RAYMOND OIL COMPANY, INC.

#1 HINEMAN FARMS

ALAMOTA SOUTH

755' FSL & 1660' FWL

4 19S 27W

LANE KANSAS

L. D. DRILLING, INC.

1-13-14 1-24-14

4751 4754

3515 CHEMICAL

2718

2713

2718 KB

8 5/8" @ 261'

4 1/2" @

DUAL IND., DENS.-N. MICRO

3400 4751

3400 4751

3500 4751

3900 4751

KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2070 + 648	2069 + 649
B/ANH.	2101 + 617	2100 + 618
STOTLER	3548 - 830	3547 - 829
HEEBNER	3978 - 1260	3978 - 1260
LANSING	4017 - 1299	4020 - 1302
STARK	4283 - 1565	4283 - 1565
MARMATON	4390 - 1672	4390 - 1672
FORT SCOTT	4536 - 1818	4534 - 1816
CHEROKEE	4560 - 1842	4558 - 1840
MISSISSIPPI 'U'	4650 - 1932	4648 - 1930

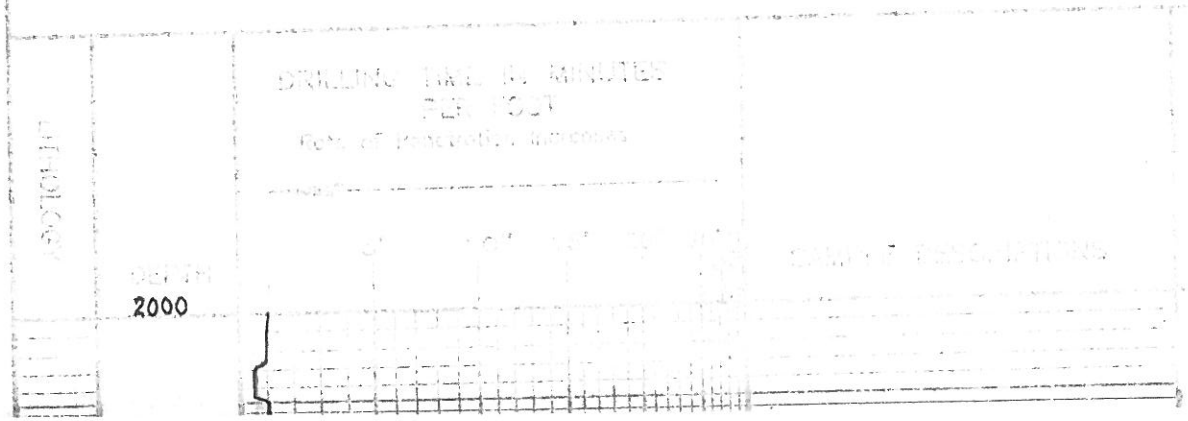
30-60-45-75

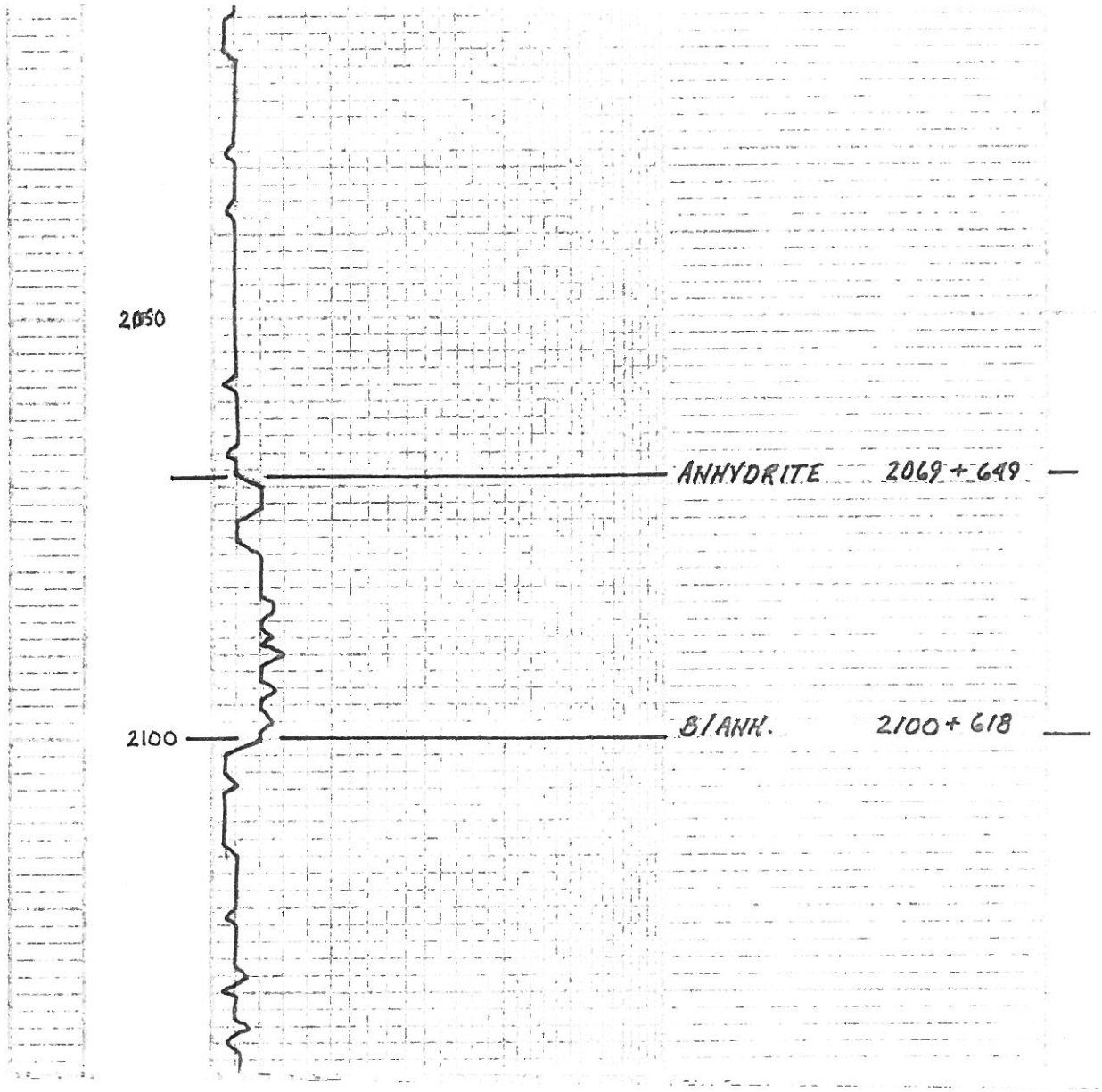
REMARKS

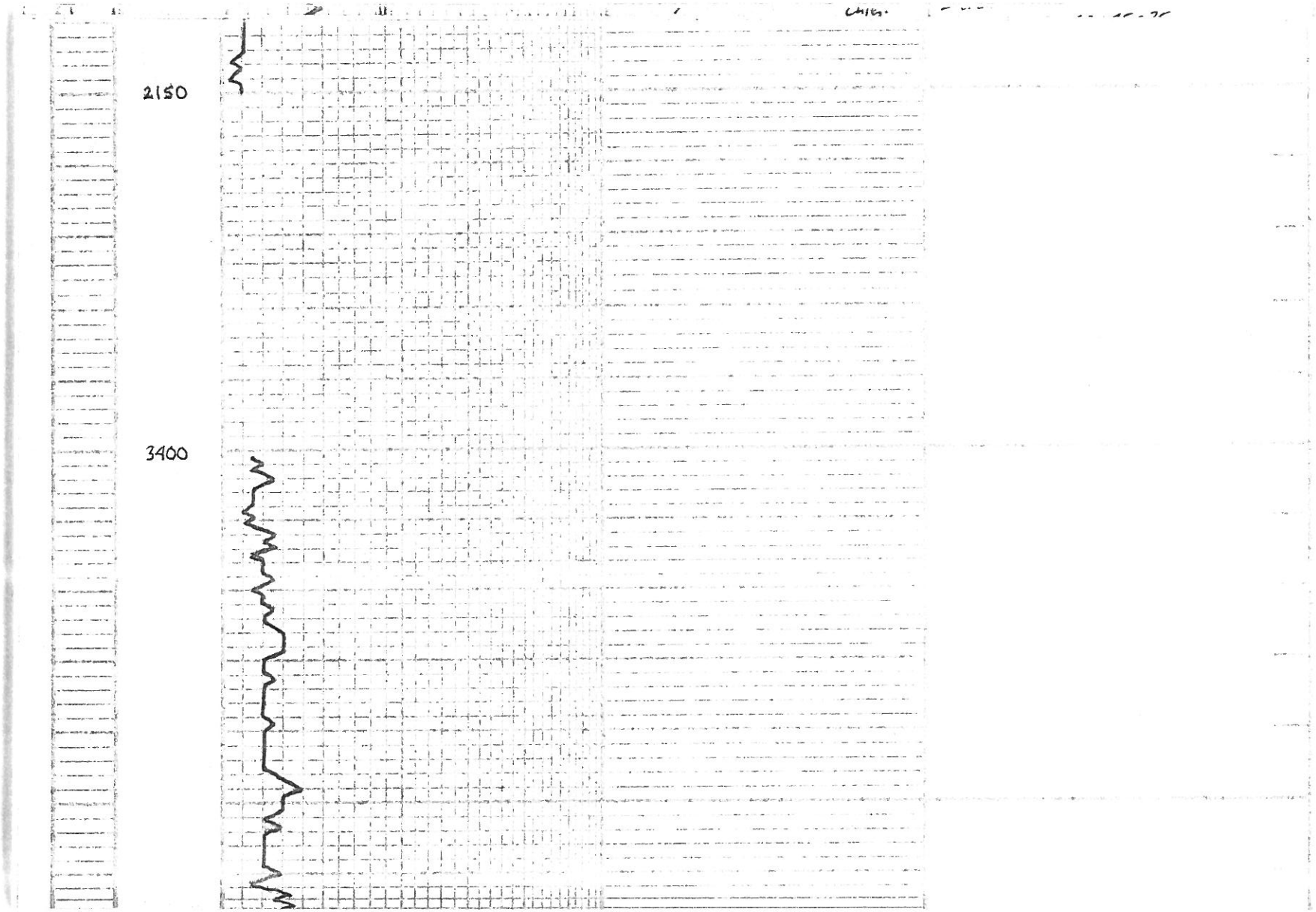
API: 15-101-22486

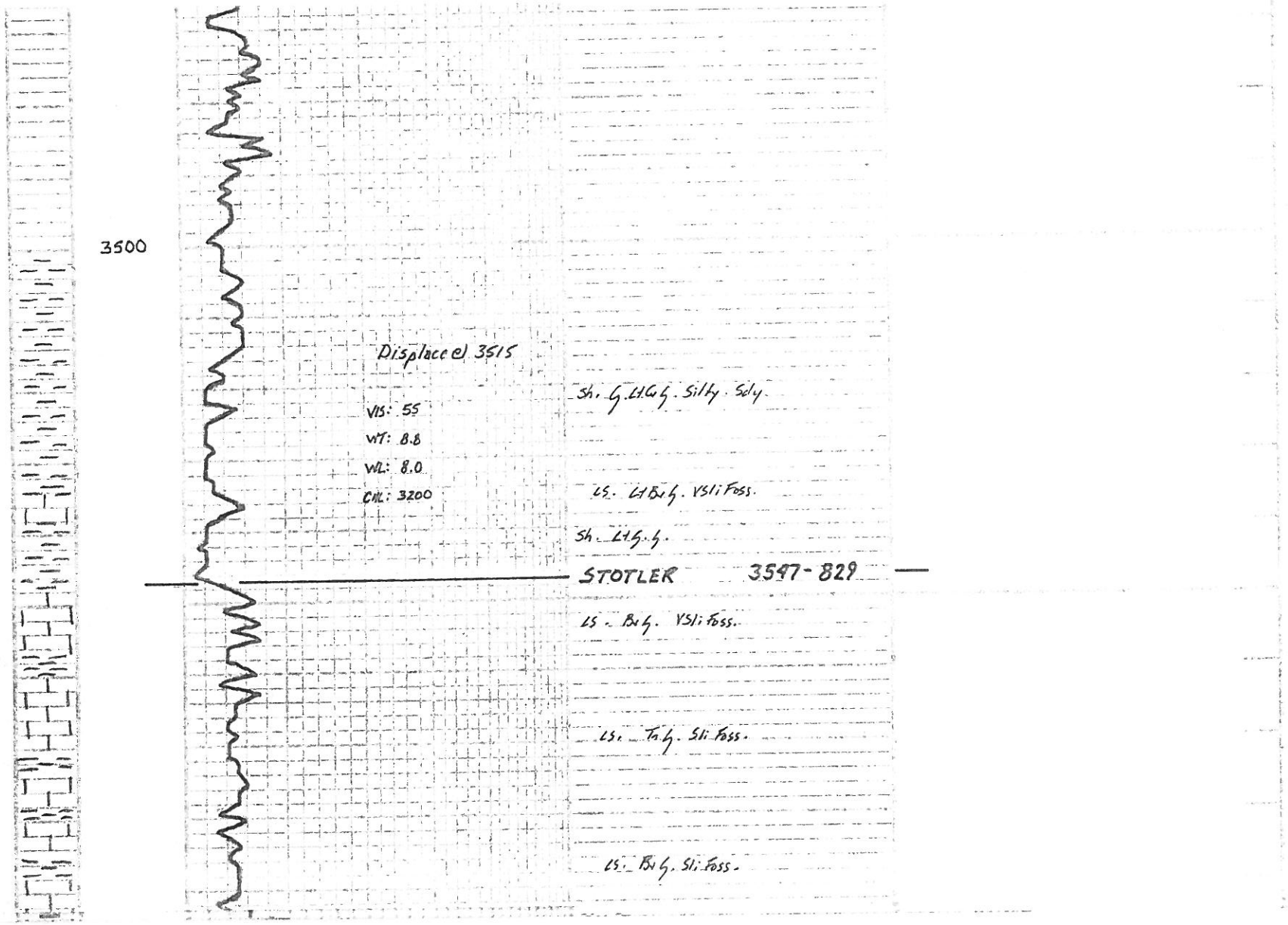
1-13-14 SPUD
1-14 @ 264'
1-15 @ 1315'
1-16 @ 2095'
1-17 @ 2950'
1-18 @ 3960'
1-19 @ 3970'
1-20 @ 4307'
1-21 @ 4553'
1-22 @ 4585'
1-23 @ 4635'
1-24 @ 4751'

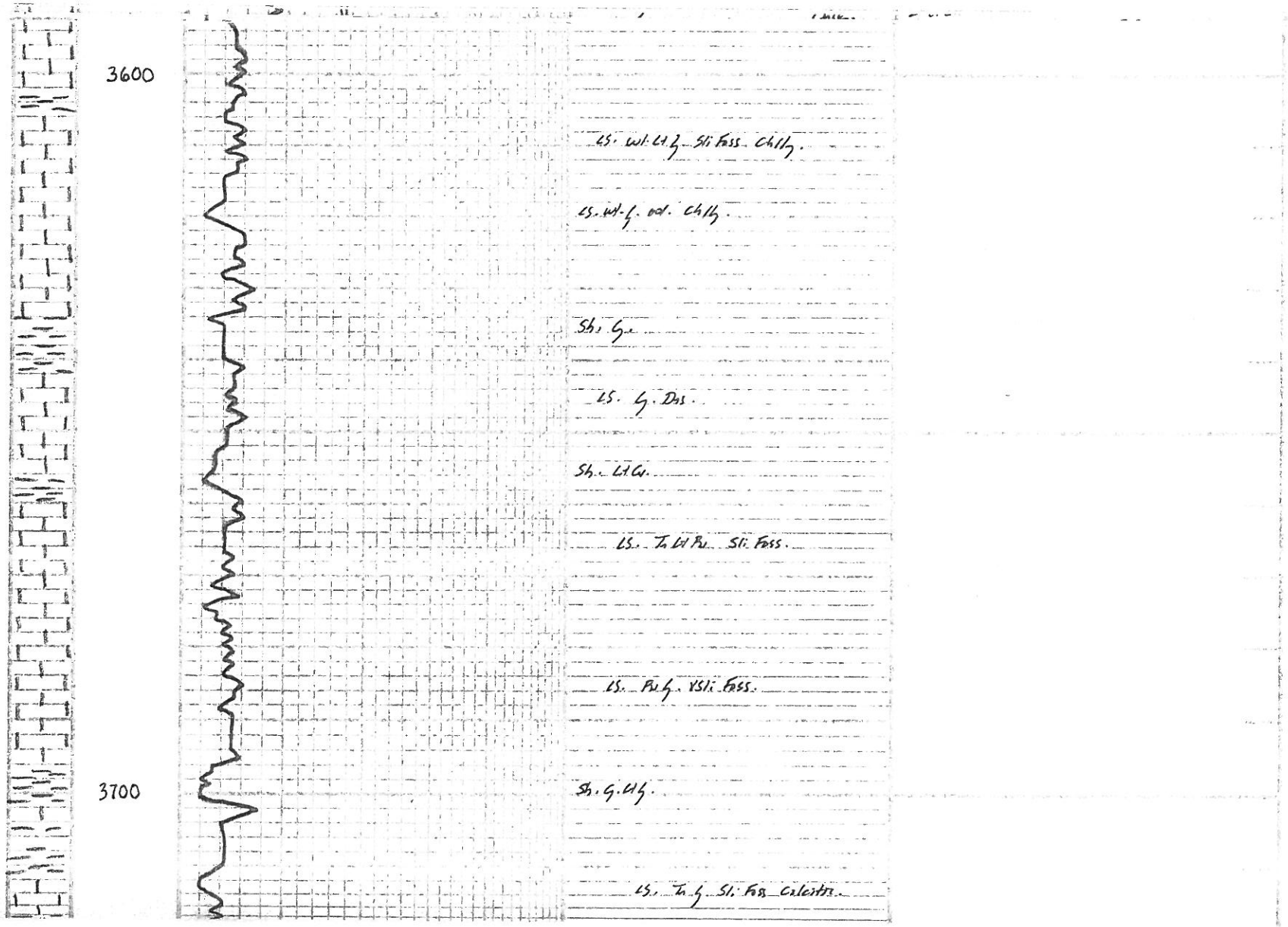
LEGEND

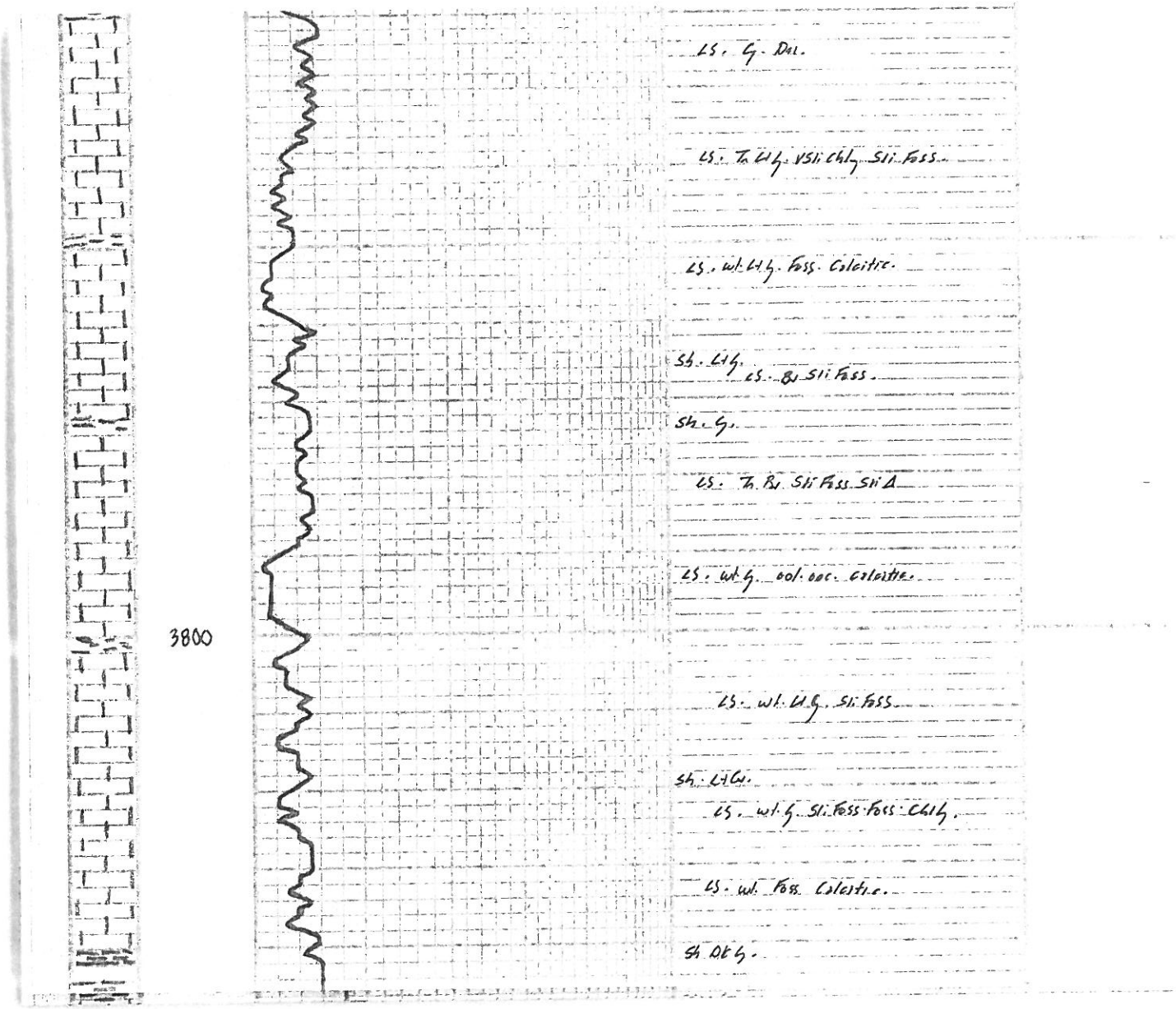


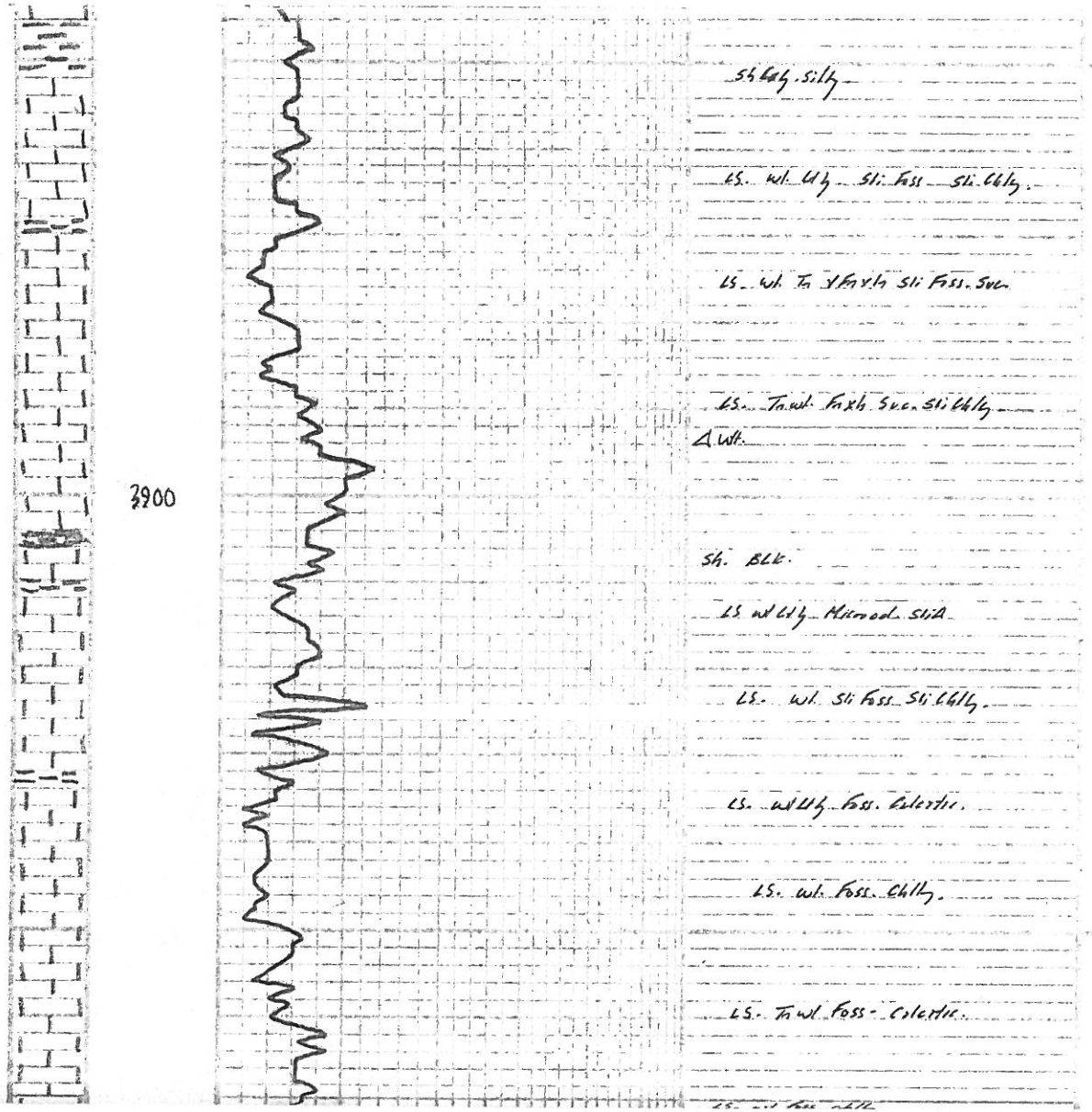

2050
ANHYDRITE 2069 + 649
2100
B/ANH. 2100 + 618

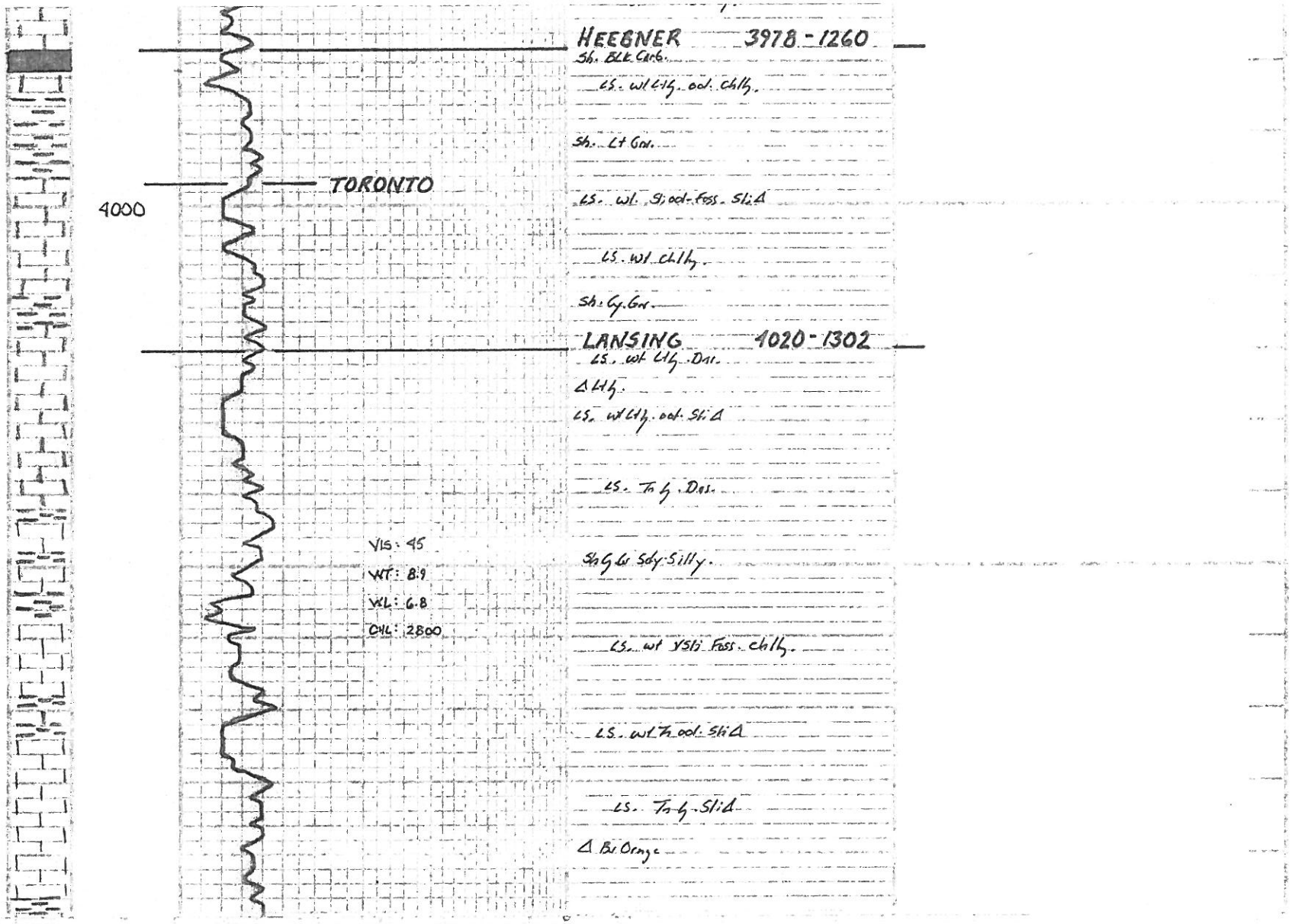

2150
3400

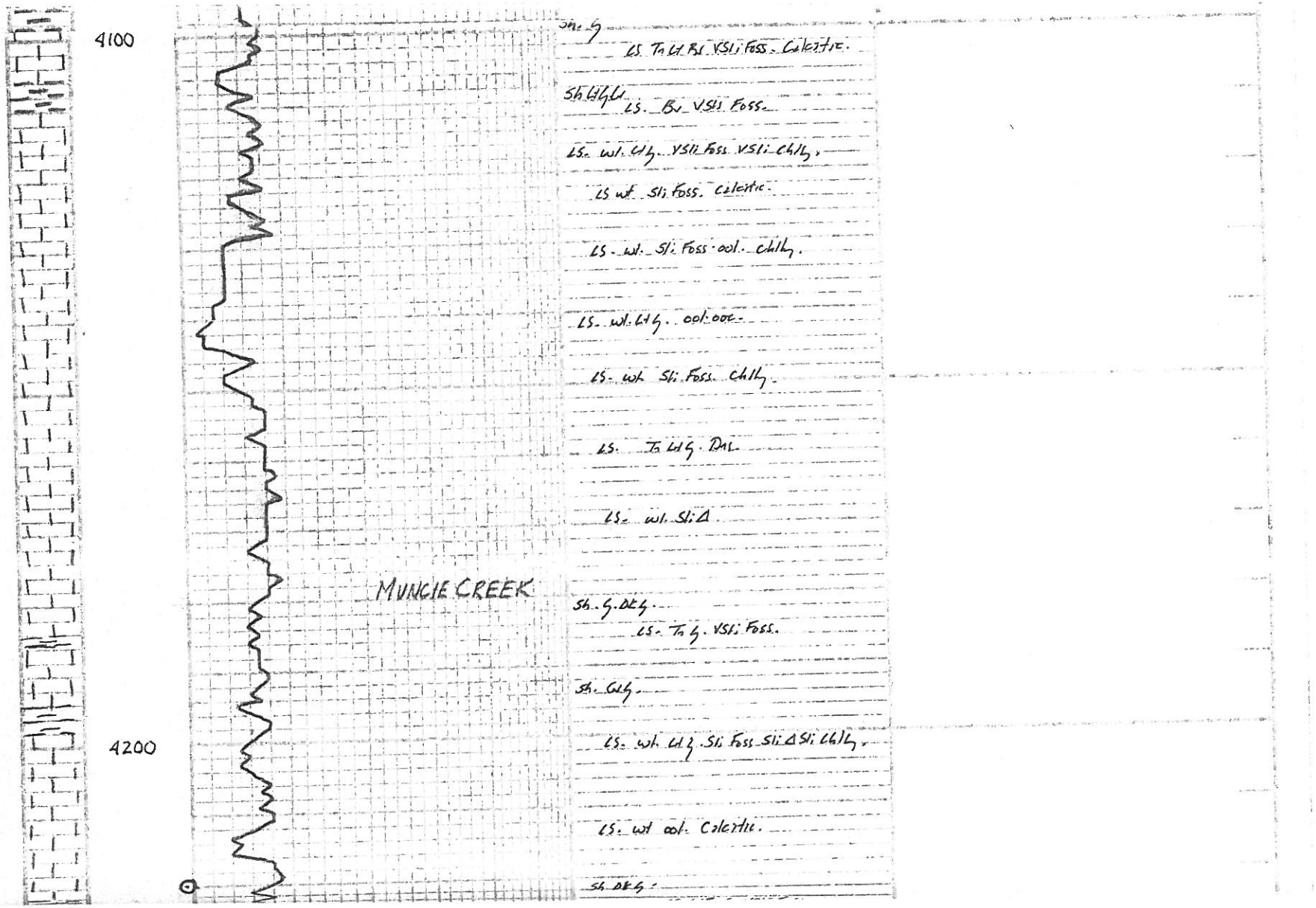

3500
Displaced 3515
VIS: 55
WT: 8.8
WL: 8.0
CHL: 3200
Sh. G. LtGy. Silty. Sdy.
LS. LtBr.Gy. VSli Foss.
Sh. LtGy.
STOTLER 3547-829
LS. Br.Gy. VSli Foss.
LS. Tn.Gy. Sli Foss.
LS. Br.Gy. Sli Foss.

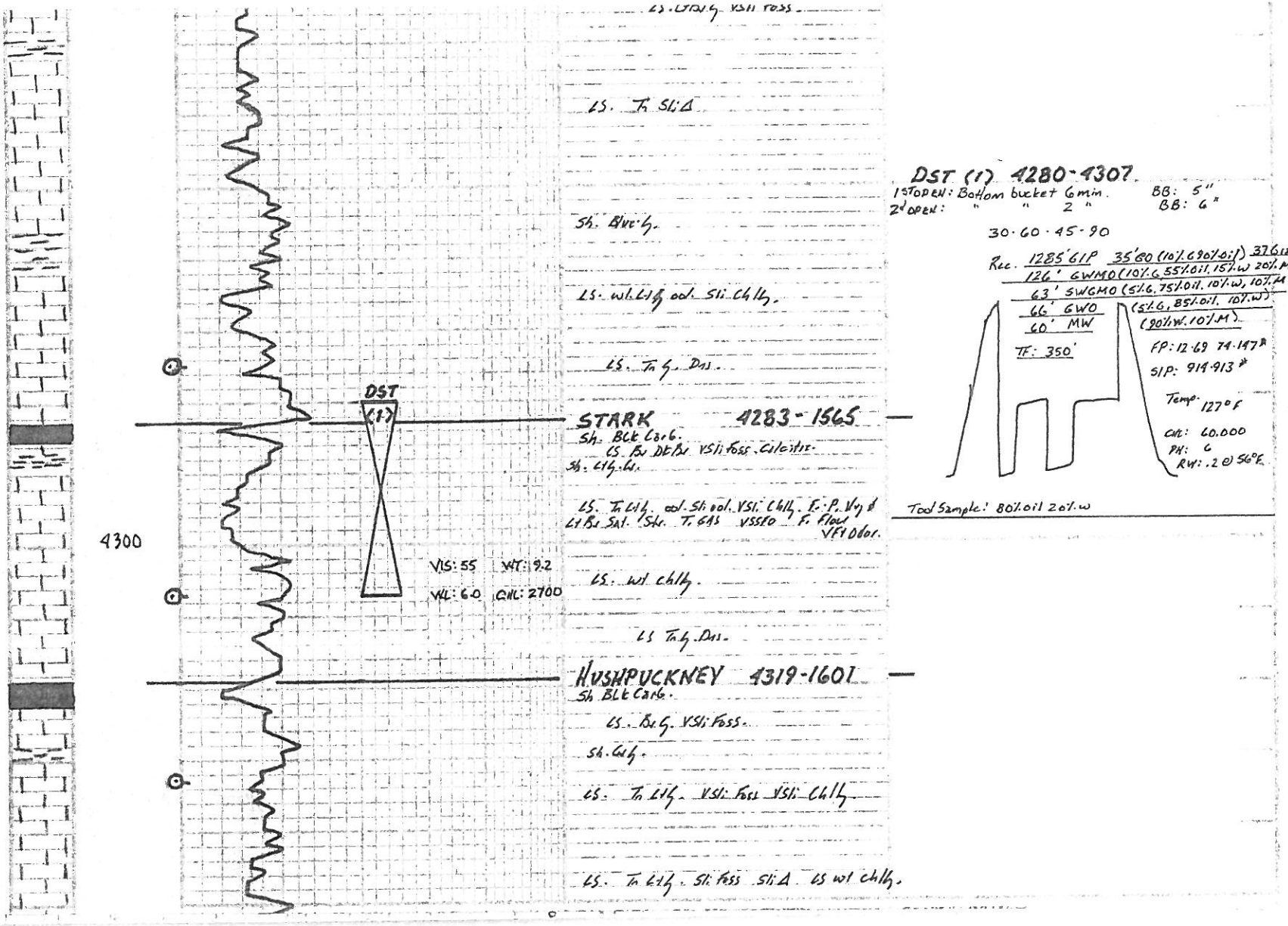

3600
3700
Ls. wh. Lt G. Sli Foss. Chlk.
Ls. wh-G. occ. Chlk.
Sh. G.
Ls. G. Dns.
Sh. Lt G.
Ls. Tn Lt Pu. Sli. Foss.
Ls. Pu G. VSli. Foss.
Sh. G. Mg.
Ls. Tn G. Sli. Foss Calcite.

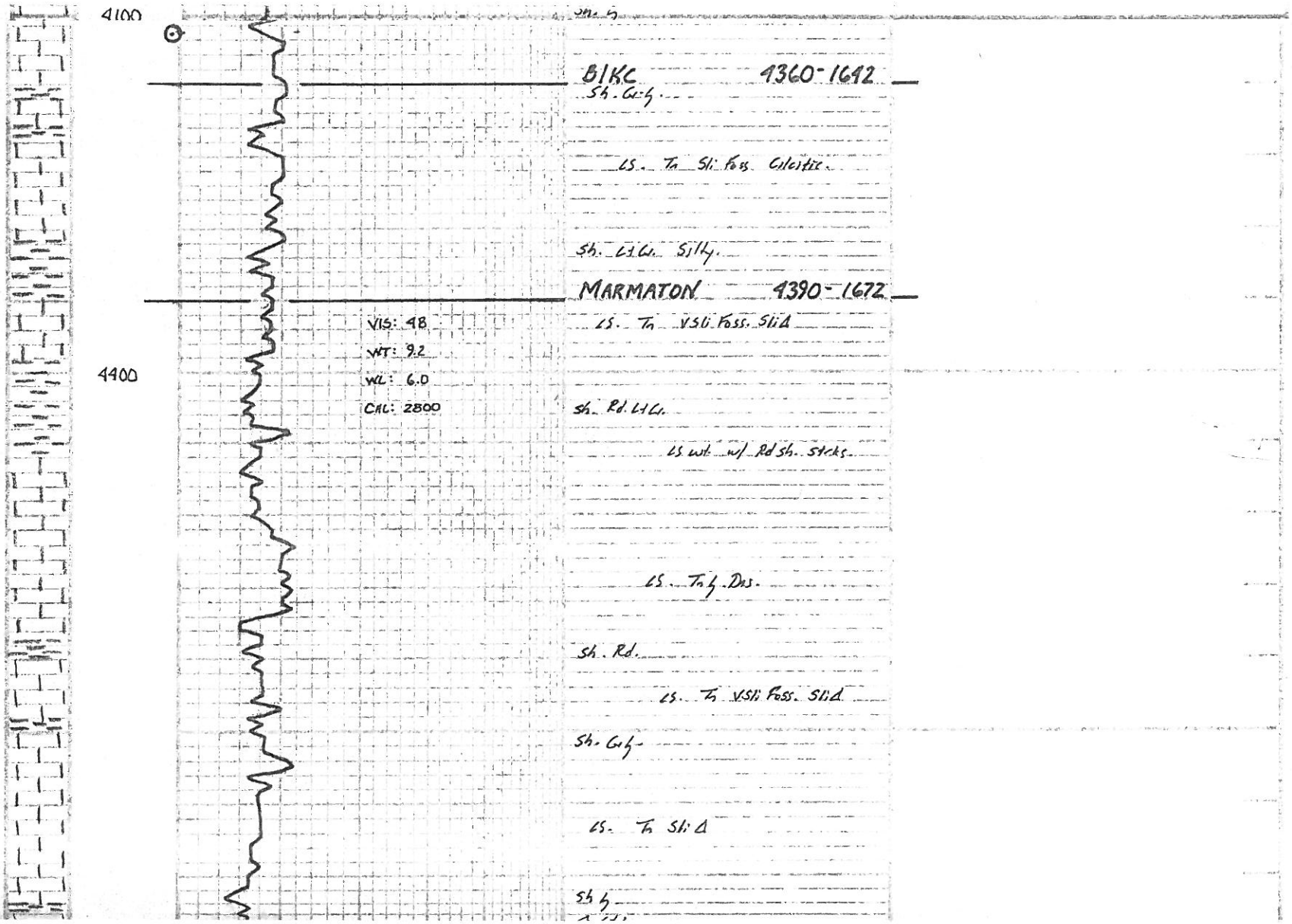

3800
LS. G. Dol.
LS. Th Lt G. vSli Chty. Sli. Foss.
LS. wl. Lt G. Foss. Calcitic.
Sh. Lt G.
LS. Bf. Sli Foss.
Sh. G.
LS. Th. Bf. Sli Foss. Sli A.
LS. wl G. ool. ooc. Calcitic.
LS. wl. Lt G. Sli. Foss.
Sh. LtGr.
LS. wl G. Sli. Foss. Foss. Chty.
LS. wl. Foss. Calcitic.
Sh. Dk G.

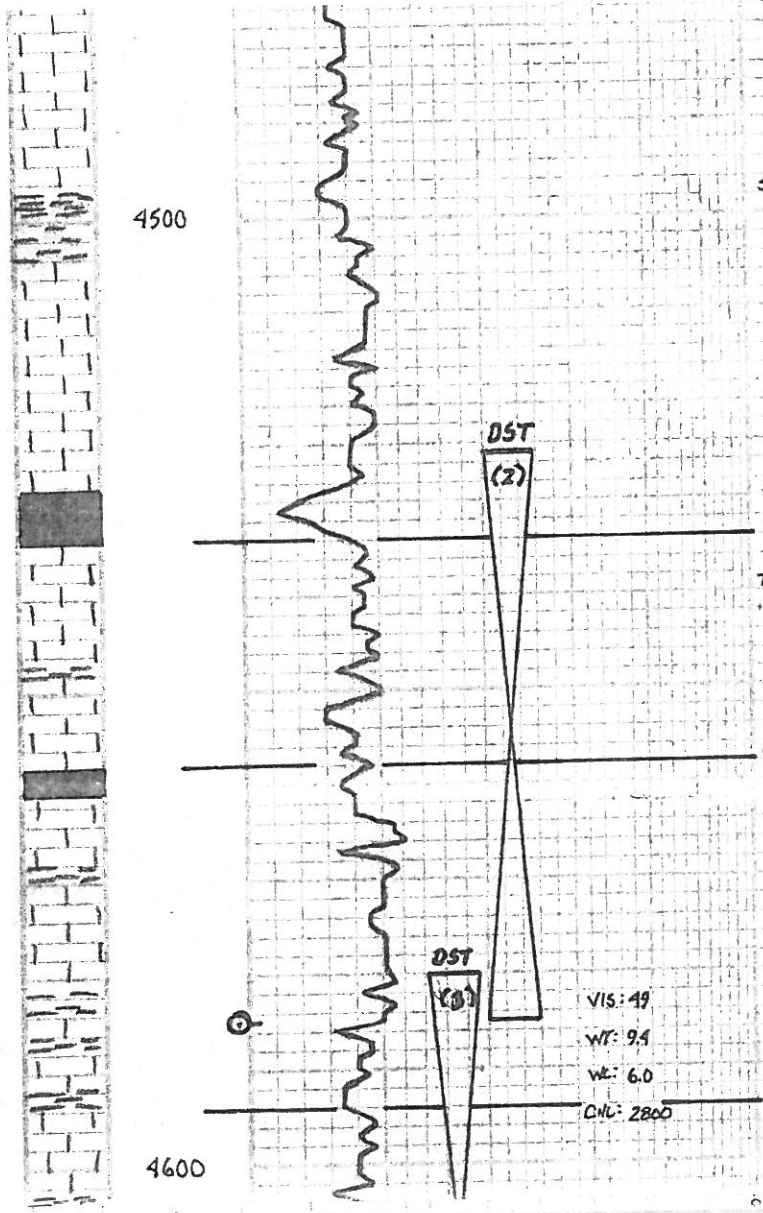

3900
sh. Gry. silty
LS. wl. Gry. sli. foss. sli. Chty.
LS. wl. Tn Yish sli foss. suc.
LS. Tn wl. Fossh. suc. sli Chty.
Δ wk.
sh. BLK.
LS. wl Gry. Microd. sli.
LS. wl. sli foss. sli Chty.
LS. wl Gry. foss. Colestic.
LS. wl. foss. Chty.
LS. Tn wl. foss. Colestic.


HEEGNER 3978 - 1260
Sh. Blk Carb.
LS. wl Lt Gy. ool. chlk.
Sh. Lt Grn.
LS. wl. Sl ool-foss. sli A
LS. wl. chlk.
Sh. Gy. Grn.
LANSING 4020 - 1302
LS. wt Lt Gy. Dns.
A Lt Gy.
LS. wt Lt Gy. ool. sli A
LS. Tn Gy. Dns.
Sh Gy Grn Sdy. Silty.
LS. wt vsli foss. chlk.
LS. wt Tn ool. sli A
LS. Tn Gy. sli A
A Br Orng
TORONTO
4000
VIS: 45
WT: 8.9
WL: 6.8
CHL: 2800


4100
MUNCIE CREEK
4200
Sh. Gy
LS. Tn Lt Bf. VSli Foss. Celestite.
Sh. Gy Gy
LS. Bf. VSli Foss.
LS. wt. Gy. VSli Foss. VSli Chty.
LS wt. Sli Foss. Celestite.
LS. wt. Sli Foss. ool. chty.
LS. wt. Lt Gy. ool. ooc.
LS. wt. Sli Foss. chty.
LS. Tn Lt Gy. Dol.
LS. wt. Sli Δ.
Sh. Gy. Dk Gy.
LS. Tn Gy. VSli Foss.
Sh. Gy Gy.
LS. wt. Lt Gy. Sli Foss. Sli Δ Sli Chty.
LS. wt ool. Celestite.
Sh. Dk Gy.


DST (1) 4280-4307.
1ST OPEN: Bottom bucket 6 min. BB: 5"
2d OPEN: " " 2 " BB: 6"
30-60-45-90
Rec. 1285' GIP 35' GO (10% G 90% O:) 376 GV.
126' GWMO (10% G, 55% Oil, 15% W 20% M)
63' SWGMO (5% G, 75% Oil, 10% W, 10% M)
66' GWO (5% G, 85% Oil, 10% W)
60' MW (90% W, 10% M)
TF: 350'
FP: 12-69 74-147 #
SIP: 914-913 #
Temp. 127° F
Cht: 60,000
PH: 6
RW: .2 @ 56° F
Tool Sample: 80% oil 20% w
DST (1)
4300
VIS: 55 WT: 9.2
WL: 6.0 CHL: 2700
LS. Grn Lt Vsli Foss.
LS. Tn Sli A
Sh. Blue Lt.
LS. wh Lt Lt oo Sli Chty.
LS. Tn Lt. Dns.
STARK 4283-1565
Sh. Blk Carb.
LS. Brn Dk Brn Vsli Foss. Glauc.
Sh. Lt Gy. Wx.
LS. Tn Lt Gy. oo. Sli oo. Vsli Chty. F. P. Vug & Lt Brn Sat. Shr. T. Gas Vsslo F. Flour Vfl Odor.
LS. wl chty.
LS Tn Gy Dns.
HUSHPUCKNEY 4319-1601
Sh Blk Carb.
LS. Brn Gy. Vsli Foss.
Sh. Gy.
LS. Tn Lt Gy. Vsli Foss Vsli Chty
LS. Tn Lt Gy. Sli Foss Sli A LS wl chty.


4100
4400
B/KC 9360-1692
Sh. Gy.
Ls. Tn Sli. Foss. Calcitic.
Sh. Lt Gy. Silty.
MARMATON 9390-1672
Ls. Tn VSli Foss. Sli A
VIS: 48
WT: 9.2
WL: 6.0
CAL: 2800
Sh. Rd. Lt Gy.
Ls wt w/ Rd sh. stks.
Ls. Tn Gy. Dns.
Sh. Rd.
Ls. Tn VSli Foss. Sli A
Sh. Gy.
Ls. Tn Sli A
Sh Gy.



LS. Tn wh. VSli foss. VSli A

Sh. Dk Gy.

Sh Lt Gy. L

LS. G. VSli foss VSli A

LS G. Fnely Silty.

Sh Blk Carb.

FORT SCOTT 4534-1816

LS. Tn Br ool. Sli A Pr Vug ϕ Lt Br Spld Sty. T. Cas T. Fo Dull Flour. No Odor. Mostly Burrow Brool. LS.

LS Tn G VSli Foss Sli A

LS. Tn G. Foss. Pr Vug ϕ Spld Dk Br Sli dd Sty T. Cas, T. Fo Dull Flour No Odor

CHEROKEE 4558-1840

Sh Blk Carb. Δ Tn Br ool.

LS. Lt G. Dns. VSli Chty.

LS. G. Dns.

Sh. Dk G.

LS. Lt Br VSli Foss.

JOHNSON 4594-1876

LS Tn Lt Br Sli Foss. Pr Vis ϕ Br Spld Sty SSFO Dull Flour. VFI Odor.

Lt Gy VSli Foss Sli A ISS

VIS: 49
WT: 9.4
WL: 6.0
CHL: 2800

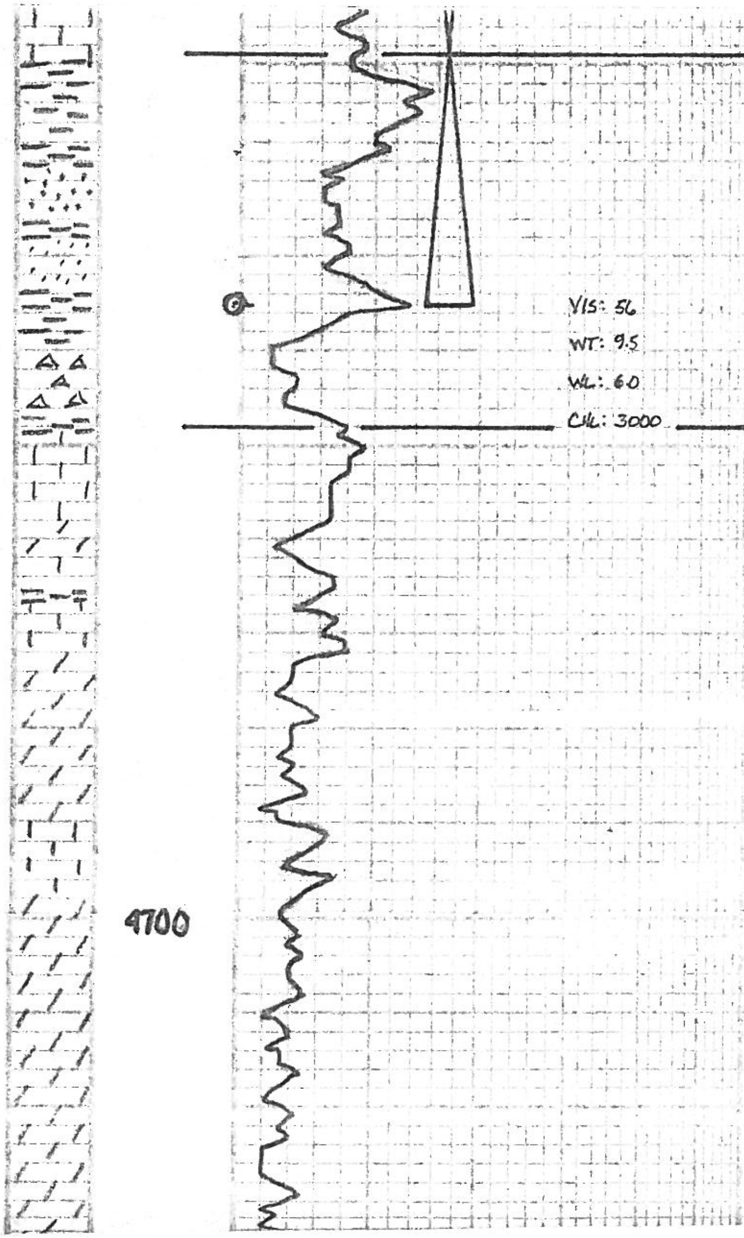
DST (2) 1525-1585

ISTOPEN: Blow built to 1"
2ndOPEN: No Blow
30-60-45-75
Rec. 5' Mud w/oil spks in Tool.

FP: 7-8 B-15 #
SIP: 51-28 #
Temp. 122 °F

DST (3) 1580-1635

ISTOPEN: Surface Blow T/out



B/JOHNSON 4609-1891

Sh. Lt Blue-Gy Silty

Sd Gy. Dns. Fn Gr Sub Rd P. Intg ø Bu Sat. Stn FSFO Dull Flour. No Odor

Sd Clr. Wt. Fn-Md-Co Gr Sub Rd Poorly Sorted Fr-P Intg ø Bu Slidd Stn. FSFO Slidd FO Dull Flour. No Odor

Δ Wt. Ltg. Fresh Cut - Foss.

MISSISSIPPI 'U' 4648-1930

LS Tn Lt Bu Sli ool. Sli Chlky.

LS Tn Bu. Fnxln Suc.

LS. Tn Bu. Sli Foss Sli Δ

Dol. Tn Lt Bu Vfnxln Suc. VSli Foss.

Dol. Lt Gy Vfnxln Sli Foss. Vuggy.

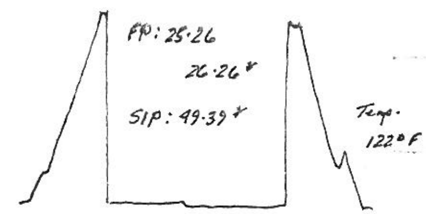
LS Tn Lt Bu VSli Foss Sli Δ

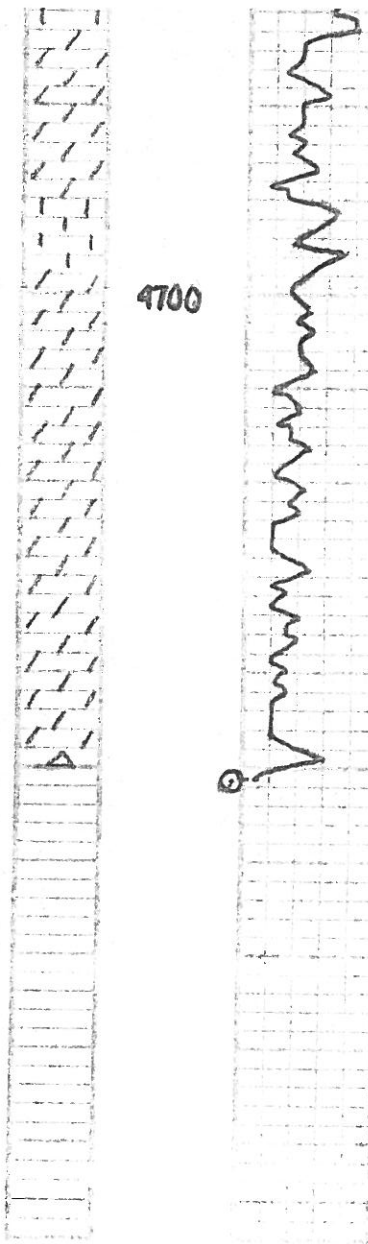
Dol. Tn Fnxln w/ Dk Gy. Incl.

Dol. Tn Lt Gy. Vfnxln VSli Foss Suc.

30-60-45-75

Rec. 5' oil specked Mud





Dol. Tn LtBr VfnxIn Suc. VSli Foss.

Dol. LtGy VfnxIn Sli Foss. Vuggy

LS Tn LtBr VSli Foss Sli Δ

Dol. Tn FnxIn w/ DkGy. Ind.

Dol. Tn LtGy. VfnxIn VSli Foss Suc.

Dol. Gry. FnxIn Sli Glauconitic

RTD 4751-2033 Δ w/ LtGy. Fresh Cut VSli Foss.