# Märc Downing

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## GEOLOGIC REPORT LOG

COMPANY: Downing-Nelson Oil Co., Inc.
WELL: Hillman-Dubach
FIELD: Wildcat
LOCATION: 600' FNL - 270' FEL
SEC. 31 TWP. 12s RGE. 21w
COUNTY: Trego
STATE: Kansas

12s 21W
31

PRODUCTION: Dry

ELEVATION KB 2283
DF
GL 2275
Drilling Measured From: 2283 KB

Samples Saved From 3500 To: TD
Drilling Time From 3250 To: TD
Samples Examined From: 3500 To: TD
Geological Supervision From 3300 To Total Depth
Wellsite Geologist: Alan Downing
Electrical Surveys: Nabors
CNL/CDL - microlog
Sonic - Dual Induction

OPERATOR: DNOCI
CONTRACTOR: Discovery Drlg. Rig #3
COMM: 10-1-12 COMP: 10-7-12

### CASING RECORD

SURF: 8 5/8" - 217 PROD: -
TOTAL DEPTH DRILLERS: 4048
TOTAL DEPTH LOG: 4048

### FORMATION TOPS AND STRUCTURAL POSITION

| FORMATION | SAMPLE TOP | ELECTRIC LOG TOP | SUB-SEA DATUM | STRUCTURAL POSITION |
|---|---|---|---|---|
| Anhydrite | 1703 | 1704 | +579 | -9 |
| Base | 1750 | 1748 | +535 | -3 |
| | | | | |
| Topeka | 3330 | 3328 | -1045 | +3 |
| Heebner | 3550 | 3550 | -1267 | +5 |
| Toronto | 3572 | 3571 | -1288 | +4 |
| Lansing | 3584 | 3583 | -1300 | +4 |
| BKC | 3823 | 3820 | -1537 | +5 |
| Marmaton | 3903 | 3903 | -1620 | +5 |
| Cherokee Shale | 3942 | 3942 | -1659 | +4 |
| Arbuckle | 4021 | 4020 | -1737 | -10 |

### REFERENCE WELL FOR STRUCTURE

Isern-Wells Schoenthaler #1
NW-NW-NW SEC 32-12s-21W Trego Co., Ks

### DRILL STEM TESTS

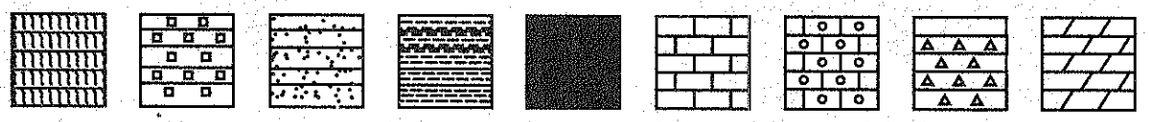
| No. | Interval | IFP/Time | ISIP/Time | FFP/Time | FSIP/Time | IHP-FHP | RECOVERY |
|---|---|---|---|---|---|---|---|
| 1 | 3578 - 3654 | 24#/30' 113 | 765#/30' | 119-170#/30' | 753#/30' | 1718#/1678# | 330' MW |
| 2 | 3910 - 3934 | 28#/30" | 42#/30" 1003 | 44-48/30# | 951#/30 | 1967/1904 | 20' mud w/ oil spots |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

REMARKS AND RECOMMENDATIONS

Due to No show & Negative drillstem tests -

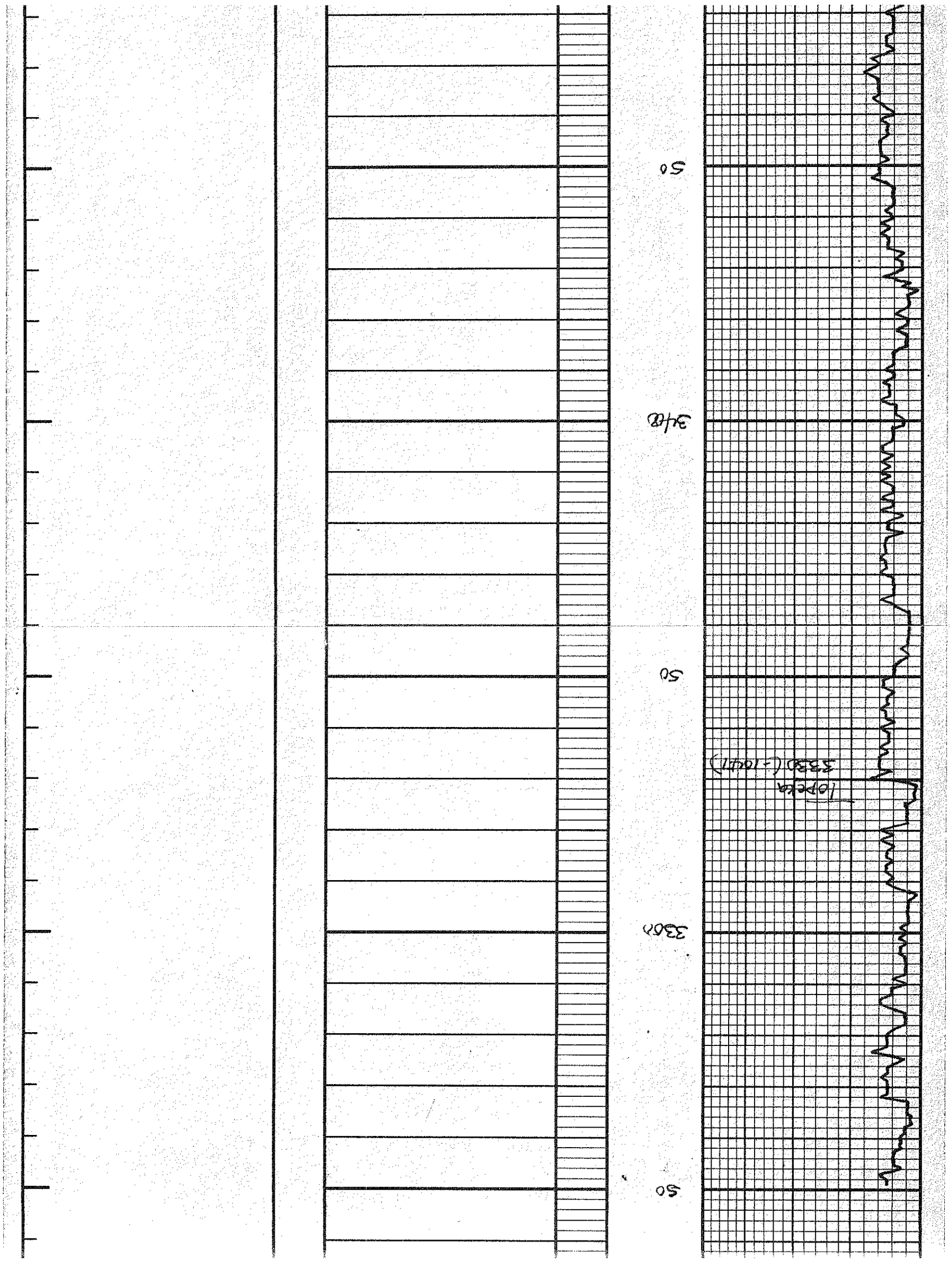
Arbuckle fell out of Bed — Plug Away

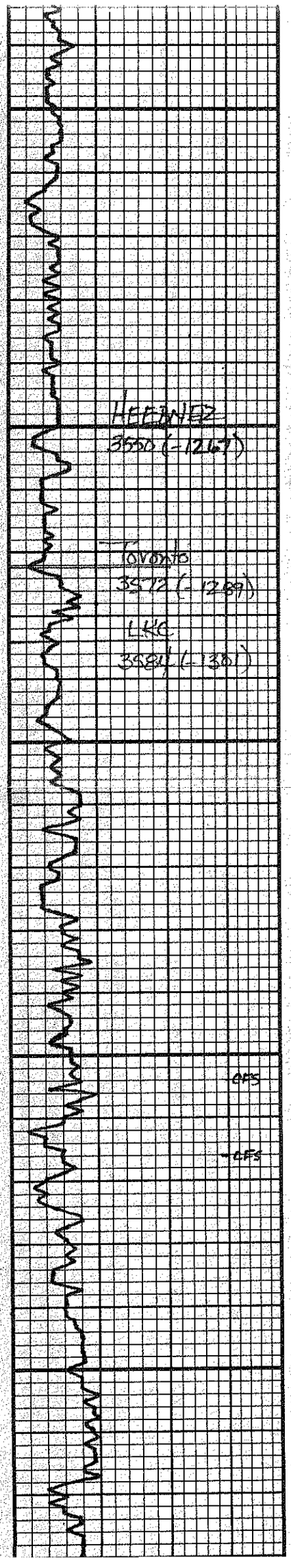
# LEGEND



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

| DRILLING TIME IN MINUTES PER FOOT<br>Rate of Penetration Decreases<br>5″ 10″ 15″ | DEPTH | LITHOLOGY | SAMPLE DESCRIPTIONS | OIL SHOWS | REMARKS |
|---|---|---|---|---|---|
| | | | | | |


50
340
50
330
50
10Pcka
5330 (-10dB)




3500

50

3600

50

3700

Sh: Black- Carb
Ls: wht fxn v. dse

Sh: gm- Brown

Ls: Tan fxn w gd pp ø w/ gd sat stn - lt odor - some total Brn-Blk sat. - tly oil

Ls: wht fxn w fr.-gd intxn + col ø w/ lt. fr. sfo few pcs Brn sat stn v. lt. odor.

Ls: Tan fxn w/ brand-tan chert w/ No v. show - slt. chkn

Sh: gm- Brown- Black

Ls: Tan-Lt-Tan fxn v. cd w/ fr. SFO in good - v. gd col ø v. faint odor

Sh: Brown

Ls: Tan - lt. Brn fxn w fr ppø w/ gd SFO - fr. odor -

Ls: Brn gd SFO Some total Black sat. in fr. PP - ø

Ls: wht f. subxln 1-2 pcs w/ slt col ø mostly qu v. chky NSFO - No odor

Ls: wht fxn w fr occø NSFO, v chky - to subxln

Ls. wht - Lt. Tan fxn w gd pocø w/ 1-2 pcs w/ v. spt. SFO No odor.

Ls. wht f-vfxn qu v. dse w/ spotty tan - off wht chert

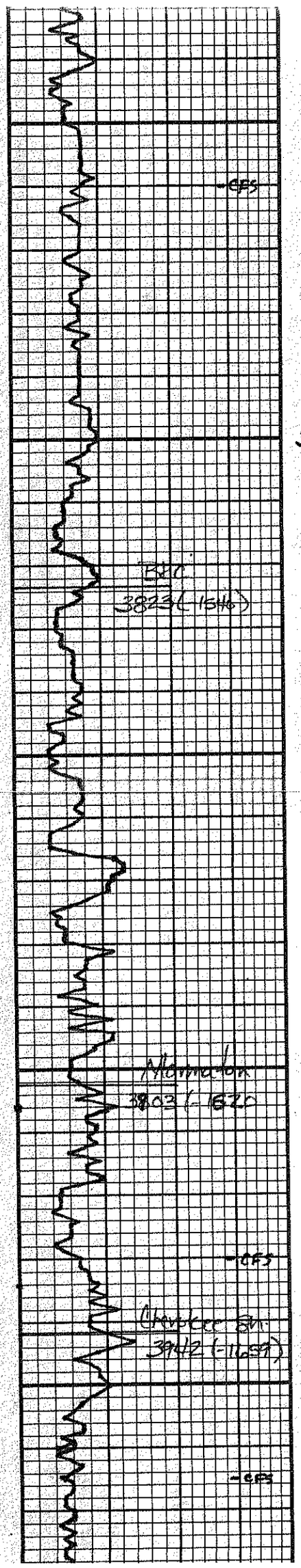
qu Ns.

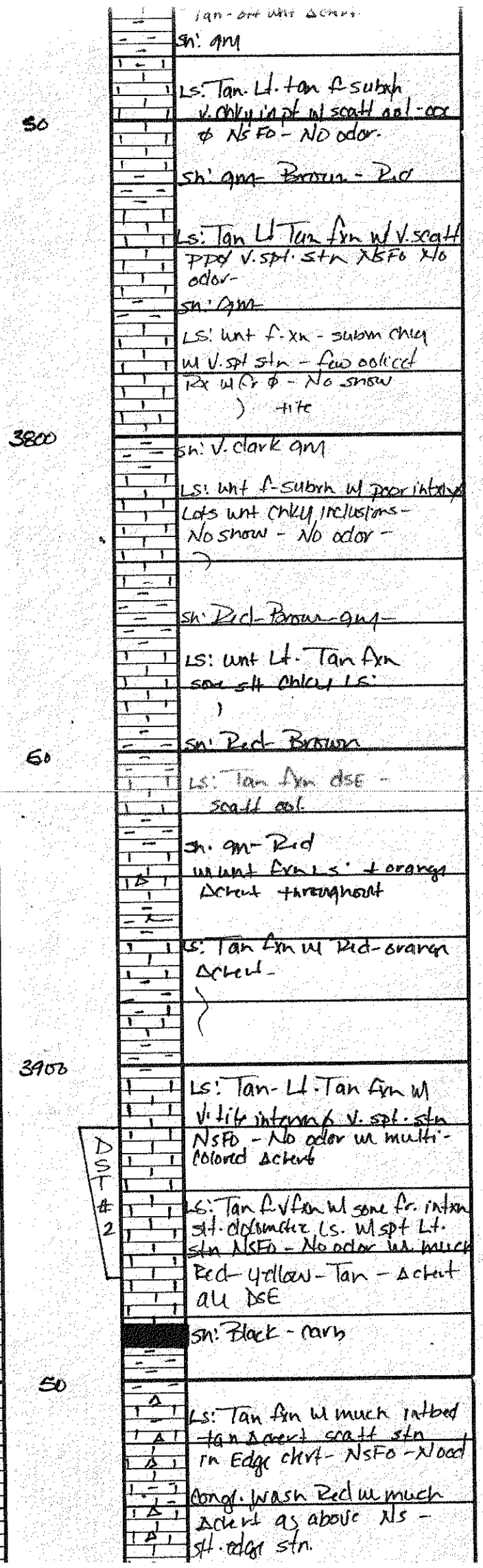
Sh: v. lt. gm - Red

Ls: Tan fxn w poor intxn ø 1-2 pcs lt. stn NSFO No odor mostly qu dse w/ interbed

VIS 56
wt 8.7
wl 7.6
cm 2#

DST #1
3578-3654
30-30-30-30
Rec: 330' mw
IHP: 1718#
IFP: 24-103#
FFP: 119-170#
SIP: 765-753#
FHP: 1678#

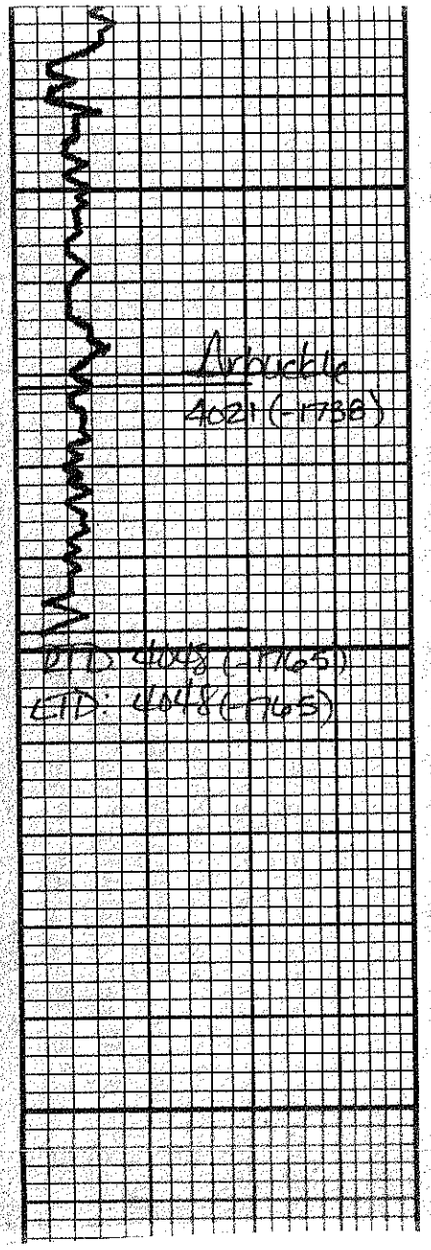


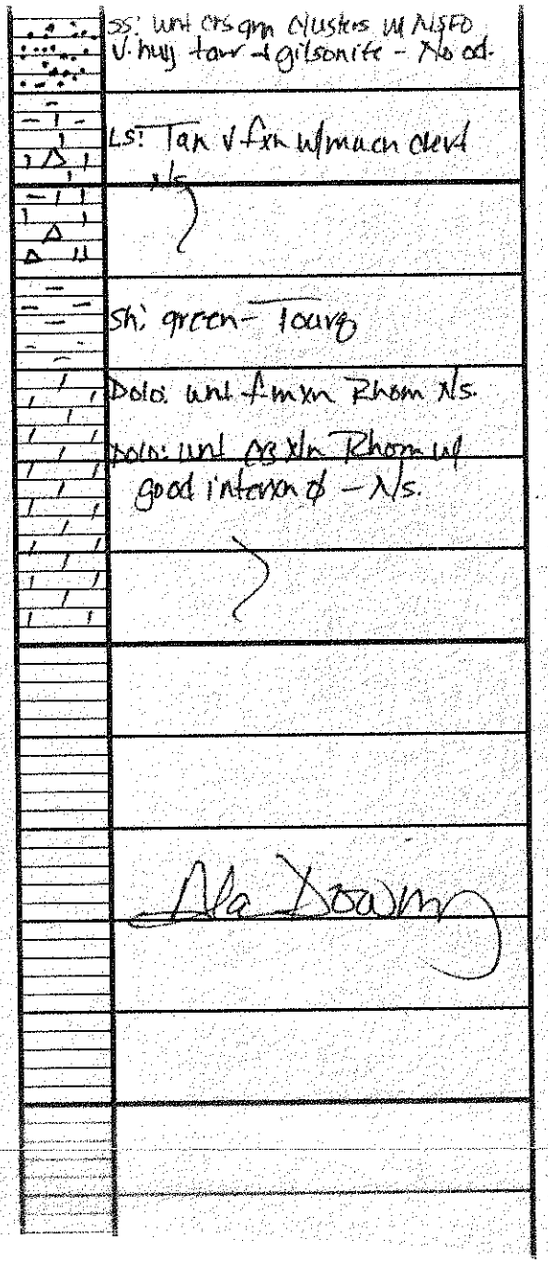

DST #2
3910 - 3934

Rec: 20' mud w/ oil spts

IHP: 1967 #
IFP: 48-44 #
FFP: 28-42 #
SIP: 1003-951 #
FHP: 1904 #


Arbuckle
4021 (-1738)
PTD: 4048 (-1765)
CTD: 4048 (-1765)

4000


SS: wht crs qm clusters w/ NSFO
v. hvy tar & gilsonite - No od.
LS: Tan v fxn w/much chert
n/s
Sh: green - Tourq
Dolo: wht fmxn Rhom n/s.
Dolo: wht crs xln Rhom w/
good intercxn ϕ - n/s.
No Drawing