



42A10NW0617 12 DUNDONALD

010

Diamond Drilling

Township of DUNDONALD (Cont'd)

Report No 12

Work performed by:

Claim No	Hole No	Footage	Date	Note
	8-1964	250.0'	Oct/64	
	9-1964	291.0'	Oct/64	
L 74884	9	335.0'	Sept/62	
L 76533	10-1964	215.0'	Oct/64	
	11-1964	116.0'	Oct/64	
	12-1964	420.0'	Oct/64	

Notes:

Diamond Drilling

Township of DUNDONALD

Report NO 12

Work performed by: Falconbridge Nickel Mines Limited

Claim NO	Hole NO	Footage	Date	Note
L 71005	D-1	470.0'	Oct/60	
	D-2	547.0'	Oct/60	
	D-4	300.0'	Nov/60	
	D-6	252.0'	Nov/60	
L 71007	D-3	394.0'	Oct/60	
L 71194	D-5	372.0'	Nov/60	
L 71018	D-7	315.0'	Nov/60	
L 74887	6	295.0'	Aug/62	
L 74888	7	339.0'	Aug/62	
	8	224.0'	Sept/62	
	1-1964	229.0'	Oct/64	
	2-1964	218.0'	Oct/64	
	3-1964	353.0'	Oct/64	
	4-1964	204.0'	Oct/64	
	5-1964	217.0'	Oct/64	
	6-1964	313.0'	Oct/64	
Notes:	7-1964	281.0'	Oct/64	



42A10NW0617 12 DUNDONALD

020

FALCONBRIDGE NICKEL MINES LIMITED

REPORT OF DIAMOND DRILLING ON CLAIMS IN DUNDONALD TWP.

Larder Lake Mining Division, Ontario

Date: October 18, 1962

FALCONERIDGE NICKEL MINES LIMITED

REPORT OF DIAMOND DRILLING ON CLAIMS IN DUNDONALD TWP.

Larder Lake Mining Division, Ontario

Introduction

This report describes exploration carried out by means of diamond drilling on 13 claims numbered L.74882 to 74888 inclusive, L.76626 to 76630 inclusive and L.76533, all situate in Dundonald Township. Accompanying forms and applications give details with respect to ownership, grouping and assessment commitments.

Four diamond drill holes have been located to examine favourable geological and geophysical targets. This program is the culmination of an intense program of geological mapping and detailed ground geophysical examination. Attention was directed to this part of the claims by the discovery of favourable nickel assays in old pits and trenches.

Diamond Drill Results

DIAMOND DRILL HOLE 6

Diamond drill hole 6 was located at the east end of an elongate serpentinite mass, along which interesting nickel assays have been discovered. The drill hole was located to examine a favourable electromagnetic conductor which is associated with known, low grade mineralization, at or near the contact of the serpentinite body. Beneath some 22 feet of overburden, a 54 ft. zone of altered volcanic rocks was intersected before the ultrabasic body was encountered. The drill hole ended at a depth of 290 feet in dense, serpentinitized ultrabasic rock, and sulphide mineralization was not detected in any part of this body. Intensely sheared and brecciated volcanics, with accompanying sulphide and graphite mineralization occur near the contact with ultrabasic rocks. This highly altered zone is attributed to be the cause of the ground geophysical electromagnetic anomaly.

DIAMOND DRILL HOLE 7

Diamond drill hole 7 was located at the west end of the aforementioned serpentinite body, in order to intersect rocks below an old prospecting pit. Low grade nickel sulphide mineralization was detected in this pit, and it was deemed necessary to examine rocks which extend below it. The direction and angle of the hole was decided on the basis of the position and shape of the pit.

Below an overburden thickness of 7 feet, some 106 feet of fractured and altered acidic to basic volcanics were intersected. These rocks contain varying amounts of sulphides and graphite, and show great variation in composition from band to band. A zone of serpentinitized ultrabasic rocks was intersected between 113 and 157 ft. depths. This rock shows great variation in composition and texture, and contains several highly brecciated and altered

“NOIÉAR” ®

HOLD FAST

“NOIÉAR” ®

zones. Below the ultrabasic zone, a further sequence of serpentinized and brecciated volcanic rocks were intersected to a depth of 339 feet. In these footwall volcanics, near the ultrabasic body, a narrow zone of sulphide-bearing breccia was intersected at a depth of 207 feet. This consisted of some 6 inches of 50% sulphide and 8 inches of massive sulphide. The remaining volcanic rocks contain varying amounts of graphite and disseminated sulphides, but no further mineralization of interest.

DIAMOND DRILL HOLE 8

This hole was located to examine a significant flexure in the contact of the elongate ultrabasic body. It was hoped that this structure, in close connection with known nickeliferous sulphides, would give rise to significant sulphide accumulations.

After passing through 27 feet of overburden, this drill hole collared in serpentinized ultrabasic rocks, and continued in the same to a depth of 112 feet, where serpentinized gabbro was encountered. Below a 10.5 ft. zone of serpentinized gabbro, brecciated, footwall, volcanics were intersected to a depth of 224 feet. Volcanics were once again highly brecciated and mineralized with graphite and pyrite. The serpentinized ultrabasic body was conspicuously barren of any interesting sulphide mineralization.

DIAMOND DRILL HOLE 9

This diamond drill hole was located to intersect a strong electromagnetic anomaly which shows good correlation with a moderate, positive magnetic anomaly. It was hoped that this excellent geophysical pattern was indicative of massive sulphide mineralization.

After penetrating 39 feet of overburden, this drill hole intersected 78 feet of gabbroic rocks, 166 feet of serpentinized ultrabasic rocks, and thence returned to a section of 52 feet of gabbroic rocks. Visible sulphide mineralization was not seen in any of the rocks in this drill hole. Brecciation is predominant at contacts between rock types, but is conspicuously barren of sulphide mineralization. No explanation was found for the strong electromagnetic anomaly, but the strongly magnetic nature of the serpentinized ultrabasic rocks explains sufficiently the magnetic anomaly detected by ground surveys.

Conclusions

The three diamond drill holes were located to examine the contact of an elongate serpentinized ultrabasic body on claims L.74887 and 74888. One of these drill holes intersected a narrow body of sulphide mineralization, but it was not possible to trace it along the contact by further drilling.

Diamond drilling of a strong magnetic and electromagnetic anomaly at the northeast end of the claim group, proved very discouraging, and did not sufficiently explain the reason for the electromagnetic anomaly.

It is concluded that nickeliferous sulphide bodies of significant size are not associated with the electromagnetic anomalies examined by this drill program.

Respectfully submitted,

FALCONBRIDGE NICKEL MINES LIMITED,



L. C. Kilburn, Ph.D., P.Eng.,
Geologist.

LCK:lh

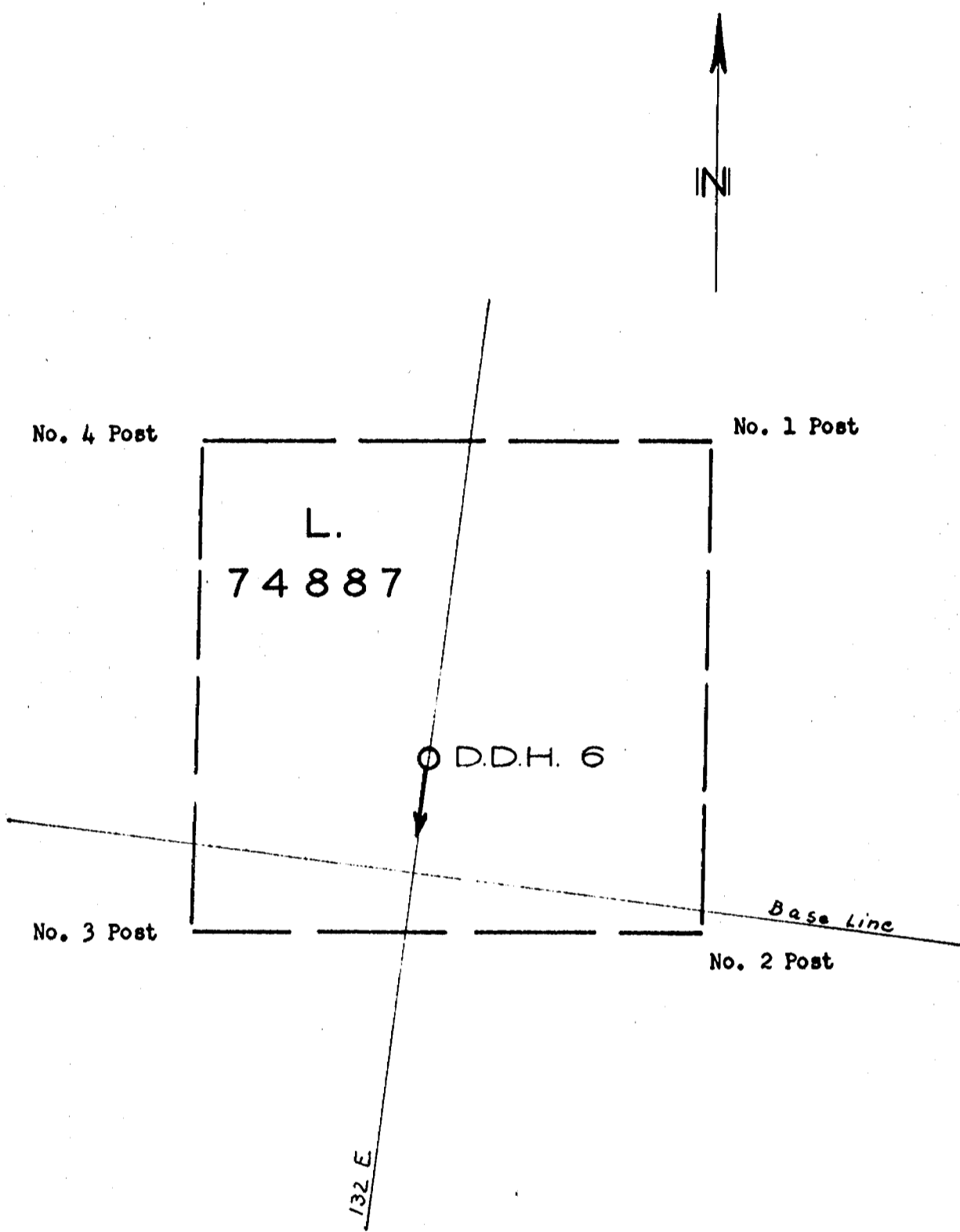
HOLD FAST

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"NOISEAR"

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Scale: 1" = 400'

FALCONBRIDGE NICKEL MINES LIMITED

Location Plan

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

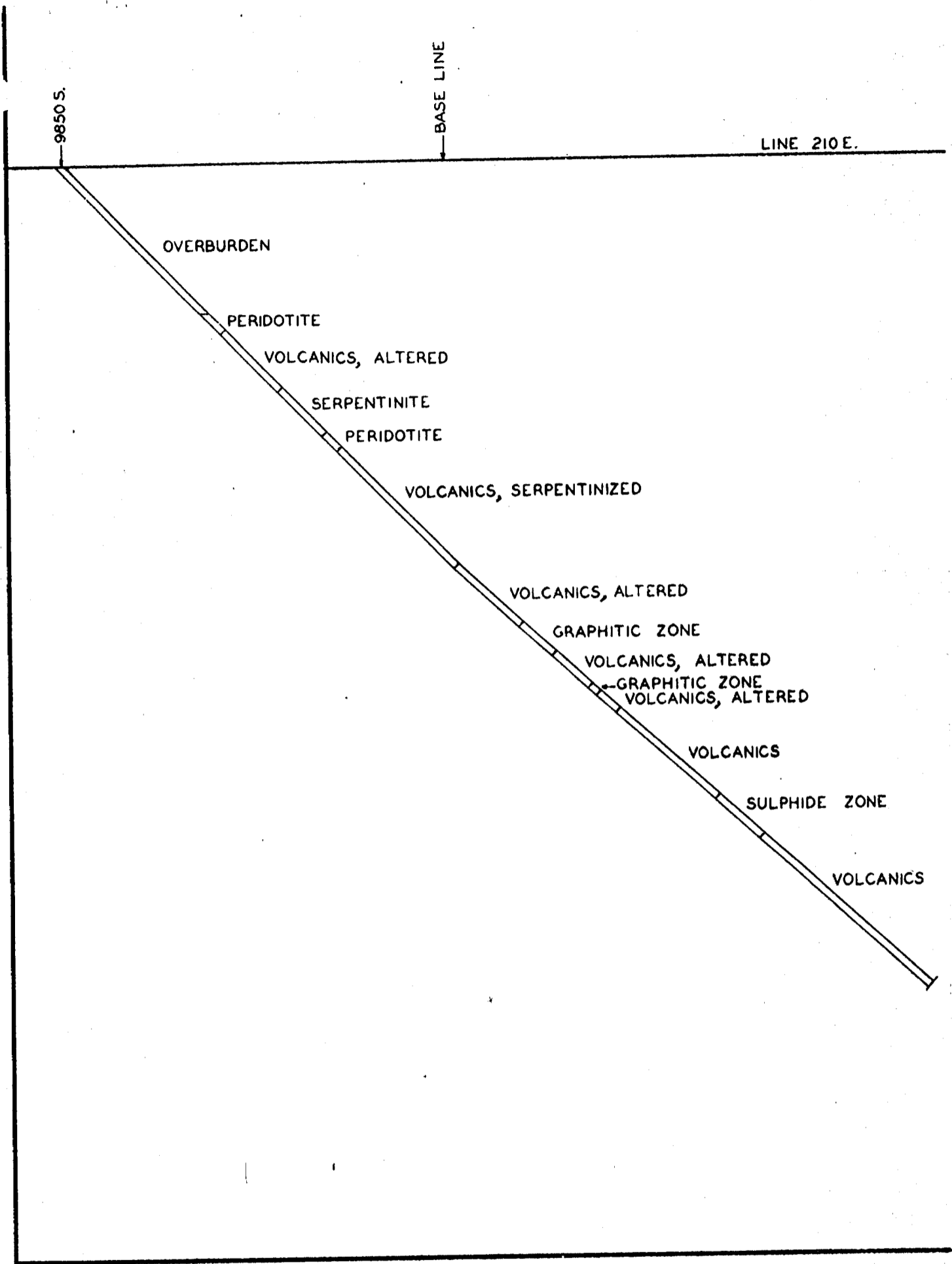
LOCATION 210 E - 9850 S BEARING SE HOLE NO. D-1
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
 DUNDONALD TWP.
 STARTED _____ TESTS (CORRECTED) _____
 FINISHED October 17, 1960 470' - 41°
 CASING 0-92'
 CORE SIZE AX

FROM	TO	DESCRIPTION
0	82	Overburden
82	92	Peridotite - fairly unaltered (euhedral pseudomorphs of olivine)
92	94.9	Gravel
94.9	105	Volcanics - (andesite-dacite), serpentinized in fractures
105	124	Altered volcanics (?), greenish black, lathe-like crystals in a grey matrix, a few short sections (<1') of unaltered andesite
124	149	Serpentinite, sections up to 1' in length having a spotted appearance due to round grains of greenish carbonate in a dark serpentine groundmass, asbestos stringers throughout, becomes more serpentinized with depth
149	157	peridotite - relatively unaltered
157	220	Serpentinized volcanics. Massive serpentine in places, abundance of asbestos stringers, blue serpentine stringers common, pyrite in slip planes, serpentinization reaches its peak at 207' - 209' and then gradually diminishes with depth
220	235	Andesite - only slightly altered
235	245.5	Andesite - abundance of serpentine stringers
245.5	248	Volcanics - highly fractured with serpentine in the fractures, sulphides occur in small, widely scattered blebs (pyrrhotite and possibly pentlandite)
248	255	Altered volcanics (?) - green coloured rock with greenish-black, lathe-like crystals (amphibolite?) that give a lattice-like texture to the rock 252-255 - up to 1% pyrrhotite in a brecciated equivalent of the preceding 4'
255	272	Graphite zone (in altered volcanics) 256-257 - massive, amorphous graphite 259-261 - 50-75% graphite 262-268 - brecciated zone with graphite filling around fragments 268-270 - massive graphite 270-272 - brecciated zone with graphite and pyrite and a few specks of pyrrhotite.
272	291	Altered volcanics - having lattice-like texture

FALCONBRIDGE NICKEL MINES LIMITED**DIAMOND DRILL LOG**

LOCATION 210 E - 9850S BEARING SE HOLE NO. 1-1
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
Dundonald Twp.
 STARTED _____ TESTS (CORRECTED) _____
 FINISHED October 17, 1960 470' - 41°
 CASING 0 - 92'
 CORE SIZE AX

FROM	TO	DESCRIPTION
291	295	becomes finer grained with depth, disseminated sulphides, 1-5% pyrrhotite with few specks of chalcopyrite Graphite zone. 291-293.5 - graphite filling in breccia
295	296.5	293.5-295 - 75 - 100% graphite Altered volcanics. Lattice-like texture with finely disseminated pyrrhotite in fractures
296.5	306	Altered volcanics - coarser grained than above, no pyrrhotite visible
306	327	Andesite - small amphibole phenocrysts, probably fine-frained equivalent of the lattice textured rock, occasional speck of pyrrhotite, sheared and serpentinized only in a few short sections
327	354	Volcanics (dacite → rhyolite), brecciated zones containing graphite and pyrrhotite 332 - 333 - grey, silicious volcanic with serpentine in fractures 346 - 349 - Ground core - particles mostly pieces of graphite 349 - 354 - light green rhyolite with silica stringers throughout
354	359	Volcanics - sheared, serpentinized with graphite and pyrite
359	382.5	Sulphide zone 359 - 360.5 - 75-100% pyrite in brecciated volcanic, some pyrrhotite visible 360.5 - 365 - 25-50% pyrite in brecciated volcanics, some pyrrhotite visible 365 - 377 - 5-10% sulphides in brecciated volcanics, pyrite:pyrrhotite ratio about 4:1, volcanics much more silicious 377 - 382 - 1-5% pyrrhotite in silicious brecciated volcanics, brecciated fragments show porphyritic texture
382.5	393.5	Volcanics (andesite → dacite) - breccia fragments porphyritic
393.5	470	Volcanics (dacite → rhyolite) - similar to fragments found in the above breccia, white phenocrysts in light green groundmass, blebs up to 2" long of bluish-grey groundmass
	470	END OF HOLE.



SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

SECTION D.D.H. D-1
DUNDONALD TWP.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 224 E - 96 S BEARING SE on line HOLE NO. D-2

LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
 Dundonald Twp.

STARTED October 17, 1960 TESTS (CORRECTED)

FINISHED October 22, 1960 547' - 45°

CASING Piping 0-73' : Casing 0-76'

CORE SIZE AX

FROM	TO	DESCRIPTION
0	76	Overburden
76	123	Volcanics, medium grained, intermediate, serpentinized zones 113 - 114 and 120 - 121 105 - 123 - serpentine stringers appear and become more abundant with depth
123	157	Serpentinite (altered peridotite?), black aphanitic serpentinized rock
157	175	Volcanics, serpentinization decreases with depth, stringer content decreases, rock becomes more granular with depth
175	199	Volcanics, 175 - 181 - fairly unaltered, medium grained, intermediate 181 - 199 - serpentine in fractures, fine grained
199	201.5	Shear zone - highly fractured and brecciated, silicious stringers and graphite
201.5	217	Altered volcanics, crystals of amphibole giving lattice-like texture 201.5 - 203 - nodules of pyrite, perfectly round blebs of a black mineral of medium hardness, 2 mm. in diameter
217	228	Volcanics, slightly serpentinized
228	239	Serpentinite (altered peridotite?), dense, black aphanitic rock, asbestos stringers
239	438	Volcanics 239 - 283 medium grained intermediate, relatively unserpentinized 283 - 296 serpentinite 296 - 317 fractured with serpentine in fractures, few lath-like crystals amphibole, specks of pyrite 317-438 medium grained intermediate, relatively unserpentinized
438	443	Volcanics, with sections of a black shale-like rock of low specific gravity, similar to that found on surface on south part of property
443	474	Graphite, 75-100% in black shale
474	479	Graphitic shale with marcasite nodules
479	485.5	Shear zone, brecciated with graphite and carbonate

FALCONBRIDGE NICKEL MINES LIMITEDDIAMOND DRILL LOG

LOCATION 224 E - 96 S BEARING SE on line HOLE NO. D-2
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
Dundonald Twp.
 STARTED October 17, 1960 TESTS (CORRECTED) _____
 FINISHED October 22, 1960 547' - 45°
 CASING Piping 0-73' : Casing 0-76'
 CORE SIZE AX

FROM	TO	DESCRIPTION
485.5	493	Volcanics, medium grained, intermediate, small specks of pyrite scattered throughout the rock, pyrite in slip faces
493	504.5	Serpentinized volcanics
504.5	506.5	Shear zone with graphite and carbonate
506.5	532	Altered volcanics - amphibole crystals giving lattice-like texture, varying from fine grained to coarse grained
532	538	Brecciated zone, serpentinized, graphite filling between fragments
538	547	Serpentine, massive, both green and blue
	547	END OF HOLE

No 4
POST

No 1
POST

L. 71007

D-3 45°



No 3
POST

No 2
POST

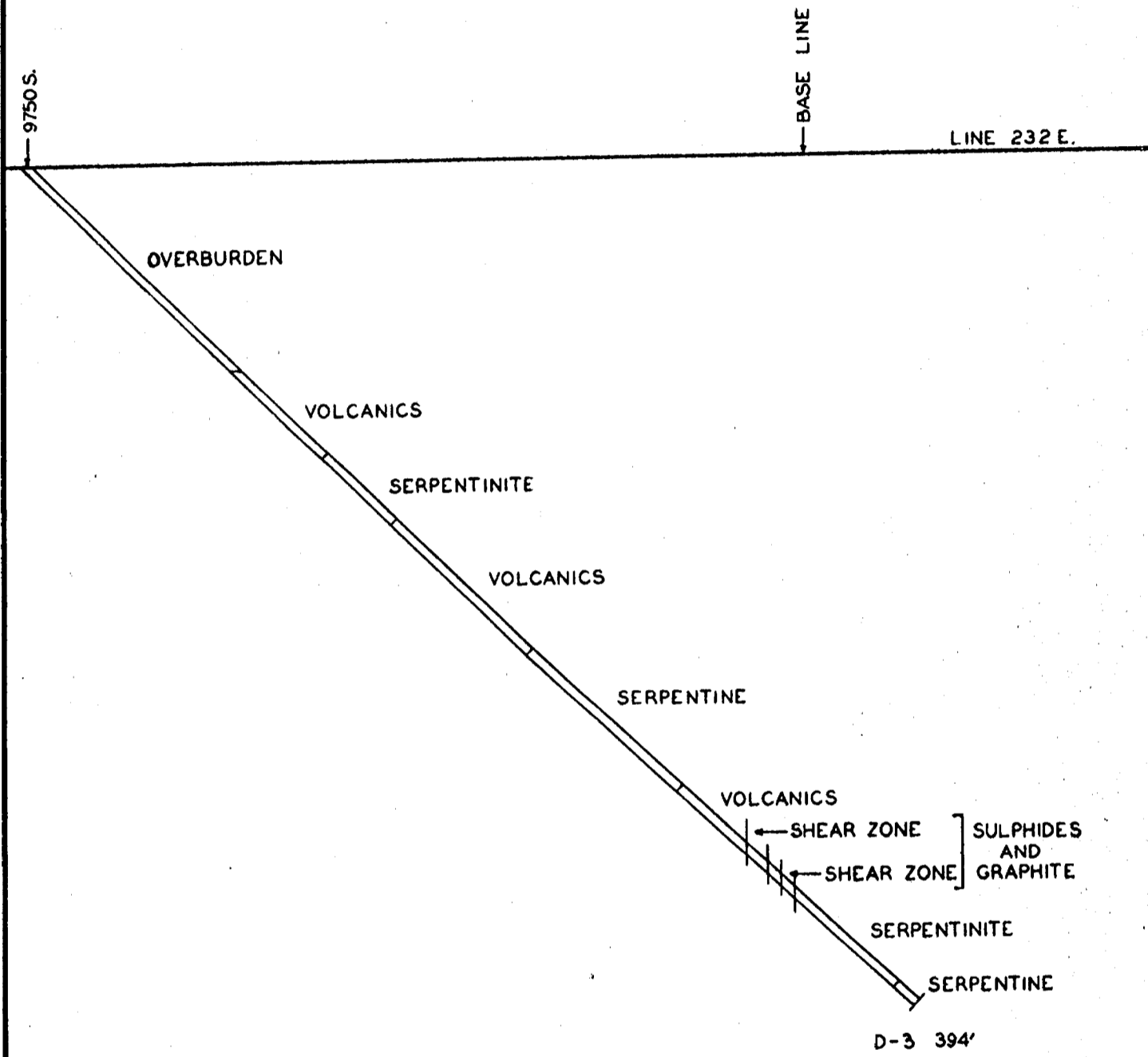
1 INCH = 200 FEET

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 232 E - 9750 S BEARING SE on line HOLE NO. D-3
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
 DUNDONALD TWP.
 STARTED October 26, 1960 TESTS (CORRECTED) _____
 FINISHED October 31, 1960 394' - 43'
 CASING Piping 0-75 : Casing 0-93
 CORE SIZE Ax

FROM	TO	DESCRIPTION
0	93	Overburden
93	120	Volcanics, medium grained, fairly unaltered
120	124	Ground Core, "cave" in hole, cementing necessary
124	133	Volcanics, serpentized
133	164.5	Serpentinite, sheared, fractured, almost massive serpentine 156 - 157 - 5% pyrrhotite in volcanics only slightly serpentized
164.5	167	Volcanics, highly silicified
167	215	Sheared volcanics - only slightly serpentized, short sections epidotized, pyrite and a soft reddish-green mineral (?) in slip planes
215	226	Volcanics, highly sheared and altered
226	273	Serpentine - sheared, with a few carbonate stringers
273	291	Serpentinized peridotite (?), massive dark green to black rock with abundant asbestos stringers
291	320	Volcanics, brecciated, with serpentine between the fragments
320	323	Shear zone - brecciated in sections, graphite and serpentine (banding at 45° to core), 1% pyrite and pyrrhotite with specks of chalcopyrite (sulphides occur in small blebs)
323	329	Volcanics, altered and sheared, slightly graphitic, coarse grained lattice-like texture in places, 1-3% pyrrhotite and pyrite along shear planes and in fractures
329	335	Volcanics, altered, serpentized
335	339	Shear zone, graphitic breccia with pyrite, pyrrhotite and specks of chalcopyrite, less than 1% sulphides (occurring in blebs), banding at 45° to core
339	340	Volcanics, altered with 10% graphite
340	386	Serpentinite - highly serpentized rock, changes every foot or so from an amphibolite rock to one with large phenocryst feldspar. 375 - 381 - highly silicified
386	394	Serpentine, asbestos and carbonate stringers
	394	END OF HOLE



SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

SECTION D.D.H. D-3
DUNDONALD TWP.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 95 S - 216 E BEARING SE on Line HOLE NO. D-4
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
 DUNDONALD TWP.
 STARTED _____ TESTS (CORRECTED) _____
 FINISHED November 5, 1960 300' - 43°
 CASING Piping 0-50' : Casing 0-55'
 CORE SIZE Ax

FROM	TO	DESCRIPTION
0	55	Overburden
55	76.5	Serpentinized Peridotite (?) (or advanced stage of serpentinized volcanics)
76.5	102	Volcanics, serpentinized - abundant serp. stringers - decrease in stringers with depth
102	110	Volcanics, medium grained, intermediate, fairly unaltered
110	115	Volcanics, ophanitic - highly fractured
115	116	Graphite, in brecciated volcanics
116	126	Volcanics, altered - lattice-like texture with amphibole phenocrysts
126	128	Volcanics, medium grained, fairly unaltered
128	146	Volcanics, serpentinization increasing with depth 136.5 - 140 massive serpentine
146	181	Volcanics, highly silicious, aphanitic, serpentinized
181	204	Volcanics, medium grained, serpentinization increasing slightly with depth
204	212	Serpentine, black massive (altered peridotite?)
212	239	Volcanics, serpentinized (highly)
239	272	Serpentinized peridotite (?), asbestos and blue serpentinized stringers (or advanced stage of serpentinized volcanics)
272	300	Volcanics, medium grained, serpentinized
	300	END OF HOLE

LINE 216 E.

9500 S.

9700 S.

OVERBURDEN

PERIDOTITE, SERPENTINIZED

VOLCANICS, SERPENTINIZED

GRAPHITE IN BRECCIATED VOLCANICS

VOLCANICS

VOLCANICS, SERPENTINIZED

SERPENTINE

VOLCANICS, SERPENTINIZED

PERIDOTITE, SERPENTINIZED

VOLCANICS

D-4 300'

SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

SECTION D.D.H. D-4
DUNDONALD TWP.

No 4
POST

No 1
POST

D-5 45°



L. 71194

No 3
POST

No 2
POST

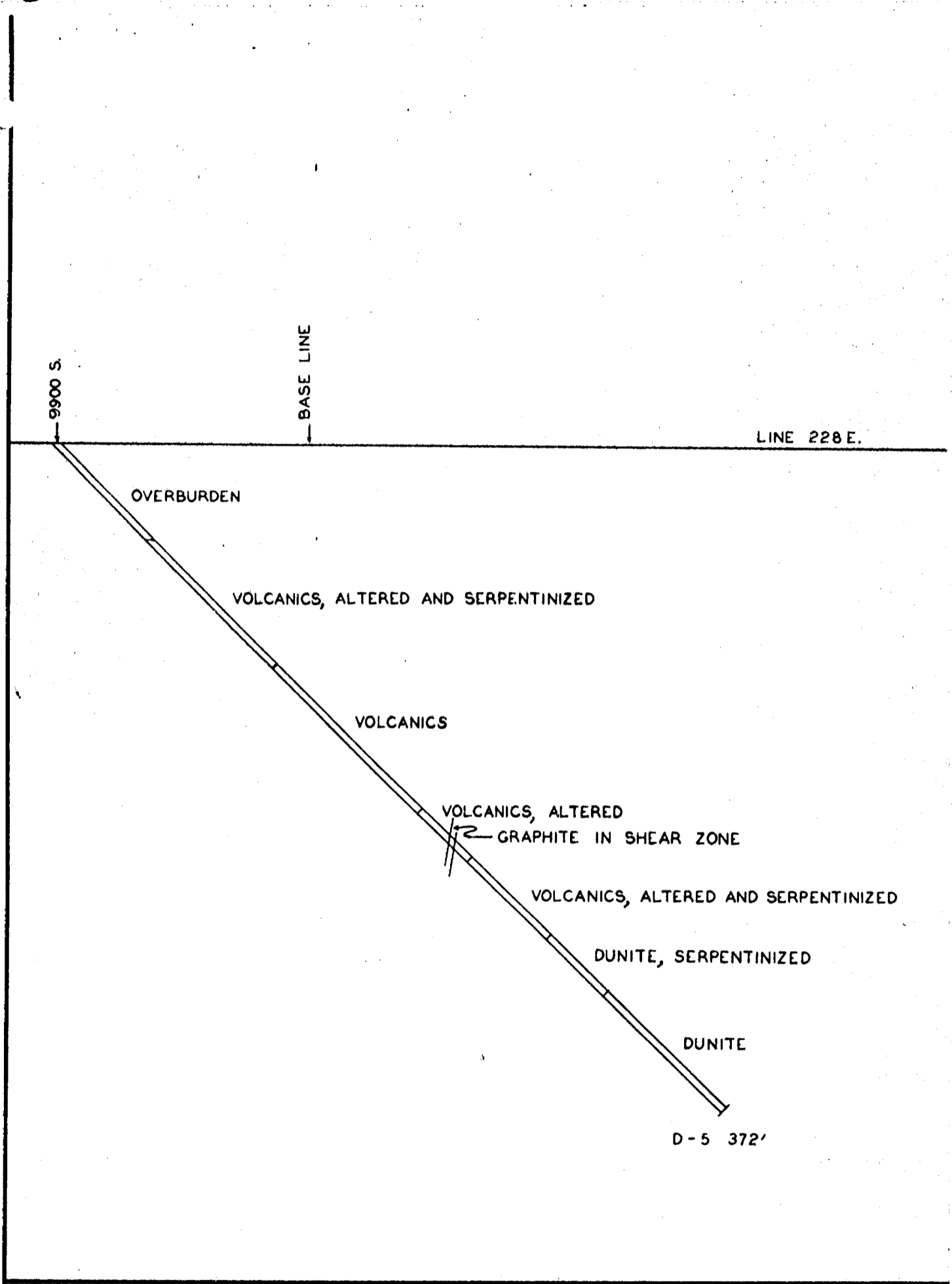
1 INCH = 200 FEET

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 228 E - 99 S BEARING SE on line HOLE NO. D-5
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
 DUNDONALD TWP.
 STARTED _____ TESTS (CORRECTED) _____
 FINISHED November 16, 1960 372' - 43½'
 CASING Piping 0-50 : Casing 0-51
 CORE SIZE AX

FROM	TO	DESCRIPTION
0	51	Overburden
51	62	Volcanics, altered and fractured, lattice-like texture in places, few serpentized stringers in fractures
62	81	Volcanics, intermediate, medium grained, slightly serpentized
81	86	Volcanics, serpentized, brecciated, round blebs of serpentine
86	107	Volcanics, serpentized and fractured
107	114	Serpentinite, black, massive serpentine with a few asbestos stringers
114	121	Volcanics, highly serpentized, serpentization decreasing with depth
121	203	Volcanics, medium grained, intermediate, serpentine stringers throughout
203	219	Volcanics, altered and serpentized with lattice-like texture 204 - 209 finer grained, fractured with a few widely scattered blebs of pyrite and pyrrhotite
219	222	Graphite in shear zone with a few small blebs of pyrite (shearing @ 55°)
222	230	Volcanics, altered, serpentized, speckled appearance due to round blebs of serpentine mixed with white fragments of volcanics
230	236	Serpentinite
236	245	Volcanics, serpentized
245	261	Serpentinite, 248 - 250 graphite in shear zone
261	274	Volcanics (?) highly altered recrystallized rock, serpentized
274	305	Dunite, serpentized, unaltered olivine content increasing with depth
305	372	Dunite, unserpentized, numerous black bands consisting probably of magnetite and/or chromite
	372	END OF HOLE



SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

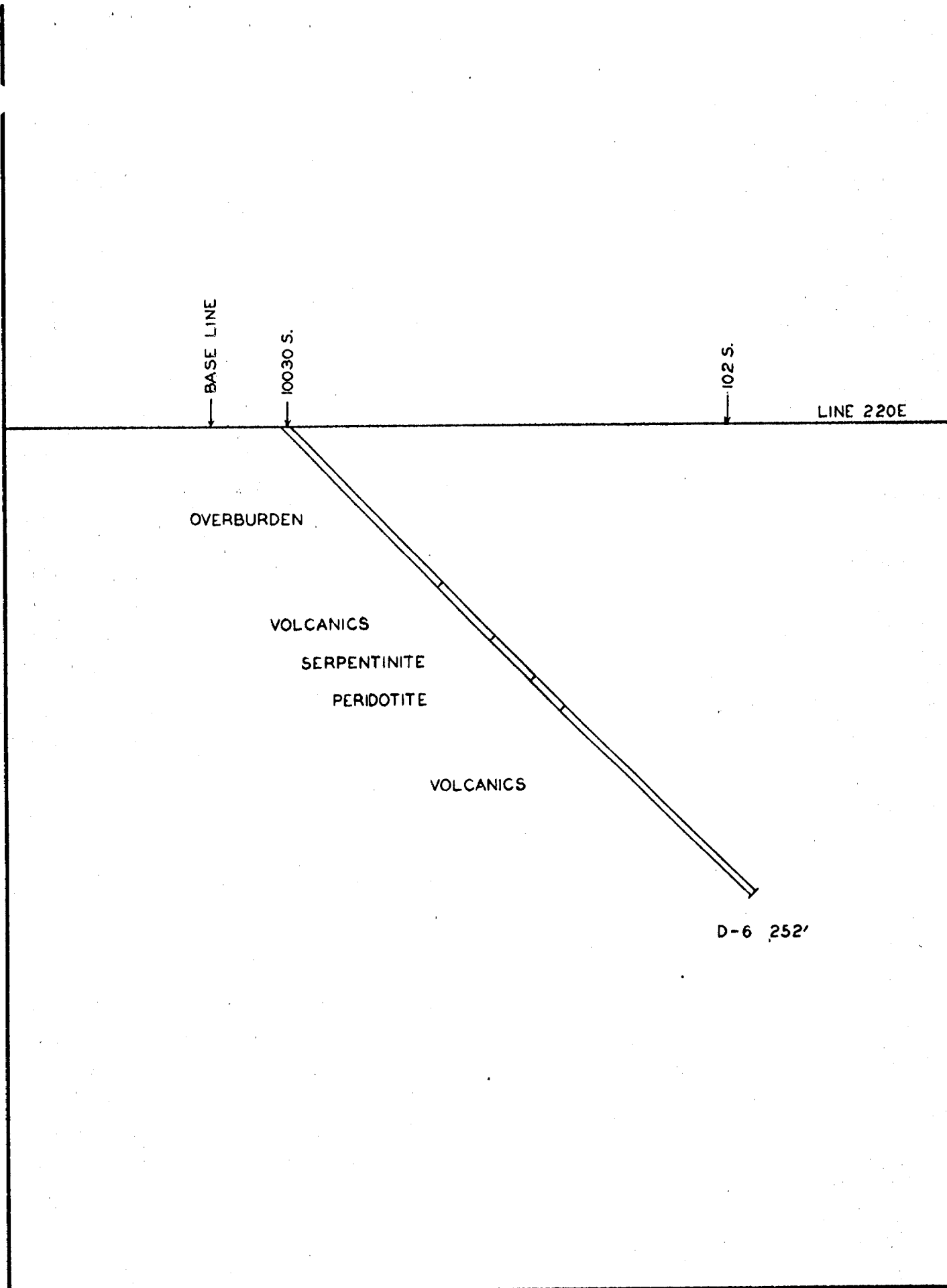
SECTION DDH D-5
DUNDONALD TWP.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 220 E - 100 + 30' S BEARING SE on line HOLE NO. D-6
 LOGGED BY J. Bissett ELEVATION _____ DIP 45° PROPERTY Alexo Claims
 DUNDONALD TWP.
 STARTED _____ TESTS (CORRECTED) _____
 FINISHED November 18, 1960 252' - 44°
 CASING 0 - 83
 CORE SIZE Ax

FROM	TO	DESCRIPTION
0	83	Overburden
83	106	Volcanics, altered and serpentized, slightly silicious, abundant serpentine stringers a few carbonate stringers
106	113	Volcanics, altered, lattice-like texture
113	127	Serpentinite, black massive serpentine, a few carbonate stringers, 119 - 120 silicious volcanics (rhyolite?)
127	134	Brecciated, altered serpentized rock, a few specks of pyrite, very small amount of graphite between fragments
134	150	Peridotite, serpentized with a few asbestos stringers
150	155	Volcanics, altered serpentized, becoming less granular and more silicious with depth
155	166	Volcanics, medium grained, highly silicious
166	176.5	Volcanics, fine grained to aphanitic, highly serpentized
176.5	252	Dioritic-looking rock, probably volcanics 201 - 209 abundant serpentine stringers 209 - 216 silicious zone, aphanitic, serpentized 216 - 252 varying amounts of serpentine stringers up to 50%
	252	END OF HOLE



SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

SECTION DDH D-6
DUNDONALD TWP.

No 4
POST

No 1
POST

D - 7 - 90°

○

L . 71018

No 3
POST

No 2
POST

1 INCH = 200 FEET

FALCONBRIDGE NICKEL MINES LIMITED
DIAMOND DRILL LOG

LOCATION 212 E - 89 S BEARING _____ HOLE NO. D-7
 LOGGED BY J. Bissett ELEVATION _____ DIP 90° PROPERTY Alexo Claims
 _____ Dundonald Twp.
 STARTED _____ TESTS (CORRECTED) _____
 FINISHED November 26, 1960
 CASING 0 - 82 315' - 88°
 CORE SIZE Ax

FROM	TO	DESCRIPTION
0	82	Overburden
82	134	Peridotite, serpentized, slightly sheared in places with hematite in shear planes
134	178	Peridotite, altered, serpentized, blebs of light-green serpentine gives a spotted appearance, 10% graphite, micaceous, disseminated throughout
178	202	169 - 170 10-20% graphite Volcanics, altered serpentized, 5-10% graphite, few scattered flakes of biotite
202	253	Serpentinite, a few asbestos stringers
253	264	Volcanics, medium grained, serpentized, a few scattered flakes of graphite
264	276	Serpentinite
276	299	Volcanics, medium grained, serpentized, some flakes of graphite
299	315	Volcanics, altered, serpentized
	315	END OF HOLE

88 S. 89 S. 90 S. LINE 212E.

OVERBURDEN

PERIDOTITE

PERIDOTITE WITH GRAPHITE

VOLCANICS WITH GRAPHITE

SERPENTINITE

VOLCANICS
SERPENTINITE

VOLCANICS

D-7 315'

SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

SECTION D.D.H. D-7
DUNDONALD TWP.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION Line 132 E 310' N. (New grid) BEARING S HOLE NO. D.D.H.#6

LOGGED BY G.D.Mason ELEVATION _____ DIP 45° PROPERTY Dundonald Claims

STARTED August 24th, 1962 TESTS (CORRECTED)

FINISHED August 25th, 1962.

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	22	Casing
22	76	<p>Altered volcanics</p> <p>22'-29' M.G. soft light gry.-gn. rock. This may be a serpentized gabbro.</p> <p>29'-48.5' F.G. uniform partially serpentized volcanic. Some sulphide disseminated throughout.</p> <p>at 32' 1/2" vein of white carbonate cuts core at 45°.</p> <p>48.5'-76' Brecciated & sheared up volcanic. Carbonate and chalcopryrite intrude these shears in places. Some zones very rich in graphite. Sulphides concentrated in brecciated zones to 15%.</p> <p>51'-53.5' Graphite shear cuts core at 45°.</p> <p>53.5'-56' Blocky ground.</p> <p>66.5'-69.5' Graphite shear cuts core at 45°.</p> <p>at 72' 8" graphite shear.</p>
76	295	<p>Serpentized Ultrabasite.</p> <p>Rock is dark blue - gry. to black - original texture largely destroyed. Dull emerald green serpentine best developed in zones of shearing. Magnetite disseminated throughout - though occasionally as a dark matrix around olivine pseudomorphs.</p> <p>at 78.5' 6" of brecciated volcanic material as before.</p> <p>at 87' 6" of sheared & pyrite intruded rock.</p> <p>86.5'-88' Blocky ground.</p> <p>98.5'-100' Blocky ground.</p> <p>109'-113' Blocky ground.</p> <p>at 114' 1/2" vein of dull green-gry. serpentine. Vein cuts core at 20°.</p> <p>115'-121.5' Blocky ground.</p> <p>at 121.5' 6" brecciated ultrabasite.</p> <p>124'-128.5' Blocky ground.</p> <p>135'-138' Sheared and brecciated ultrabasite.</p>

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION _____ BEARING _____ HOLE NO. D.D.H.#6

LOGGED BY _____ ELEVATION _____ DIP _____ PROPERTY _____

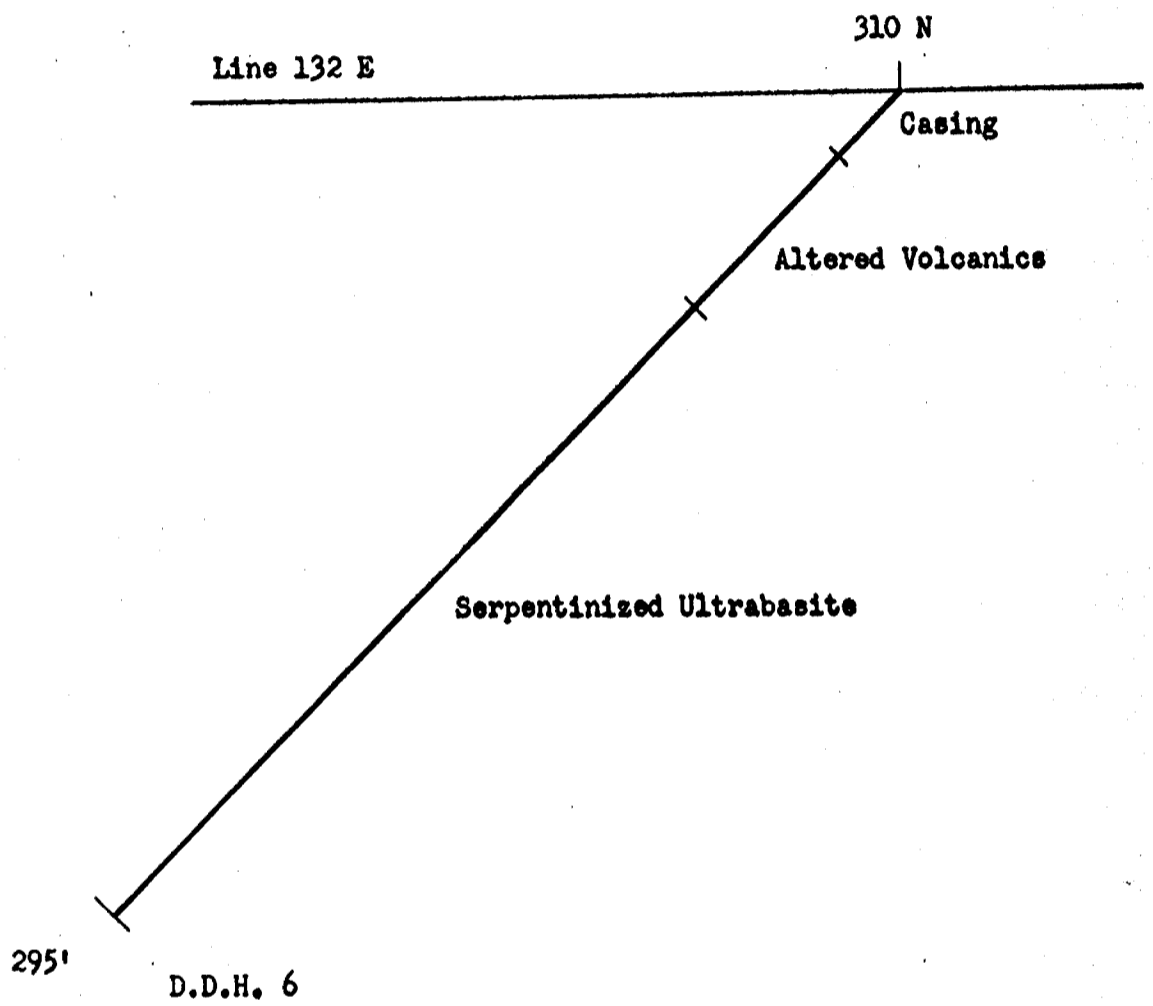
STARTED _____ TESTS (CORRECTED) Page 2

FINISHED _____

CASING _____

CORE SIZE _____

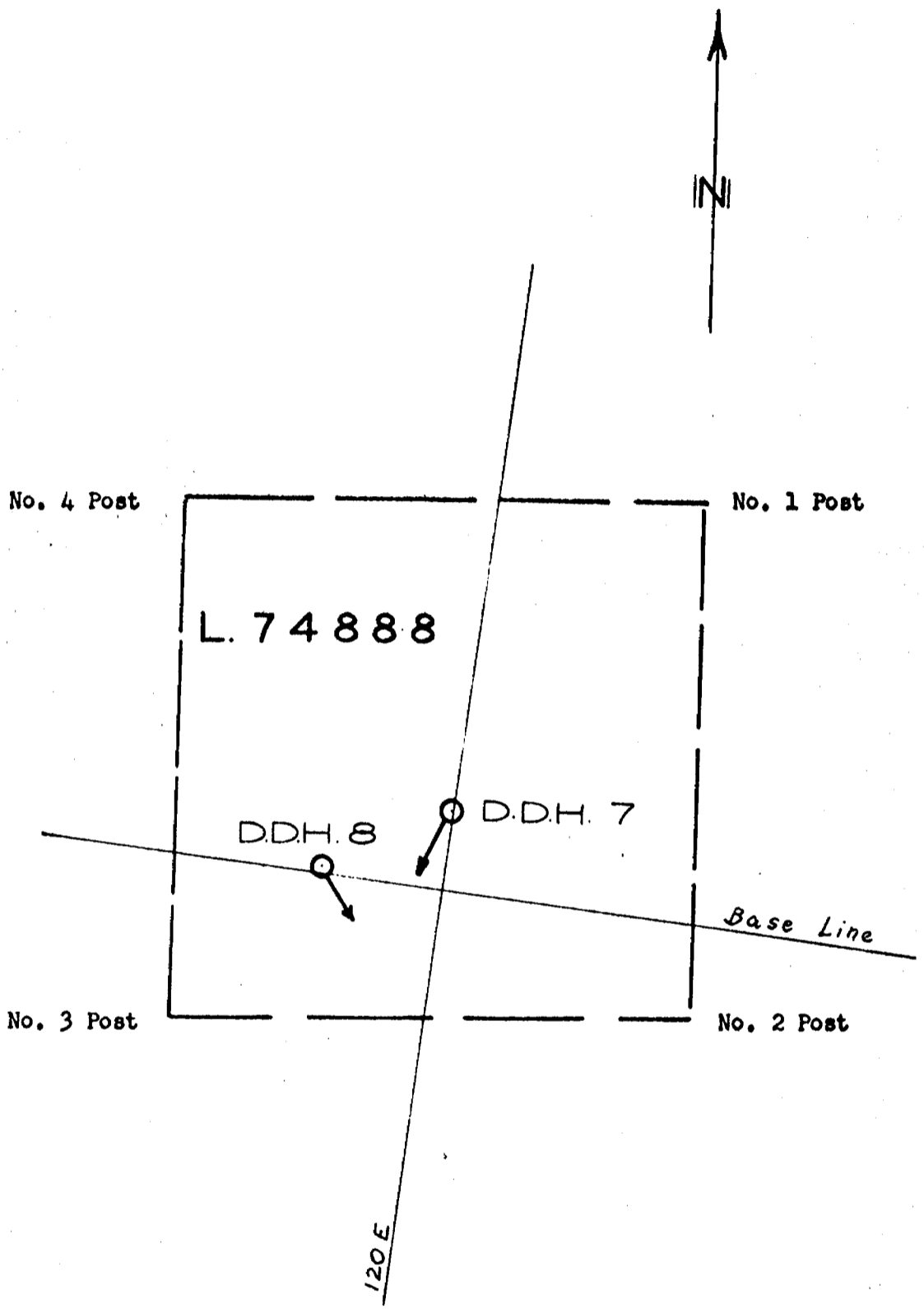
FROM	TO	DESCRIPTION
		<p>at 150' 3/8" talc. vein cuts core at 90°.</p> <p>at 164.5' 1/2" serpentine vein cuts core at 10°.</p> <p>at 178' 3/8" serpentine vein cuts core at 30°.</p> <p>at 202' Two 3/8" light green to white serpentine veins cut core.</p> <p>202'-295' Rock very uniform dark serpentized ultrabasic with magnetite disseminated throughout. A few insignificant, small serpentine veins cut core making a negligible percentage of the rock.</p>
	295	End of Hole.



Scale: 1" = 50'

FALCONBRIDGE NICKEL MINES LIMITED

D.D.H. Section 6



Scale: 1" = 400'

FALCONBRIDGE NICKEL MINES LIMITED

Location Plan

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 200' North on line 120E BEARING 207° True HOLE NO. D.D.H.#7

LOGGED BY G.D.Mason ELEVATION _____ DIP 45° PROPERTY Dundonald Twp.

STARTED August 27th, 1962 TESTS (CORRECTED) _____

FINISHED August 30th, 1962

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	7	Casing
7	16	Fine to medium grained diorite - 80% gry, feldspar 20% anhedral dark mineral. at 16' Abrupt volcanic - diorite contact intersects core at 45°.
16	17	Ultra fine grained medium gry. acid volcanic.
17	18.5	Gradational change back into diorite.
18.5	23.5	Medium grained diorite.
23.5	28	Gradational change to volcanics. Few scattered sulphides and several small graphite seams with pyrite up to 1/8" cutting core at 90°. at 28' 1 1/2" crush zone with about 10% white carbonate.
28	43	f.g. Medium gry. acid volcanic with few small sulphide and graphite slips. at 37.5' 1/8" dull green serpentine and carbonate vein cuts core at 60°.
43	44	Zone of brecciation & partial serpentinization.
44	69	f.g. Medium gry. acid volcanic carrying some sulphides in irregular fractures. at 56' 6" blocky ground at 64' 12" of brecciated volcanic & graphite. at 66' irregular but large vug of crystalline carbonate (white)
69	72	Zone of acid volcanics - dark gry. because of numerous areas of seams of graphite & sulphides.
72	93	Fine grained acid volcanic with many small seams of graphite (1/32" and smaller). These make up about 3% of the rock. at 73.5 6" of dark pyrite, graphite, carbonate shear. at 78' 6" of graphite pyrite shear cutting core at 30° at 83' 6" of blocky ground at 91' 3" of blocky ground.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION _____ BEARING _____ HOLE NO. D.D.H.#7

LOGGED BY _____ ELEVATION _____ DIP _____ PROPERTY _____

STARTED _____ TESTS (CORRECTED) Page 2

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
93	97	Large very dark shear zone with graphite, few sulphides and some white carbonate.
97	113	f.g. Acid volcanics with localization of disseminated sulphides and a few serpentine shears carrying some sulphides. Also several graphitic areas with sulphides. 99'-104' Intermittent brecciated zone with sulphides. at 107' 8" of crushed & highly sheared graphite zone.
113	157	Serpentinized ultrabasite. 113'-118' Transition from volcanics to ultrabasite. Rock becomes softer and a more dull green - gry. 118'-128' Very fine grained ultrabasic rock of poor texture. Generally a light dull green-gry serpentine carries disseminated sulphides & some localities of sulphides in small veins of the serpentine. 128'-133' Brecciated & highly altered serpentinized ultrabasite containing sulphides in small shears as well as disseminated. 133'-157' Highly altered & serpentinized ultrabasite. original texture completely destroyed. Rock is lighter than normal U.B. characterized by dull green-gry. serpentine and small magnetite veins cutting core usually at 45°. 144'-155' A zone of intense shearing. Some carbonate also sulphides present. Maybe a few angular volcanic (hard) fragments in this zone.
157	162	Serpentinized volcanic with needle-shaped serpentines. A medium colored green - gry rock grading back into good volcanics.
162	207.5	Medium gry. to dark gry. volcanic of intermediate composition. Small areas are brecciated with concentration of sulphides. Most of rock has considerable sulphide finely disseminated throughout. at 207' 8" nearly 100% sulphides - probably nickeliferous. 207'-207.5' 6" about 50% to 60% sulphides.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION _____ BEARING _____ HOLE NO. D.D.H.#7

LOGGED BY _____ ELEVATION _____ DIP _____ PROPERTY _____

STARTED _____ TESTS (CORRECTED) _____

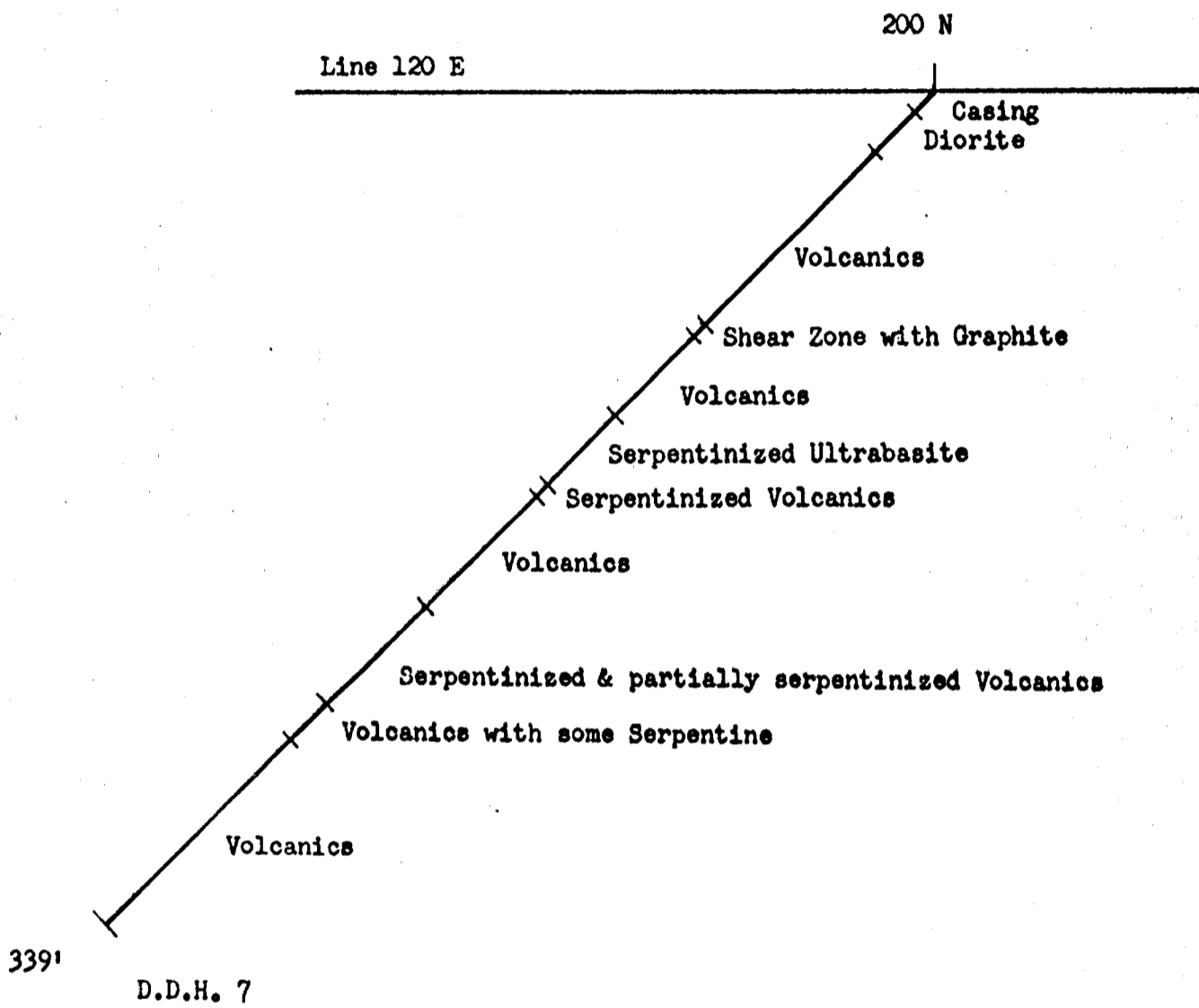
Page 3

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
207.5	248	Serpentized & Partially serpentized volcanics. Much of rock is crushed bearing sulphides. Brecciated zones predominate. Also disseminated sulphides in places. In brecciated zones rock is volcanic (fragments) with green-gry. to black serpentine.
248	262	Medium volcanics with some serpentine & brecciated zones - less frequent than from 207.5 to 248' also containing fewer sulphides.
262	326	Fine grained acid to intermediate volcanics. Few small breccia zones with dull emerald green serpentine. Occasional small dark bands (graphite?) cut core at 30°. Those are few and make up only small percentage of rock.
326	339	Medium grained volcanic of intermediate gry. color and composition uniform and free from sulphides.
	339	End of Hole.



Scale: 1" = 50'

FALCONBRIDGE NICKEL MINES LIMITED

D.D.H. Section 7

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 17' North of station 117+24' East BEARING 140° HOLE NO. D.D.H.#8

LOGGED BY G.D. Mason ELEVATION _____ DIP 45° PROPERTY Dundonald Claims

STARTED September 3, 1962. TESTS (CORRECTED)

FINISHED September 5, 1962.

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	27	Casing
27	112	<p>Serpentinized Ultrabasite</p> <p>Highly serpentinized dark black ultrabasite cut by a very few small (1/8") veins of asbestos and incipient asbestos. Magnetite is uniformly disseminated throughout and flecks of green serpentine show up occasionally. Few minor disseminations of sulphides.</p> <p>at 29.5' small (1/4") vein of carbonate cuts core at 45°.</p> <p>at 38' few white carbonate stringers.</p> <p>at 39' 6" mild shearing by dark emerald green serpentine.</p> <p>39'-40.5' blocky ground.</p> <p>43'-45' Sheared rock intruded by green serpentine and white carbonate.</p> <p>at 46' 8" abundant, irregular white carbonate.</p> <p>at 48' few white carbonate stringers cut core at 30° - mild shearing associated.</p> <p>48'-49' blocky ground.</p> <p>51.5'-53' blocky ground.</p> <p>at 68' 2" blue-grey mud seam.</p> <p>99'-104' segregation and veining of magnetite in about 70% of core here. Rock very black, no green serpentine seen. Small asbestos seams developed</p>
112	122.5	<p>Serpentinized gabbro</p> <p>A highly altered gabbroic rock. Fine grained greenish-grey feldspar predominates. Where extremely fine grained the rock resembles a volcanic - these may be inclusions with very gradational contacts. Those zones carry a few scattered sulphides. Rock is all partially serpentinized.</p> <p>112'-116' Transition zone of brecciation and alteration. Rock becomes a lighter color; -green-grey and develops distinct texture. Where brecciated blebs of sulphide occur.</p>

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION _____ BEARING _____ HOLE NO. D.D.H.#8

LOGGED BY _____ ELEVATION _____ DIP _____ PROPERTY _____

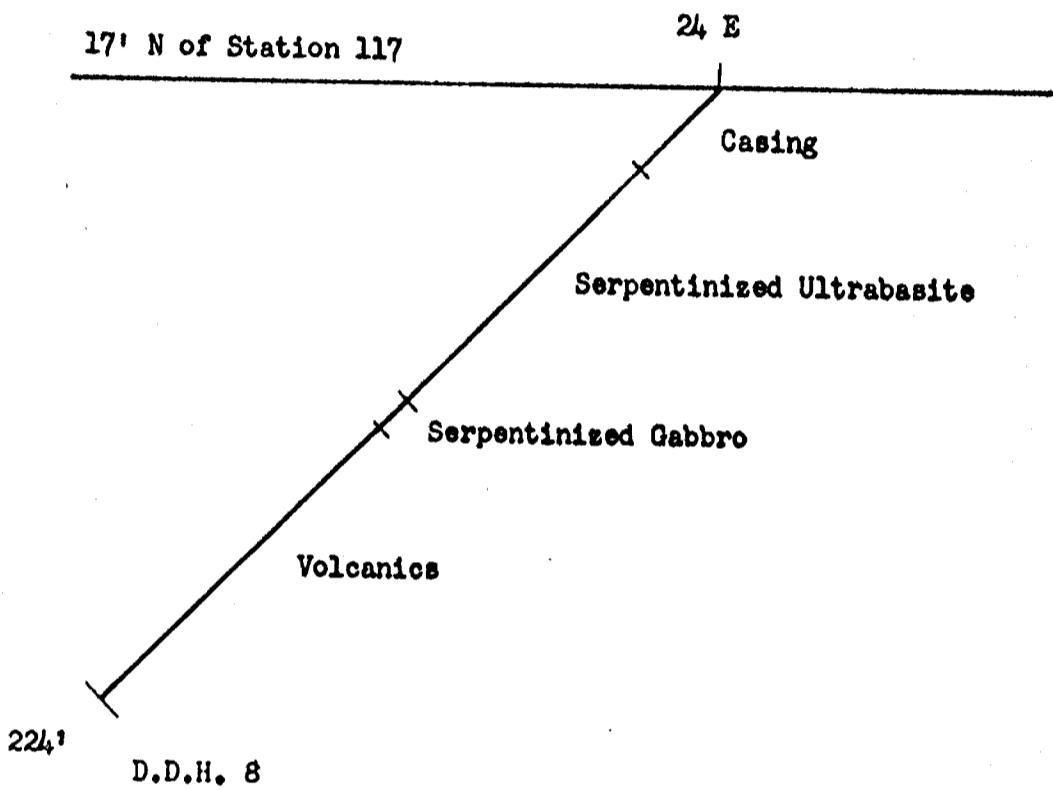
STARTED _____ TESTS (CORRECTED) Page 2

FINISHED _____

CASING _____

CORE SIZE _____

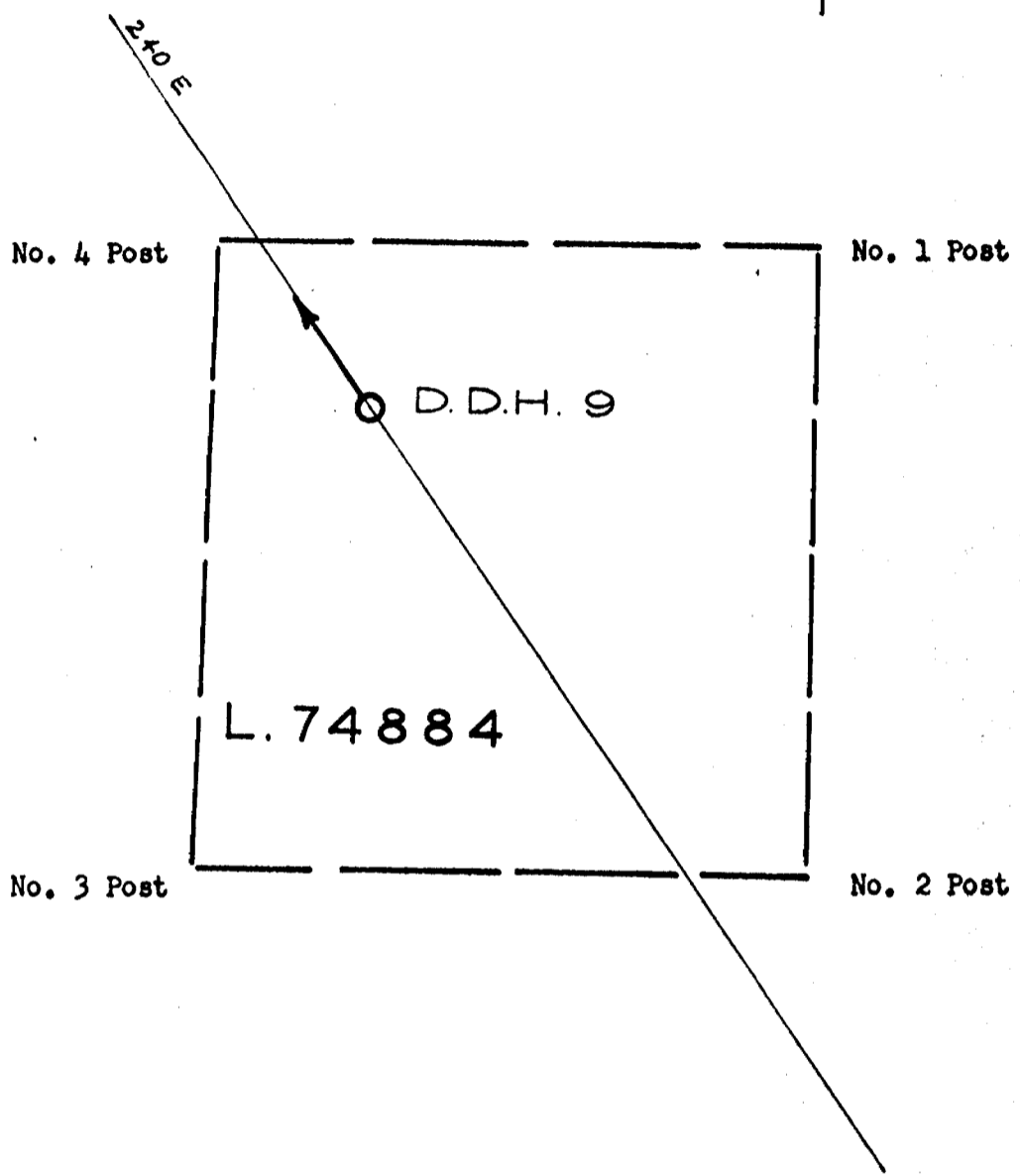
FROM	TO	DESCRIPTION
122.5	224	<p>Volcanics</p> <p>122.5'-123.5' Brecciated grey volcanic bordered in either side by emerald-green serpentine zones of about 2".</p> <p>at 140.5' 1/8" fracture cutting core at 15° carries about 30% sulphides in light groundmass.</p> <p>158.5'-162.5' Zone of graphite and pyrite. A dark black fine grained rock which shows no shearing.</p> <p>185'-188.5' Brecciated hybrid rock carries few sulphides.</p> <p>189' 6" graphite shear.</p> <p>202.5'-204' Very coarse with diabasic texture - grades back to a fine grained rock.</p> <p>212.5'-219' Graphite - pyrite shear</p> <p>222'-223' Graphite - pyrite zone cuts core at 45° This is a dark rock without any shearing.</p>
	224	End of Hole.



Scale: 1" = 50'

FALCONBRIDGE NICKEL MINES LIMITED

D.D.H. Section 8



Scale: 1" = 400'

FALCONBRIDGE NICKEL MINES LIMITED

Location Plan

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION Line 240 E at 2250' South (Old grid) BEARING 325° true HOLE NO. D.D.H.#9

LOGGED BY G.D. Mason ELEVATION _____ DIP 45° PROPERTY Dundonald Claims,

STARTED September 8th, 1962 TESTS (CORRECTED)

FINISHED September 10th, 1962.

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	39	Casing
39	117	Gabbroic Rock. Differentiated Rock. A pure green pyroxenite at 39' grades into a pyroxene rich gabbro at 81' which grades continuously to a good gabbro at 98'. All of this rock is partially serpentinized. Rhombic serpentine pseudomorphs after pyroxene are abundant. There are no sulphides in this rock. 98'-117' Zone of contact metamorphism. The gabbro is much more altered here than in the previous core. 109'-117' Rock intensely baked, altered and brecciated with dark emerald green serpentine matrix making up about 2% of rock.
117	283	Serpentinized Ultrabasite. 117'-117.6' Sheared and brecciated transition to serpentinized ultrabasite. 117.6-283' Fine grained dense black serpentinized ultrabasite. This is a uniform rock. Magnetite is disseminated very uniformly throughout with no segregations. A light green serpentine in small flecks is seen everywhere. There are no visible sulphides in this ultrabasite. A few very small (1/32" to 1/16") asbestos vein cut the core at various angles. These make up only a minute percentage of the rock. 122.6'-125.6' Blocky ground. 172'-173.5' Mild shearing. 175'-183' Blocky ground. at 186' 6" blocky ground. 191.5'-193' Blocky ground. at 202' 8" blocky ground. at 213' 6" blocky ground. at 217' 6" of intermitent ultrabasite are very pale green serpentine cutting core at 45°. Pale green serpentine composes about 50% of rock. at 257' 1" vein of ultra fine grained green siliceous material cuts core at 45°.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION _____ BEARING _____ HOLE NO. D.D.H.#9

LOGGED BY _____ ELEVATION _____ DIP _____ PROPERTY _____

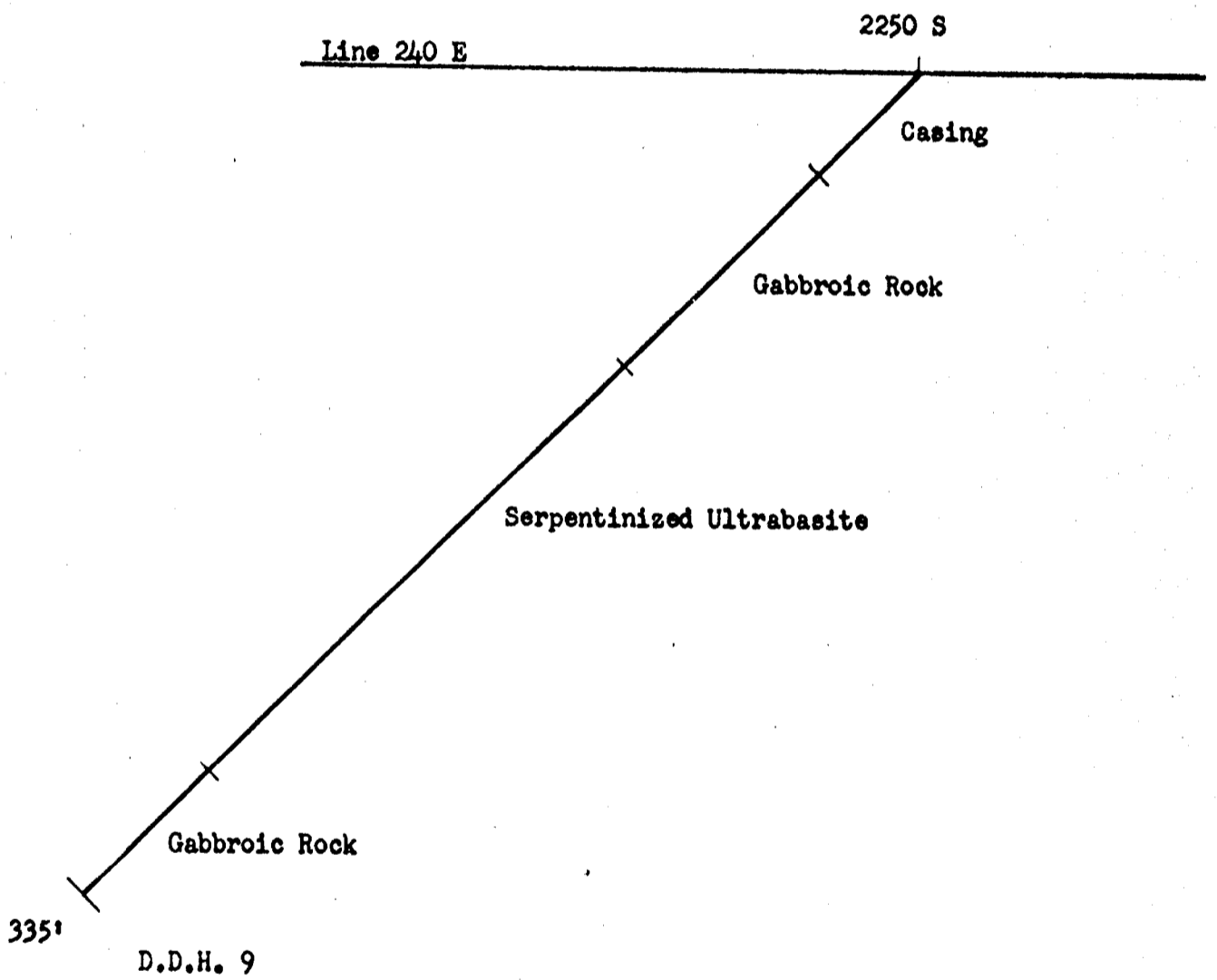
STARTED _____ TESTS (CORRECTED) Page 2

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
283	335	<p>Gabbroic Rocks.</p> <p>283'-291' Pyroxene rich gabbro. Euhedral serpentine pseudomorphs after pyroxene in 15% of rock.</p> <p>291'-335 Altered gabbro with varying amounts of pyroxene in places becomes a pyroxenite for short distances. All of rock is slightly serpentinized; pseudomorphs after pyroxene.</p> <p>293'-294.5' Ultra fine grained light greenish gray siliceous material. Concentrations of a dark serpentine occur along the contacts. This cuts the core at 30".</p> <p>at 298.5' 1" of the same siliceous material as at 293'. Again the dark serpentine contacts occur. These are about 1/8" thick.</p>
	335	End of Hole.



Scale: 1" = 50'

FALCONBRIDGE NICKEL MINES LIMITED

D.D.H. Section 9

FALCONERIDGE NICKEL MINES LIMITED

Report of Assessment Diamond Drilling

Dundonald Township

INTRODUCTION

A program of 3,107 feet of AXT diamond drilling was completed in twelve drill holes during October, 1964. This drilling was carried out by N. Morissette Diamond Drilling Ltd., Haileybury, Ontario, using one diamond drill outfit. Drilling was planned to examine targets arising from an extended geological and geophysical program started in 1959.

LOCATION AND ACCESS

The property is located approximately one mile southwest of Highway 67 near MacIntosh Springs, which is thirty miles northeast of Timmins. A graveled road approaches within one half mile of the drilling locations. Drill holes 1-64 to 9-64 and 12-64 are located in the southwest quarter of north half, Lot 3 - Concession I (Claim L74888) and drill holes 11-64 and 10-64 are located in the southeast quarter of north half, Lot 4 - Concession I (Claim L76533), Dundonald Township.

GENERAL GEOLOGY

A basic sill has intruded a sequence of acid to basic volcanics. This sill appears to have differentiated into peridotitic pyroxenitic and gabbroic layers, which show gradational contacts. Based on a world wide association of nickel deposits with basic and ultrabasic rocks, exploration is concentrated in the vicinity of the differentiated sill.

Basic to intermediate volcanics and peridotite form the rock types within the area of drilling. These may be described more fully as follows:

Volcanic Rocks

Andesite and dacite form the wall rock of the ultrabasites. Volcanic rocks are fine to medium grained, light greyish-green, and locally highly fractured. Alteration is extensive in the form of mica rich derivatives. Volcanic breccias are common and contain coarse needles of a soft dark green mineral which microscopic examination has shown to be serpentine. Sulphide bearing graphitic schists are common in the volcanics.

Ultrabasites

Ultrabasite is a dark green to greenish-black, fine to medium fine grained, moderately to intensely serpentinized peridotite. Ultrabasite in drill hole 1-64 is greyish and much less altered with mineral outlines and features clearly visible. On the other hand, the same rock type in drill holes 2-64 to 10-64 inclusive and 12-64 is intensely altered with development of disseminations and stringers of apple-green serpentine. Occasional veins of cross fibre asbestos and stringers of pale bluish serpentine are common also. Occasional sections of core are found to consist of coarse, light grey, fragments of talc-serpentine set in a matrix of black peridotite.

MINERALIZATION

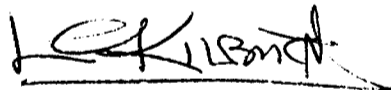
Sulphides occur on the north andesite-peridotite contact in drill holes 2-64 and 8-64, over core lengths of 6 inches and 18 inches respectively. Neither intersection was found to extend laterally to the next drill section.

Stringers of disseminated sulphides form part of graphitic shears in volcanic rocks south of the ultrabasite. Up to 50% of the mineralized zone is graphite occurring as either massive veins of up to 8 inches thick, or as breccia fragments in a volcanic matrix.

CONCLUSION

Drilling has successfully delineated the plan shape of the ultrabasite, and detected several small disconnected zones of sulphide and/or graphite in the volcanic wall rocks.

Respectfully submitted,



L. C. Kilburn,
P. Eng.,
Geologist,
FALCONBRIDGE NICKEL MINES LIMITED.

LCK/spz

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 1+30 N 121 + 50 E BEARING S on lines HOLE NO. 1 - 1964

LOGGED BY R. N. Saukko ELEVATION _____ DIP -45° PROPERTY Dundonald Twp.

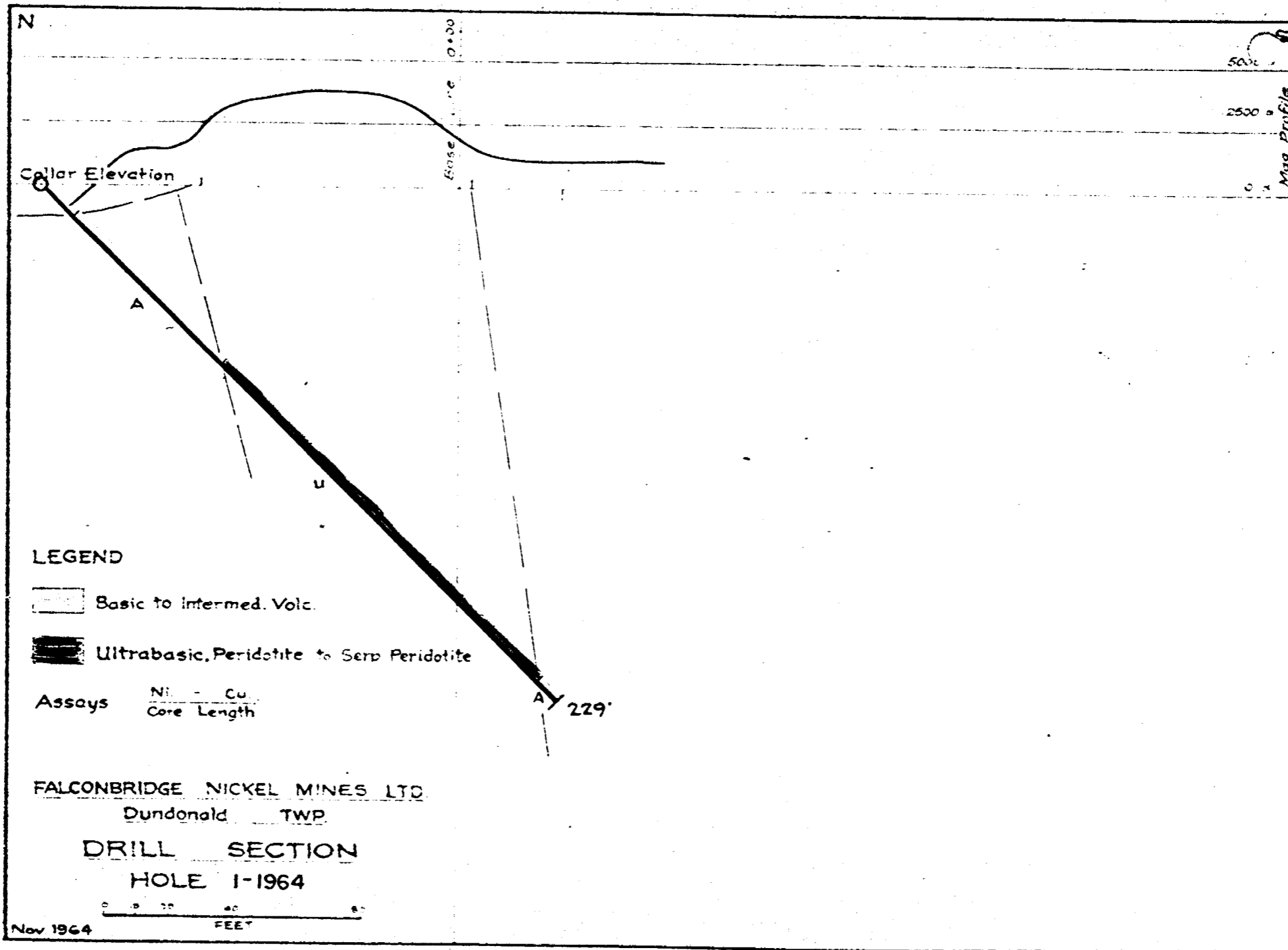
STARTED _____ TESTS (CORRECTED)

FINISHED October, 1964.

CASING _____ No Tests

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	14	Casing
14	79.5	Andesite? Basic to intermediate Volcanic. Pale greenish grey fine grd. Quite massive. Cut by a few chloritic slips. 36.5 - 54 Coarser grd phase of volcanic, appears somewhat darker in colour. Both contacts obscured. Could be a diabase intrusive. 54 - 74 Breccia phase of volcanic. Coarse aggregates of acicular green mineral in matrix similar to 14 to 36 above. Last 3 feet of zone sheared and serpentinized.
79.5	220.5	Ultrabasic - Peridotite Med. fine grd. dark grey, quite massive, moderately serpentinized. Dark green to black serpentinite slips and shears through section. Some increase in grain size to centre of section. Light grey (serpentine) interstitial to dark mins. Lower contact obscured. Vague foliation in spots at 40 - 45°.
220.5	229	Andesite Similar to section at top of hole. Vague foliation at 50°.
	229	END OF HOLE



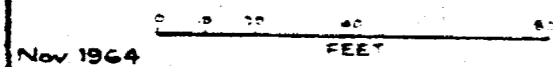
LEGEND

- Basic to Intermed. Volc.
- Ultrabasic, Peridotite to Serp Peridotite

Assays Ni Cu
 Core Length

FALCONBRIDGE NICKEL MINES LTD
 Dundonald TWP

DRILL SECTION
 HOLE 1-1964



Nov 1964

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 1+25N 119+30E BEARING S on lines HOLE NO. 2 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP -45 PROPERTY Dondonald

STARTED _____ TESTS (CORRECTED) _____

FINISHED October, 1964.

CASING _____ No Tests

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	14	Overburden
14	55.5	Andesite Light greyish green - fine to med fine grained. Cut by fair number of quartz stringers and chloritic slips.
55.5	56	Massive Sulphides Massive pyrrhotite with 3-4% chalco as stringers. Appears to be some fine pentlandite. Dissem sulphide and stringers for 1 ft. above and 2½' below section.
56	128.5	Ultrabasic Contact with volcanics not clearly marked. Assumed to occur at massive sulph. zone. 6" heavy graphite at 59. U.B. brownish colour cut by bands of dark green serpentine. Minor bands of Chyrstotite fibres to 1/8". Very fine minor disseminated sulphides in much of section, less than ½%. 3% dissem. sulph. over last 10 feet.
128.5	218	Andesite Various phases 128.5 - 136 Breccia - angular frags of fine grained light green volcanic with much of matrix composed of black amorphous graphite. Some fragments show distinct alteration rims. Blobs of sulphide 136 - 171 Fine grained volcanic light green grey highly fractured no preferred orientation. 171 - 180 Same but medium grained 148 - 148.5 Graphite 180 - 216 Fine grained 216 - 218 Type with coarse amphiboles
	218	END OF HOLE

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 1+25N 119+ 30E BEARING S on lines HOLE NO. 3- 1964

LOGGED BY R.N. Saukkö ELEVATION _____ DIP -45 PROPERTY Dundonald

STARTED _____ TESTS (CORRECTED)

FINISHED October, 1964.

No Tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	10.0	Overburden
10.0	80.2	Andesite As in previous holes. Quite soft probably largely saussurite and carbonate. 23 - 24 Long amphiboles needles 54.5 - 80.2 Distinct colour changes at sharp contact at 45 - 50° to greyish nondescript rock - massive fine grd. not as soft as green andesite. Patches of trypical green andesite in zone. Fair amount of sulphides starting at 68'. Unusual coarse concretion like sulphides, occasionally composed of several rings, alternating pyrite and pyrrhotite. Crystal orientation radical to concretion boundary. Diameter up to 1".
80.2	92	Ultrabasic Dark grey to black, whitish spots and specks throughout. Quite different in appearance from other ultrabasic occurrences. Inclusions in well of zone banded sections of carbonaceous cherty material. Graphitic slips common. Concretion like sulphides also occur within the zone. Minor cross fibre slips 7% sulph.
92	353	Andesite Upper part similar to zone 54.5 to 80.2. Sulphides and minor ultrabasic sections (up to 8") to 100' 102 - 102.5 Breccia 108 - 110 Amphibole needles fine grd. Moderately fractured Pale greenish grey 185 - 195 Med fine grd. 230 - 234 Med fine grd. gradational from fine grd zone to med grd zones.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

Page 2

LOCATION _____ BEARING _____ HOLE NO. 3 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP _____ PROPERTY Dundonald

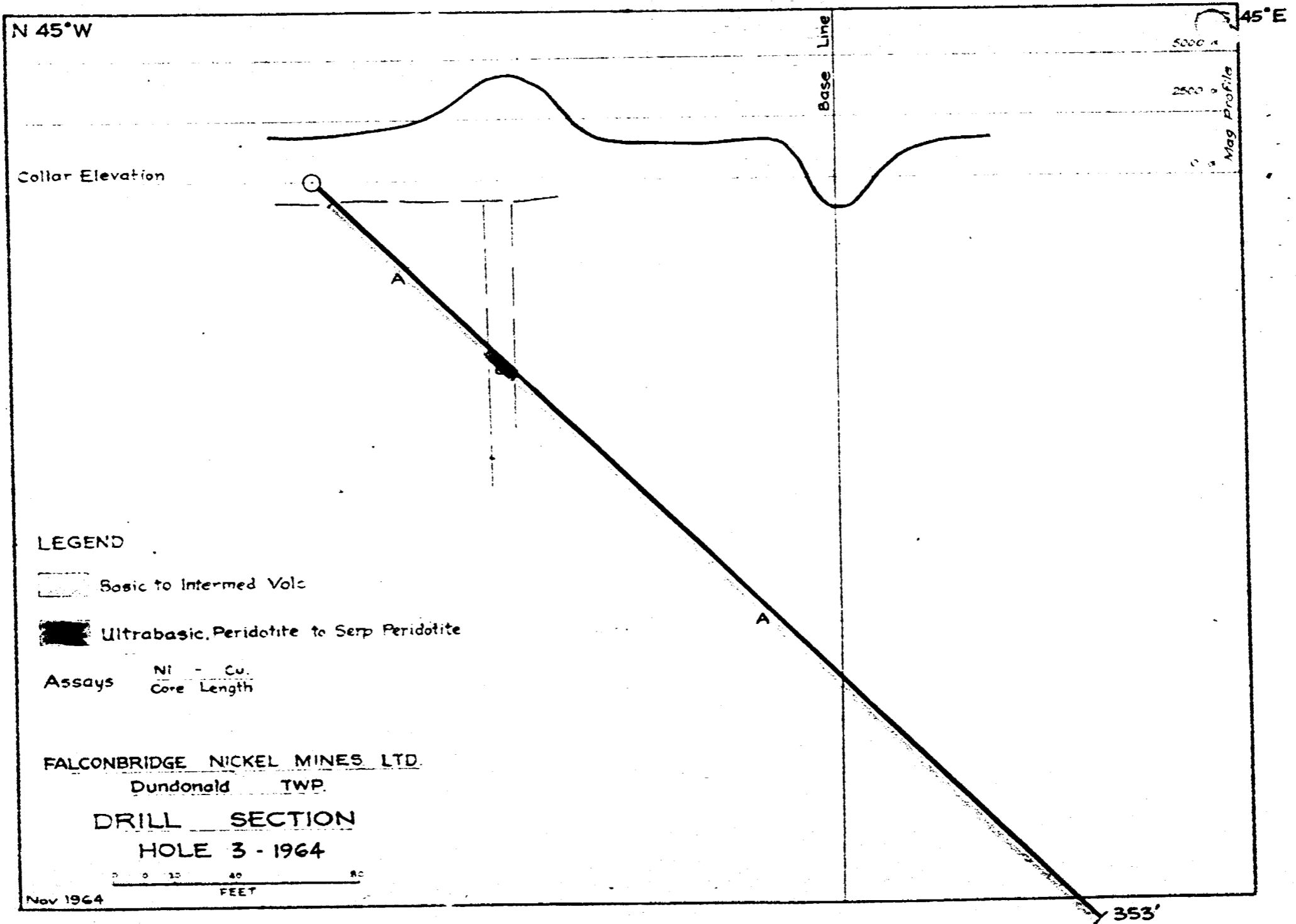
STARTED _____ TESTS (CORRECTED) _____

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
		234 - 238 Coarse amphibole needles
		251 - 260 Med Grained
		308 - 353 Becomes fair amount coarser in grain. Coarse grd. phase of basic flow.
		338 - 353 Coarse grd. with coarse amphibole needles.
		345 - $\frac{1}{2}$ " Po vein
	353	END OF HOLE



Collar Elevation

LEGEND

- Basic to Intermed Volc
- Ultrabasic, Peridotite to Serp Peridotite

Assays Ni Cu.
 Core Length

FALCONBRIDGE NICKEL MINES LTD.
 Dundonald TWP.

DRILL SECTION
 HOLE 3 - 1964



Nov 1964

353'

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 0+85N 118+70E BEARING S on lines HOLE NO. 4 - 1964

LOGGED BY R. N. Saukko ELEVATION _____ DIP -45 PROPERTY Dundonald

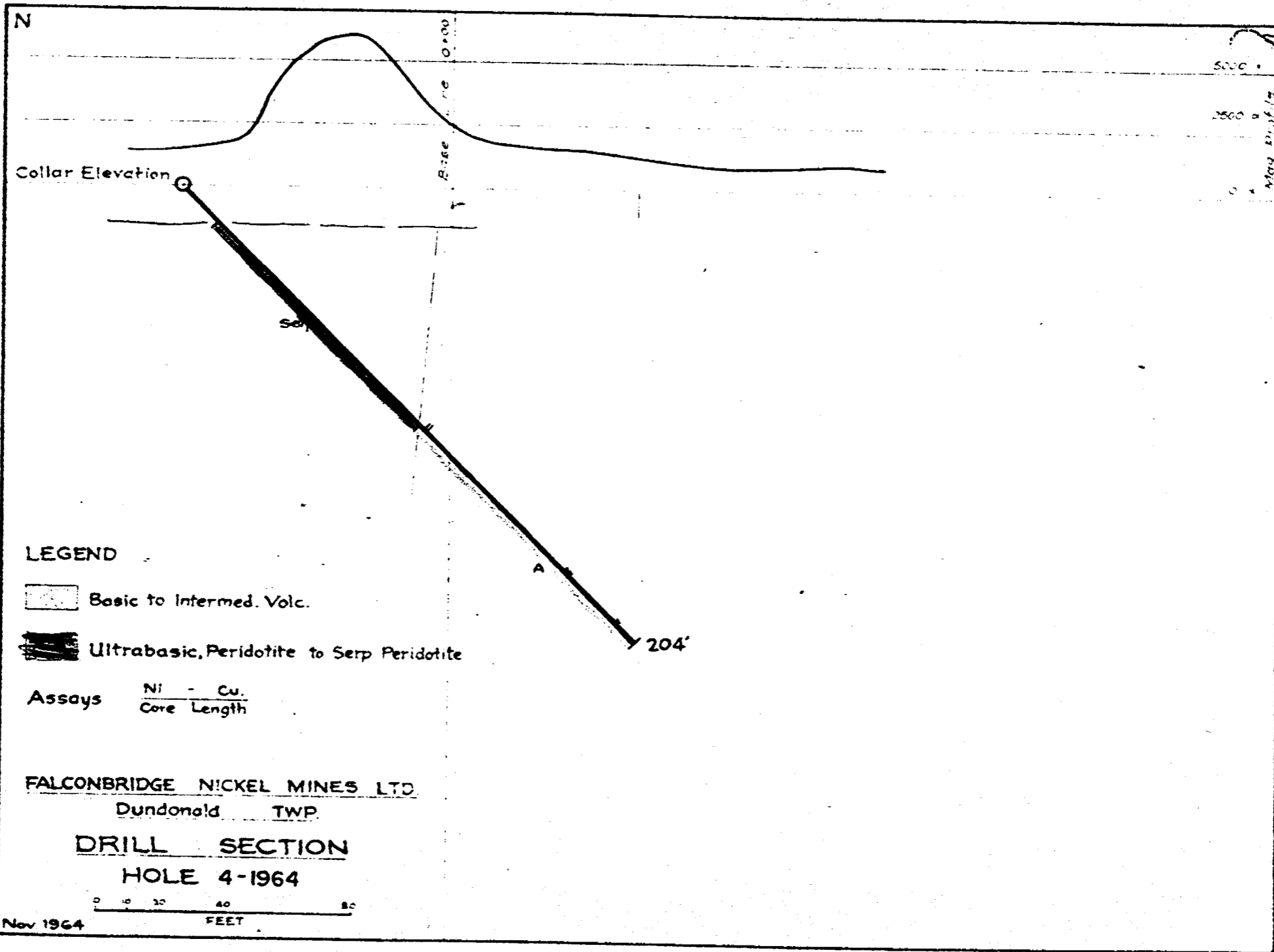
STARTED _____ TESTS (CORRECTED) _____

FINISHED October, 1964 No tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	16	Overburden
16	107	Ultrabasic Med Fine Grd. Dark greenish black cut by numerous slips of apple green serpentine. Quite distinctly different from ultrabasic of hole No. 1. Greater development of serpentine. Very little variation in section. Lower contact indistinct. No sulphides.
107	204	Andesite As in previous holes. 109.5 - 110.5 10% pyrrhotite, minor chalco. Alternating sections of fine grd and med grd. 173.5 - 175.5 breccia 194. - 195.5 breccia sulphide blebs - 3% associated with breccias.
	204	END OF HOLE



FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 0+ 85 N 118 + 00 E BEARING S on lines HOLE NO. 5 - 1964

LOGGED BY R. N. Saukko ELEVATION _____ DIP -45 PROPERTY Dundonald

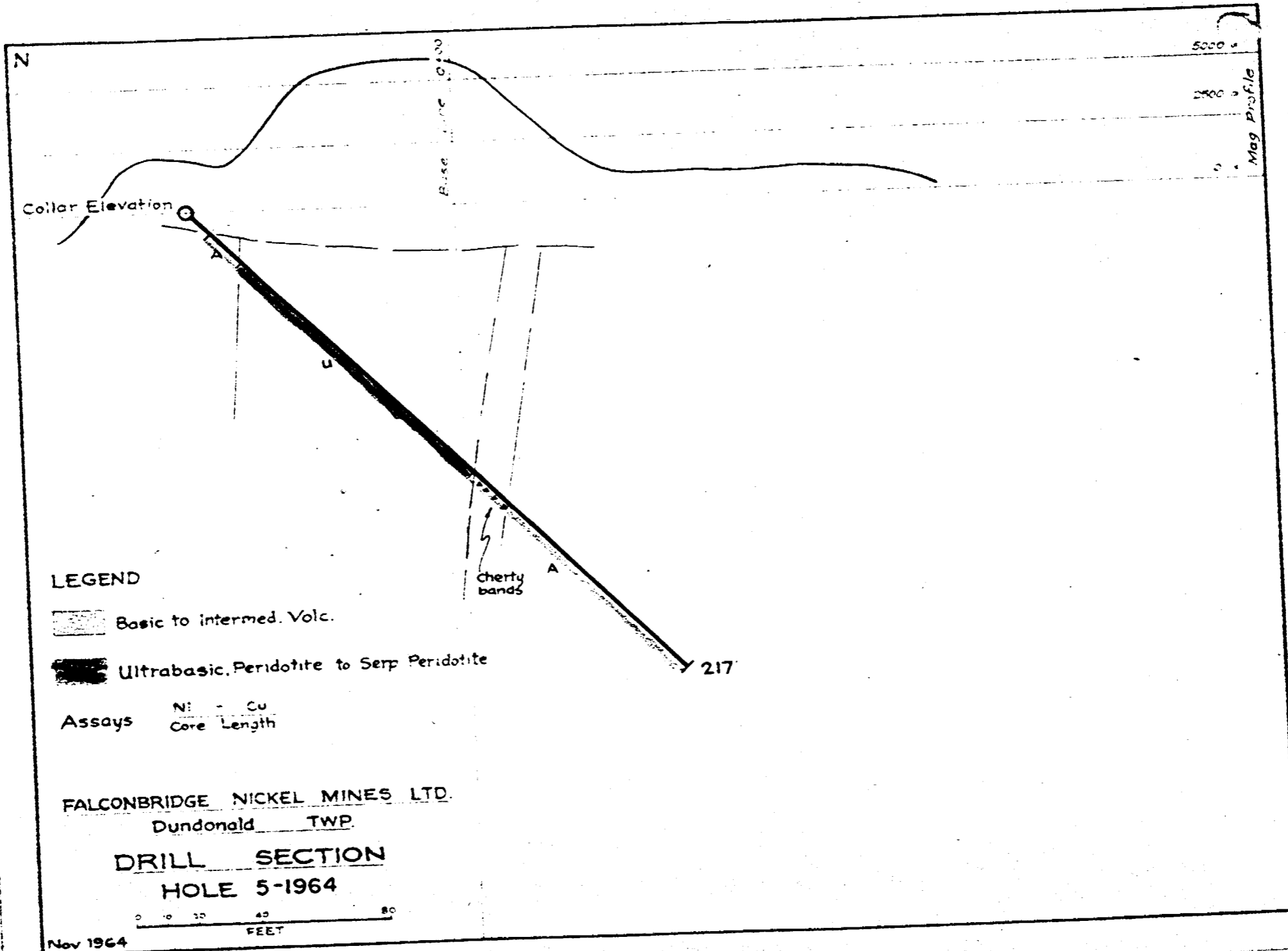
STARTED _____ TESTS (CORRECTED) _____

FINISHED October 1964 No Tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	10	Overburden
10	23.5	Andesite Med Fine grd. As before. Contact with ultrabasic a fracture zone gradational over 5 feet. Andesite fragments with ultrabasic stringers and matrix.
23.5	124	Ultrabasic Highly serpentized. Dark greenish black with flecks of apple green serpentine throughout. Med fine grd. Very similar to hole No. 4. Core highly broken and cut by numerous carbonate cross fibre asbestos, apple green serpentine, bluish serpentine stringers. No preferred orientation apparent. Lower contact at 55'. Becomes finer grd. and more massive to lower contact. No sulphides.
124	217	Volcanic Upper 25' quite irregular with short breccia sections, dark grey to black cherty sections intermittent from 142 to 150. 148 2" well banded cherty zone at 70°. 128 - 130 - Could be agglomerate 135.5-137 - " " " 124 - 138 Patches with irregular blobs and specks of Po Possibly 7% over section 150 - 217 Alternating fine and very fine grained volcanic 180 - 183 Breccia with Po blebs. 217 END OF HOLE Not assayed



N

5000



2500

Mag Profile

Collar Elevation

Base Line 0.00

LEGEND

-  Basic to intermed. Volc.
-  Ultrabasic, Peridotite to Serp Peridotite

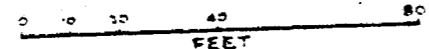
Assays Ni - Cu
 Core Length

cherty bands

217

FALCONBRIDGE NICKEL MINES LTD.
 Dundonald TWP.

DRILL SECTION
 HOLE 5-1964



Nov 1964

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION Q+80 N 117+15 E BEARING S on line HOLE NO 6 - 1964

LOGGED BY R. N. Saukko ELEVATION _____ DIP 45 PROPERTY Dundonald

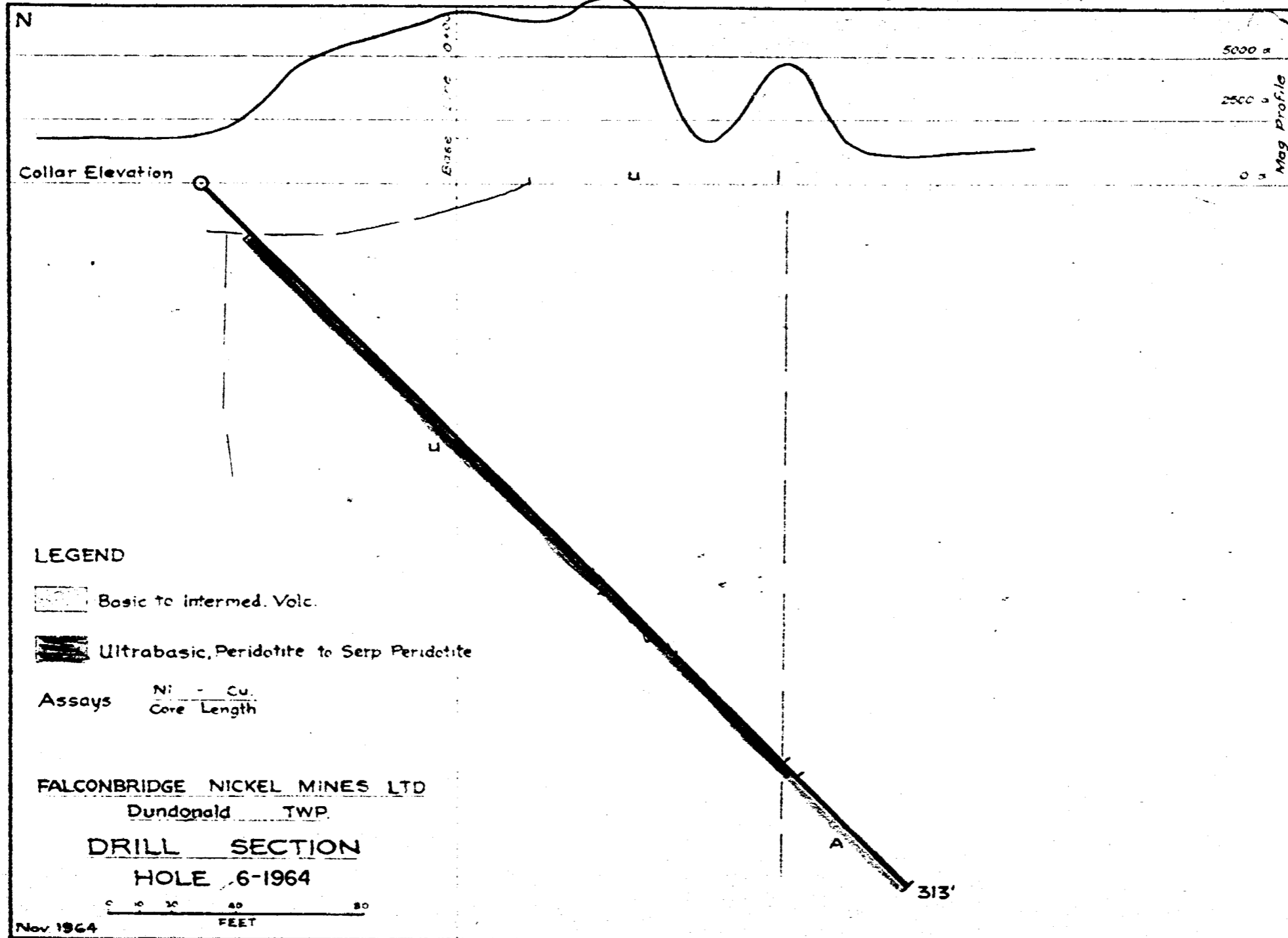
STARTED October, 1964 TESTS (CORRECTED) _____

FINISHED _____

CASING AXT No tests

CORE SIZE _____

FROM	TO	DESCRIPTION
0	22	Overburden
22	259	Ultrabasic Dark greenish black, med fine grd. Soft. Cut by apple green Serp. Slips. Apple green serp flecks through rock. Very similar to holes 4 & 5. Minor cross fibre veinlets. 79 - 80 Core ground 82 - 84 " " 87 - 88 " " Uniform through section. Becomes somewhat more massive and less fractured in bottom 75'. Not as highly serpentized Lower contact obscured.
259	313	Andesite As before. Somewhat brecc. with sulphide blebs from 259 - 265. 265 - 313 <i>PALE</i> green gray. Fine frd sections alternating with short med grd sections.
	313	END OF HOLE



FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 0+55N 116+00E BEARING S on lines HOLE NO. 7 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP -45 PROPERTY Dondonald

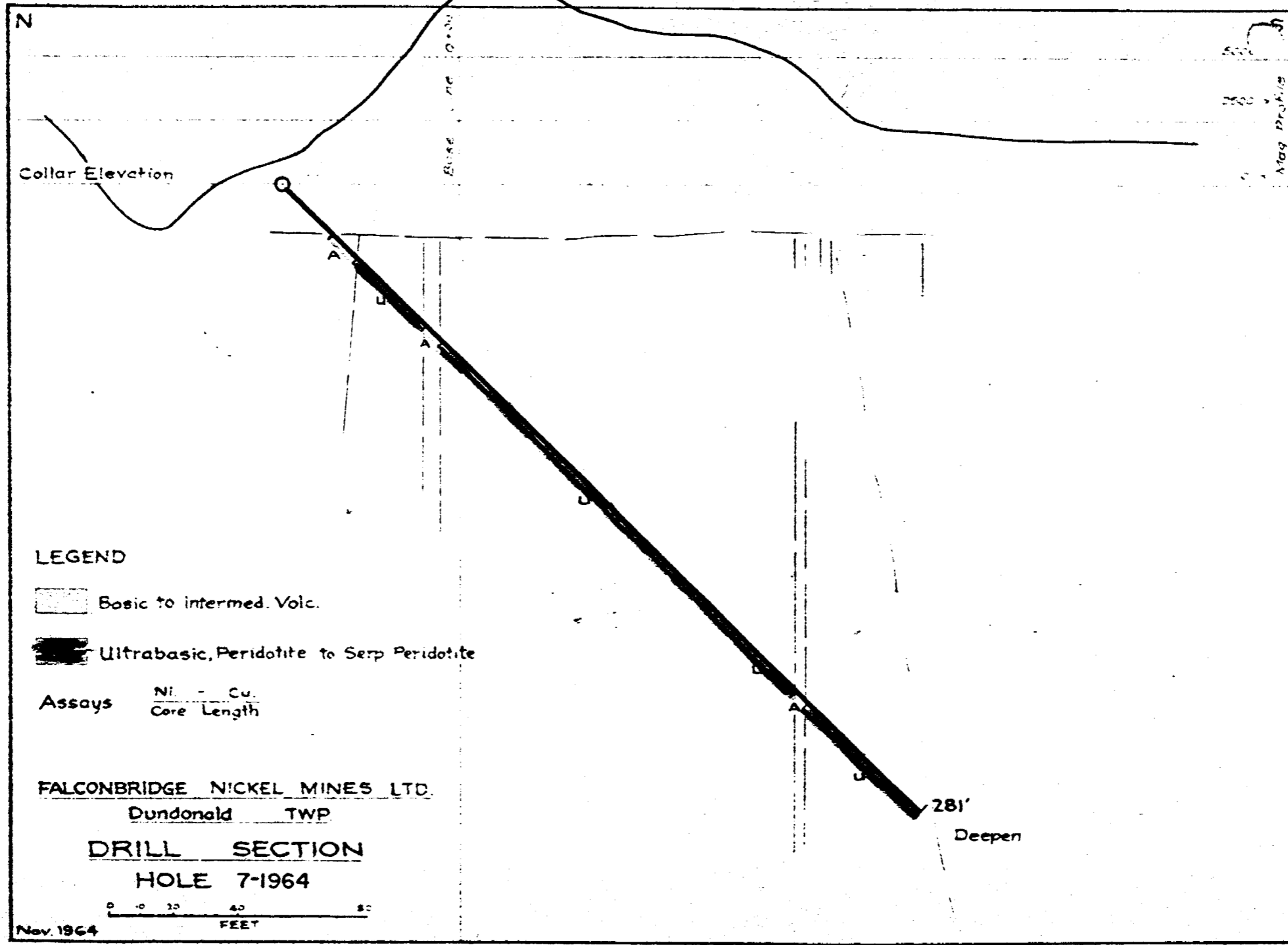
STARTED _____ TESTS (CORRECTED)

FINISHED October, 1964 No Tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	22	Overburden
22	33	<u>Andesite</u> Light greenish grey. As before 30-32 Amphibole needles coarse Most of section fractured with black filling, probably ultrabasic
33	63	<u>Ultrabasic</u> Black, fine grd. Serpentine veinlets throughout. Though rock appears to be little serpentinized. Core recovery poor.
63	70.5	<u>Andesite</u> Pale green, fine grd. Somewhat brecciated. Upper contact 45° lower obscured.
70.5	202	<u>Ultrabasic</u> Similar to section in holes 4,5 & 6. More massive- less veinlets towards bottom of hole.
202	227	<u>Ultrabasic</u> Ultrabasic with large grey intensely brecciated fragments of what is presumably the andesite. Matrix black-similar to UB above. Frags could be mixture of talc-serpentine.
227	232	<u>Andesite</u> As before
232	281	<u>Ultrabasic</u> As above. Black fine grd. Minor sulphides as rounded zoned veinlets from 238 - 242. 240 6" Massive graphite Not as intensely serpent.
	281	END OF HOLE



Collar Elevation

Basic Line Profile

Basic Line Profile

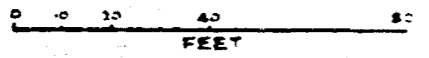
LEGEND

- Basic to intermed. Volc.
- Ultrabasic, Peridotite to Serp Peridotite

Assays Ni - Cu.
 Core Length

FALCONBRIDGE NICKEL MINES LTD.
 Dundonald TWP

DRILL SECTION
 HOLE 7-1964



Nov. 1964

281'
 Deepen

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 0+25N 115E BEARING S on lines HOLE NO. 8 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP -45° PROPERTY Dundonald

STARTED _____ TESTS (CORRECTED) _____

FINISHED October, 1964. No Tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	28	Overburden
28	31	Andesite As before. Coarse amphiboles Some U.B. pieces as well.
31	32.5	Massive sulphides 60% Massive Po 5% Cpy. Breccia frags in sulph. Rock type of fragments?
32.5	49.5	Ultrabasic As before. Central part more serpentized. Sections with large brecciated fragments (as in hole 7)
49.5	56.5	Andesite Med grd. variety
56.5	87	Ultrabasic with fragments as described before.
87	193.5	Ultrabasic Typical. Numerous apple green serp. veinlets and flecks 150 Apple green serp dies out. 167 - 193.5 Large breccia frags intermittent through section. Lower contact 40°.
193.5	195	Andesite Type with coarse amphibole needles
195	198	Ultrabasic With frags as before
198	202	Andesite Type with coarse amphibole needles
202	212	Ultrabasic Round blebs to $\frac{1}{4}$ " of soft black mineral (probably serpentine) with whitish mins forming 30-40% of rock set in what appears to be an ultrabasic matrix.

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

Page2

LOCATION _____ BEARING _____ HOLE NO. 8 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP _____ PROPERTY Dondonald

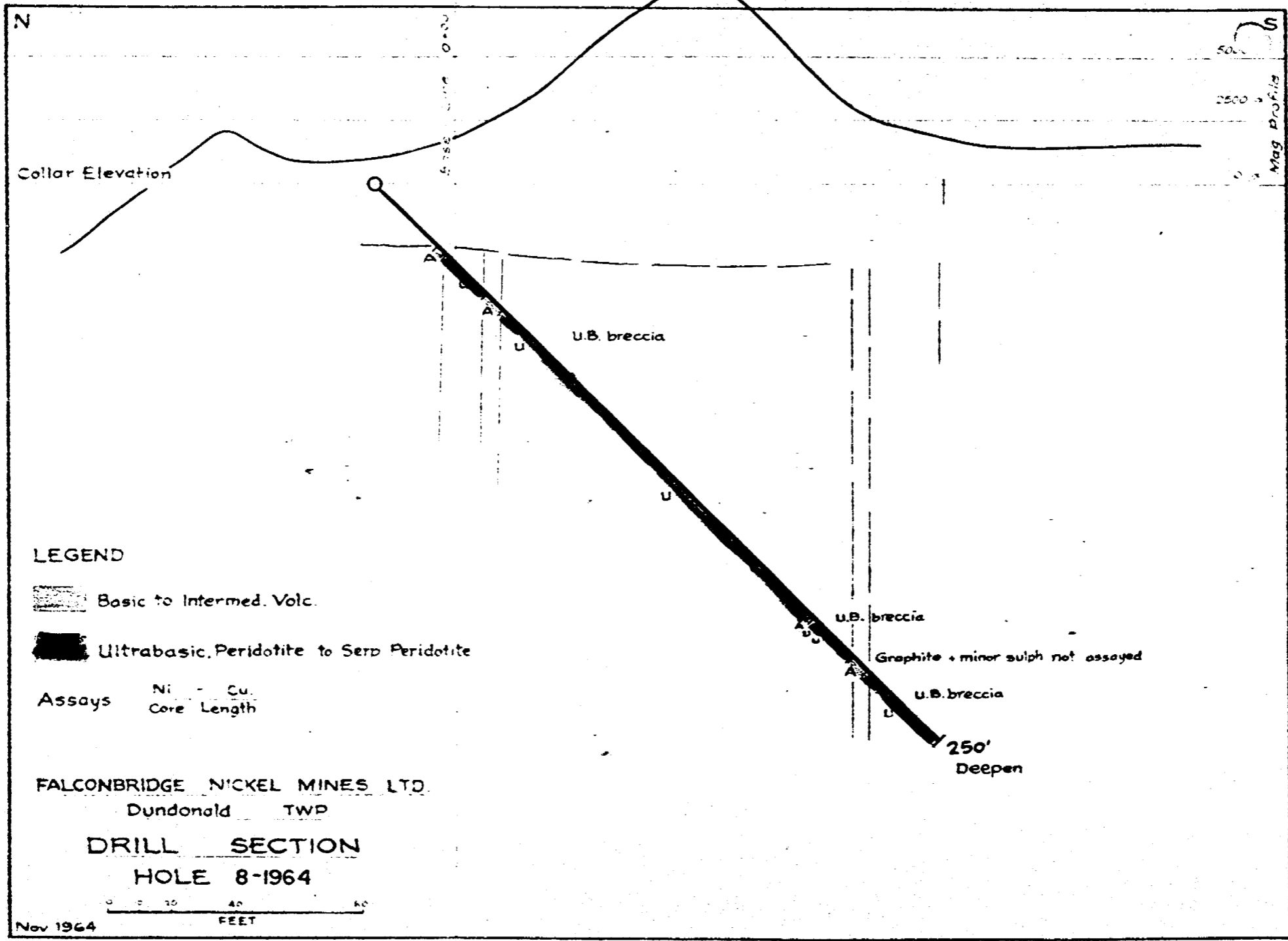
STARTED _____ TESTS (CORRECTED) _____

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
212	219	Andesite Fractured pale green, patches with coarse amph. needles Graphite with minor sulphides common through section.
220	250	Ultrabasic Type with med grey breccia fragments probably serpentine-talc breccia, cut by black UB stringers and sections
	250	END OF HOLE.



Collar Elevation

5750

500
2500
Mag Profile

U.B. breccia

U.B. breccia

Graphite + minor sulph not assayed

U.B. breccia

250'
Deepen

LEGEND

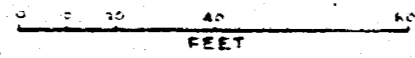
Basic to Intermed. Volc.

Ultrabasic, Peridotite to Serp Peridotite

Assays Ni - Cu.
 Core Length

FALCONBRIDGE NICKEL MINES LTD.
Dundonald TWP

DRILL SECTION
HOLE 8-1964



Nov 1964

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 0+25N 114+00E BEARING S on lines HOLE NO. 9 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP -45 PROPERTY Dondonald

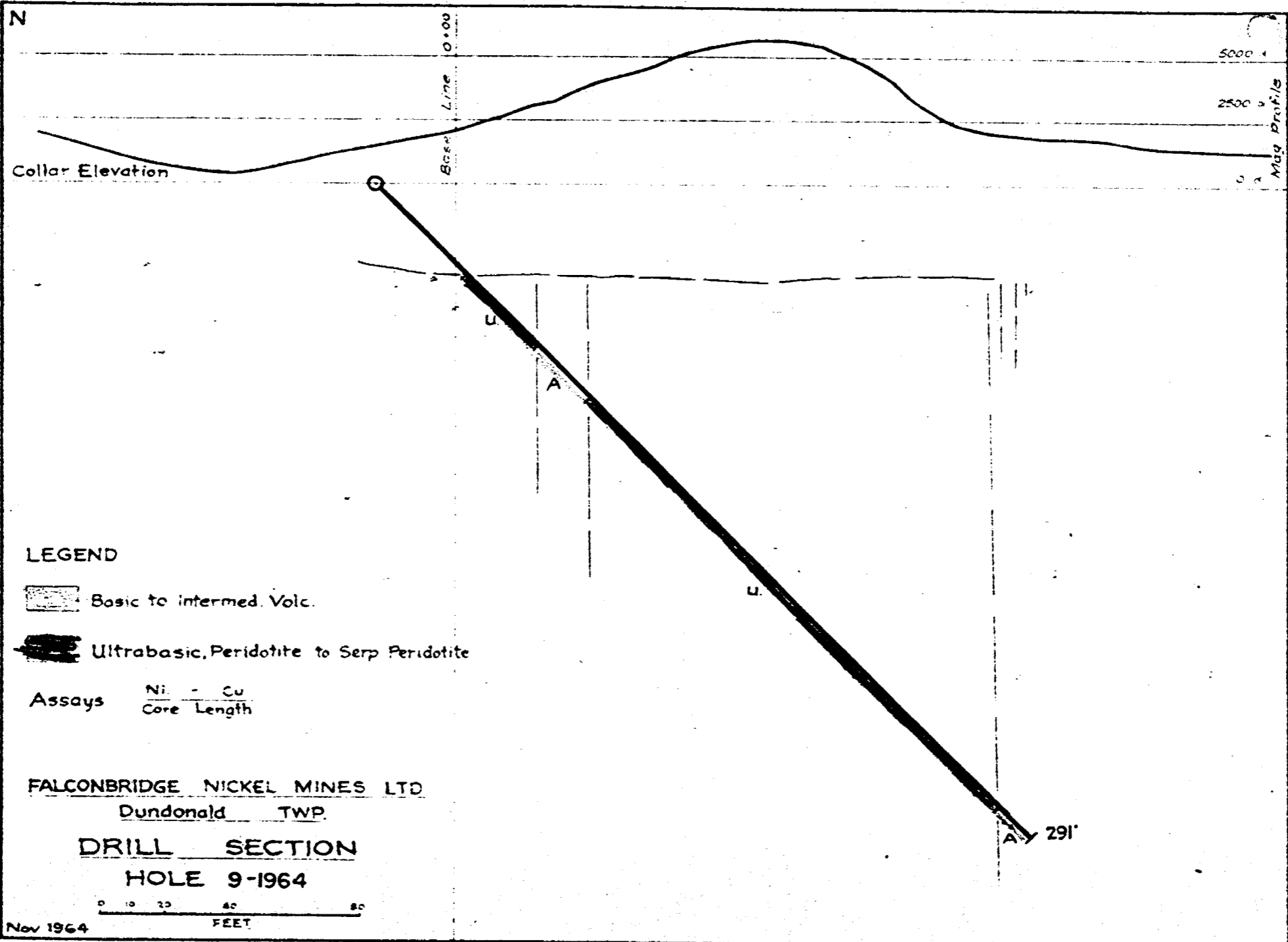
STARTED _____ TESTS (CORRECTED)

FINISHED October, 1964. No Tests



CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	40	Overburden Casing to 46
40	72	Ultrabasic Black with greyish frags. as before Serpentine veins rare in this type. Lower contact at 40°. Sharp with serp. veining.
		58.5 - 59.5 Andesite with coarse amphibole needles
72	95	Andesite Med grd type
95	277	Ultrabasic As before. Upper 5 ft fine grd, black, with frags. After somewhat coarse with flecks and veins of apple green serpentine. 177-179 Consid. carb. veining 185-195 Becomes quite coarse grd. 241-277 Ultrabasic type with coarse frags.
277	291	Andesite 277-282 Type with long amph. needles 282-287 Zone with 50% graphite, 7% Po in Andesite graphite in large irregular shaped blobs, brecciated in spots with andesite (??) filling. 287-291 Med. grd. andesite
	291	END OF HOLE



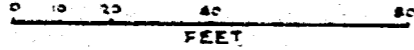
LEGEND

-  Basic to intermed. Volc.
-  Ultrabasic, Peridotite to Serp Peridotite

Assays Ni - Cu
 Core Length

FALCONBRIDGE NICKEL MINES LTD
 Dundonald TWP.

DRILL SECTION
HOLE 9-1964



Nov 1964

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 113+ 00E 0+305 BEARING S on lines HOLE NO. 10 - 1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP -45 PROPERTY Dondonald

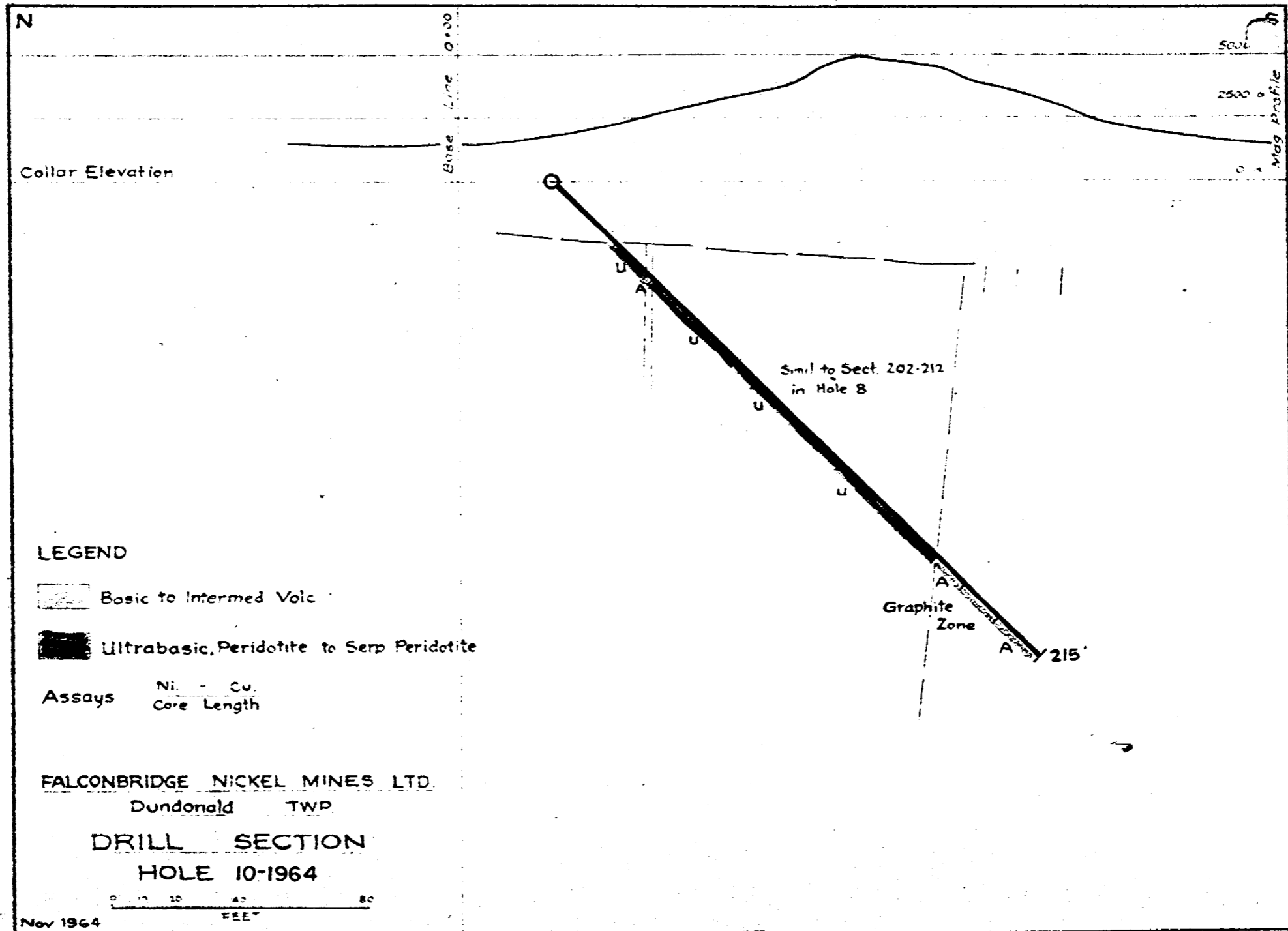
STARTED _____ TESTS (CORRECTED)

FINISHED October, 1964 No Tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	28	Overburden
28	42	Ultrabasic Black, fine grained occasional frags (prob serpentine talc)
42	44	Andesite Med Grained. Light green. Looks highly carbonatized. Contacts obscured.
44	90.5	Ultrabasic Black fine grained frags rare at top. Increase to bottom. Last 10 ft. mainly frags. Light grey fine grd rocks non-descript. Soft fractured dark grey alteration proceeding from fractures. 89 - 90 Andesite-amph needles.
90.5	100	Ultrabasic Rock similar to that in section 202-212 hole No. 8. Round black serpentine blobs. Minor patches of graphite.
100	170	Ultrabasic Typical. Dark green black. Somewhat less serpentized than previous holes. 159-170 Light grey fractured type, similar to section 80-90.
170	182.5	Andesite Mainly type with coarse amph needles. Possibly some short ultrabasic sections.
182.5	197	Graphite zone in Andesite. 50 - 60% graphite with 10% Pyrite, Po.
197	215	Andesite 197-204 No core 207-210 No core 211-215 No core
	215	END OF HOLE



FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 112 + 00E 0+75 S BEARING S on lines HOLE NO. 11 - 1964

LOGGED BY R. N. Saukko ELEVATION _____ DIP -45° PROPERTY Dundonald Twp.

STARTED _____ TESTS (CORRECTED) _____

FINISHED October 1964, _____

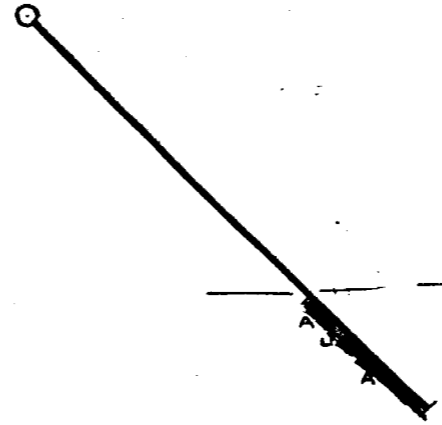
CASING _____ No Tests

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	82	Overburden
82	116	Andesite As before. Various phases 86 - 90 Core Ground All core badly broken. Hole caving considerably. Abandoned. 90 - 93 Ultrabasic Core recovery overall, possibly 20% 113-114 And. with cs acicular amphiboles.
	116	END OF HOLE



N

Collar Elevation



116'
 Hole Abandoned
 Caving
 Recovery 20 - 30%

LEGEND

-  Basic to Intermed. Volc.
-  Ultrabasic, Peridotite to Serp Peridotite

Assays Ni - Cu
 Core Length

FALCONBRIDGE NICKEL MINES LTD.
 Dundonald TWP

DRILL SECTION
 HOLE 11-1964



Nov 1964

FALCONBRIDGE NICKEL MINES LIMITED

DIAMOND DRILL LOG

LOCATION 119+30E 2+ 25N BEARING S on lines HOLE NO. 12-1964

LOGGED BY R.N. Saukko ELEVATION _____ DIP 55° PROPERTY Dundonald

STARTED _____ TESTS (CORRECTED)

FINISHED October 31, 1964.

No Tests

CASING _____

CORE SIZE AXT

FROM	TO	DESCRIPTION
0	14	Overburden
14	232 As	Andesite As in previous holes. Light greyish green. Fine to medium grd. Soft Probably highly saussuritized and carbonatized. Various phases. 16.0 - 17.0 Core ground 17.0 - 19 Breccia zone 40 - 45 Med fine grained 67 - 81 Breccia zone distinct from type above which has andesite fragments. This type andesite matrix with angular blocks of graphite as fragment. Minor sulphides Po, Py assoc. with graphite. Little in the way of shearing. Not assayed. 90 - 127 Med grd. Same colour regular grain size, massive. Could be intrusive though no distinct contacts found. 185 - 190 Breccia zone-graphite frags. Also hard black cherty material. Fair sulphides.
232	276	Ultrabasic 232 - 241 Breccia typw with light grey fragments. This section could be part of the volcanics. 241 - 276 Fine grd. dark greenish black to brownish. highly altered in zone 245 - 250. Carb stringers. Patches with grey breccia fragments. Little sulphides 258 - 259 Core badly broken but some fragments of massive sulphide.
276	420	Andesite As before 286.5 - 298 Zone with intermittent graphite breccia 10% sulphides 289 - 295

FALCONBRIDGE NICKEL MINES LIMITED

Page 2

DIAMOND DRILL LOG

LOCATION _____ BEARING _____ HOLE NO. 12

LOGGED BY R.N. Saukko ELEVATION _____ DIP _____ PROPERTY Dundonald

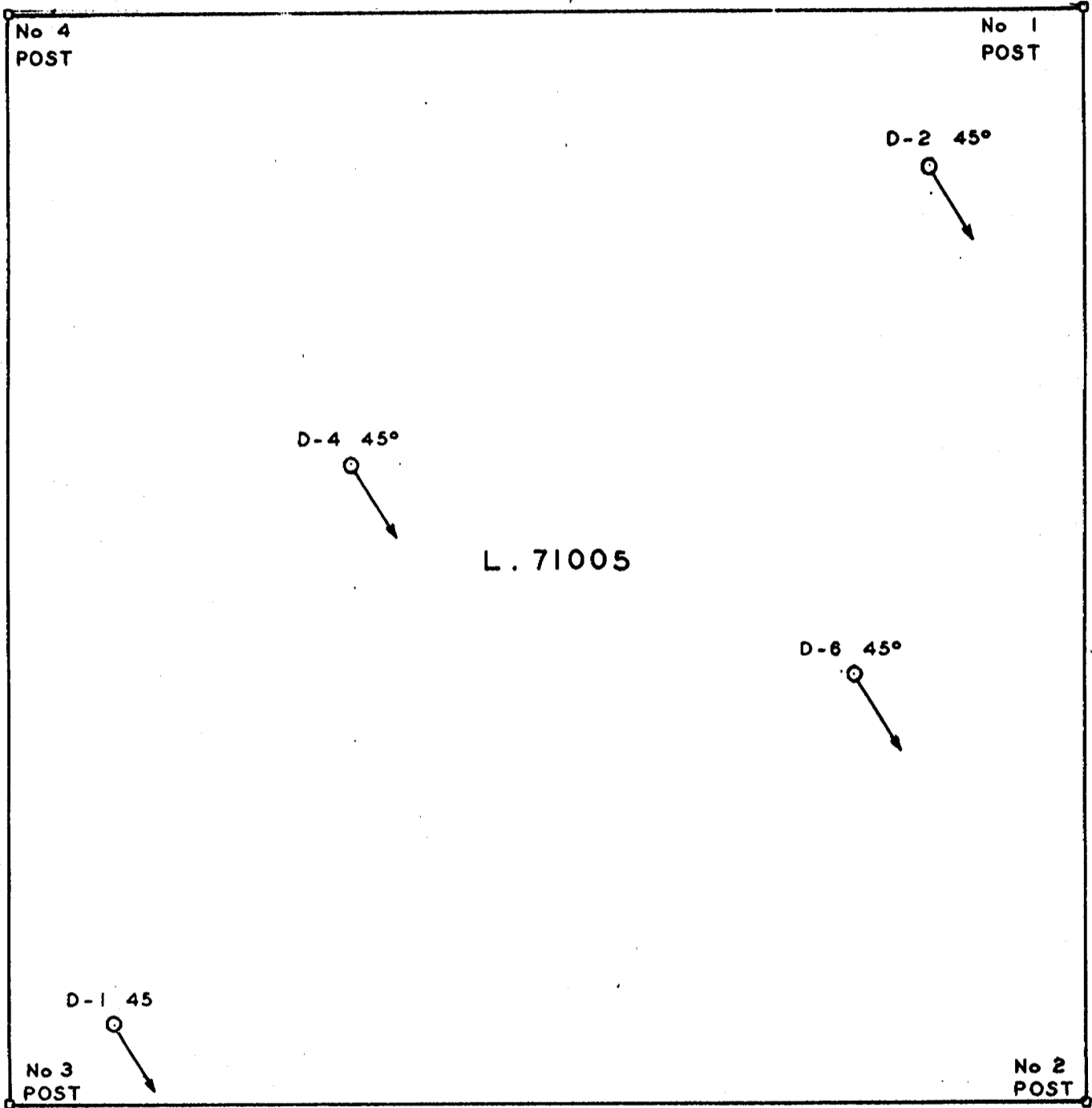
STARTED _____ TESTS (CORRECTED) _____

FINISHED _____

CASING _____

CORE SIZE _____

FROM	TO	DESCRIPTION
		298 - 300 Core ground
		301 - 303 " "
		305 - 306 " "
		308 - 310 " "
		313 - 315 " "
		300 - 323 Considerable graphite and schistose patches
		315 - 320 15% Sulphides with section from 317.5 - 319.5 running 30%.
		323 - 340 Quite massive andesite
		340 - 400 Intermittent graphitic zones. Erratic sulphide patches. Not assayed.
		400 - 420 Massive andesite
	420	END OF HOLE



1 INCH = 200 FEET

L - 76533

L - 74888

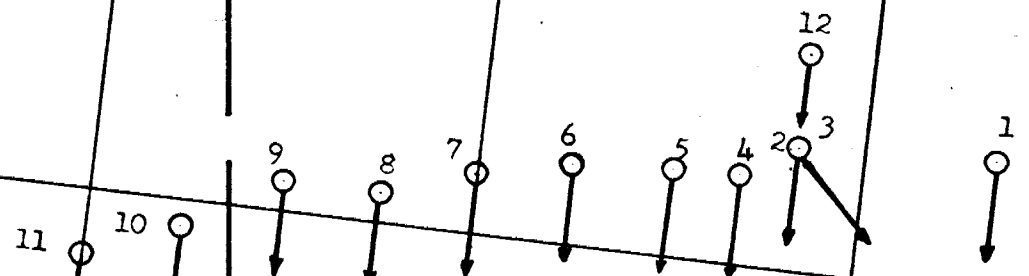
Nos. 4 & 1 Posts

No. 1 Post

112

116

120



Base Line



Nos. 3 & 2 Posts

No. 2 Post

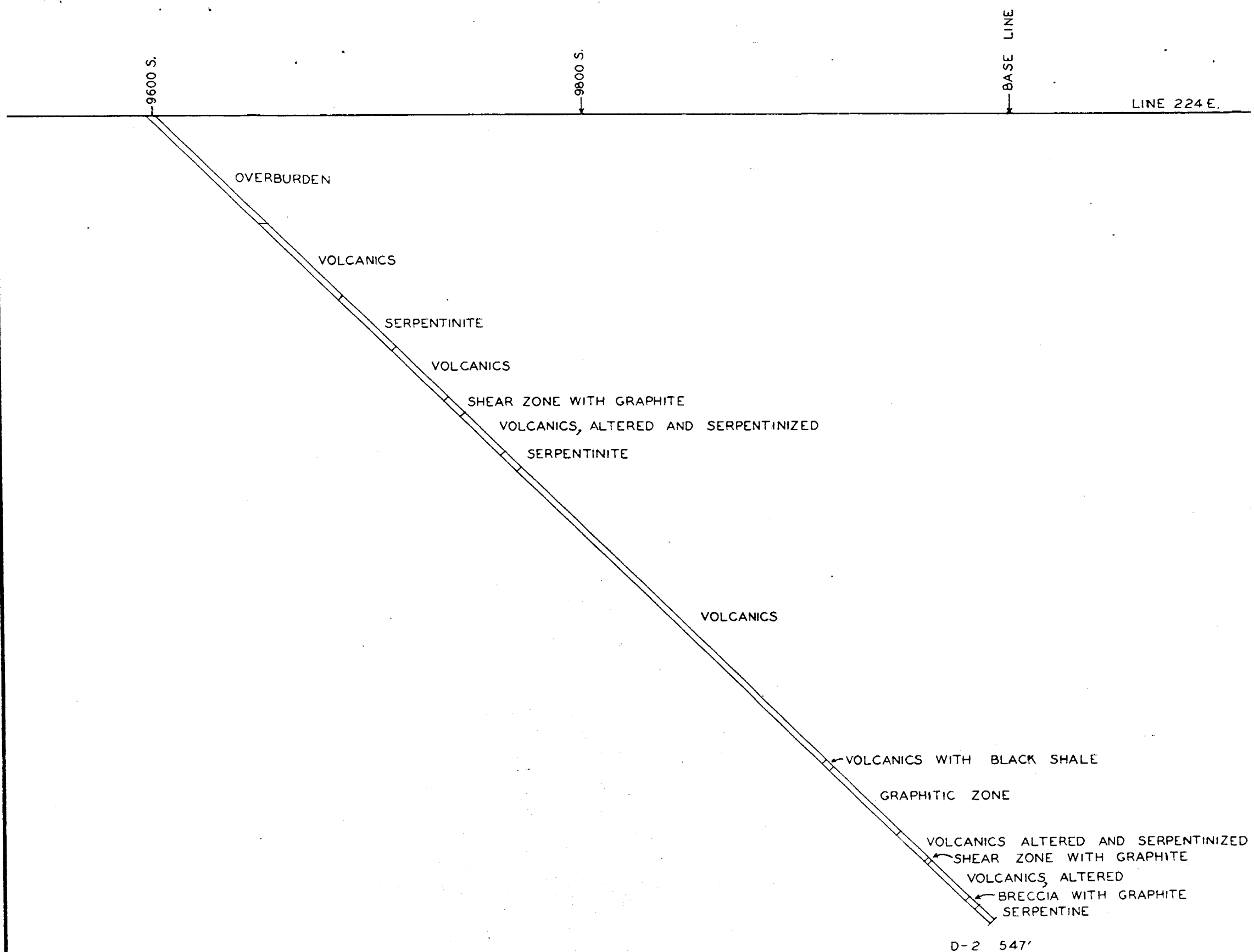
FALCONBRIDGE NICKEL MINES LIMITED

LOCATION PLAN

DIAMOND DRILLING

LUNDONALD TOWNSHIP

Scale: 1" = 200'



SCALE 1" = 50'

FALCONBRIDGE NICKEL MINES LTD.

SECTION DD.H. D-2
DUNDONALD TWP.

N

Collar Elevation 12

2

Base Line

A

A

Graphite

Graphite

218'

LEGEND

- Basic to Intermed. Vols
- Ultrabasic, Peridotite to Serp Peridotite

Assays Ni, Cu
Core length

FALCONBRIDGE NICKEL MINES LTD
Dundonald TWP

DRILL SECTION
HOLE 2+12 - 1964

Nov 1964

U

Graphite

Graphite

A

Intermittent graphite zones

420'

1000