



31M05NE0065 28 BUCKE

010

Diamond Drilling

Township of Bucke

Report NO: 28

Work performed by: Norite Explorations Ltd.

Claim NO	Hole NO	Footage	Date	Note
T 52905	N-1	401'	July/63	
	N-2	774'	July/63	
T 52904	N-3	808'	Aug/63	
	N-4	550.5'	Aug/63	
	N-5	607'	Sept/63	

Notes:

Norite Explorations LimitedHOLE No-1

Location B 350 W 200

DIP: COLLAR 45°

Azimuth 74°

DATE: 16 July 1963 - 22 July 1963.

Depth 401.0

DRILLER: R. Barron Diamond Drilling.

- 0 - 44.0 Casing, clay except for the last 5 feet which contained boulders and perhaps sand.
- 44.0 - 198.9 MURONIAN Slate-like greywacke, 1/8" to 6/4" bands of varying colour, black to sandy; intermittent black spotting approximately 1/8" in diameter confined to some sandy beds; bedding angle 50° to core; some thin beds contain red hematite.
- @ 103.0 12" salmon-red feldspathic material, 10%, very irregular.
- 124.0 - 134.0 fractured ground, red rust on fractures.
- @ 157.1 1/4" bleb of chalcopyrite in fracture 10° to core.
- From 169 Core is more broken with hematite on fractures
- From 196 - 198.9 Greywacke altered to red epidote; contact with diabase is fused over 2 inches and lacks a chilled contact.
- 198.9 - 299.4 KEWENAWAN diabase, reddish alteration up to 206; then medium grained, fresh, ophitic.
- @ 201.4 2" salmon pink calcite, black chlorite on margins, 40°; feldspars in wall rock altered red.
- @ 215.9 1/8" calcite and hematite; speck of pyrite, 40°
- @ 213.1 1/8" grey siliceous material, specks of chalcopyrite and pyrite 40°
- @ 205.0 1/8" calcite 40°.
- @ 230.9 1/4" calcite and hematite
- @ 254.0 Diabase texture blurred about a 1/4" epidote seam, fine specks chalcopyrite, 45°

HOLE N-1 (continued)

@ 282.0 1/4" epidote 45°

@ 283.2 2" incipient vein zone, partially carbonated, filled with blades of chlorite; some green serpentine-like chlorite, 400 - promising.

299.4 - 384.5 HURONIAN greywacke; very altered within 7 feet of the contact in which textures are obscured. Not so finely banded

@ 307 12" dark core, white spotting, and nearly invisible chalcopyrite and pyrite grains.

Hematite not in evidence on this east side of dyke; fine black spotting present.

@ 320.5 1/4" sedimentary band, pyrite, chalcopyrite

@ 341.0 1/4" quartz in broken core

@ 331.2 1/4" sedimentary band, pyrite, chalcopyrite

Core broken within 7 feet of contact.

384.5 - 401.0 HURONIAN conglomerate, red granite porphyry pebbles in greywacke groundmass; groundmass approaches arkose in appearance.

401.0 End of Hole N-1

Sludge samples every 10 feet from 100 feet - all trace.

A. A. Campbell P. Eng.

Norite Explorations Limited

HOLE N-2

Location S 350; W 500

DIP: COLLAR 60°

Azimuth 74°

DATE 23 July 1963 -
6 August 1963

Depth 774.0

DRILLER: H. Barron
Diamond Drilling

- 0 - 23.0 Casing; overburden all clay
- 24.0 - 347.2 HURONIAN: Slate like greywacke, 1/8" - 1/4" bands of varying colour, black to sandy with about 30% red hematite bands; bedding at 60°; sandy beds quite granular.
- @ 100 hematite content gradually diminishes
- @ 140 hematite completely absent
- 197 - from here, core becomes broken, with short drill runs, and bedding less distinct, little contrast between beds.
- @ 250 rock has graded into dark greywacke with bedding discernable by a slight difference in grain size; rock still broken.
- Contact gradual from granular greywacke, with faint bedding to conglomerate with greywacke groundmass.
- 347.2 - 371.1 HURONIAN Conglomerate; first pebble at 347.2; red granitic pebbles up to 1 inch in a grey granular greywacke groundmass. Rock unbroken. Some small pebbles are angular feldspar crystals.
- 371.1 - 465.6 NIPISING diabase, chilled contact at 65°, fairly well jointed with minor actinolite and calcite seams.
- @ 381 diabase is coarse grained; pegmatitic at 418. Piece of slate save at 403
- @ 437.5 1/8" calcite 30°
- 456.2 - 457.5 lost core; diabase here is broken and dark with dark hematite on breaks.
- @ 465.6 Abrupt change from coarse diabase to finer grained, variable with some sections containing pink feldspar grains.

HOLE N-2 (continued)

465.6 - 485.5

KEWENAWAN diabase dyke.

- ④ 483.9 Chilled contact of following rock against previous irregular about 20°; green altered diabase
- ④ 484.9 Chilled against following rock which is red-green and mottled
- ④ 485.5 Sharp contact against normal coarse diabase, still with hematite fractures

485.5 - 774.0

WIPISIBINO diabase

- ④ 490.8 9 inches epidote and quartz 35°
- 492.0 - 493.5 Quartz and epidote in broken core, some cave
- Broken core and sedimentary cave to 552.
- ④ 586.0 1 1/2" white crystalline vuggy calcite 25°, very fine sparse pyrite crystals on vug crystals; some sooty grey material in fine vuggy wisps; trace of pyrite along walls; no attendant alteration; subsequent 15 feet has fine calcite stringers.

From 615 diabase less coarse and less crystalline to 630, then coarse and normal.

774.0 End of Hole N-2

Sludge samples every 10 feet from 300; all trace except

300 - 310	0.04	oss Ag
310 - 320	0.04	
330 - 340	0.03	
430 - 440	0.03	
480 - 490	0.03	
490 - 500	0.03	
530 - 540	0.03	
550 - 560	0.03	
580 - 590	0.04	
590 - 600	0.03	
660 - 670	0.03	

Campbell P. Eng.

Norite Explorations Limited

DJH N-3

Location L 2000 S, 250W

DIP - 60°

Azimuth 74°

DATE 8 August - 19 Aug 63

Depth 808'

DRILLER: R. Barron
Diamond
Drilling

0 - 16.0

Casing

16.0 - 444.1

MURONIAN Greywack-slate, distinct bedding at 60°, 40% hematitic bands average 1/4", the rest is dark grey greywacke. Hematite diminishes until at 105 rock is a laminated greywacke with bands of alternating coarseness.

@ 218 Rock becomes hematitic once more, change is abrupt.

@ 254 Rock ceases to be hematitic, change is abrupt, 65°, subsequent rock grey, granular greywacke in which bedding becomes less distinct, and at 370 is absent.

From 300, core becomes broken

375.0 - 376.6 Lost core

422.5 - 424.5 Lost core

@ 426.0 Rock becomes bedded again, 70°.

444.1 - 581.8

MURONIAN Conglomerate, change is abrupt, grey, granular, greywacke matrix, small pebbles of pink granite up to 1/2 inch, very sparse, - about 2%; matrix gradually becomes arkosic.

481.5 - 544.0 Black spotting

506.0 - 507.5 Lost core

@ 508.0 1/2" pink calcite 20°, chlorite along margins speck of chalcopyrite in wall rock, possibly very fine cobalt in chlorite; 2 stringers of pink calcite @ 507.5

@ 510.5 1 1/4" and 1/2" pink calcite 20°; included wisps of grey calcite surrounded by fringe of chlorite

DDH N-3 (continued)

SAMPLE 3508, 507.7 - 508.3 0.63 oss Ag
SAMPLE 3510, 510.0 - 511.0 0.42 oss Ag

@ 551.3 Breccia cemented with quartz;
chlorite and disseminated pyrite,
10°.

554.5 - 556.0 Lost core

@ 573.2 1/8" pink calcite stringer 15"

581.8 - 663.1

NIPISSING DIABASE, BILL Stony and brown at
contact with some chalcopyrite; within 15 ft.
of contact it becomes normal medium to coarse
grain diabase

* 653.4 Dense dull red dyke 6", 30°.

Nipissing diabase becomes red and texture-less
within 3 feet of main dyke contact.

663.1 - 772.0

KEMUNAWAN DIABASE DYKE Mottled red and green-
grey, 2" chlorite and 20% calcite at contact,
extremely variable, some red with 1% chlorite,
some dark with little texture and dull red
feldspar.

687.0 - 716.0 25 calcite stringers with some
pyrite and ilmenite in wall rock

* 716.0 1/4" pink calcite, 5°; very fine
pyrite in wall rock, promising
chlorite

@ 718.6 8 in^h zone, broken, 20% pink cal-
cite, vuggy

716.0 - Continued calcite stringers, pyrite
in stringers and cracks, very minor
chalcopyrite, promising chlorite.

772.0 - 808.0

NIPISSING DIABASE BILL Earthy red for 10 feet
then red-altered with fine pyrite on slips and
proliferous fractures, especially from 782 - 792;
red alteration diminishes to faint at 802.7

@ 784.1 2" chilled green dyke 45°

808 End of Hole N-3

DDH N-3 (continued)

Sludge samples, every 10 feet from 250; all
trace except

250 - 260	0.04
320 - 330	0.04
330 - 340	0.04
350 - 360	0.05
360 - 370	0.04
430 - 440	0.03
510 - 520	0.05
520 - 530	0.04
530 - 540	0.05
540 - 550	0.31
570 - 580	0.26

A. A. Campbell P. Eng.

Norite Explorations Limited

DEM N-4

Location: L 20005, 250W

DIP - 45°

Asimuth: 74°

DATE 19 Aug - 4 Sep 63

Depth: 550.5'

DRILLER: R. Barron
Diamond Drilling

0 - 18.0

Casing

18.0 - 378.3

HURONIAN Slate like greywacke, 1/8" - 1/4" bands, black to sandy, fine beds hematitic, 40°, diminishing and ceasing at about 75. Sparse pyrite on slips

186.0 - 187.0 Lost core

208.5 - 217.0 1/32 inch calcite seams 60°, nearly normal to bedding, thirteen of them

276.0 - 277.0 Lost core

264.0 Core angle with bedding 55°.

@ 290.3 4" zone 30% quartz, 5% calcite, vugs, chalcopyrite in 1/10" blebs and coated on vug faces, irregular.

@ 293.8 1/4" vuggy calcite, 45° normal to bedding black glistening chlorite in vugs.

306.2 - 307.2 Lost core

341.6 - 343.1 Lost core

@ 372.2 1/4" calcite with 70% chalcopyrite, pyrrhotite possibly trace of sphalerite, 45°. Pyrite along bedding planes on both sides 1.5 feet and 2.0 feet away.

378.3 - 536.9

Keweenaw Diabase Dyke

378.7 - 379.7 Lost core

381.2 - 383.7 Lost core

393.0 - 394.0 Lost core

394.0 - 402.5 Brecciated section with lacework of calcite seams and black alteration near end of section

@ 398.0 3" quartz and pink calcite, sparse chalcopyrite 35°.

DDH N-4 (continued)

- 400.5 - 401.5 broken black core, soft, fine black chlorite and possibly fine grained cobalt.
- SAMPLE 4400 2" possible cobalt. 0.05 oss Ag; 0.04 % co.
- @ 433.4 1/2" grey vuggy calcite 20° black chlorite and possibly cobalt.
- @ 434.7 1/4" irregular calcite
- @ 436.8 1/2" quartz and calcite 65°
- @ 441.3 Calcite filled breccia, 6 inches, 20% calcite
- @ 443.7 1/4" pink calcite 15°.
- @ 444.4 1/4" pink calcite 15°
- @ 450.3 2" black sand
- @ 452.5 black sand, possibly 6 inches, shreds of calcite
- SAMPLE 4452 mud 0.06 oss ag; 0.06 % co
- @ 456.5 more sand, but probably from hole above
- 450.2 - 457.0 Core dark and altered.
- @ 532.1 3/4" calcite and quartz, irregular
- @ 532.6 2" calcite and quartz 25°
- 536.9 - 550.5 MURONIAN Conglomerate, sparse granitic pebbles in fine grey greywacke groundmass.

550.5 End of Hole N-4

Sludge samples every 10 feet from 250; all trace except

250 - 260	0.02	330 - 340	0.07
260 - 270	0.06	340 - 350	0.07
270 - 280	0.10	350 - 360	0.05
		360 - 370	0.05
		500 - 510	0.06
		510 - 520	0.06

W. A. Campbell P. Eng.

Norite Explorations Limited

DIH N-5

Location L 20008, 250W

DIP: 45°

Azimuth 52°

DATE: 6 Sep 63 - 24 Sep 63

Depth 607.0 feet

DRILLER: R. Barron
Diamond
Drilling.

0 - 16.0

Casing

16.0 - 459.0

NIROKIAN Slate-like greywacke 1/8" to 1/4" bands, black to sandy, fine beds hematite near collar of hole, censing about 80 feet. Bedding @ 55°. Red hematite bands change to buff then to grey at 130 feet.

110.1 - 112.2

lost core

@ 180.0

Sand, fragments of calcite; some fine pyrite. Lost water which flowed from N-3 and 4. Cemented

SAMPLE 5180

Band 0.07 oss Ag per ton

@ 186.4

1" irregular calcite, sparse chlorite

266.0 - 266.8

Lost core; core becoming blocky

313 - 315

Core loses its banding and is finely brecciated in what appears to be primary pre-consolidation brecciation. Subsequent core is grey and banded, and is very blocky and darker.

@ 358.3

6 inches lost core

@ 366.5

9 inches lost core

@ 376.9

2 inches 20% pyrite

@ 378.0

6 inches lost core

@ 382.0

4 inches lost core

@ 387.0

24 inches lost core

@ 393.1

6 inches lost core

@ 395.2

12 inches lost core

@ 413.1

12 inches lost core

HOLE N - 5 (continued)

- @ 416.3 18 inches lost core
- @ 421.4 1/4 inch epidote 35°
- @ 423.7 1/4 inch epidote 35°
- @ 429.5 3 inches mud, grey
- @ 442.7 5" broken epidote and quartz

459.0 - 501.7

HUKONIAN conglomerate with slightly granular matrix, some granitic pebbles in slabs 2" thick.

- @ 463.0 1/2" pink calcite, quartz, and sheared chlorite, several specks of grey, very shiny, soft metallic mineral in chlorite. 20°.

SAMPLE 5463 2" 0.06 ozs. Ag.

- @ 465.7 12" lost core, possible contact; subsequent rock grey and massive, granular; might be fine grained diabase.

465 - 467.0 Irregular pink calcite nearly parallel to core, wall rock fragments and some sooty black chlorite.

- @ 474.8 1/4" dull brown calcite 45°.
- @ 476.0 1/4" calcite 45°.
- @ 477.0 1/4" pink calcite and chlorite 65°
- @ 484.6 1/4" pink calcite 65°
- @ 485.2 1/4" pink calcite 65°
- @ 479.2 Possible contact between massive greywacke facies 35°

501.7 - 582.8

KWENAWAN diabase dyke, contact not glassy; core becomes medium grained within 12 inches of contact.

- 514 - 517 Core stained with hematite from numerous slips
- @ 561.8 1/8" hematite-stained calcite 40°
- @ 566.7 1/4" hematite-stained calcite 25°

HOLE N - 5 (continued)

@ 580.1 1/4" calcite 20°

582.8 - 607.0

RUBENIAN

Conglomerate, massive greywacke
groundmass, sparse fine granitic
pebbles; core broken and blocky.

@ 583.7 3" quartz-filled breccia

605.5 - 607.0 Lost core

607.0 END OF HOLE N - 5

Sludge samples were collected at 10 ft. intervals; all ran Nil or Trace except:

80 - 90 0.03 O&B AB
90 - 100 0.03

140 - 150 0.03
170 - 180 0.05
180 - 200 0.04
200 - 210 0.04
210 - 220 0.04
250 - 260 0.05
260 - 270 0.05

300 - 310 0.03 O&B AB
310 - 320 0.04
320 - 330 0.06
330 - 340 0.06
340 - 350 0.09
350 - 360 0.05
360 - 370 0.05
370 - 380 0.09
380 - 390 0.04
390 - 400 0.06
400 - 410 0.03

410 - 420 0.05 O&B AB
420 - 430 0.04
430 - 440 0.03
440 - 450 0.05
450 - 460 0.05
460 - 470 0.03
470 - 480 0.04
490 - 500 0.22
500 - 510 0.06
530 - 540 0.03
540 - 550 0.03
550 - 560 0.04
560 - 570 0.04
570 - 580 0.04
580 - 590 0.04
590 - 600 0.05
600 - 607 0.06

P. A. Campbell
P. Eng.

MAGNETIC PROFILE

8200y

8000y

7800y

N 52° E

DDH N-5 45°

McKINNON
SHAFT

DIABASE
DYKE

SAND
1" CAL.
H SLATE

HURONIAN

VERY BROKEN CORE

H GREYWACKE

1/2" CAL.

H CONGLOMERATE

3" QTZ.
601.0'

N DIABASE

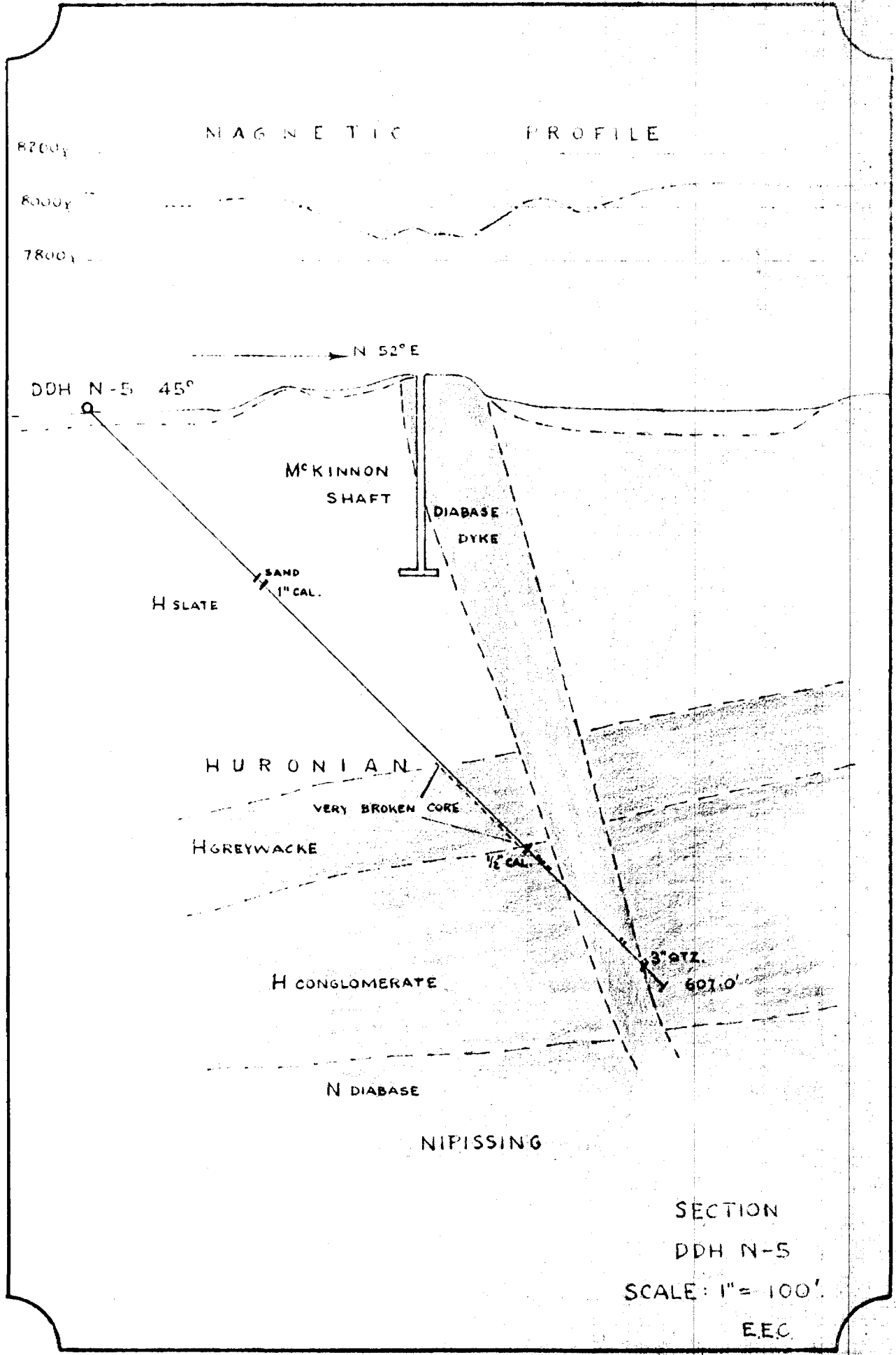
NIPISSING

SECTION

DDH N-5

SCALE: 1" = 100'

EEC



MAGNETIC
PROFILE

8200 γ

8000 γ

7800 γ

N 45° E

SHAFT

DDH N-2 60°

DDH N-1 45°

CLAY

DIABASE

H SLATE

H URONIAN

DYKE

H LIME

2" CAL.

1/2" CAL.

H GREYWACK

2" CAL.

H GREYWACK

H CONGLOMERATE

401.0

H CONGLOMERATE

H LIME

N DIABASE

1 1/2" CAL, VUGS

N LASSING

SECTION

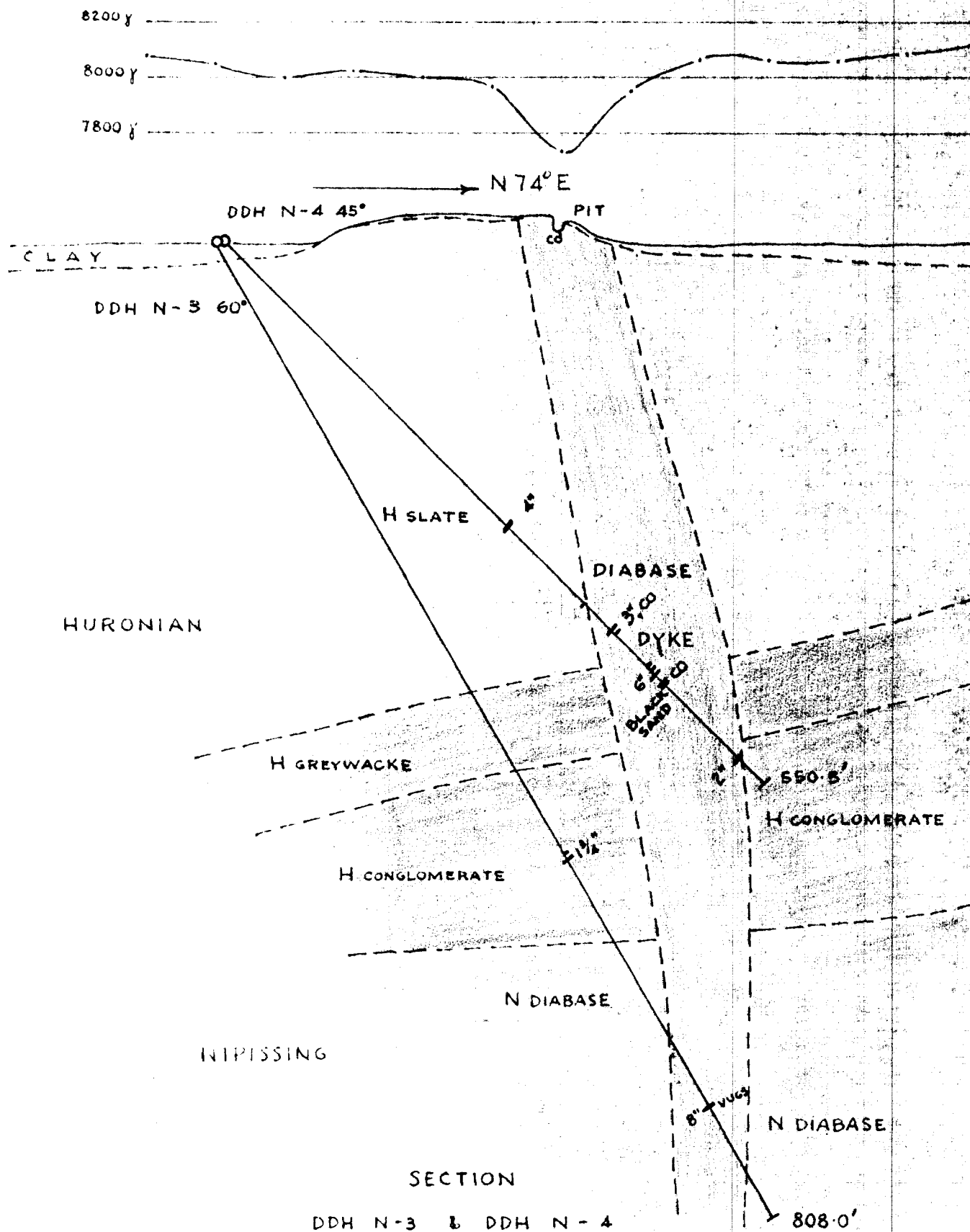
DDH N-1 & DDH N-2

SCALE: 1" = 100'

774.0

E.E.C.

MAGNETIC PROFILE



SECTION

DDH N-3 & DDH N-4

SCALE: 1" = 100'

E.E.C.