-13

Company Downing-Nelson Oil Co Inc Elevation 2093 KB 2085 GL

Address PO Box 1019 Hays, Ks 67601

Co. Rep / Geo. Marc Downing Rig Discovery rig 4

Location: Sec. 33 Twp. 17S Rge. 18W Co. Rush State Ks

Interval Tested 3480-3508 Zone Tested LKC "C"

Anchor Length 28 Drill Pipe Run 3446 Mud Wt. 8.8

Top Packer Depth 3475 Drill Collars Run 30 Vis 50

Bottom Packer Depth 3480 Wt. Pipe Run - WL 7.6

Total Depth 3508 Chlorides 3500 ppm System LCM 3#

Blow Description IFP - Weak To Strong in 18min started ½"
ISIP - No Blow
FFP - Fair To Strong in 11min started 4"
FSIP - Very weak surface Blow Blow, end of shut-in

Rec 665	Feet of GIP	%gas	%oil	%water	%mud
Rec 20	Feet of CO	%gas	%oil	%water	%mud
Rec 60	Feet of HO+GCM	20 %gas	30 %oil	%water 50	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 80 BHT 101 Gravity 38 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1623	☑ Test 1150	T-On Location 0555
(B) First Initial Flow 13	☐ Jars	T-Started 0725
(C) First Final Flow 32	☐ Safety Joint	T-Open 0935
(D) Initial Shut-In 1088	☐ Circ Sub	T-Pulled 1235
(E) Second Initial Flow 32	☐ Hourly Standby	T-Out 1408
(F) Second Final Flow 43	☑ Mileage 55RT 85.25	Comments
(G) Final Shut-In 1076	☐ Sampler	
(H) Final Hydrostatic 1604	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 45	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 45	☐ Extra Recorder	Sub Total 0
Final Flow 45	☐ Day Standby	Total 1235.25
Final Shut-In 45	☐ Accessibility	MP/DST Disc't
	Sub Total 1235.25	

Approved By Our Representative Ray Schwager Thank you

4/10

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52167

Well Name & No. Pivonka #1-33 Test No. _____ Date 3-29-13

Company Downing - Nelson Oil Co Inc Elevation _____ KB _____ GL

Address _____

Co. Rep / Geo. Marc Downing Rig Discovery #4

Location: Sec. 33 Twp. 17s Rge. 18w Co. Rush State KS

Interval Tested _____ Zone Tested _____

Anchor Length _____ Drill Pipe Run _____ Mud Wt. _____

Top Packer Depth _____ Drill Collars Run _____ Vis _____

Bottom Packer Depth _____ Wt. Pipe Run _____ WL _____

Total Depth _____ Chlorides _____ ppm System LCM _____

Blow Description Picked up tools @ 3-29-13 @ 3:00pm

Rec _____ Feet of _____ %gas %oil %water %mud

Rec _____ Feet of _____ %gas %oil %water %mud

Rec _____ Feet of _____ %gas %oil %water %mud

Rec _____ Feet of _____ %gas %oil %water %mud

Rec _____ Feet of _____ %gas %oil %water %mud

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

(A) Initial Hydrostatic _____

(B) First Initial Flow _____

(C) First Final Flow _____

(D) Initial Shut-In _____

(E) Second Initial Flow _____

(F) Second Final Flow _____

(G) Final Shut-In _____

(H) Final Hydrostatic _____

Initial Open _____

Initial Shut-In _____

Final Flow _____

Final Shut-In _____

- ☐ Test _____
- ☐ Jars _____
- ☐ Safety Joint _____
- ☐ Circ Sub _____
- ☐ Hourly Standby _____
- ☒ Mileage 55RT 85.25
- ☐ Sampler _____
- ☐ Straddle _____
- ☐ Shale Packer _____
- ☐ Extra Packer _____
- ☐ Extra Recorder _____
- ☒ Day Standby ~~over 24 hrs~~
- ☐ Accessibility _____

Sub Total 85.25

T-On Location _____

T-Started _____

T-Open _____

T-Pulled _____

T-Out _____

Comments _____

- ☐ Ruined Shale Packer _____
- ☐ Ruined Packer _____
- ☐ Extra Copies _____

Sub Total _____

Total 85.25

MP/DST Disc't _____

Approved By _____ Our Representative Cody B

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 Pivonka Trust #1-33

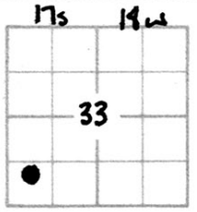
FIELD Wildcat

LOCATION 1075' FSL + 725' FWL

SEC. 33 TWP. 17s RGE. 18w

COUNTY Rush

STATE Kansas



PRODUCTION LKC

ELEVATION KB 2093
DF
GL 2095

Drilling Measured From: KB

Samples Saved From 3400 To: TD
Drilling Time From 3150 To: TD
Samples Examined From 3400 To: TD
Geological Supervision From 3150 To Total Depth
Wellsite Geologist Marc Downing
Electrical Surveys Nabors
CNL/CDL - DIL
MEL - Sonic

OPERATOR DNOCI
CONTRACTOR Discovery Drilling, Rig #4
COMM: 3-23-13 COMP: 3-29-13

CASING RECORD

SURF: 8 5/8" @ 1259' PROD: 5 1/2" @ 3910'
TOTAL DEPTH DRILLERS: 3911'
TOTAL DEPTH LOG: 3913'

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
Top Anhydrite	1249	1250	+843	+10
Base Anhydrite	1285	1283	+810	NA
Topeka	3189	3189	-1096	NA
HEEBNER	3421	3422	-1329	+4
Toronto	3442	3442	-1349	+5
LKC	3468	3469	-1376	+5
BKC	3737	3737	-1644	+7
Marmaton	3796	3796	-1703	+1
Arbuckle	3867	3868	-1775	+2

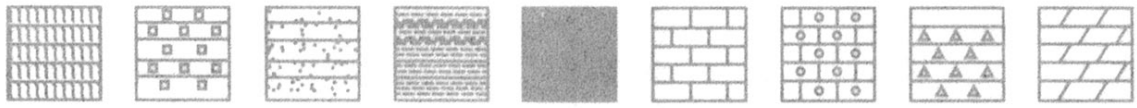
REFERENCE WELL FOR STRUCTURE Rains + Williamson Oil Co.
Downs-Pivonka #1 SE-NW-SW Sec. 33-17s-18w

DRILL STEM TESTS

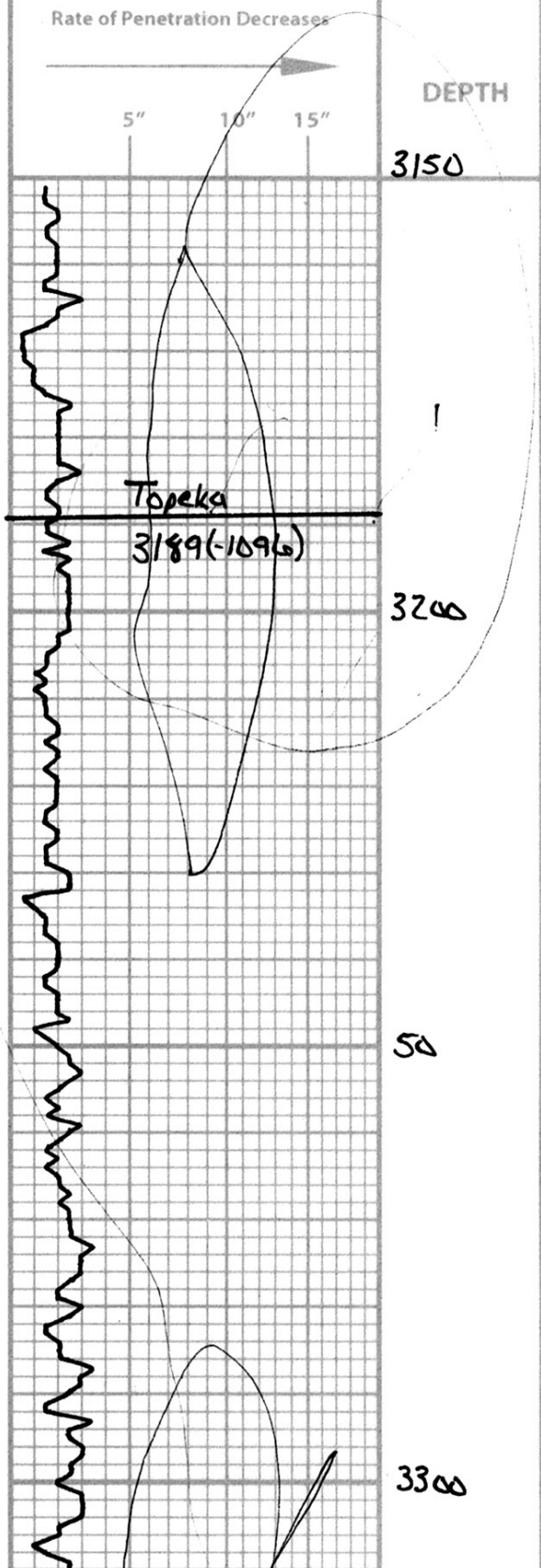
No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IHP-FHP	RECOVERY

REMARKS AND RECOMMENDATIONS

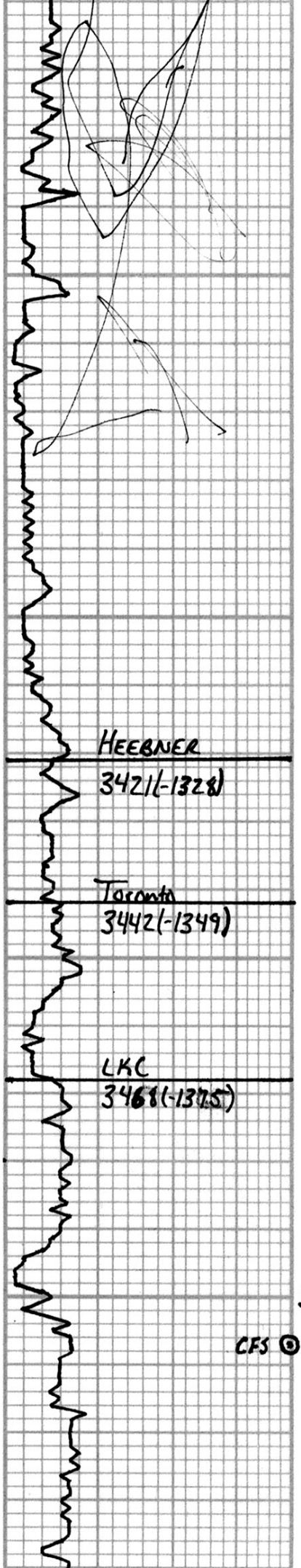
LEGEND



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



DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
3150				
3200				
50				
3300				



Sh: Black Carb

Sh: gry

LS: wht, md xln wl lrg foss. Trng fnxln, chlky in prt. All NS.

Sh: lt gry wl brn

LS: wht, fn-md xln. Few pcs wl oocsx, mostly tite & dns. All NS.

DST #1

Sh: gry wl brn

LS: cont-lt tan, ool, sltly sme mtx. gd oocsx, friable. gd lt brn sat stn wl gd SFO, gssy in prt. gd rnbow stn throughout. gd Od, Free oil on cup.

Sh: gry

LS: wht, fn-vfn xln, poss, tite. All NS wl No Od.

Sh: Black Carb

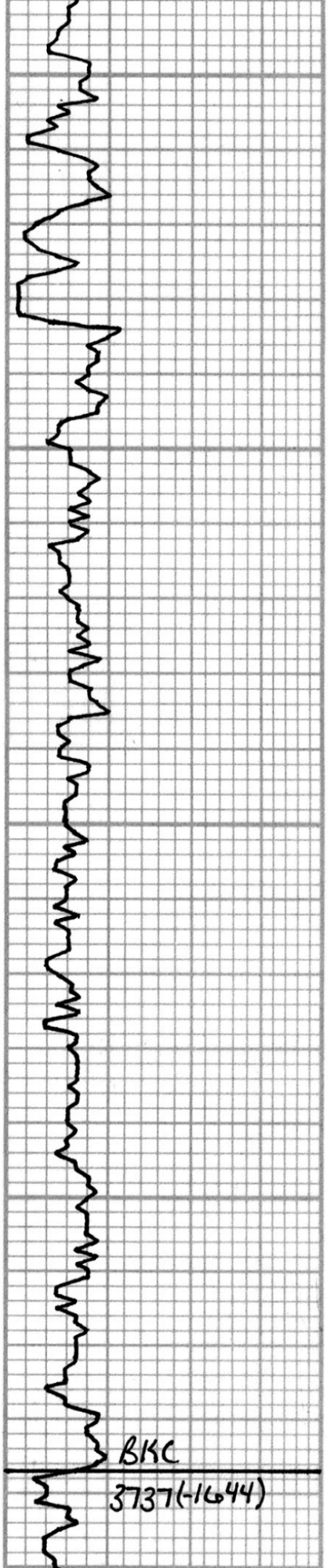
Vis: 50 wt: 8.8

DST #1
3480 - 3508
45 - 45 - 45 - 45
I.F.- BOB 18 min / No SIB
F.F.- BOB 11 min / weak surf SIB at end of S.I.

IFP: 13-32
FFP: 32-43
SIP: 1089-1076
HP: 1623-1604

Rec:
665' GIP
20' CO
60' HO&GCM 20%g, 30%o

BHT: 101° G=38



50

Sh: gry

LS: wht, fn-md xln. Smal frag Fass, prx, NS.

LS: wht, mostly fn xln + sub xln-chlky. Scat fr oacx wl/ lt brn stn + spttd SFO. Mostly barren, No Od.

LS: wht - lt tan. Many sub xln-chlky rx. fr amt gd oacx, mostly barren 1-2 pcs wl rainbow stn, NSFO No Od.

3600

LS: wht, fn-md xln, scat ool, fr oacx. Trng prx & dms, All NS.

Sh: gry

Sh: gry

LS: wht, ool. pr-fr oacx, subxln in prt. Mostly barren, 1-2 rx wl vlt brn stn, spttd SFO, v fnt Od.

Sh: gry

LS: wht, fn-md xln, ool. prx + tite, All NS. Scat sub xln rx.

50

Sh: brn

LS: wht, fn-md xln, chlky. Scat pr oacx, totally barren, No Od. Carging fr amt brn Sh.

3700

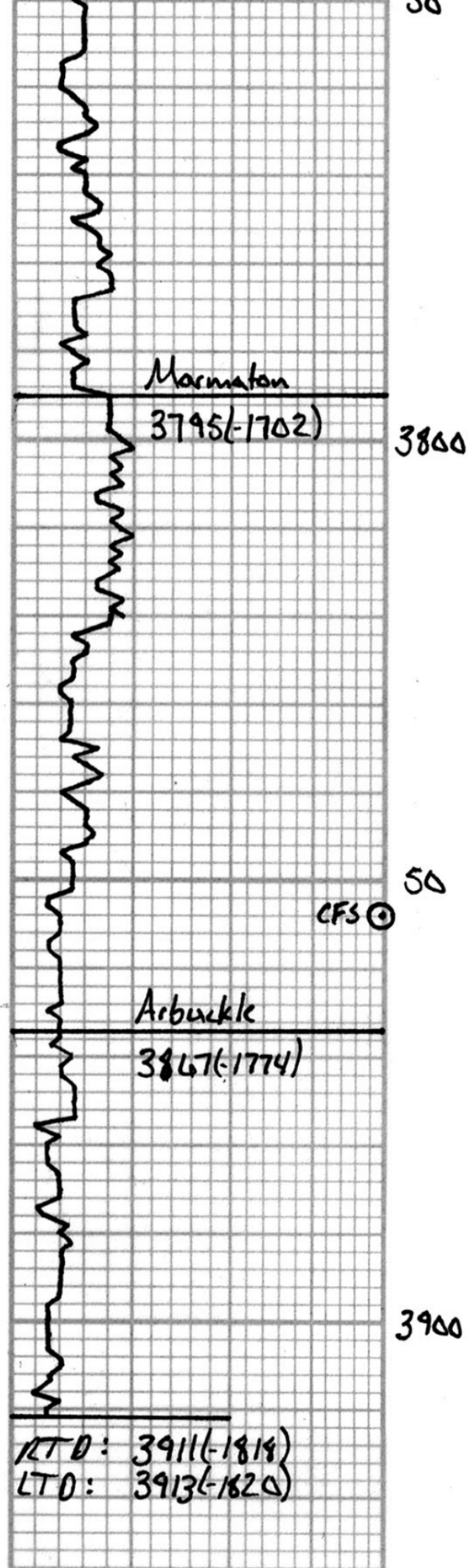
LS: wht, fn-md xln, scat ool. subxln, trng prx + dms. NS

Sh: gry wl brn

LS: wht - lt tan, fn-md xln. prx wl subxln rx. All NS.

Sh: brn

50



LS: tan, mod xln, prØ

Sh: brn

LS: AIA

Sh: AIA

LS: tan, fn xln, dms org shp chtΔ.

Sh: gry w/ some brn

LS: wht - tan, fn - vfn xln, No visØ, dms. Scat org & tan chtΔ, All NS, No Od.

brn - red Sh w/ fr amt tan - org chtΔ, washes red.

Fr amt wht - tan dms LS. Much tan - org shp chtΔ, 1-2 pcs sltly weath. Fr amt brn - red Sh.

Dolo: wht, mod - crs rhom xln. Scat vugs, mostly prØ. Fr amt brn Sh & tan - org chtΔ. Totally barren, No Odor.

Dolo: wht, crs rhom xln, gd vugØ, few chlky rx.

Totally barren, No Od.

LS: Tray prØ & tite. Barren.