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 Patty #1-30
FIELD Wildcat
LOCATION 775' FNL + 335' FEL
SEC. 30 TWP. 12s RGE. 21w
COUNTY Trego
STATE Kansas

PRODUCTION D+A

ELEVATION KB 2317
DF
GL 2309
Drilling Measured From: KB

Samples Saved From 3350 To: TD
Drilling Time From 3300 To: TD
Samples Examined From: 3350 To: TD
Geological Supervision From 3300 To Total Depth
Wellsite Geologist Marc Downing
Electrical Surveys Superior
CNL/CDL
DIL
MEL
Sonic

OPERATOR DNOCI
CONTRACTOR Discovery Drilling, Rig #4
COMM: COMP: 4-1-72

CASING RECORD

SURF: 8⅝" @ 221' PROD: None
TOTAL DEPTH DRILLERS: 4060'
TOTAL DEPTH LOG 4061'

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
Top Anhydrite	1738	1739	+578	+2
Base Anhydrite	1781	1782	+535	+5
Topeka	3355	3354	-1037	+3
HEEBNER	3575	3376	-1059	+1
Toronto	3596	3594	-1279	+2
LKC	3608	3608	-1291	+2
BKC	3846	3847	-1530	+5
Marmaton	3928	3929	-1612	+4
Arbuckle	4008	4008	-1691	+23

REFERENCE WELL FOR STRUCTURE Lance Drilling, Inc.
Wynn 'A' #1 NW-NE-NE Sec. 30-12s-21w

DAILY PENETRATION		BIT RECORD						
DATE	DEPTH	NO	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS

FORMATION	INTERVAL	DESCRIPTION OF SHOW	LOG ANALYSIS	
			Ø	SW

DRILL STEM TESTS

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

REMARKS AND RECOMMENDATIONS

LEGEND

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

REMARKS

OIL SHOWS

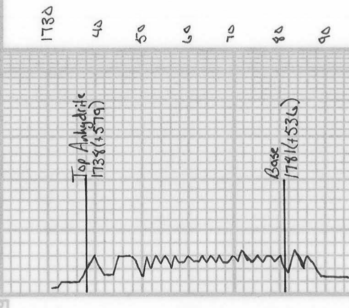
SAMPLE DESCRIPTIONS

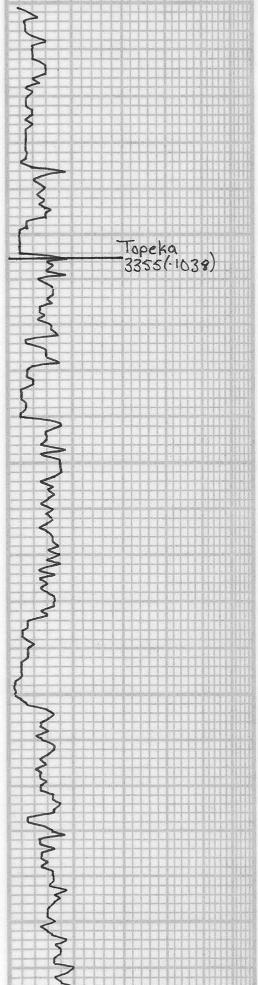
LITHOLOGY

DEPTH

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Decreases

5" 10" 15" 20" 25"





1800

3300

50

LS: wht, md-fn xln, scat fass. sub xln in prt, pr ø, NS.

Sh: gry

Sh: gry

LS: tan-brn, fn xln, suc. gd int xln ø, scat gd vug ø ppø. Total sat w/ gd SFO, fr-gd od.

Sh: drk gry - blk

3400

Sh: gry

LS: tan, fn-md xln, scat fr-pr stn, sptd SFO, in pr-fr ppø. lt od.

LS: tan, md xln, fr amt foss. prø fdms.

LS: tan-wht, md xln, sltly mtld. chlky. 1-2 pcs w/ stn in gd vug ø. NSFO, lt od.

50

Sh: Black Carb

Sh: gry

LS: wht, md xln, scat ool. fr int ool + vug ø. gd-fr sat stn, fr SFO, lt-fr od.

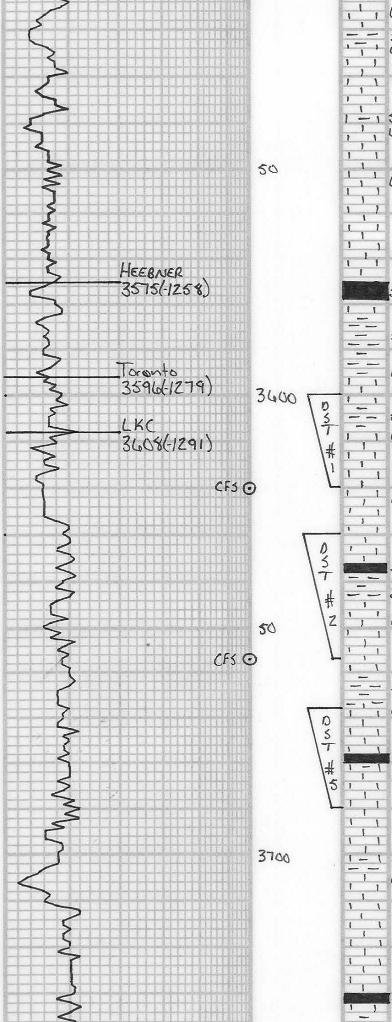
LS: wht, foss. few rx AIA, trng sub xln - chlky, prø fdms w/ depth, All NS.

3500

Sh: gry

LS: wht, md xln, foss

Sh: Black Carb



LS: Wht, Fn-md xln, sub xln

Sh: gry
LS: Wht, ool, Fr-gd int ool ø, Fr amt chlky rx. Fr stn + SFO, Fr-lt Od. Rx trng dns

Sh: gry
LS: Wht, ool, sltly dolom. Fr-gd intxln-ø, Fr stn, spttd SFO, lt Od.

LS: tan, md xln, Trng v mtld w/ prø. Fr Amt tan Foss chts, All NS.

Sh: Black Carb

Sh: gry

LS: wht, fn xln, mostly dns w/ prø, tan in prt w/ Foss. 1-2 pcs w/ pr stn, NSFO, No Od.
Sh: gry
LS: wht, md xln, Foss w/ Few ool. Fr intxlnø, Fr-gd lt brn sat stn, spttd SFO, lt-Fr Od. Fr amt subxln rx.

LS: wht, Fn-vFn xln. Prø + dns w/ scat pr stn. Few pcs wht chts.
Sh: Black Carb

Sh: gry

LS: wht, Fn-md xln, Few ool + Foss rx. Fr intxln + ppø, 1-2 rx w/ gd vugø. Fr-gd sat stn, Fr SFO, gd-Strong Od. Trng subxln w/depth.

Sh: gry
LS: wht-lt tan, Fn-md xln. pr ppø, Fr lt brn stn, rare SFO, No Od. Mostly tite.
Sh: Black Carb

LS: lt tan-wht, Fn-md xln, few foss. prø + dns. 3-4 ool + Foss rx, pr-Fr intxln-ø, lt brn stn, rare SFO, No Od.

Sh: gry
LS: wht, mostly chlky. Scat pr ooc + vugø w/ pr brn stn, NSFO, No Od.

LS: wht, vFn xln, v dns w/ No visø, NS.

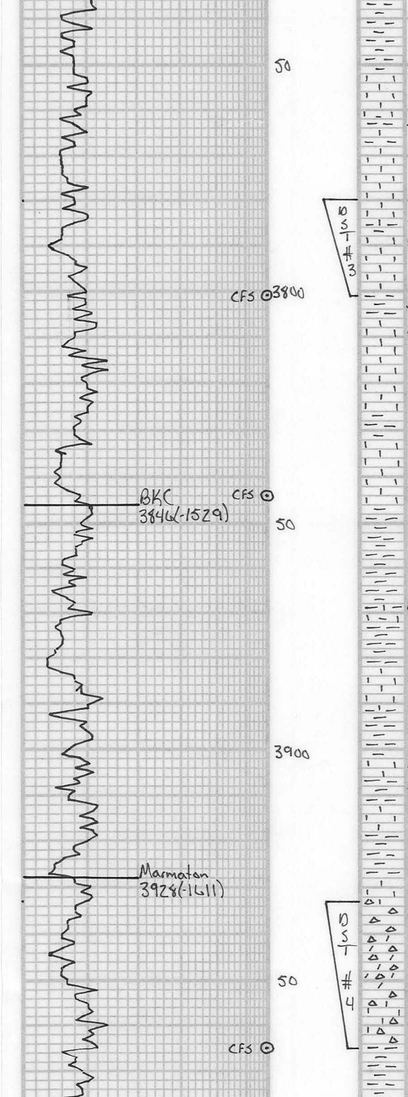
Sh: Black Carb

Vis: 47 Wt: 8.9

DST #1
3600-3620
45-45-45-45
I.F.- 6" blow
F.F.- 5½" blow
IFP: 38-50
FFP: 54-72
SIP: 516-509
HP: 1755-1699
Rec:
30' GIP
10' FO
95' socmw 5%o, 70%w
BHT: 110° G=38 Chlor: 33K

DST #2
3630-3657
15-30-15-30
I.F.- BOB 2 min
F.F.- BOB 3½ min
IFP: 88-334
FFP: 410-514
SIP: 783-784
HP: 1784-1722
Rec:
990' sw
BHT: 115° Chlor: 35K

DST #5
3668-3690
45-45-45-45
I.F.- 7½" blow
F.F.- 3" blow
IFP: 13-57
FFP: 58-90
SIP: 488-464
HP: 1887-1772
Rec:
150' Mw w/ oil scum
BHT: 112°



Sh: gry

LS: wht-tan, fn xln, mostly dns + prø, 2-3 pcs w/ pr stn in ppø, NSFO, No Od.

Sh: gry

LS: wht-tan, fn xln, scat pr-fr stn, spttd SFO, fnt Od in pr-fr intxlnø. Fr amt subxln-chlky rx.

Sh: gry

LS: tan, fn xln, v suc. gd intxln + vugø, gd stn + some total sat, gd SFO. lt-fr Od.

Sh: drk gry

LS: wht-tan, fn xln, pr-fr ppø, fr spttd stn, rare SFO, fnt-lt Od. 2-3 rx w/ fr SFO in vugø.

Sh: gry

LS: wht-tan, mostly fn xln, subxln in prt. scat pr resid stn, NSFO, No Od.

Sh: brn-red, washes red

LS: wht, fn xln, dns

Sh: mostly gry, scat brn.

LS: wht, fn-md xln, prø, dns.

Sh: gry

LS: AIA

Sh: gry w/ brn

LS: wht-tan fn xln, dns fr amt org chts.

Sh: brn

Much org chts, scat tan + wht.

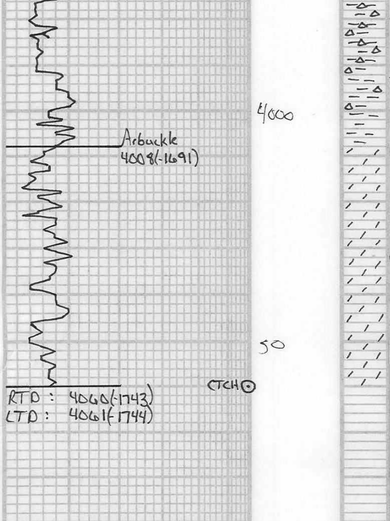
Cht: wht + tan, fr amt dolom cht. fr-gd ppø, gd brn stn w/ gd spttd SFO, fr Od.

Scat rx AIA, trng barren w/ fr amt wht + tan fn xln LS. No-fnt Od.

DST #3
3780 - 3801
30-30-30-30
IFP: 10-15
FFP: 28-45
SIP: 36-25
HP: 1857-1858
Rec:
10' VSOCM 3'1.0
BHT: 107°

Vis: 63 Wt: 9.2

DST #4
3933 - 3965
45-45-45-45
I.F.- 3" blow
F.F.- 1½" blow
IFP: 15-32
FFP: 34-43
SIP: 1000-977
HP: 1995-1837
Rec:
10' FO
60' MW
BHT: 117° G=34 Chlor: 27K



Abnt brn sh, scat grg. fr
Amt wht - lt tan chtΔ, shp.
All NS.

Sh: brn-red w/ tan, yel
chtΔ, washes red.

Dolo: wht - lt tan, fn-md
rhom xln. Scat fr vugx, many
tite rx. Fr stn w/ uvg SFO,
lt Od. Rx fmg md-crs xln,
tite. Fr brn stn, sptd SFO,
many barren rx, fnt Od.

Dolo: wht, md-crs rhom xln,
mostly pr ϕ & tite, scat wht
chtΔ, few chlky rx. pr stn,
rare SFO, No Od.

Dolo: wht, Mostly A/A,
few chlky rx w/ many
tite rx, mostly NS.