

GM 10702

43 DDH LOGS WITH ASSAY RESULTS

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Énergie et Ressources
naturelles

Québec 

L. O. No. N-48
Location: Walkout No 6

Started: March 25-1960
Completed: April 1-1960
Logged by: P.K. Gaisberger.

Station at Collar: 124°
Dip at Collar: 0°

Pajari Test at 200' Bearing S 20° E Dip +2°

Length: 398.0'
Dip: 15°

0.0 **ALT'D DIORITE**
(UNIT)

Med. grey, f. to m. grained and sl. sh'd 10° to cn. Main constituents are chlorite-some carb-probably some sericite-clay mineral and traces of pyrite. Sl. softer than a nail, mod. to h. silicif'd and h. carb'd. An occas. qtz carb str's.

7.1-9.0 : Replacement of H.A. by brownish carb and qtz. Extra h. carb'd patches and streaks. The last 3" are sl. weath'd; a 1" milky qtz carb py str., 55° to m.

9.0-26.3 : Like 0.0 containing several brownish, extra h. carb'd streaks and str's. The fol'n is hardly visible.

17.9 3" x 2" wuggy streak of brownish carbonate and bluish qtz.

25.4-26.3 : H.A. is 90% replaced by brownish carbonate and milky to greyish qtz. U.L. 10° to m., L.O. 10° to cn.

26.3 Like 0.0, fol'n is not very conspicuous.

26.2-32.0 : Collescent type of alt'n. Med. to dark grey with bluish probably chloritic or sericitic, patches, irregular in size and shape. Faint fol'n 40° to cn., sl. softer than a nail and containing chlorite-qtz-carb-some sericite-clay mineral and tr. of sulphides. An occas. qtz carb str. Mod. to h. in siling and h. in carb's. This type of texture, grades into the grey-green alt'n.

32.0 Mod. grey-green and dotted by a carb. med. or greyish clay mineral. These dots are orientated 20° to m. in the first 5.0'.

Main constituents are: chlorite-probably some carb and carb.

Med. to h. carb'd and mod. to sl. silicif'd. Softer than a knife. The rock is cut by several milky grey qtz-carb. str's.

60.0 + or -

Mod. grey, c. gr. somewhat spotted in appearance, fairly massive and hard. The gabbro is only relatively w. alt'd and the texture is coalescent in places hypidiom. Main constituents are al'd feldspar, 55-65%, chl'd amphibole, some leucoxene or clay mineral, intergranular carb and traces of sulphides.

The grain size is larger than in N-72 at 173.0 besides that this gabbroid rock contain carb's. Small, in alt'd sections in between.

90.0 Only near the pinkish leucoxene some carbonate. Mod. to coarse grained.

110.5 1" milky white qtz carb str. 50° to cn.

134.8 1 1/2" milky white qtz carb str 45-20° to cn.

140.0 Interganular carb.

150.0 The rock becomes gradually greyish green.

152.0

152.0 **ALT'D GABBRO**

Light grey-green, original texture faintly visible and the main constituents are epidote-zoisite-qtz-chlorite-probably sericite-carbonates and a pinkish grey clay mineral (leucoxene?). Mod alt'd gabbro. Mod. silicif'd (?) and h. carb'd. The alt'n colour changes gradually.

Ministere des Ressources Naturelles, Québec

SERVICE DES GITES MINÉRAUX

No GM-10702

161.0 Original texture still visible. Dark grey to black, ~~coarse-~~
~~cast~~ texture dominates and in places faintly fol'd. The h. alt'd
gabbro is sl. softer than a knife, h. carb'd and mod. silicif'd.
Main constituents are chlorite-qtz-carb-epidote-saizite?-some
graphite-probably some sericite and irregular spots of a soft
greyish clay mineral. The rock is cut by several, narrow qtz-carb
str's.

163.2 3" composite qtz-carb-RR str. 45° to cn.

175.0 F. fol'd 40° to cn.

216.7 " bluish qtz carb str. 60° to cn.

242.4 " " " " " 30° to cn.

254.0 Gradual change into a mod. alt'd gabbro like at 152.0.

267.0-269.2 : Dark grey to black alt'd gabbro, the same as at 161.0.

270.0

270.0 GABBRO

Only relatively sl. alt'd. The same as at 60.0.

279.0-280.0 : Last core.

288.0-290.0 : Last core.

295.0-291.5 : Last core.

291.6 Fresh and rel. unalt'd gabbro; 55-65% amphibole, 35-45%
feldspar, some leucokene, some qtz and traces of sulfides.
Hypidiomorphic texture.

298.0

298.0 END OF THE ROLE

CABING FILLED

LOGGED BY: P.K. GEISTEMER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>As Oz/Ton</u>
	<u>From:</u>	<u>To:</u>		
N 2666	7.2	8.2	1.0	.010
N 2667	8.2	9.1	0.9	TR
N 2668	9.1	9.8	0.7	TR
N 2669	9.8	10.8	1.0	TR
N 2670	18.0	18.7	0.7	TR
N 2671	25.3	26.2	0.9	TR
N 2720	110.3	111.0	0.7	TR
N 2721	134.8	135.2	0.4	TR
N 2722	163.1	163.8	0.7	TR
N 2723	211.2	211.9	0.6	TR
N 2724	212.0	212.6	0.6	TR

NORBRAU MINES (QUEBEC) LIMITED.

D. D. N. NU-7

Location: K-cut 6 E

9,616.88 N 9,816.02 E

Bearing: N 61° W

Dip -14° 35'

Started: March 17-1960

Compl.: April 3-1960

Logged: P.K. Geisterfer.

Pajari test at	Bearing	Dip
150'		-14°
300'	N 22° W	-9°
450'	N 22° W	-7°
600'	N 17° W	-6°
800'	N 15° W	-10°

Length: 900.0'

Core: AXF

0.0 ALP'D DIORITE

Mod. gray, f. gr. and h. alt'd, h. sh'd, 10° to cn and consisting out of chlorite-carbonate-qtz-sericite?- a clay mineral and tr of pyrite. Sl. softer than a nail. Sl. carb'd, low-mod. silicif'd (qtz-eyes): a few, and only locally, oblong carb-qtz patches.
2.7 1" str. of dias. pyrite 10° to cn. (+ or -)
3.3 The texture becomes dotted.

5.0

5.0 ALP'D DIORITE

Mod. grey-green, f. gr. and dotted type of texture; consisting out of chlorite-carb-quartz-a pinkish grey (clay or leucoxene) mineral-sericite (?) and tr of pyrite. Sl. softer than a nail. Sl. carb'd, low to mod. silicif'd (qtz-eyes in places) and cut by several-num. irregular milky white qtz carb str. and streaks, and around 30-50° to cn. At 9.8 is 1.0' section of coarse qtz eyes. Brecciated? This type of alt'd diorite is suspected to be (faintly) fol'd.
25.0 The colour becomes gradually more green and the pinkish grey dots starts to disappear.

27.0

27.0 ALP'D DIORITE

Mod. to dark gn., f. gr. and h. alt'd. Main constituents are chlorite (amphibole) - quartz (eyes, lineated) - carb.- locally a grey clay mineral and tr of pyrite. Sl. softer than a knife. Sl. carb'd and mod. to low in quartz. The rock is cut by several milky qtz-carb str's, 30-60° to cn.
34.0-40.0 : Dotted type of texture.
37.0 The alt'd diorite becomes fairly continuous magn'c. Sl. to mod. in places low, even mod to high.
50.0 In places several qtz-carb str's.
55.0-97.0 : In general non-magn'c.
54.0-59.0 : Dots.
60.0-77.0 : Zone of several milky white qtz-carb str's and streaks. Cn. varies 40-120° to cn.
66.0-77.8 : Dotted.
77.8-87.4 : U.C. 35° to cn., L.C. 50° to cn. C. gr. alt'd diorite. Mod. to dark gn., spotted by a greyish clay mineral and or qtz eyes. Groundness is f. gr. Sl. softer than a nail, low-mod. silicif'd and non- to local mod. carb'd. The ct's are sharp.
87.4-88.5 : Dots, f. gr., carb'd etc.
88.5-90.1 : Like 77.8. U.C. 85° to cn., L.C. 55° to cn.
90.1-96.8 : Dots etc., but non-carb'd.
96.8-108.7 : Like 77.8. U.C. 60° to cn.

- 102.4 $\frac{1}{2}$ " milky and bluish qtz-carb str. 50° to cn., some chl.
The c. gr. alt'd diorite contains sections h. in epidote or sections
with grayish to white secondary qtz or feldspar patches. In general
mod. magn'c and non-carb'd.
- 108.7 Mod. to dark gn., f. gr. and a few dotted sections. In
general non-carb'd and mod. magn'c. Several chl or epidote str's and
streaks, an occas. qtz-carb str's.
- 112.8 1" qtz-carb str. 65° to cn. The HR is dotted over 1-2'.
HR over L.C., F.S. 1.7'.
- 116.6 1"(?) qtz-carb-(chl) str. $50-90^{\circ}$ to cn. The HR is dotted over
a few inches.
- 137.4 $1\frac{1}{2}$ " chl. str. 50° to ch. with some epidote, qtz and pyrite
xll's parallel the ct's.
- 139.0-161.0 : Several sections with very narrow and branching
epidote str's.
- 140.0 In places not magn'c.
- 175.0 Non-magn'c, in places only sl. Low diss epidote percentage
except in a few sections; a few streaks and str's of epidote.
- 186.8 A few qtz carb patches containing diss. pyrite over 3". HR
is not dotted.
- 188.0 Gradual coming in of the dots, not everywhere equally con-
spicuous.
- 193.2 and 197.3 : Less than L.C. section of c. gr. alt'd diorite.
Texture is well preserved. High epidote percentage, secondary
qtz-feldspar.
- 206.0 Non-magnetic. Still like 108.7 although dominantly dotted.
- 202.0-207.3 : C. gr. alt'd diorite. H. epidote percentage, well preser-
ved texture. F.S. 50° to cn.
- 233.8 1- $1\frac{1}{2}$ " milky white and gn's qtz-carb-chl-epidote str. $50-20^{\circ}$
to cn. with some py in H.S. The HR is dotted.
- 248.2 2" C. gr. alt'd diorite. U.C. 45° to cn., F.S. 155° to cn. or
compl.
- 251.8-259.8 : C. gr. alt'd diorite. High in epidote, sec qtz-
feldspar. U.C. and L.C. sharp but irregular.
- 273.8-281.1 : C. gr. alt'd diorite. High in epidote. U.C. sharp
 50° to cn. (?).
- 284.3 Some xl-py with a narrow qtz carb str. 60° to cn.
- 289.4-298.3 : C. gr. alt'd diorite. Epidote, sec. qtz-feldspar.
U.C. 25° to cn. L.C. 60° to cn.
- 298.3 F. gr., mod. to dark gn. Dots are not well conspicuous. Non-
carb'd and not-magn'c. Mod. to h. in epidote.
- 308.8 $1\frac{1}{2}$ " composite qtz carb chl str. 30° to cn.
- 349.3-365.0 : C. gr. alt'd diorite, epidote, sec qtz and feldspar.
Locally mod to c. gr.
- 366.0 Like 298.3 Sections with and without dots alternates.
- 368.3 Some diss. carb and a red, intergrown with the carb., patches
containing 5-7% pyrite.
- 393.4 $\frac{1}{2}$ " milky and orange qtz carb str 70° to cn.
- 405.0 The alt'd diorite becomes sl. to mod. carb'd.
- 423.0-437.0 : A few $\frac{1}{2}$ " milky white qtz carb. str. 45° to cn.
- 442.8 A composite qtz-carb-chl str. 60° to cn. of 3"
- 469.0 Patchy-like str. of diss. carb.

- 470.0 Sl. carb'd in places. There is an increase in the amount of epidote to mod. to high, and the appearance of the alt'd diorite becomes less homogeneous. There are several very narrow cracks filled with epidote and some carb. The rock appears to be locally coarser, namely mod. gr. although there are still small, f. gr. sections with the dotted type of texture. Gradual decrease in alt'n?
- 528.0 F. gr., mod. to dark gn. and in places dotted type of texture. A few mod. gr. sections (like 470.0) in between. Mod. to high carb'd. A few qtz-carb str's and streaks.
- 530.1 1/2" indication of sh'g. 45° to cn., epidote-chlorite. A few specks of pyrite.
- 536.7 1" milky to sl. greenish white qtz carb chl str. 70° to cn.
- 542.6-543.7 : Patchy-like str. of qtz-carb-chl and tr of pyrite.
- 564.5-569.3 : C. gr. alt'd diorite. Sec. feldspar. Mod. carb'd. U.C. 45° to cn., F.C. 60° to cn.
- 569.3 Like 528.0 but only carb'd in places.
- 575.2-578.3 : C. gr. alt'd diorite. Cr's irregular.
- 581.0-589.0 : Several milky white qtz carb str's, 45° to cn. A few of them contain some pyrite.
- 594.2-598.6 : C. gr. alt'd diorite. U.C. 35° to cn., F.C. 40° to cn. Epidote.
- 615.5-618.0 : C. gr. alt'd diorite. U.C. gradual to sharp 70° to cn., L.C. gradual. Epidote.
- 624.0 Like 530.1, only 1" wide. Some py specks.
- 625.0 Mod. to dark gn., f. gr. and homogeneous in appearance. Sl. silicif'd and mod. epidot'd but not carb'd. In places some dots. The amphibole is partly alt'd, to chlorite and probably also to biotite.
- 637.6 3/4" qtz carb str. 50° to cn. containing some pyrite.
- 641.9 1/2" qtz carb str. 40° to cn. containing some pyrite.
- 643.3-651.0 : C. gr. alt'd diorite. High epidote percentage.
- 651.0-678.5 : Very narrow str's and streaks of qtz-carb containing some pyrite.
- 678.5 The alt'd diorite loses its homogeneous appearance. Mod. to in places, c. gr., mod. to dark gn. and hard. Sl. silicif'd and low to nil in carb's.
- 700.6 3/4" qtz carb str. 30° to cn. containing some pyrite.
- 716.0 1 1/2" with sec. qtz and carb.
- 717.5 Like 625.0, mod. to h. carb'd.
- 754.0-756.5 : Broken core.
- 756.5-757.8 : Lost core.
- 757.8 Mod. dark gn., fine to mod. gr. and non-carb'd. Some dotted sections in between.
- 755.0-860.0 : Mod. carb'd, mod. gr. and mod. to dark gn. There are several 1 to 2.0" sections with qtz eyes of about 3 mm.
- 802.0-803.8 : Broken core.
- 807.2-810.0 : Broken core.
- 817.4 Composite, bluish qtz-carb and some chl str. 50° to cn.
- 850.0-865.0 : Several 1-2" milky white or bluish qtz carb. str's 50-60° to cn. No sul hides. The alt'd diorite is still sl. carb'd, in places non-carb'd, mod. to dark gn. and mod. gr. Grain size varies from mod. to c. Non-homogeneous in appearance.

885.0 The alt'd diorite becomes more homogeneous in appearance than before. Med. gr., med. to c. gr. and spotted by pinkish grey spots (3x3 mm.). Constituents are the same and also al. carb'd.

900.0

900.0 END OF THE HOLE

LOGGED BY: P.K. CRISTOFER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>As Ca/Ton</u>
	<u>From</u>	<u>To</u>		
N 2607	2.5	2.8	0.3	TR
N 2608	18.2	18.9	0.7	TR
N 2609	23.1	23.9	0.8	TR
N 2610	28.0	28.8	0.8	TR
N 2611	28.8	29.7	0.9	TR
N 2612	60.7	71.2	0.5	TR
N 2613	65.7	66.9	1.2	TR
N 2614	67.9	68.8	0.9	TR
N 2615	74.6	76.2	1.6	TR
N 2653	112.5	113.3	0.8	TR
N 2654	116.4	117.1	0.7	TR
N 2655	137.2	137.8	0.6	TR
N 2656	186.8	187.3	0.5	TR
N 2657	196.4	196.7	0.3	TR
N 2658	233.7	234.1	0.4	TR
N 2396	300.6	301.0	0.4	TR
N 2397	368.4	368.9	0.5	TR
N 2398	382.3	383.3	1.0	TR
N 2399	383.3	384.3	1.0	.030
N 2400	384.3	385.3	1.0	.010
N 2515	385.4	386.4	1.0	.010
N 2516	386.4	387.0	0.6	TR
N 2552	437.1	437.9	0.8	TR
N 2531	530.0	530.9	0.9	.010
N 2532	542.5	543.6	1.1	TR
N 2581	581.0	581.9	0.9	TR
N 2582	581.9	582.7	0.8	.020
N 2583	582.7	583.4	0.7	.020
N 2584	592.7	593.2	0.4	TR
N 2585	623.8	624.1	0.4	TR

N 2516	637.3	637.8	0.5	TR
N 2517	655.0	655.7	0.7	TR
N 2518	663.0	664.0	1.0	.010
N 2519	664.0	665.0	1.0	TR
N 2520	715.8	717.0	1.2	TR
N 2725	817.2	817.8	0.6	.010
N 2587	851.3	852.1	0.8	.010
N 2588	856.0	856.7	0.7	TR
N 2589	858.6	859.3	0.7	TR

NOVAPLAN MINES (QUEBEC) LIMITED

D. P. H. BU-6

Location: Adit Survey Station U-11 + 62.0' SW

9577.4N 9765.9E

Started: March 14-1960

Compl. : March 15-1960

Logged by: P.K. Geisterfer.

Altitude at Collar:

Dip at Collar: 0°

Length: 54.0'

Core: AKT

0.0 ALP'D BIGNITE

Mod. gray green, f. gr., and dotted. Mod. sh'd 40° to en., and h. carb'd. Low to mod. in qtz. Less than 1% pyrite.

4.3 1.0' with several narrow py str's h° to en. (A few of these are oxid.)

5.9 1.1' of bluish qtz. Contact supposed h°-45° to en.

6.0-12.7 : All is (bluish) silici'd. Some py.

12.7

12.7 ALP'D BIGNITE

Like 0.0, but mod. gr. texture and individual grains are fairly well visible. H. carb'd and containing an occas. qtz (carb) str. In places bluish qtz patches.

15.7 3" milky and bluish qtz (carb) str. U.S. 30° to en. and

h. 35° to en.

24.8 6" milky white and bluish qtz str.

25.7 3" of oxid. and weath. rock.

27.3 7" oxid. and weath'd.

30.4 1.0' " " "

30.7 1.0' " " "

35.8 1.2' brocc. qtz zone.

38.0 2.0' bluish qtz str. Broken core.

43.5 1" milky white qtz carb str., 70° to en.

49.8

49.8 ALP'D BIGNITE

Mod. green, f. gr., and dotted. Sl. carb'd.

54.0

54.0 END OF THE HOLE

P.K. GEISTERFER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Zn Oz/Ton</u>
	<u>From</u>	<u>To</u>		
N 1998	4.1	5.7	1.6	TR
N 2130	5.6	6.8	1.2	TR
N 2131	6.8	8.0	1.2	TR
N 1999	7.9	9.1	1.2	TR
N 2000	9.1	10.0	0.9	.010
N 2135	10.0	11.4	1.4	.010
N 2136	11.4	12.5	1.1	.010
N 2137	12.5	14.1	1.6	TR
N 2138	14.1	16.1	2.0	TR
N 2139	16.1	16.7	0.6	TR
N 2140	16.7	18.6	1.9	TR
N 2141	18.6	19.1	0.5	TR
N 2142	19.1	20.9	0.8	TR
N 2143	20.9	21.8	1.1	TR
N 2144	21.8	23.2	1.4	TR
N 2145	23.2	24.7	1.5	TR
N 2132	24.6	25.2	0.6	0.010
N 2146	25.2	26.2	1.0	TR
N 2147	26.2	27.3	1.1	TR
N 2148	27.3	28.3	1.0	TR
N 2149	28.9	30.1	1.2	TR
N 2133	30.0	39.0	1.0	.010
N 2134	39.0	40.0	1.0	.250
N 2150	52.9	53.6	0.7	TR

D. D. E. 20-5

Location: Adit Survey Station 8-11 + 62.0' SW
4.579.1N 9.767.1E

Started: March 13-1960

Comp. : March 14-1960

Logged by: P.R. Geisterfer

Azimuth at Collar: 283° 24'
Dip at Collar: 0°
Length: 55.0'
Core: AAT

- 0.0 ALT'D HIGHITE Mod. grey green, mod. sh'd and h. carb'd. (For detail description, see H2-2 and 4). Some scattered pyrite, 1-2%.
- 3.6 ZONE OF QTZ STR'S
3.6 HR in the same as at the collar.
3.6 1.3' of bluish qtz. U.S. 40° to en. (?) L.S. 10° to en. (?)
The quartz seems to be brecciated and (later) cemented by carb. (qtz?). Less than 1% pyrite.
6.0 0.8' of bluish qtz. The same as at 3.6. Contacts are missing.
13.7 Milky white qtz str. of 0.9'. U.S. 30° to en., L.S. missing.
19.0 A few inches scattered py xls.
21.9 1.6' of ground conc. Quartz milky and bluish str. Some py.
- 23.6 ALT'D HIGHITE The same as at the collar. Mod. grey green, f. gr., and dotted. Mod. sh'd. Somewhat like the bleached zone.
- 29.0 ALT'D HIGHITE (P. GR.)
29.0 Mod. green, f. gr., and dotted. Sl. carb'd, low in qtz, softer than a knife and occas. cut by a bluish qtz str with some py.
34.3-37.0 : Several small (less 1") bluish qtz (carb) str's, 45-55° to en. with py xls.
46.0 1" qtz (carb) str., 35° to en., some py xls.
- 55.0 END OF THE HOLE

P.R. GEISTERFER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u>	<u>To</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Gr/ Ton</u>
N 2348	1.0	2.1	1.1	TR
N 2349	2.1	3.7	1.6	.010
N 2350	3.7	4.7	1.0	.050
N 2355	4.7	5.9	1.2	.010
N 2366	5.9	7.0	1.1	TR
N 2367	7.0	8.0	1.0	TR
N 2368	8.0	8.3	0.3	TR
N 2369	8.3	10.0	1.7	TR
N 2370	10.0	12.0	2.0	TR
N 2371	12.0	13.7	1.7	TR
N 2372	13.7	14.5	0.8	TR
N 2373	14.5	17.0	2.5	TR
N 2374	17.0	19.5	2.5	.010
N 2375	19.5	20.9	1.4	.010
N 2376	20.9	22.0	1.1	TR
N 2377	22.0	23.0	1.0	.010
N 2378	23.0	23.7	0.7	.060
N 2379	23.7	25.0	1.3	.080
N 1992	34.4	35.0	0.6	TR
N 1993	35.0	36.0	1.0	TR
N 1994	36.0	37.1	1.1	TR
N 1995	38.0	41.0	3.0	TR
N 1996	45.5	46.8	1.3	TR
N 1997	48.1	49.3	0.9	TR

D. D. H. NU-4

Location: Adit Survey Station U-11 + 62.0' SH

9,582.8 N 9,770.5 E

1.7' ABOVE NU-2

Started: March 13-1960

Compl. : March 13-1960

Logged by: P.H. Christensen.

Azimuth at collar: 325°00'

Dip at collar: +25°

Length: 42.5

Core: AET

0.0 ALT'D DIORITE

Med. greenish, grey, fine gr. and soft. Dotted type of texture, fol'd 0-10° to en., med. sh'd. Main constituents are chlorite (alt'd amphibole), carb, a pinkish grey clay mineral, some qtz and some sericite (?).

1.9-2.9 : 5% diss. pyrite with a 1/4" "str". 0-5° to en. of 50% diss. pyrite.

2.9

2.9 ZONE OF QTZ STR'S

HR like 0.0, slightly more grey in colour.

2.9 3" of bluish qtz, u.c. 10° to en., F.C. 30° to en. At the far contact, tr. of pyrite.

3.5-5.2 : Upper contact 30° to en., far contact 50° to en. Dark grey to black qtz str. with cementing (?) carb. in the first 5".

5.2-8.0 + or - : This section has the appearance of the bleached zone containing streaks and eyes of bluish quartz, patches of milky carb. and in between light brownish patches (siderite?) partly made out of carbonate.

11.5 2 1/2" bluish qtz str. U.C. 60° to en. F.C. irregular.

12.3 3" (?) bluish qtz str., qtz are gradual.

14.2-15.3 : Bluish and milky qtz str. containing carb. filled cracks.

15.3-16.2 : Alt'd diorite with 5-10% pyrite.

18.0 + or - to 22.9 : Bluish qtz-(carb) str. Broken core, contacts are not recovered.

22.9-24.1 : Alt'd diorite containing 5-10% pyrite.

24.1

24.1 ALT'D DIORITE

Med. gr, fine gr., and dotted. The dots seemed to be lined. Sl. carb'd and cut by a few milky qtz carb str's.

29.5 Some pyrite acc. with qtz carb (two 1/4" str's 30-45° to en.)

40.5 Patch of qtz carb with some scattered pyrite (mils).

42.5

42.5 END OF THE HOLE

P.H. CHRISTENSEN.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u>	<u>To</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Oz/Ton</u>
N 2219	1.9	2.9	1.0	.020
N 2250	2.9	3.2	0.3	.340
N 2333	3.2	4.2	1.0	.010
N 2334	4.2	5.2	1.0	.010
N 2335	5.2	6.7	1.5	TR
N 2336	6.7	8.2	1.5	TR
N 2337	11.7	12.8	1.1	TR
N 2338	12.8	13.8	1.0	TR
N 2339	13.8	15.3	1.5	TR
N 2340	15.3	16.2	0.9	TR
N 2341	16.2	18.0	1.8	.030
N 2342	18.0	19.0	1.0	TR
N 2343	19.0	20.0	1.0	TR
N 2344	20.0	21.0	1.0	TR
N 2345	21.0	22.8	1.8	TR
N 2346	22.8	23.3	0.5	TR
N 2347	23.3	24.1	0.8	TR
N 2381	29.6	30.0	0.4	.010
N 2382	40.0	41.0	1.0	.010

NORB LAU MINES (QUEBEC) LIMITED.

D. B. H. NU-3
Location: 9,577.1 N 9,777.5 E

Started: March 12-1960
Compl. : March 17-1960
Logged by: P.K. Geisterfer.

Asimuth:
Dip at collar: 0°
150.0' 22°30' Bearing S 22° E Pajari Test

Length: 328.0'
Core: AXF

0.0 ALT'D DIORITE

Mod. to dark grey, fine gr. and in places a faint indication of dots. The rock is softer than a knife and its constituents are chlorite-carbonate-a clay mineral, some qtz and sericite. Tr of sulphides. The rock is h. carb'd and contains some bluish qtz-carb str's. 5.0 1" (?) black qtz str. U.C. missing, L.C. irregular to 50° to cn. Tr of pyrite.

5.4 2" bluish qtz carb str. 20-30° to cn.

8.0 0.6' of h. silicif'd and h. carb'd alt'd diorite.

9.5 2" like 8.0, containing some pyrite.

10.3 2" like 9.5

10.5 3" bluish qtz carb str. 10° to cn.

12.2 1" branching qtz-carb. str. containing a grey brown mineral, (siderite?)

15.4 3" str., 20° to cn., like 12.2 (not branching)

19.1 Some pyrite x'ls associated with qtz-carb.

21.7-22.8 : Zone of relatively more impregnated qtz and carb.

22.8 There is a gradual change in alt'n. The rock is black with light gn. irregular shaped coalescent spots. Its constituents are green to black chlorite, light gn. sericite (?), specks of a clay mineral and a mod. to high amount of carbonates. The rock is softer than a knife. The core surface is glossy and it contains tr of po, py and epy.

51.2 1" qtz carb str. 50° to cn.

53.5 and at 62.0 a few inches of weath'd and wuggy rock.

56.8 Some local sh'g, 55° to cn.

64.6 The change from the previous type of alt'n is within 1.0', apparently 60° to cn. Pale gn., fine gr. and in general with a spotted texture, probably also a ghost texture. Near the U.C. are no spots. The spots are probably of feldspatic origin, white, cleavage?, and the matrix is suspected to consist mainly out of chlorite. The rock is not as hard as a knife, mod. silicif'd and mod. carb'd. In places weath'd and pitted.

90.0-101.0 : Several sections of weath'd and pitted rock.

106.0-113.0 Transition zone from alt'd feldspatic gabbro to alt'd gabbro

113.0

113.0 GABBRO

Spotted rock, dark gn. amphibole, 40-50% in a matrix of yellow white 50-60% feldspar. C. gr., massive and hard. Besides feldspar and amphibole, there is a violet color red interstitial mineral, 1-2%, several alt'n products, chl, laucorone, clay etc., and tr of po and epy. Occ. a few inches w. alt'd gabbro.

128.0 3" milky white qtz carb str. 65° to cn.

129.8 3" " " " " chl. str. 15° to cn.

134.3 Two narrow qtz carb str 60 and 45° to en., a branching str.
143.8 A few inches weath'd and pitted core.
196.3-197.4: Bl. weath'd and pitted rock. One qtz fragment.
Broken core.
203.4 Pitted qtz carb str.
233.0 Pitted qtz carb. str. 50° to en.
250.3 Milky white qtz patch, environment mod. alt'd.
258.8 " " " " " " " "

293.7

293.7 ALT'D GABBRO Light grayish gn., c. gr. and mod. alt'd. Texture is well visible.
H. carb'd.

297.6

297.6 ALT'D AND SH'D GABBRO

Like 293.7, w. to mod. sh'd 45° to en.

299.7 Milky white qtz-carb patchy-like str.

300.1 1.0' milky and bluish qtz carb str (?) 50° to en. (?)

310.6-312.7: Milky white quartz carb. str. 70° to en.

318.0

318.0 GABBRO

Like 113.0, still is alt'd. About 50-60% amphibole.

328.0

328.0 END OF THE HOLE

LOGGED BY: P.K. GELSTENFER

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole Front</u>	<u>Top</u>	<u>Sample Length</u>	<u>Au Oz/Ton</u>
N 2601	223.0	223.7	0.7	TR
N 2602	232.8	233.4	0.6	TR
N 2603	250.3	250.7	0.4	TR
N 2604	265.2	269.2	1.0	TR
N 2605	299.5	200.0	0.5	TR
N 2606	300.0	301.1	1.1	TR
N 2591	310.5	311.6	1.1	TR
N 2592	311.6	311.6	1.0	TR
N 2422	1.9	2.2	0.3	TR
N 2380	5.0	5.6	0.6	.010
N 2423	7.9	8.7	0.8	TR
N 2424	8.7	9.6	0.9	TR
N 2425	9.6	10.6	1.0	TR
N 2426	15.0	15.8	0.8	TR
N 2427	21.6	23.1	1.5	TR
N 2428	51.3	51.8	0.5	TR
N 2429	56.8	57.3	0.5	TR

D. D. No. MU-2
 Location: Adit Survey Station U-11 + 52.0' SW
 4582.8 N 9.770.5 E

Started: March 8-1960
 Compl.: March 12-1960
 Logged by: P.K. Geisterfer.

Azimuth at Collar: 325° 00'
 Dip at Collar: 0°
 Length: 238.5'
 Core: ANT

Pajeri Tests: at 150.0' Bearing N 20° 30' W Dip
 at 230.0' N 22° W
 (Strike not reliable, mod. magnetic rock).

0.0 ALT'D DIORITE

Light to mod. grey green, fine gr. and mod sh'd 40° to cn., (elongated dots) with a few narrow pyrite streaks parallel this sh'g. Main constituents are calcite (alt'd amphibole), carbonate, a pinkish, gray clay mineral, probably some sericite and (low) qtz, trace to 1% pyrite. Hardness less than a knife.

2.9

2.9 ZONE OF QUARTZ VEINS

The RR is the alt'd diorite, without dots, containing the same minerals. High quartz percentage.

2.9-3.8 : Bluish qtz with from 3.2-3.5 a qtz replacement zone. Oxidation of the RR. In the weath'd parts are H. carb'd, the bluish qtz, however, is very low (only a few cracks) in carb. Contacts are gradual.

4.2-4.5 : Qtz replacement and weath'g.

5.6-6.0 : " " " "

6.6 3" of bluish qtz. U.C. suspected 40° to cn., L.C. gradual and irregular.

7.9-8.6 : Qtz replacement and weath'g (3") grading (?) into milky bluish qtz. Cracks in the qtz 55° to cn., and also a few brown weath'g spots.

13.8-15.6 : Bluish milky qtz str. Ox. cracks 45-50° to cn.

15.6-16.4 : Bl. bleached, containing 5% pyrite and a small (py) qtz-replacement streak 20° to cn.

16.4

16.4 ALT'D DIORITE

Like 0.0, but mod. greenish, not sh'd., and a dotted type of text. Suspected low sericite percentage. A few sections with lined dots, there are several to num. qtz carb. str's. Remarkable is their high carb. content, in relation to the low carb. content in the bluish (upper) qtz veins.

26.1 3" extra h. carb'd with a narrow qtz carb. streak 40° to cn., 1-2% pyrite.

27.2-28.7 : Several bluish qtz carb str's, 30° to cn. Tr pyrite and cpy.

29.5 1/2" milky white qtz carb str., 75-80° to cn.

30.3 1/2" bluish qtz carb str., 20° to cn. Tr py and cpy.

31.4 Two 1/2" bluish qtz carb str's, 20° to cn. and 50° to cn. (displaced by the 20° to cn.)

33.6 1/2" milky white qtz carb. str., 70° to cn.

36.1-37.3 : Irregular milky and bluish qtz carb str's, 70-90-110-90-60° to cn.

43.5 1/2" milky white qtz carb chl str. 20° to cn.

43.5 The alt'd diorite becomes gradually mod. to dark green. Dotted type of texture.

50.3 Irregular streak of milky qtz carb and some green chlorite.
 62.8 2" qtz carb. str (between milky and bluish).
 50° to cn., a few py patches in the chl's str.
 73.0-75.0 : Blocky ground. 60-70% core recovery.
 74.5 2" qtz patches.
 75.0 6" of sl. to mod. magnetic diorite.
 76.0 An occas. qtz carb str's.
 85.7 3" qtz carb str. 45-50° to cn.

91.0

91.0 ZONE OF QTZ CARB STR'S

In general milky white qtz carb. str's. Several of which contain up to 5% pyrite (xls). The str's are irregular, streaky and patchy in appearance and the cn. varies.

103.2

103.2 ALT'D DIORITE (F. GR.)

Like before.

134.0 About the end of the dotted type of texture, the alt'd diorite is f. gr., mod. to dark gn, homogeneous in appearance and start to become continuously magnetic (up to mod. coincides with surface anomaly. The two Pajeri tests gave about the same strike namely N 20° 30' - 22° W : Orientated magnetized?)
 An occas. narrow milky qtz carb str. and a few patches, streak or str's of light gn. epidote. Tr of pyrite, (very narrow streaks or patches) is in generally associated with dark green chlorite.

133.2

133.2 ALT'D DIORITE (C. GR.)

Greenish, co. gr. and gabbroid in texture. Main constituents are amphibole (chlorite), feldspar and quartz, some magnetite (the first 2-4') and low in epidote percentage. U.C. is 50° to cn., L.C. 10° to cn.

140.0

140.0 ALT'D DIORITE (F. GR.)

Like 103.2. Mod. carb'd. Dotted type of texture.

162.0-162.6 : Qtz carb lenses parallel the chl'g, 45-50° to cn., 3-5% pyrite.

165.0 4.0' of dotted type of texture.

175.0-185.3 : Dotted type texture with a mod. to co. gr. section of 2.0' at 178.0

194.0 There seems to be a gradual increase in epidote percentage to mod. to high.

197.0 About the end of the magnetite zone.

208.0-224.0 : A few co. gr. sections, texture is well preserved.

238.5

238.5 END OF THE HOLE

P.H. CHRISTENSEN.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Assay</u> <u>Oz/ Ton</u>
	<u>From</u>	<u>To</u>		
N 2225	0	2.3	2.3	TR
N 2226	2.3	3.0	0.7	.030
N 2227	3.0	3.8	0.8	.060
N 2228	3.8	4.5	0.7	.020
N 2229	4.5	5.7	1.2	TR
N 2230	5.7	6.1	0.4	TR
N 2231	6.1	6.6	0.5	.020
N 2232	6.6	7.0	0.4	.010
N 2233	7.0	7.9	0.9	TR
N 2234	7.9	8.7	0.8	TR
N 2235	8.7	10.0	1.3	TR
N 2236	10.0	12.0	2.0	TR
N 2237	12.0	13.8	1.8	TR
N 2238	13.8	14.8	1.0	.010
N 2239	14.8	15.6	0.8	.010
N 2240	15.6	16.4	0.8	TR
N 2241	16.4	18.9	2.5	TR
N 2242	18.9	21.4	2.5	TR
N 2243	21.4	22.2	0.8	TR
N 2244	22.2	22.6	0.4	.010
N 2245	22.6	23.6	1.0	TR
N 2246	23.1	24.2	0.6	TR
N 2247	24.2	25.0	0.8	TR
N 2247	25.0	25.0	1.0	TR
N 2308	26.0	26.4	0.4	.010
N 2309	26.4	27.2	0.8	TR
N 2310	27.2	28.8	1.6	TR
N 2311	28.8	30.3	1.5	TR
N 2312	30.3	31.3	1.0	.010
N 2313	31.3	31.7	0.4	TR
N 2314	31.7	32.3	0.6	TR
N 2315	32.3	33.5	1.2	TR
N 2316	33.5	34.0	0.5	TR
N 2317	34.0	34.7	0.7	TR
N 2318	34.7	35.5	0.8	TR
N 2319	35.5	36.1	0.6	TR
N 2320	36.1	37.4	1.3	.070
N 2321	37.4	38.6	1.2	TR
N 2322	38.6	39.3	0.7	.020
N 2330	64.2	65.0	0.8	.010
N 2323	91.7	92.5	0.8	TR
N 2324	92.5	93.7	1.2	TR
N 2325	93.7	95.0	1.3	TR
N 2326	95.0	97.4	2.4	TR
N 2327	97.4	98.5	1.1	.030
N 2328	98.5	99.3	0.8	.020
N 2329	99.3	100.0	0.7	.010
N 2473	102.2	103.2	1.0	.020
N 2474	162.0	162.6	0.6	TR
N 2475	190.7	191.1	0.4	TR

B. B. H. BOURNAU ADIT 1.

(33-1)

STARTED: Jan 6-60

Completed: Jan 6-60

Logged by: Peter L. Honey

Location:

Core:

Length: 22'

Azimuth:

Dip: 2°

0.0 ALP'D MICRITE

0.0

: F.C., medium to dark green, soft, occas. blue quartz eyes, highly chloritized, low to nil carb, clay min, epidote. Occas. Hairline carb stringers, gen. 10-10° to cn. Joints rusty, tr. py, po (?).

4.5 ALP'D MICRITE

4.5

: F.C. gradational. Rk. similar to above but grey rather than greenish, highly carb. Joints rusty, tr. py. po (?) throughout.

6.9-7.7: Abt 2% py (?). Heavily tarnished.

7.7

7.7 BOURNAU VEIN

: Contacts missing core badly broken. Vein consists of deep blue quartz cut by white carb stringers with trace of py.

7.7-8.6: Tr. arsenopy.

9.7-11.0: Tr. arsenopy.

11.0-12.0: Vein quartz or highly silicified wall rock.

5% py. in elongate streaks, lenses generally at 20-10° to cn. Traces arsenopy. (?).

12.0

12.0 ALP'D MICRITE

: F.C. medium grey to dark grey, soft, sericitized (?), some introduced silica, low in carb. Abt 1% py. throughout.

12.0-13.1 : Brecc. zone ? . Very rusty rk., schistose 25° to cn., num. quartz veinlets, elongate patches sulphides, highly silicified. Abt 2% py., tr. arsenopy.

15.0-15.4 : Abt 2% arsenopyrite as fine wedge-shaped xls. Rusty, tr. py.

16.5-17.5 : Irreg. veinlet siderite (or sphalerite?) with minor py., arsenopyrite.

22.0

22.0 END OF HOLE

Sample Number	Section of Hole From	To	Sample Length	As	Ag	Co
514	5.0	7.7	2.7	.060		
515	7.7	9.0	1.3	.070		
516	9.0	10.0	1.0	.030		
517	10.0	11.0	1.0	.060		
518	11.0	12.0	1.0	.020		
519	12.0	13.0	1.0	.030		
520	13.0	15.0	2.0	.030		
521	15.0	16.0	1.0	.610		
522	16.0	18.0	2.0	.030		
523	18.0	20.0	2.0	.010		
524	20.0	22.0	2.0	72		
			SLUDGE			
456	0	10	10	.050		
457	10	22	12	.070		

NORDEAU MINES (QUEBEC) LIMITED.

D.D.H. N-77

Location: L 37+25 W 12+00'S
8,933.09 N 8,592.26 E
Elevation 1356.43

Started: March 28-1960
Compl. : April 4-1960
Logged by: P.K. Geisterfer.

Asimuth: 304°
Dip at collar: 45°
at 300' 43°
at 500' 41°

Length: 508.0'
Core: AX

Casing pulled.

0.0 CASING

44.0 SERP'D DUNITE

44.0

Blackish, darker than the serp'd dunite in hole N-74 and also less coarse in grain size. Orbicular texture with magnetite and a dark grey mineral in between the serp. orbicules. At occas. serp str. and also a few narrow magn. str's. Mod. magn'c and softer than a nail. The original composition of N-74 was probably sl. more descriptive than that of N-77. Core recovery is quite good, in places broken core.

141.5-142.3 : Ground core.

142.3 The serp'd dunite starts to become fol'd 50-60° to cn., but the fol'n is hardly visible. The rock shows the tendency to break parallel to this direction.

150.0 The fol'n 70° to cn. becomes more conspicuous. Elongated orbicules give the fol'n.

154.8-167.2 : Serpentine-carbonate zone. Section of non-magnetic, mod. transparent gn., fine gr. and soft serpentine alternates with sections of magn., dark gn. to black rock. The serpentine sections also contain a soft red brown changing into a yellow brown pseudomorphic ? mineral. The magn. sections are made out of serpentine, magnetite, carbonate and probably also a little qtz. These sections give the impression of a w. sh'd rock.

159.4-150.3 + or - : Pale greenish to white stringer of carb. and asbestos, m. in quality, 70° to cn.

167.2 Serp'd dunite cut by num. very narrow light gn. serp-talc-carb str's, 10 and 60-75° to cn. The HR is dark gn. to black in colour, mod. magnetic and still indication of sh'g. There are a few carb'd sections in between.

167.0 Fol'n 55-65° to cn.

196.7-197.8 : Extr. h. carb'd section. It contains also that red brown mineral (sphalerite?). Upper contact about 20° to cn., L.C. vague.

200.0 Serp'd dunite becomes less sh'd with only locally indication of sh'g. Decrease in yellow gn. carb-serp str's to "several". Still mod. magn'c and there are several 1-2.0' sections of broken core.

225.0 Decrease in str's and sections of broken core. Type of serp'd dunite is the same as at collar except the local carb'n.

255.6-263.0 : Mod. carb'd, several narrow mod. gn. and light gn. str's of serpentine, talc and carb.

- 257.5 1.3' light pale gn. vein of serpentine, probably talc, carb. and some magnetite. U.C. 50° to cn., L.C. 40° to cn. Poor quality.
- 283.0 Numerous v. fine light gn. talc carb str's, 30-50° to cn. The serp'd dunite is sl. carb'd. Orbicular texture is not conspicuous.
- 291.5 Gradual increase in carb'n to h. Num. v. f. light gn. talc-carb str's. Tr of sulphides.
- 293.1-295.2 : Bluish grey carb zone with a few inches of serp'd dunite. Besides carb, there are also probably some sericite, chlorite and qtz. Two 1" milky white carb str's 15-20° to cn.
- 295.2-303.6 : Serp'd dunite, h. carb'd, inplaces only sl.
- 302.8 Red brown mineral of 154.8.
- 303.6-312.6 + or - : Still carb'd but only mod. and even non-carb'd in places. Num. very fine carb. (serpentine) str's 20-40° to cn., and several carb-serpentine str's 50-70° to cn., parallel to and diagonally to the first mentioned set. In this section is also locally a violet red mineral often with mod. gn., translucent serpentine. Traces of sulphides.
- 312.6 + or - to 325.0 + or - : Still mod. carb'd but only in patches, of 4-5". In between no carb'n and the serp'd dunite has there the orbicular texture. Num. light pale gn. and narrow carb-serp. str's 40° to cn.
- 325.0 + or - Like 312.6, but a decrease in the amount of carb'd patches and in the amount of str's.

341.0

341.0 TRANSITION ZONE

- Blackish in colour, mod. gr. and sl. softer than a knife. The rock is still an alt'd dunite and the orbicular texture is still conspicuous although there is an increase in greyish, interstitial material. In places the rock can even be more greyish in colour because of this mineral. There are two carb-serp str's 30-65° to cn., and at 343.7 a 1" str. 65° to cn. of epidote-zoisite?-serpentine-qtz and magnetite. This part of the zone is mod. to h. magn'c.
- 345.1 Probably the contact. The rock is mod. to light grey and without an orbicular texture although there are still some dark green, oval spots probably serpentine left.
- 345.8 6" str., near ct 20° to cn, far ct 60° to cn., like 257.5

PYROXENITE 348.7

348.7 ~~TRANSITION ZONE~~

- Light gn-grey in colour, fine gr. in appearance but actual a med. gr. rock. It is harder than a knife, has occas. a few dark gn., chl'c spots, 2x4 mm. and is cut by a few milky white qtz-carb-epidote str's. The appearance is massive and homogeneous. The rock seems to be rel. w. alt'd. Main constituents are small elongated light gn laths, apparently ~~epidote-carb~~ ^{PYROXENE} and chl'd amphibole, 10-20%.
- 358.4 4" qtz-carb-epidote str., F.C. 15° to cn.
- 407.1-414.1 : This section seems to be c. gr. consisting of chl'd and epidotized minerals of which the percentages varies. Upper contact is gradual within 2", F.C. is missing. This c. gr. sections are probably comparable to those in the mod. to dark gn, f. gr. and alt'd diorite (?).
- 425.0 Gradual change in colour to mod. to light grey.
- 440.0-445.0 : Mod. to light grey, fine to med. gr. and massive. It seems to contain more fibrous min. than the environment, there is gradually also an increase in the amount of qtz and this section contain traces of disseminated cpy, py, po and probably also some sphalerite. (red brown mineral) Contacts are missing.

445.0 Alt'd gabbro, light greenish grey.

455.0-472.6 : Like 445.0 with a few narrow qtz str's, 60-90° to cu. containing some sulphides; epy, py, po and sphalerite. No ore.

475.0-495.0 : In places, some broken core.

508.0

508.0 END OF THE HOLE

LOGGED BY: P.K. GEISTNER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au Gg/Ton</u>
	<u>From:</u>	<u>To:</u>		
N 2725	157.2	158.3	1.1	.010
N 2727	158.3	159.5	1.2	.020
N 2728	195.6	196.8	1.2	.010
N 2672	292.9	294.1	1.2	.030
N 2673	294.1	295.2	1.1	.030
N 2674	441.4	442.3	0.9	.020
N 2675	466.3	467.2	0.9	.010
N 2676	467.2	468.0	0.8	.010
N 2677	468.0	468.9	0.9	.010

SLUDGES

N 2683	260	270	TR
N 2684	270	280	TR
N 2685	290	300	TR

NORBEAN MINES (NORROR) LIMITED.

D. D. H. N-76
 Location: L 23+70 W, 9+15' S
 9,178.25 N 9,621.94 E
 Elevation 1434.84
 1-55' S on section line 10-32 SW

Started: March 22-1960
 Compl. : March 27-1960
 Logged by: P.K. Geisterfer.

Asimuth at Collar: 304°
 Dip at Collar: 45°
 Length: 171.0'
 Core: AX7
 Casing pulled.

0.0 CASING

25.0

25.0 ALT'D GABBRO
 (c. gr., grey-gn)

Light gray-gn., c. gr. and hypidiomorphic. The rock is softer than knife and the original texture becomes less well conspicuous. Main constituents are amphibole-chlorite, alt'd feldspar, epidote-sericite, some carb, qtz and a pinkish grey mineral probably leucoxene. The alt'd gabbro is h. carb'd and has an occas. silky or bluish qtz-carb str.

31.0 The alt'd gabbro is fol'd 45° to cn.

36.8 The rock becomes grey, original texture is hardly visible.

(mod. grey)

41.0 Mod grey, apparently f. gr., softer than a knife and fol'd 30° to cn. Sl. carb'd and low to m. silicif'd. Main constituents are chlorite-carb-qtz-sericite?-tr of sulphides. There are a few narrow qtz carb str's.

53.6 W. sh'd. Original c. gr. texture conspicuous.

60.0

60.0 SHEAR ZONE AND ZONE OF QTZ STR'S

The greyish alt'd gabbro is m. sh'd 50° to cn. and contains several 1/4" bluish qtz str's, occas. with some carb., parallel to the sh'g. BR is still the same, in places replaced by carb's. The alt'd gabbro is h. carb'd, low to m. silicif'd and is locally sl. weath'd and oxid.

63.5 Qtz-carb replacement.

68.5

68.5 NORBEAN VEIN

Bluish to black in colour with a few brown oxid cracks. Tr of sulphides.

70.0

70.0 SHEAR ZONE

Mod. sh'd 40° to cn. Patches, streaks and a few str's of blackish qtz. Sl. silicif'd and carb'd.

73.0 + or -

73.0 ALT'D GABBRO

Like 53.6. Fol'n 35° to cn. Sl. silicif'd and carb'd. Locally carb patches.

86.7 Patchy-like qtz-carb str.

88.4-89.8 : Orientated pinkish grey dots of 5 x 10 ma. of leucoxene and qtz.

90.7 3/4" bluish qtz carb str 30° to cn.

(grey-gn)

92.0 Light grey and gradationally becoming light gray gn. M. silicif'd, h. carb'd and cut by a few bluish qtz carb str's. There are several to num. chl'c streaks about 45° to cn.

125.0-150.0 : This box was dropped. Only a part of the core was rearranged.

136.0 + or -

136.0 GABBRO

(mod. gr.)

Mod. gn., med. gr., hypidiomorphic, massive and band. About

50-60% amphibole-chlorite and 40-50% epid'd feldspar. Some qtz
and violet grey leucocrans. A few w. alt'd section in between.

171.0

171.0 END OF THE HOLE

LOGGED BY: P.K. GRISTEPIER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole From:</u>	<u>To:</u>	<u>Sample Length</u>	<u>Au Oz/Ton</u>
N 2534	36.3	36.7	0.4	.020
N 2535	47.9	48.4	0.5	.090
N 2536	60.0	61.0	1.0	.020
N 2537	61.0	62.0	1.0	.020
N 2538	62.0	63.0	1.0	TR
N 2539	63.0	64.0	1.0	TR
N 2540	64.0	65.0	1.0	TR
N 2541	65.0	66.0	1.0	TR
N 2542	66.0	67.0	1.0	TR
N 2543	67.0	68.5	1.4	.010
N 2533	68.5	70.0	1.5	TR
N 2544	70.0	71.0	1.0	TR
N 2545	72.0	73.0	1.0	.010
N 2546	77.1	78.2	1.1	TR
N 2547	83.7	85.0	1.3	TR
N 2548	86.5	87.2	0.7	TR
N 2549	90.4	90.9	0.4	TR
N 2550	95.4	95.9	0.5	TR
N 2569	100.9	101.7	0.8	.010
N 2570	113.7	114.5	0.8	.020

SLUDGES

N 2571	50	60		TR
N 2572	60	70		.010
N 2573	70	80		.010
N 2574	80	90		.020
N 2575	90	100		.020
N 2576	100	110		.010
N 2577	110	120		.010
N 2578	120	130		TR
N 2579	130	140		.010
N 2580	150	150		TR

NORBEAU MINES (QUEBEC) LIMITED.

D. D. N. N-75
 Location: L 7+00 N, 7+05' SE
 10,301.69 N 11,004.83 E
 Elevation 1485.80

Started: March 23-1960
 Compl. : April 14-1960
 Logged by: P.K. Geisterfer.

Asimuth: 304°
 Dip at Collar: 83°

Pajari Test at 150'	Bearing N 40° W	Dip 82°
300'	N 42° W	84°
450'	N 56° W	83°
600'	N 54° W	84°
750'	environment magnetic, cancelled.	

Length: 989.0'
 Core: AXT

0.0 ALT'D DIORITE

Mod. gn., c. gr. appearing rock. Original the texture is not well preserved. Harder than a nail and not magnetic. Main constituents are: epidot'd feldspar, chl'd amphibole, a soft greyish clay mineral, secondary qtz and tr of sulphides. The alt'd diorite is not homogeneous in appearance. Sl. silicif'd, mod. epidot'd and an occas. qtz carb str.

26.1 1 1/2" qtz-carb-chl-str. 10° to cn.

75.0 There is in places an increase in the amount of epidote to mod. to high.

86.9 1.0' of ground core.

99.2 1 1/2" qtz-carb-ep str. 50° to cn.

110.4 1.0' ground core.

163.7 1/2" red and milky white qtz-carb str. 15° to cn.

177.0 Decrease in grain size to med., the colour becomes sl. darker green, but there are still section of c. gr., alt'd diorite, the same as at the collar, in between. There is also a decrease in the epidote percentage to medium.

189.5 7" qtz-carb-chl str. suspected 35° to cn.

195.0 Dotted type of texture is almost dominant.

225.0 The dots are hardly visible.

225.0-265.0 : Sl. carb'd in places.

258.9-261.5 : Quartz-carb zone with dark green enclosed chlorite. The str's are 40-60° to cn. and at the end the qtz contains a violet-pinkish diss. mineral and also some of that orange red, probably carb'c mineral.

265.0 The alt'd diorite starts to become homogeneous in appearance.

Mod. gn., f. gr., and massive. Sl. silicif'd, mod. to h. epidot'd and cut by an occas. qtz-carb str.

316.5-332.0 + or - C. gr. section; h. epidot'd.

318.3 2" qtz-carb-epidote str. 10° and 50° to cn.

318.9 1 1/2" axinite (?) - carb str. with chl inclusions.

332.0 Mod. to dark gn., f. to med gr'd alt'd diorite. Appearance is not homogeneous, c. and f. gr. sections in between, with or without dots. The rock is h. silicif'd, mod. epidot'd and not carb'd. C. gr. sections, however, do have a high percentage of epidote.

341.8-343.0 : Ground core.

350.5-351.5 : ground core.

450.0 In general f. gr. and dotted with a few c. or med. gr. sections in between. Mod to dark gn., not carb'd and not magnetic. The alt'd diorite is h. silicif'd and mod. epidot'd. Fairly

homogeneous in appearance.

500.0 The alt'd diorite becomes mod. carb'd.

525.0 Sl. carb'd, f. gr. and dotted alt'd diorite.

601.0-630.0 : Several 1/8-1/4" milky white and bluish qtz carb str's, 20-50° to cn. Some of them contain or associated with: ct, py. HR is locally w. sh'd 75° to cn.

604.2-605.4 : Bleached zone. Extra h. carb'd with stringers of diss. pyrite or black qtz grain 70-75° to cn., in general 30° to cn. Bluish qtz. about 5% pyrite and tr of cpy.

630.0 Still h. carb'd. The appearance is not homogeneous. The alt'd diorite is fine to med. gr. with f. gr. sections. In general with a dotted type of texture and f. fol'd 75° to cn.

655.0 Mod. carb'd.

665.0 End of the carb'd zone. Med. to dark gr., f. to med. gr. and not homogeneous in appearance. In general dotted. The alt'd diorite starts to become locally magnetic.

675.0 Gradual increase in epidote percentage to med. to high.

792.0 Decrease in the percentage of epidote to low. The alt'd diorite starts to become carb'd.

798.0 Sl. carb'd. In general f. gr. and dotted, but there are f. to med. gr. dotted and non-dotted sections. Still a few magnetic spots.

850.0 Like 798.0 but not magn'c.

875.0-877.0 : Four 1/8" bluish qtz str's, 60° to cn. containing some pyrite.

877.0 Several milky white and bluish grey qtz carb str and streaks, cn. varies 45-70° to cn. The alt'd diorite is h. carb'd, m. silic'd and contains about 1-2% pyrite.

898.0-898.4 + or - M. sh'd rock 45° to cn.

898.4

898.4 NORBEAL VEIN

Ground core. Bluish qtz containing 5-7% pyrite, tr of cpy and locally a brown very fine chloritic ? mineral in v. narrow str. 50° to cn. U.C. 40° to cn. L.C. missing.

899.3

899.3 ALT'D DIORITE

It has the appearance of the bleached zone. There are patches and eyes of qtz and carb. The rock is h. carb'd, m. silicif'd and it contains locally some pyrite.

900.2 1/8" qtz-carb str. 40° to cn. containing some po-py.

900.4-901.4 : About 5% pyrite; in small patches.

900.4 Mod. dark gn., f. to med. gr. alt'd diorite. Sl. carb'd.

Mod. in silica and cut by several milky and bluish qtz carb str's, 40-50° to cn.

925.0 The rock starts to contain bluish grey sec. qtz eyes giving the appearance of a med. to c. gr. alt'd diorite. Sl. carb'd and several narrow milky white qtz-carb. str's, cn. varies.

960.0 Med. to dark gn., f. gr. alt'd diorite with in places a dotted type of texture. Locally sl. to h. carb'd.

989.0

989.0 END OF THE HOLE

LOGGED BY: P.E. CHRISTENSEN.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole From:</u>	<u>To:</u>	<u>Sample Length</u>	<u>Au Oz/Ton</u>
N 2586	189.6	190.6	1.0	.010
N 2590	260.6	261.5	0.9	TR
N 2606	603.1	604.1	1.0	TR
N 2607	604.1	605.3	1.2	TR
N 2608	605.3	607.0	1.7	TR
N 2609	607.0	609.0	2.0	TR
N 2690	609.0	611.0	2.0	TR
N 2691	611.0	613.0	2.0	TR
N 2692	613.0	615.0	2.0	TR
N 2693	615.0	615.0	1.0	TR
N 2694	616.0	617.0	1.0	.020
N 2695	617.0	618.0	1.0	.010
N 2696	618.0	620.0	2.0	.010
N 2697	620.0	621.0	1.0	TR
N 2698	621.0	622.0	1.0	TR
N 2699	623.0	624.0	1.0	TR
N 2700	622.0	623.0	1.0	TR
N 2621	624.0	625.0	1.0	TR
N 2622	625.0	626.7	1.7	TR
N 2623	626.7	627.7	1.0	TR
N 2624	627.7	628.9	1.2	TR
N 2625	655.8	656.6	0.8	TR
N 2751	875.0	876.0	1.0	TR
N 2752	876.0	877.0	1.0	TR
N 2753	877.0	879.0	2.0	TR
N 2754	879.0	881.0	2.0	TR
N 2755	881.0	883.0	2.0	TR
N 2756	883.0	885.0	2.0	TR
N 2757	885.0	887.0	2.0	TR
N 2758	887.0	889.0	2.0	TR
N 2759	889.0	891.0	2.0	TR
N 2760	891.0	893.0	2.0	TR
N 2761	893.0	895.0	2.0	TR
N 2762	895.0	897.0	2.0	TR
N 2763	897.0	898.4	1.4	.010
N 2764	898.4	899.3	0.9	.030
N 2765	899.3	900.0	0.7	.030
N 2593	900.0	902.2	1.2	TR
N 2594	901.2	902.5	1.3	TR
N 2595	911.4	912.4	1.0	TR
N 2596	917.0	918.0	1.0	TR
N 2597	945.5	946.2	0.7	TR
N 2598	962.3	963.2	0.9	TR

NORDBAU MINES (QUEBEC) LIMITED.

D. D. H. N-74
Location: 138+20W, 17+55'S

Started: March 11-1960
Compl. : March 27-1960
Logged by: P.K. Geisterfer.

Asimuth: 301P
Dip at collar: 59°
126' 53°
400' 55°
600' 55°
Length: 758.0'
Core: AXT
Water Depth: 54.0'

0.0 CASING

115.0

115.0 SERPENT'D DONITE

Black with tiny, light green spots. Massive, soft and med. to h. magnetic. The constituents are serpentine, magnetite and a soft, greyish mineral. Med. gr., orbicular with interorbicular magnetite and a greyish, soft mineral. Occas. a narrow magnetite str.

115.0-120.0 : Broken core.

The serpent'd donite is cut by a few asbestos-talc cracks or slip-str's. This fibrous mineral is light pale gn or bluish green and the fibres are short and not very flexible. The width of the str's varies between 1-4 mm. They are in generally near zones of broken core.

141.0-144.0 : Broken core, serp-talc str.

145.0-149.0 : " " " " "

150.0-151.0 : " " " " "

156.0-158.0 : Branching serp.-talc str.

170.5-172.0 : Broken and ground core.

184.0-192.5 : Broken and a few inches ground core, some serpentine and talc.

200.0-201.5 : Broken core, serp. and talc.

210.0-211.0 : Ground core, serp of sl. better quality.

211.0-217.0 : Broken core, serp. and talc.

207.8 Serp str. 75° to cu, width at least 1".

257.5-260.0 : Broken core.

297.6-299.0 : Local increase in the interorbicular, grey coloured mineral.

336.7 1.0' broken core.

340.0 1.0' ground core.

386.6 1.0' broken core, serpentine and talc.

416.7-418.4 : Broken core.

433.0-435.0 : Broken core, serpentine and talc.

525.0 Still the same kind of rock. Dark gn to black, med. gr., orbicular in texture and soft. Main constituents are serpentine, magnetite and a soft greyish mineral. The latter mentioned minerals are in between the serpentine grains. Med. to h. magn'c and there are occas. a few asbestos-talc and magnetite str's. In places short sections of broken core.

553.6 1.4' broken core; 1/4" asbestos needles still quite brittle, poor quality.

717.0-728.7 : Ground core.

758.0

758.0 END OF THE HOLE

CASING FULLED, HOLE NOT CEMENTED

LOGGED BY: P.K. GEISTERFER.

111.2-115.0 : Some of bluish qtz str., streaks and patches. Replacement of the HR. Tr of cpy and py. General orientation is 30-40° to cn.

- 115.0 **NORSEMAN VEIN**
115.0 Bluish qtz vein, low carb %, Tr of pyrite. A few brown cracks filled with sericite
U.S. 5° to cn., L.C. 0-5° to cn.
- 118.7 **BRECCIA**
118.7 Bluish qtz carb., in between blackish and dark gn. HR. The bluish qtz contains carb. filled cracks. Tr po-py.
- 120.0 **ALT'D GABBRO (GREY)**
120.0 Like 98.1, texture in general fairly well visible. Mod. carb'd and mod to low silicif'd. Softer than a knife. The same h. carb'd patches as at 98.1'.
122.0 Fol'n 30° to cn., suspected w. shearing, elongated min's. The appearance is homogeneous, no h. carb'd patches like 98.1 and only an occas. qtz carb str.
125.3 Three 1/4" dark bluish grey qtz, str's 40-45° to cn.
145.0 1.0' with several narrow dark bluish grey qtz str's, irregular.
- 150.0 Gradual change in colour to grey-green.
156.7 3" milky white qtz carb str 50° to cn.
- 157.0 **ALT'D GABBRO (DUSY GREEN)**
157.0 Appearance is the same as before except for the colour which is grey-green. Fol'n, elongated min'n, c.gr., is about 60-65° to cn. There are sections containing several milky qtz carb str's, cn. varies. Increase in carb'n to high.
166.3-170.0 : Locally, usually associated with qtz-carb., tiny black needles, tourmaline.
- 172.0 **ALT'D DIORITE (DUSY GREEN)**
172.0 Change in rock type? Contact is replaced by a milky qtz carb str. 50° to cn. Grey-green, fine gr'd and sl. softer than a knife. Translucent and non to sl. carb'd. Spotted by irr. patches (3 x 3 mm.) of a soft pinkish-greyish clay mineral. Fol'n is faintly visible.
172.8 3" milky qtz carb str. 50-60° to cn.
178.0-183.0 : Indication of w. shearing 55° to cn.
194.1-195.0 7" vein ? 40° to cn with some HR remnants and Tr of po-cpy.
195.0 The fol'n becomes less conspicuous. The dots are pinkish-grey.
179.6 4" bluish qtz carb str. 10° to cn. Still with HR inclusions.
200.0 The rock start to change in colour. Carb'n is not continuous.
- 204.0 **ALT'D DIORITE (MOD. GREEN)**
204.0 Mod. green, f. gr. and dotted. In general non-carb'd, mod to high in epidote and mod. in silica content, sl. softer than a knife. The dots are becoming less conspicuous after the first 10.0'. Main constituents are light gn epidote, feldspar, idiomorphic and dark gn chl'c amphibole. Mod. to c. gr. and sl. more feldspar than amphibole. Tr of po and cpy.
- 220.0 **END OF THE HOLE**
220.0

MONTEAU MINES (QUEBEC) LTD.

D. D. H. N-73

Location: 9,456.37 N 9,768.80 E

Elevation 1429.43

1-39' S on section line 7-22 SW

Started: March 17-1960

Compl. : March 21-1960

Logged by: P.K. Geisterfer.

Azimuth: 304°

Dip at Collar: 15°

Length: 220.0'

Core: AX

0.0 CASINO

16.0

16.0 GABBRO

Fresh, massive and spotted texture. Dark green amphiboles, 40-50%, in a white feldspar, 50-60%, matrix. Amphibole isobothroidal, feldspar euhedral and other constituents are: a grayish, often violet coloured soft mineral, leucoxane, clay? a little bit quartz and traces of py and cpy. The gabbro is harder than a knife and the first 25.0' shows rusty and weathered joints?.

42.0-44.0 : Broken core, sl. weath'd.

52.6

52.6 ALT'D GABBRO
(ORBY)

Mod. alt'd. Mod. gn. faintly visible texture and sl. softer than a knife. Mod. carb'd and mod. silicif'd. This greenish alt'n zone grades into a mod. to dark grey, h. alt'n zone. In places, the text. is faintly visible, the alt'd gabbro is sl. softer than a knife and is mod. carb'd and a soft grayish min. and tr of pyrite.

Mod. silicif'd. Constituents are qtz-chl-carb-sericite?

56.4 1.0' with num qtz carb streaks 30-40° to cn and one 1/2" bluish qtz str 40° to cn. Tr of pyrite and locally in the streaks some tourmaline and a brownish, fibrous min. In between the streaks, black qtz eyes.

56.4-57.5 : Ground core.

59.3-61.0 : Ground core.

61.0 The alt'd gabbro becomes fol'd 40° to cn. Suspected sl. sh'd. In places sl. weath'd and pitted.

65.0-70.0 : Several narrow qtz carb str. 50° to cn.

66.7 2" pitted rock.

71.6 1/2" bluish qtz str. 50° to cn.

76.2-78.3 : weath'd and oxid.

83.8

83.8 BALSE QTZ-VEIN

Black, in places dark bluish grey. A few oxid. cracks. The last 3" contains some alt'd diorite. Upper and lower contacts are missing. Near the lower contact, some pyrite

85.3

85.3 ALT'D GABBRO
(ORBY)

Like 51.0, the fol'n becomes more conspicuous 45° to cn. An occas. qtz str's.

87.2 3" of oxid. and weath'd rock.

88.4 2" " " " "

91.0-93.0 : A few 1/2" bluish qtz carb str's 45° to cn. Narrow veinlets of qtz carb. perpendicular to the wall, in the 1/2" stringers.

95.0 3.5' of mod. sh'd 45° to cn alt'd gabbro.

98.1 The rock becomes harder, probably by an increase in the amount of qtz. The texture is in places fairly well visible, but there are sections which contain irregular, fine gr'd and extr. h. carb'd patches, suspected to be a replacement from the HR. The same constituents as before.

99.0-100.0 : Composite carbonate, qtz vein. Upper contact 40° to cn. Lower contact 30° to cn. Suspected breccia zone.

ASSAY RESULTS

Sample Number	Section of Hole From	To	Sample Length	Au Oz / Ton
N 2701	56.5	57.5	1.0	TR
2	57.5	58.6	1.1	TR
3	58.6	60.0	1.4	TR
N 2704	65.7	66.7	1.0	TR
N 2705	71.3	71.8	0.5	TR
N 2706	84.0	84.9	0.9	TR
N 2651	84.8	85.0	0.2	
N 2652	85.0	86.0	1.0	
N 2707	86.3	87.6	1.3	TR
N 2708	98.2	99.1	0.9	.030
N 2709	99.1	100.0	0.9	TR
N 2710	110.0	111.6	0.6	TR
N 2711	111.6	112.2	0.6	.020
N 2712	112.2	113.2	1.0	.010
N 2713	113.2	114.2	1.0	.010
N 2714	114.2	115.0	0.8	TR
N 2715	115.0	116.0	1.0	.020
N 2716	116.0	117.0	1.0	TR
N 2717	117.0	118.0	1.0	TR
N 2718	118.0	118.7	0.7	.010
N 2719	118.7	120.0	1.3	.020
N 2386	127.2	127.6	0.4	.010
N 2387	127.6	128.1	0.5	TR
N 2388	128.1	128.8	0.7	TR
N 2389	135.4	135.9	0.5	TR
N 2390	145.0	145.8	0.8	TR
N 2391	156.5	157.4	0.9	.010
N 2392	172.5	173.4	0.9	TR
N 2393	194.1	195.0	0.9	TR
N 2394	199.5	200.0	0.5	.010

SLUDGES

N 2517	50	60		TR
N 2518	60	70		TR
N 2519	60	80		TR
N 2520	80	90		TR
N 2521	90	100		.010
N 2522	100	110		.020
N 2523	110	120		TR

N 2524
N 2525
N 2526
N 2527
N 2528
N 2529
N 2530

120
130
140
150
160
170
180

130
140
150
160
170
180
190

.010
TR
.010
TR
TR
.020
TR

QUEBEC MINES (QUEBEC) LIMITED.

D. G. H. N-72

Location: 9,340-12 N 9,685.78 E

Elev. 1437.80

1-35' S on section line 8-64 SW

Started: March 7-1960

Compl. : March 16-1960

Logged by: P.K. Gaisterfer.

Azimuth at Collar:

Dip at Collar: 45°

Pajari Tests:

At 150.0'	Bearing	N 15° W	Dip	40°
300.0'		N 18° 30' W		39°
450.0'		N 2° W		28°

(The pajari tests are not reliable because of a local magnetite vein?)

Length: 646.0'

Core: ANT

0.0 GABING

15.5

15.5 GABBRO

Spotted, light in colour, co. gr. and consisting out of 50% amphibole, partly chl'd, 40% feldspar partly? epidotized, some qtz, a mineral, leucoxene or clay and tr of sulphides. Harder than a knife.

25.4 3" weathered and oxidized.

29.5

29.5 CARB'D GABBRO

Texture is still well visible. The feldspar is alt'd into a pinkish grey soft mineral and most of the amphibole into chl. The rock is duller in appearance than at the collar. Sl. carb'd. 30.0-32.2, 36.7-37.4 and 42.0-42.6 pitted and sl. weath'd.

38.0

38.0 ALT'D GABBRO

The gabbro becomes greyish to black. The original texture is still fairly well visible except for the transition zone from 38.0-48.3 where the texture is only faintly visible.

38.0-48.3 : The rock is h. alt'd. In this zone are a few sections containing streaks and patches of black chlorite. The alt'd gabbro is h. carb'd and softer than a knife. Tr of min'n.

63.5 The alt'd gabbro becomes fol'd 30° to cn.

66.2-67.7 : Bluish qtz vein, nil carb's, with irr. ctct's, 10° to cn? Nil in sulphides.

67.7

67.7 SHEARED AND ALT'D GABBRO

Mod. to dark grey, mod sh'd 45° to cn., h. alt'd and h. carb'd. The fol'n is accentuated by oblong carb'd patches, greyish in colour, the rock is softer than a knife.

80.0 Shearing 50° to cn.

85.0 Less sh'g.

89.1

89.1 NORTHEAST VEIN

Upper contact not well visible, 45° to cn. The first 0.9' is a transition from weak sh'g and alt'd, mod. to dark grey gabbro to a blackist quartz vein. This transition zone is h. carb'd and contain numerous narrow milky white qtz carb str's 35-45° to cn.

The vein starts at 89.8', is dark grey to black in colour, has a low carbonate percentage and contains tr of cpy, py and also a few po patches. There are several very narrow and irregular milky white qtz-carb. str's.

96.9 End of the vein, transition zone starts.

99.0

99.0 SHEARED AND ALT'D GABBRO

Like 85.0, weak sh'd 45° to cn., h. alt'd and h. carb'd. Mod. to dark grey in colour. Small spots of a grey clay mineral.

110.0 + or -

110.0 ALT'D GABBRO

Like 63.5, fol'd in places (117.0 : 50° to cn.). Still some spots of that greyish and soft mineral.

120.6 2" milky white and bluish qtz carb str., 70° to cn.

116.0 Irregular qtz-carb. str.

117.0 The rock is still h. carb'd, fol'd in places and shows a spotted texture. Mod. grey and mod. grey to black minerals responsible, alt'd feldspar? and alt'd amphibole?

161.0 Several milky-grey milky qtz carb. dr's. Cn. varies.

170.0 The colour becomes slightly greenish. There are nearly no transition zone characteristics. The alt'd gabbro start to look like 29.5, except for the mineral ratios which are different and therefore, the alt'd gabbro appears too. Still h. carb'd.

GABBRO

180.6 ~~DIORITE~~

160.6

Transition is sharp within 0.6'. Light in colour giving the impression of a light greenish rock. Lighter and less coarse than at the collar. 75-80% feldspar and 20-25% amphibole, a violet greyish coloured soft clay, leucoxene, mineral and some qtz. Hard, massive, mod. to co. gr.

188.7 1.0' bracediated and cemented An.

GABBRO

200.0 ~~DIORITE~~

200.0 + or -

There seems to be a gradual increase in amphibole percentage. Here 25-35% amphibole, 75-65% feldspar.

202.6-212.0 : The texture is nearly visible, suspected alt'd and probably originally more than 75 % feldspar.

205.6 2" milky qtz carb str, 50° to cn.

223.7 1.0' of alt'd rock, silic'd, non carb'd and str's of pale gn yellow epidote 45° to cn.

262.4-264.5 : Mod. green, mod. alt'd, silicif'd and at 263.7, pale green yellow massive epidote.

270.0 Several streaks of dark gn. chl.

282.0 Texture becomes gradually less visible. Change in colour to green. The rock becomes alt'd.

GABBRO 284.1

284.1 ALT'D ~~DIORITE~~

Mod. green, fairly evenly coloured, but not homogeneous in appearance. Sl. It consists out of chlorite, quartz, carb's (h.) and pinkish grey clay, leucoxene, mineral. The alt'd rock is softer than a knife.

291.6 3" bluish qtz, some carb. str 40° to cn.

294.0 There is an increase in silicifi'n to high.

304.0-305.0 : Epidote str's 60° to cn.

GABBRO

305.0 ~~DIORITE~~

305.0

The texture is not as well preserved as at 200.0, grain boundaries are not well defined. The rock is cut by several pale gn yellow epidote str's, width and cn. varies. Occas. a small po, cpy speck.

336.0 1 1/2" bluish and milky qtz carb. str 50° to cn. with tr of po and cpy.

338.1 3" pale gn. yellow epidote, irregular to 50° to cn.

355.6-358.0 : Alt'd, mainly epidot'd.

387.7-389.7 : Alt'd, chloritic and epidot'd.

425.0 Still the same kind of a rock. There are small, w. alt'd sections in between this alt'd section are mod. g.; the texture is often fairly well visible and they can contain str's of qtz-carb and / or epidote.

154.4 2" qtz carb chl str. 50° to cn., tr of po-epy.
169.0 1.3' of dull white rock. Mod to h. carb'd.
Probably 95% epidot'd and feldspar.
521.3 1" str. 70° to cn of qtz-carb and a mod. brown coloured
mine cl, sphalerite? 60%. Tr of po and epy. Very sl. magnetic.
Along the boundaries some pale gn yellow epidote.
554.6 2" like 521.3. Not magnetic, 40° to cn.
566.9-567.6 : Irregular patches of qtz-carb and dark gn chl.
579.0 1.0' of ground core.
589.3 1 1/2" bluish qtz carb str. 40-50° to cn.
600.0 There seems to be an increase in the mafic minerals.
Suspected not to be originally but secondary (alt'n). The rock
starts to become more greenish in appearance. Texture is still
well visible.
645.0 Increase in alt'n.

646.0

646.0 END OF THE HOLE

LOGGED BY: P.R. GEISLER

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au Oz/Ton</u>
	<u>From</u>	<u>To</u>		
N 2501	65.9	67.0	1.1	.020
2	67.0	67.9	0.9	TR
N 2420	75.8	76.3	0.5	TR
N 2503	89.1	89.9	0.8	TR
4	89.9	91.0	1.1	.020
5	91.0	92.0	1.0	TR
6	92.0	93.0	1.0	TR
7	93.0	94.0	1.0	.060
8	94.0	95.0	1.0	.120
9	95.0	96.0	1.0	.050
10	96.0	97.0	1.0	.010
11	97.0	98.0	1.0	.030
12	98.0	99.0	1.0	.010
N 2513	205.4	206.4	1.0	.010
N 2514	291.6	292.4	0.8	
N 2521	335.9	336.5	0.6	TR
N 2383	521.3	521.8	0.5	.020
N 1990	566.5	567.5	1.0	TR
N 1991	588.8	589.4	0.6	TR

SLUDGES

N 2483	30.0	40.0		TR
4	40.0	50.0		TR
5	50.0	60.0		TR
6	60.0	70.0		TR
7	70.0	80.0		TR
8	80.0	90.0		.030
9	90.0	100.0		.020
90	100.0	110.0		.010
1	110.0	120.0		TR
2	120.0	130.0		TR
3	130.0	140.0		.020
4	140.0	150.0		.030
5	150.0	160.0		.030
6	160.0	170.0		TR
7	170.0	180.0		TR
8	180.0	190.0		TR
9	190.0	200.0		TR
N 2500	200.0	210.0		TR

NORBERG MINES QUEBEC LIMITED.

D. S. N. N-71
Location: 10.628.73 N 12.195.17 E
1412.47
L3+00E 4+78 N 91'W

Started: March 1-1960
Compl. : March 10-1960
Logged by: F.A. Galsterfer.

Dip at Collar: 15°
at 300.0' 39°30'
at 497.0' 17°
Length: 197.5'
Core: AKT

0.0 CASING

7.0 ALT'D DIORITE

7.0

Mod. to dark green, mod. to co. gr., containing chlorite (sphenobolite), quartz, a greyish clay mineral and (low to mod.) epidote. Non-carb'd. A few sections with small dots, texture, partly secondary, is fairly well visible, although the core is inhomogeneous in appearance.

17.0-62.0 : There are several light green epidote str's and streaks, 20-70° to an.

70.0 From here on the rock is locally sl. magnetic.

69.5-95.0 : Fracturing of the core parallel very narrow epidote str's, 70-90° to an.

103.0-119.0 : Sl. to mod. carb'd.

119.0 In places, non carb'n.

161.2 A few inches mod. sh'd 50° to an. alt'd diorite and there is an increase in epidote content (mod.) over 7.0'.

168.0 Like 7.0. In places w. fol'd.

214.0 Sl. carb'd, in places non-carb'd.

240.0 Gradual increase in carb'n to high.

275.0 Gradual decrease in carb'n to mod. to low.

307.2-308.5 : Streaks of qtz-carb and light green epidote.

325.0 Non carb'd to, local near (very narrow) str's, mod. carb'd.

370.0 Mod. to h. carb'd and sl. to non-carb'd in places.

412.0 Elongated dots 40° to an. This fol'n grades into a (w. to mod.) shear zone.

416.0-423.0 : Sl. to mod. sheared diorite. Shearing is 60° to an. and the fol'n is in places realized by very narrow epidote str's.

At 417.5 and at 421.6, the core is fractured. The rock is still carb'd, in general mod.

425.2-426.0 Fract'd core.

436.4 6" of a qtz-carb-ohl str. ?

431.0 End of the carb'd zone. The alt'd diorite is co. gr., contains (sec.) red feldspar, Sl. to mod. to h. silici'd and has a mod. epidote percentage.

474.0 The rock becomes mod. gr.

475.0 Mod. gr., mod. to dark gr. alt'd diorite, mod. carb'd and mod. to h. silici'd. In places faintly fol'd 45-50° to an.

481.3 Indication of sh'd 50° to an. over 3"

481.6 Extra h. carb'd. Broken core.

482.5 Like 475.0

477.0 There is a gradual (appearing) increase in grain size to coarse gr'd. Still mod. carb'd and in places a w. fol'n, 45-50° to an.

497.5

497.5 END OF THE HOLE

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From:</u>	<u>To:</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Gz/Ton</u>
N 2248	415.0	416.6	0.6	.020
N 2172	730.0	730.9	0.9	.010

SLUDGES

N 2401	0	10	TR
N 2402	10	20	.010
N 2403	20	30	.010
N 2404	30	40	TR
N 2405	40	50	TR
N 2406	50	60	.010
N 2407	60	70	TR
N 2408	70	80	TR
N 2409	80	90	.010
N 2410	90	100	.010
N 2411	100	110	TR
N 2412	110	120	TR
N 2413	120	130	.010
N 2414	130	140	TR
N 2351	130	140	TR
N 2352	140	150	TR
N 2353	150	160	TR
N 2354	160	170	TR
N 2355	170	180	TR
N 2356	180	190	TR
N 2357	190	200	TR
N 2358	200	210	TR
N 2359	210	220	TR
N 2360	220	230	TR
N 2361	230	240	TR
N 2362	240	250	TR
N 2363	250	260	TR
N 2364	260	270	Missing
N 2210	280	290	TR
N 2211	290	300	TR
N 2212	300	310	TR
N 2213	310	320	TR
N 2214	320	330	TR
N 2215	330	340	TR
N 2216	340	350	TR
N 2217	350	360	TR
N 2218	360	370	TR
N 2219	370	380	TR
N 2220	380	390	TR
N 2221	390	400	TR
N 2222	400	410	TR
N 2223	410	420	TR
N 2224	420	430	TR
N 2476	430	440	TR
N 2477	440	450	TR
N 2478	450	460	TR

H 2179
N 2180
H 2181

460
470
480

470
480
490

490
500
510

NORDEAU MINES (QUEBEC) LTD.

D. D. H. N-70
 Location: 11,433.27 N 12, 541.23 E
 Elevation 1331.21 (on the ice)
 14+00' S on section line 23+00' NE

Started: Feb. 29-1960
 Compl. : March 20-1960
 Logged by: P.K. Geisterfer.

Asimuth: 180°
 Dip at Collar: 85°
 at 180' 82°30'

Pajeri test at	230'	Asimuth:	S 27° E	Dip	87°
	320'		S 5° E		80°
	430'		S 27° E		85°
	530'		S 17°30' E		84°30'
	630'		N 87° W		69°

Length: 646.0'
 Core: AXI
 Water Depth: 105.0'
 Casing Pulled:

0.0 CASING

180.0

180.0 META ARGILLITE Med. grey and dark grey sections grade into each other. Fine gr., hard with a sub-conchoidal break. In places a faint lamination. The first 5.0' contains patches of rock sl. lighter in colour. Indication of slumping. In places an occas. po-cpy speck. The rock is h. quartzitic.

180.0 Lamination 60° to cn.

219.4

219.4 GREY META ARGOSE (7) Med. grey, fine gr., but sl. coarser than the previous meta-argillite. There are a few narrow qtz-carb. str's. Sl. quartzitic. Traces of po, py and cpy. U.C. sharp but discontinuous, about 60° to cn.

220.0 Gradual increase in grain size to fine to mod., quartz-feldspatic with larger fragments. The change from fine to mod. to fine gr. is sharp at 235.0 and at 247.1, 60° to cn.

233.5-247.0 : C. gr with arg's rock fragments. More like a greywacke.

244.8 4" white qtz carb str., 20° to cn. In the neighbourhood, are a few narrow qtz carb str, 15-40° to cn. Containing some po and sometimes also py and sphalerite.

255.0 There are a gradual change in colour to greyish gn.

273.0

273.0 META ARGILLITE U.C. missing. Black, fine gr. well laminated, sl. undulating 60° to cn. In places some po and py with tr of cpy. The rock is h. quartzic.

281.1 3" layered milky and bluish qtz carb str. about parallel the lamination, only locally.

282.0 Lamination is less conspicuous. The rock becomes less argillitic.

288.0 + or -

288.0 GREEN META ARGOSE Mod. grey gradually changes into mod. grey green. Fine gr., hard, massive and with a high qtz percentage. Tr of po. Glossy surface.

301.6 The colour hardly changes. The lamination 70° to cn. is not conspicuous and only locally.

315.8-325.5 : Sl. coarser gr. section, still f. gr., non-glossy core surface. U. C. sharp but irregular, approx. 45° to cn., L.C. sharp 50° to cn. Tr of po and at 322.4, 5" of diss. carb-epidote and scatt. py x'lls.

330.0 3.0' of ground core.

341.0 Gradual change to a dark olive green to black, and at 345.0, a second change to a mod. grey coloured rock. The last type of an arkose? contains several patches and streaks of carb's epidote. The original rock was laminated. 60° to cn.

350.0 The core becomes grounded.

352.0-354.3 : Lost core.

354.3 Py mineralization, still only traces, coloured becomes prominent.

363.0-373.2 : Mod. gr., mod. grey coloured. Sections. U.G. 60° to cn., l. is obscure. (qtz-carb-sp.-str.) Probably a meta-greywacke.

381.0 The sediment becomes mod. grey and laminated 60° to cn. Increase in the argillitic component.

392.0 + or -

392.0 META ARGILLITE

Blackish, fairly well laminated 60° to cn., U.G. and F.G. gradational. Tr of py. The rock is h. quartzitic and m. to h. carb'd.

392.0-395.0 : Ground core.

401.4 1.0' of slabs.

406.0 1.0' of slabs.

407.3 + or -

407.3 GREY META ARKOSE

Like 219.4, f. gr. and fairly regular laminated. Mod. to h. carb'd. High percentage of qtz. The rock has in places in slaty appearance.

423.0 Increase in the arg. component.

427.0 Irr. and braunching qtz carb str. 70-90-70° to cn.

Tr of pyrite.

428.6

428.6 META ARGILLITE

Like 392.0, in places less well laminated. Mod. carb'd and a high qtz percentage.

444.0 Lamination 70° to cn. The colour becomes dark grey.

450.0 + or -

450.0 GREY META ARKOSE

Like 200.0 but not porph'e in texture. Occas. a black argillitic inclusion. Mod. carb'd; h. qtz percentage.

451.0 1.0' of ground core.

468.3 1.0' of lost core.

470.6 1.2' of lost core.

471.3-475.0 : Meta-argillitic.

475.0-476.0 : Lost core.

476.0

476.0 SER. QUARTZITE

Light grey, f. gr. and in places well laminated 60° to cn. Core surface is glossy, broken core, in places some chl., sericite and tr of pyrite. Mod. to h. carb'd and indication of sl. (?) sh'g.

478.0 The colour becomes mod. green. Suspected increase in chl. Non laminated, sl (?) sh'd and h. carb'd. Broken core. QTZ are missing.

483.5-485.0 : Like 476.0

485.0-487.2 : Lost core.

487.2 Like 278.0, gr. core.

288.0-291.2 : Lost core.

491.2 Like 278.0, gr. core.

492.4-493.8 : Lost core.

493.8 ?

493.8 QTZ-SER-CARB-ROCK
(SHEAR ZONE)

Light gn, with dark gn., orientated patches, fine gr. and hard. Indication of sh'g (auger text) and consisting out of quartz (eyes)-carb-sericite (?) (light gn around the qtz-carb, eyes)-chl. in general associated with the diss. pyrite. This diss. py is sl.

orientated parallel the fol'n. Sl. carb'd; gr. core.

495.0-498.8 : Lost core.

500.0-510.0 : Lost core.

511.8-517.3 : Lost core.

517.3 Decrease in dark gn. chl. Sh'g seems to become more intense. The sugar texture disappeared. The qtz-carb, surrounded by light gn. sericite, is concentrated in laminae 75° to cn. Diagonally to the fol'n are narrow qtz-carb-chl. str's 10-50° to cn. The bluish-green chlorite or mica in these str's is concentrated in patches and stands in general perpendicular to the wall.

517.3-527.0 : About 5-10% disse. pyrite orientated parallel to the sh'g.

527.0 Like 517.3 only a few qtz-carb str's, and these white str's do not contain chl. The rock is mod. ? sh'd 70° to cn. Grain size and colour changes, the appearance is inhomogeneous and the core surface is glossy. The rock is h. quartzitic and mod. carb'd. In places some pyrite.

527.0 Sh'g 50° to cn.

565.0 The sh'g grades into sh'd? a lamination, 50° to cn. with qtz-carb py str. in between. The rock becomes darker gn colour.

566.0

566.0 META ARGILLITE

Black, mod. grey and mod. grey-green laminated, in places contorted laminae., f. gr. and h. quartzitic. Non-carb'd and there are several to num. py-carb-qtz str's parallel to the fol'n 75° to cn. In places some graphite.

575.0-587.0 : 20% pyrite and tr of cpy.

575.0 1/2 qtz-carb-str 75° to cn.

579.0-583.5 : 60-70% pyrite. Py-breccia, cracks are filled by qtz-carb.

582.0-583.5 : Mod. grey and well laminated 75° to cn. High sericite percentage, non-argillitic !

585.0-587.0 : 50% pyrite parallel the lamination 80° to cn., tr of cpy.

587.6 0.8' quartz zone 70° to cn, containing 5% pyrite and 40% Mn.

590.0-605.0 : Broken and partly ground core.

590.0-594.0 : Quartzitic zone, like 587.6, 5-10% py and tr of cpy.

497.0-497.7 : 40-50% pyrite; in str's parallel the lamination 50° to cn.

606.7

606.7 TRANS. ZONE

Light grey green, probably chl'c str's parallel the lamination 60° to cn. First indication of the so-called transition zone. These str's contain a little carb. (see N-60B)

610.7-611.5 : L.h. grey, f. to mod. gr. and fol'd 65-60° to cn. The main constituents are qtz (eyes)-chlorite and sericite and there are a few very small argillitic inclusions. U.C. sharp 65° to cn., L.C. sharp and irregular. Tr of sulphides and sl. carb'd.

611.6-612.9 : Light to mod. grey, f. gr. and well laminated 65-70° to cn. Argillitic.

612.9-613.9 : Like 610.7

613.9 1" milky white qtz carb str. 30° to cn., no sphalerite.

613.9-618.4 : Like 610.7 but more chlorite and sericite.

Fol'n 60° to cn. Traces of sulphides.

617.1 1" milky white qtz carb str. 30° to cn. No sphalerite.

613.3 The trans. zone i. s. s. There are a few pale yellow gn str's parallel the fol'n 45-50° to cn., probably mainly of epidote.
622.4 The rock changes in colour light grey with light greyish brown (argillitic?) str's. Sharp increase in the amount of qtz. in places some pyrite, diss. and in str's parallel the lamination (up to 10% pyrite)
627.4 Qtz-chl-ear-rock, like 610.7. but there is an increase in chl. and sericite.
635.5 Patch of qtz containing pale yellow gn. and grey green patches of real transition zone rock.

636.4

636.4 ALTD DIORITE

Med. grey gn., f. gr. and h. carb'd alt'd diorite.

644.8-648.0 : Broken core.

646.0 Dotted type of texture is hardly visible.

648.0

648.0 END OF THE HOLE

LOGGED BY: P.K. CHRISTOPHER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole From:</u>	<u>To:</u>	<u>Sample Length</u>	<u>Au Oz/Ton</u>
N 2384	281.1	281.9	0.8	.010
N 2385	247.4	248.2	0.8	TR
N 2659	518.7	219.5	0.8	TR
N 2660	519.5	521.1	0.6	TR
N 2661	521.1	522.1	1.0	TR
N 2665	526.5	526.9	0.4	TR
N 2662	565.0	565.9	0.9	TR
N 2663	572.0	573.1	1.1	TR
N 2664	573.1	574.0	0.9	TR
N 2553	575.0	576.2	1.2	TR
N 2554	578.8	580.0	1.2	TR
N 2555	580.0	581.4	1.4	TR
N 2556	586.1	587.0	0.9	TR
N 2557	587.0	588.4	1.4	TR
N 2558	592.3	594.0	1.7	TR
N 2559	596.8	598.0	1.2	TR
N 2560	598.0	599.1	1.1	TR
N 2561	599.1	600.9	1.8	TR
N 2562	607.9	609.1	1.2	TR
N 2563	610.9	611.6	0.7	TR
N 2564	615.0	616.2	1.2	TR
N 2565	619.6	620.5	0.7	TR
N 2566	620.5	621.6	1.1	TR
N 2567	621.6	622.9	1.3	TR
N 2568	625.0	626.1	1.1	TR

NORDEAN MINES (QUEBEC) LIMITED.

D. D. N. H-59
 Location: 10,307.53 N 10,938.42 E
 Elevation 1451.62
 6+00'S on section line 7+00' NE
 Bearing at collar: N 36° W
 Dip at collar: 82°30'

Started: Feb. 28-1960
 Compl. : March 13-1960
 Logged by: P.E. Geisterfer.

Pajeri test at	150.0'	Dip	82°	Bearing	N 65° W
	300.0'		83°30'		N 85° W
	450.0'		82°30'		N 78°30' W
	600.0'		81°		N 81°30' W
	756.0'		79°		N 78° W
	800.0		cancelled		

Length: 900.0'
 Core: AXF

0.0 CASINO

7.5 ALT'D DIORITE

7.5

Mod. to dark gn., co. gr., rather well outlined grains, but also sections without a well preserved texture. Harder than a knife. Main constituents are chlorite, (sph.), qtz, probably feldspar and also a soft greyish mineral (responsible for the dotted texture). Sl. silicified and mod. to h. carb'd, in places, however, non-carb'd. Low to mod. in epidote. Tr of pyrite. Dotted type of texture is dominant.

69.0 Only dotted in places.

92.0 Locally small sections of sl. magnetic alt'd diorite.

Texture is in general in-homogeneous.

129.0 Not magnetic.

136.0 The alt'd diorite is only in places sl. carb'd.

133.0-150.0 : Occas. a narrow red qtz, carb str. 10-15° to cn.

140.0-144.0 : The core is fractured parallel narrow epidote str's, 75-90-115° to cn. ?

159.0 1.0' of broken core. A few scattered py xll's between 158.5 and 159.0.

160.0 1.2' of fine gr'd alt'd diorite with dots. Harder than a knife, no carb's. Far and near contacts are gradational.

174.0 1.0' of broken core.

187.8 Indication of fract'g (ep. str's), 70-75° to cn., with a few py xll's.

230.4 6" of (40-60%) diss. epidote.

231.8 1" milky white qtz-carb str., 5-10° to cn. The core after this stringer start to contain more (replacement?) quartz and at 232.5, is a 3" patch of milky qtz-carb., with dark gn. chlorite. This qtz-carb. patch is cut by two narrow, partly reddish, qtz-carb. str. 5° to cn.

241.7 1" milky qtz-carb str., 10° to cn., containing some chlorite and epidote. Near the far contact local increase of chlorite and epidote over a few inches.

311.6 1" bluish qtz-carb. str. 25° to cn., with perpendicular to the contact, streaks of epidote.

323.6 1.4' of broken core.

327.4 1" pinching milky qtz and some carb. streak.

328.3 1" qtz-carb-obl. str. and with a dark green amphibolitic mineral.

341.0-342.4 and from 346.0-348.0, fracturing along very narrow epidote str's.

17.0-197.0 : Several milky white qtz-carb. str's., 10-39° to cn. The width varies between 1" and 3". Some of them contain dark gn. chlorite. The HR is non-carb'd.

392.6 7" of disc epidote 50-60° to cn.

405.0 Several, increasing to num., qtz-carb. str's and qtz-carb-chl zones; in general, milky qtz-carb. Two sets of str's; one with a cn. of 10-35° and an other set, starting at 417.0, with a cn. of 70-90°. The HR in between the second set is h. carb'd. (No HR carb'n in between 405.0 and 417.0) and is probably also associated with qtz-carb-chl-(epidote?) zones. Both sets have tr of pyrite, but a few str's of the 70-90° set contain a fair amount of pyrite. The 10-35° seems to be younger (offset).

450.0 There are only a few qtz carb. str's 10-70° to cn., but the diorite is still carb'd (mod) and h. silicif'd. Tr of pyrite.

502.5-508.0 : Several narrow streaks of epidote about 40-45° to cn., the alt'd diorite is mod. gr., with the normal constituents. A few sections are w. fol'd. Texture is homogeneous in appearance.

499.0-539.0 : Several bluish and milky qtz str's 10-25° to cn., with some carb. and pyrite 5-10%. The alt'd diorite is mod. gn., co. gr., h. silicif'd and h. carb'd with local scattered pyrite. This zone shows a slight resemblance with bleached zone in the FR.

515.9-518.9 10% pyrite

520.6 The HR becomes sl. darker.

539.0 About the end of the zone. The alt'd diorite is still carb'd, (mod.) and h. silicif'd. An occas. qtz carb str.

570.0 Non-carb'd to local only sl.

591.2 30-40% disc. epidote over 1.0'

596.0-625.0 : 20-30% disc epidote.

625.0 Increase in grain size to mod., a few sections are still co. gr. Decrease in epidote percentage to low to mod.

650.0 Mod. to f. gr. alt'd diorite.

657.0 The alt'd diorite is cut by several milky white qtz-carb-(chl) str's 10-40° to cn.

675.0 Fine gr. alt'd diorite cut by several narrow milky qtz-carb. str's. Cn varies. Sl. silicif'd and sl. carb'd.

700.0 Gradual coming in of the dotted type of texture. In the meantime mod. carb'd.

712.0-714.0 : Co. gr. section, with well preserved texture. Non-carb'd

725.0 Fine to mod. gr., in places mod. to co. gr.

740.0 Fine to mod. gr. with tiny spots of a sub-metallic mineral, spotted texture. Sl. carb'd and still several qtz carb str's.

745.0 Irr. milky qtz carb str. with a few pyrite specks.

755.3 After 1" of scatt'd py xll's, streaks of pyrite parallel the (local) ch'g 50° to cn; 15-20% pyrite over 0.7'.

756.0

756.0 NORBBAN VEIN

Bluish grey qtz dominates with a more milky (and bluish) section of 2 1/2' in the center, which is cut by a 1/2" milky white qtz (and some carb) str. 20° to cn. Cracks are 45-50° to cn. and in general contain some chlorite or a brownish fibrous-like mineral. Min'n is scatt. About 5-7% pyrite (in general xll's) in the 10.0'. There are tr of spy around 757.7, lots of V.G. between 758.1-759.0, in general in small individual specks but also in, near and bordering (in cracks) the pyrite, there is a brownish mineral (and carb.) probably sphaerulite (traces). From 760.0-761.3, 5-7% asp. in cracks (and also a

local higher pyrite percentage about 10-15%) 45-50° to cn.
Upper contact 45-50° to cn., far contact 45° to cn.

- 766.0 BLEACHED ZONE
766.6 ALT'D DIORITE
- 766.0 Contain about 10% pyrite and is h. silicif'd.
- 766.6 Suspected mod. to co. grained, is mod. to h. silicif'd, mod. carb'd and contains several very narrow milky white qtz-carb str's 5-10° to cn; some scattered pyrite and a few bluish qtz str's, 45° to cn. at 767.4, 70-80° to cn. at 771.5 and 65-70° to cn. at 774.0. 770.0-791.0 : There is faintly visible foliation realized by streaks (lenses) of quartz, carbonitized material.
- 775.4 Irr. bluish qtz (carb) str., about 70-75° to cn.
- 780.2 1½" bluish qtz carb str., U.C. 55° to cn., L.C. 65° to cn.
- 790.0 The alt'd diorite becomes fine gr'd, in places still mod. grained. Mod. carb'd.
- 792.7 1" bluish qtz-carb str.s, 50° to cn.
- 794.0 ¾" bluish qtz carb str., 50° to cn.
- 797.6 1" milky white (and a few orange red spots) qtz carb str., 15° to cn.
- 800.2 1" milky white qtz carb str., 40° to cn.
- 801.3 1.0' of ground core.
- 808.0 Decrease in carb'n to sl. Dotted type of texture, fine gr.
- 835.0 Only sl. carb'd along fine cracks.
- 844.4 W. sh'd 60-65° to cn. over 2½".
- 847.5 2.0' of co. gr. and the texture is well preserved (second?).
- 854.0 Fine gr. and dotted is still dominant, but there is an increase in the amount of co. gr. sections and in the amount of epidote to high.
- 878.0 Fine gr. and dotted type of texture.
- 900.0
- 900.0 END OF THE HOLE

P.K. GEISTERFER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u>	<u>To</u>	<u>Sample</u> <u>Length</u>	<u>Au</u> <u>oz/Ton</u>
N 2075	158.5	159.2	0.7	.010
N 2076	187.5	188.3	0.8	TR
N 2077	232.0	233.0	1.0	.010
N 2087	374.9	375.9	1.1	TR
N 2088	380.4	381.0	0.6	TR
N 2089	387.6	388.4	0.8	TR
N 2119	390.7	391.2	0.5	TR
N 2270	408.4	408.9	0.5	.010
N 2271	417.8	418.9	1.1	TR
N 2272	418.9	419.9	1.0	TR
N 2273	432.9	433.5	0.6	TR
N 2274	436.0	437.1	1.1	.020
N 2275	437.2	437.2	0.1	.010
N 2276	437.2	437.8	0.6	TR
N 2277	437.8	439.2	1.4	TR
N 2278	439.2	440.3	1.1	TR
N 2279	440.3	441.4	1.1	TR
N 2280	441.4	442.5	1.1	TR
N 2281	447.3	448.9	1.6	TR
N 2282	451.6	452.2	0.6	TR
N 2283	480.0	480.8	0.8	TR
N 2284	485.4	486.0	0.6	TR
N 2285	498.7	499.1	0.4	.020
N 2286	501.2	502.0	0.8	.150
N 2287	502.0	503.0	1.0	TR
N 2288	503.0	504.4	1.4	TR
N 2289	504.4	506.4	2.0	TR
N 2290	506.4	507.6	1.2	.080
N 2291	507.6	510.0	2.4	.020
N 2292	510.0	512.5	2.5	.020
N 2293	512.5	515.0	2.5	TR
N 2294	515.0	516.0	1.0	TR
N 2295	516.0	517.5	1.5	.020
N 2296	517.5	519.0	1.5	.030
N 2297	519.0	520.5	1.5	.010
N 2298	520.5	521.7	1.2	TR

N 2299	521.7	523.7	2.0	TR
N 2300	523.1	524.6	1.5	TR
N 2301	524.6	525.6	1.0	.020
N 2303	525.6	527.6	1.0	.010
N 2304	527.6	528.6	1.0	.010
N 2305	528.6	529.2	0.6	.010
N 2306	533.3	534.3	1.0	.010
N 2331	745.7	746.2	0.9	TR
N 2332	748.0	749.0	1.0	TR
N 2451	753.0	754.0	1.0	TR
N 2452	754.0	755.3	1.3	.020
N 2453	755.3	756.0	0.7	.170
N 2454	756.0	757.0	1.0	.060
N 2455	757.0	758.1	1.1	.060
N 2456	759.1	759.0	0.9	3.020
N 2457	759.0	760.0	1.0	.160
N 2458	760.0	760.6	0.6	.030
N 2459	760.6	761.3	0.7	.510
N 2460	761.3	762.0	0.7	.010
N 2461	762.0	763.0	1.0	.140
N 2462	763.0	764.0	1.0	.020
N 2463	764.0	765.0	1.0	.030
N 2464	765.0	766.0	1.0	.060
N 2465	766.0	767.3	1.3	.020
N 2466	767.3	768.0	0.7	TR
N 2467	769.0	769.0	1.0	TR
N 2468	769.0	770.0	1.0	TR
N 2469	770.0	771.0	1.0	TR
N 2470	771.0	772.0	1.0	TR
N 2471	772.0	774.0	2.0	TR
N 2415	775.0	776.9	1.8	TR
N 2416	780.0	780.7	0.7	TR
N 2417	792.6	793.0	0.4	TR
N 2418	793.0	794.1	1.1	TR
N 2419	794.1	794.8	0.7	TR

SLURGS

N 2130	10	20		TR
N 2131	20	30		TR
N 2132	30	40		TR
N 2133	40	50		TR
N 2134	50	60		TR
N 2135	60	70		TR
N 2136	70	80		TR
N 2137	80	90		TR
N 2138	90	100		TR
N 2139	100	110		TR
N 2085	110	120		TR

N 2086
N 2087
N 2088
N 2089
N 2090
N 2091
N 2092
N 2093
N 2094
N 2095
N 2096

120
130
140
150
160
170
180
190
200
210
220

130
140
150
160
170
180
190
200
210
220
230

TR
TR
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TR
TR
TR
TR

N 2207
N 2208
N 2209

300
310
320

310
320
330

TR
TR
TR

BORBEAC MINES (CUBANA) LIMITED.

D. D. H. N-68
 Location: 10,468.48 N 10,932.27 E
 Elevation 1435.28
 6+00' S on section line 8+00' NE

Started: Feb. 25-60
 Compl. : March 5-60
 Logged by: P.F. Gaisterfer

Bearing at Collar: N 56° W

Dip at Collar: 80°

Pafari Tests:	at 140.0'	Dip	80°	Bearing	N 54° W
	300.0'		81°		N 77° W
	700.0'		80°		N 82°30' W

Length: 736.0'

Core: ART

6.0 CASINO

6.0 ALT'D DIORITE

6.0

Mod. to dark gn, co. gr. In general not well outlined grains although there are sections of which the individual minerals are easily visible. There seems to be a downward increase of these sections. Main constituents are quartz, chlorite (alt'd amphibole), probably some alt'd feldspar and a greyish and soft clay mineral. Tr of pyrite, in places of few specks. Scattered. Some epidote and an occas. qtz carb str. 10-40° to cn. Sl. magnetic at 36.0'.
 34.0 1.0' of diss. qtz carb epidote.
 49.0-50.4 : Ground core.
 52.6 0.7' of diss epidote qtz carb.
 64.0 The alt'd diorite becomes in places sl. magnetic.
 69.0 The alt'd diorite start to becomes mod. carb'd.
 165.0 Narrow red qtz carb pyrite str's 75° to cn.
 170.5 1.2' Ground core.
 171.0 The alt'd diorite is only sl. carb'd in places.
 256.7 1.3' of diss. epidote qtz.
 260.5 Narrow streaks of pyrite.
 283.3 A few inches of diss. epidote and qtz.
 296.0 1 1/2' w. sol'd (sl; sh'd) 75-90-115° to cn.
 301.3-302.8 : Diss. epidote. Near contact 30° to cn., far contact (partly) missing.
 307.0-32.0 : Occas. a narrow reddish qtz carb str's 10-20° to cn.
 327.3 1.0' qtz carb (dark gn. chlorite) str., 50-60° to cn. No min'n.
 328.3-336.2 : Diss. epidote with at 355.0, 2.0' of broken core suggesting fracturing.
 340.8 A few inches diss. epidote.
 358.0 1 1/2' of diss. epidote. The RR contains also more epidote (low to mod.)
 378.6 1.4' of diss. epidote.
 392.0-396.2 : Indication of w. shearing (a few very small epidote str's) 70-90-70-90-70° to cn.
 431.6 1" milky qtz carb. str. 25° to cn.
 433.6 6" of diss. epidote.
 460.0 There is an local increase in (sl. to mod.) carb'd sections.
 461.5 Indication of w. shearing 45-50° to cn. (epidote str's) and and diagonally to it, a red and milky white qtz carb str. 20° to cn.
 478.3 Patch of milky qtz. Tr of pyrite. Environment seems to be w. sheared from 478.0-479.8.
 490.6 Still the co. gr. alt'd diorite, (well outlined and not well outlined) in places sl. magnetic and locally some carb'n.

552.7-568.0 + or - The alt'd diorite is mod. sil'd 70° to an. with a few qtz eyes in the shear direction. The angle to the core decreases to 90° and sil'g decreases to very sl.

572.7 4-5° (pinching) qtz carb str. 65-75° to an.

575.0 Mod. to dark gn. alt'd diorite. In homogeneous in texture, co. gr. sl. silicif'd, non-carb'd although mod. to h. carb'd in places. Locally some epidote, diss. or in narrow str's or streaks. Still the same kind as at the cellar, except for the (local) Magn'n.

609.0 The alt'd diorite becomes sl. to mod. carb'd, although still non-carb'd in places.

650.0 No magn'n.

675.0 The alt'd diorite is h. carb'd and is softer than a knife.

688.0 Qtz carb streak, bluish and milky. Some diss. py parallel the streak.

697.0-702.4 : Bleached zone. Sl. carb'd and mod to low silicif'n, more grayish in colour and inhomogeneous in appearance. Scattered pyrite, 2-3%.

702.4

702.4 NORTHWARD VEIN

Upper contact 50° to an, far contact missing. Bluish qtz with tiny carb. filled cracks. There is a system of fairly regular cracks (joints?) 50° to an. containing green chlorite, a brown fibrous mineral and often some pyrite. There is about 2-4% pyrite.

704.6

704.6 ALP'D DIORITE

Co. gr., type, not well preserved texture. Softer than a knife. Sl. carb'd and mod. to low in silic. Some scatt. py xls.

725.0 Decrease in carb'n to mod. A few places are not carb'd. Several sections are dotted (clay mineral and qtz).

738.0 1.2' Ground core.

755.0 Sl. carb'd and h. silicif'd.

761.0 Locally sl. magnetic.

786.0

786.0 END OF THE HOLE

P.K. GEMTERFER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From:</u>	<u>To:</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Ga/Ton</u>
N 1937	154.8	155.4	0.6	TR
N 2073	266.0	266.9	0.9	TR
N 2074	327.2	328.3	1.1	TR
N 2149	390.7	391.2	0.5	TR
N 2250	687.7	688.7	1.0	TR
N 2261	697.0	698.5	1.5	TR
N 2262	698.5	700.0	1.5	TR
N 2263	700.0	701.0	1.0	.010
N 2264	701.0	702.4	1.4	.020
N 2265	702.4	703.5	1.1	.210
N 2266	703.5	704.6	1.1	.070
N 2267	704.6	705.6	1.0	.050
N 2268	705.6	707.0	1.4	TR
N 2269	711.6	712.4	0.8	TR

SLUDGES

N 1827	10	20	.010
N 1828	20	30	.010
N 1829	30	40	TR
N 1830	40	50	TR
N 1831	50	60	TR
N 1832	60	70	TR
N 1833	70	80	TR
N 1834	80	90	.010
N 1835	90	100	TR
N 1836	100	110	TR
N 1837	110	120	TR
N 1838	120	130	TR
N 1839	130	140	TR
N 1840	140	150	TR
N 1841	150	160	TR
N 1842	160	170	TR
N 1843	170	180	TR
N 1844	180	190	TR
N 1845	190	200	TR
N 1846	200	210	TR
N 1847	210	220	TR
N 1848	220	230	TR
N 1849	230	240	TR
N 1850	240	250	TR
N 2054	250	260	TR
N 2055	260	270	TR
N 2056	270	280	TR
N 2057	280	290	TR

N 2058	290	300	TR
N 2059	300	310	TR
N 2060	310	320	TR
N 2061	320	330	TR
N 2062	330	340	TR
N 2063	340	350	TR
N 2064	350	360	TR
N 2065	360	370	TR
N 2066	370	380	TR
N 2067	380	390	TR
N 2068	390	400	TR
N 2069	400	410	TR
N 2070	410	420	TR
N 2071	420	430	TR
N 2072	430	440	TR
N 2139	440	450	TR
N 2140	450	460	TR
N 2141	460	470	TR
N 2142	470	480	TR
N 2143	480	490	TR
N 2144	490	500	TR
N 2145	500	510	TR
N 2146	510	520	TR
N 2147	520	530	TR
N 2148	530	540	TR
N 2076	540	550	TR
N 2079	550	560	TR
N 2080	560	570	TR
N 2081	570	580	TR
N 2082	580	590	TR
N 2081	590	600	TR
N 2150	600	610	TR
N 2200	610	620	TR
N 2201	620	630	TR
N 2202	630	640	TR
N 2203	640	650	TR
N 2204	650	660	TR
N 2205	660	670	TR
N 2206	670	680	TR
N 2251	680	690	TR
N 2252	690	700	TR
N 2253	700	710	TR
N 2254	710	720	TR
N 2255	720	730	TR
N 2256	730	740	TR
N 2257	740	750	TR
N 2258	750	760	TR
N 2259	760	770	TR

HERBEAU MINES (QUEBEC) LIMITED

E. D. N. N-67

Location: 10,846.69 N 10,778.57 E

Elevation 1331.21

2+00' S on section line 10-00 NE

Azimuth at collar: 0°

Dip at collar: 90°

at 400.0' 44°

Pajari test at 400.0' Dip 85° Bearing N 83° E

Length: 535.0'

Core: AXT

Water depth at collar: 85.0'

Started: Feb. 22-1960

Compl. :

Logged by: F.K. Geisterfer.

O.G. CASING

134.0 ALT'D DIORITE

134.0

Fine gr., mod. green and dotted type of texture. The tiny dots are sl. pinkish in colour. Mod. carb'd. Main constituents are chl, qtz, carb, a clay min. (dots), and possible some sericite. Tr of pyrite.

This alt'd diorite resembles much the alt'd diorite in D. D. N. N-60B, which, the last one mentioned is in contact with sediments.

160.0-161.4 : Dias. py parallel a local (?) fracture 80-85° to cn.

171.0 Dots starts to disappear. Sl. carb'd.

193.0 The end of the dotted type of texture. Non to local sl. carb'd. The same grain size and the same constituents as at 134.0. Probably more qtz.

225.0 There is a gradual increase in grain size.

240.0 Mod. gr., non-carb'd. Cut by a few qtz carb str's.

247.0 A few inches of dias. epidote.

250.0-275.0 : Several qtz carb str's and a few qtz carb epidote str's.

287.0 Fine gr., alt'd diorite, non carb'd and sl. to mod. carb'd in places.

310.0 Dotted type of texture is coming in.

315.0 1.2' ground core.

316.2 1.0' of several scattered py xils (len.²).

329.0 The (real) dotted type. Non-carb'd, in places h. carb'd. Cut by a few qtz carb str's.

390.0-392.6 : Fracture along a qtz carb str., 70-90-120° to cn. The str. contains tr of pyrite. End of the Herbeau Vein?

393.0 There seems to be an increase in carb'd sections.

402.4 h" with scatt'd py xils.

418.5 A few py xils.

451.0 The dots are becoming less conspicuous. Non carb'd and there is an increase in epidote percentage to low to mod.

475.0 Gradual increase in grain size to mod.

503.0 Coming in of the dotted type of texture. In general non-carb'd.

525.7 3/4" epidote qtz carb str., near contact 45-50° to cn, far contact irregular.

535.0

535.0 END OF THE HOLE

F.K. GEISTERFER.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From:</u>	<u>To:</u>	<u>Sample</u> <u>Length</u>	<u>Au</u> <u>Co/Ton</u>
N 1583	160.0	161.2	1.2	.010
N 2053	316.2	316.3	0.1	TR
N 1984	391.7	392.9	1.2	.010
N 1814	402.4	403.0	0.6	TR
N 1515	418.2	418.6	0.4	TR

SLUDGES

N 1565	130	140	TR
N 1566	140	150	TR
N 1567	150	160	TR
N 1568	160	170	.030
N 1569	170	180	TR
N 1570	180	190	TR
N 1667	200	210	TR
N 1668	210	220	TR
N 1669	220	230	TR
N 1670	230	240	TR
N 1671	240	250	TR
N 1672	250	260	TR
N 1673	260	270	TR
N 1674	270	280	TR
N 1696	280	290	TR
N 1697	290	300	TR
N 1698	300	310	TR
N 1699	310	320	TR
N 1700	320	330	TR
N 2051	330	340	TR
N 2052	340	350	TR
N 1574	350	360	TR
N 1575	360	370	TR
N 1576	370	380	TR
N 1577	380	390	TR
N 1578	390	400	TR
N 1579	400	410	TR
N 1580	410	420	TR
N 1581	420	430	TR
N 1582	430	440	TR
N 1583	440	450	TR
N 1584	450	460	TR
N 1585	460	470	TR
N 1586	470	480	TR
N 1587	480	490	TR
N 1588	490	500	TR
N 1589	500	510	TR
N 1590	510	520	TR
N 1591	520	530	TR

NORBEAU MINES (QUEBEC) LIMITED

B. B. N. N-66

Location: 10,599.19 N 11,112.64 S

Elevation 1405.92

6-00' S on section line 10+00 NE

Bearing at Collar: N 56° W

Dip at Collar: 30°

Pajari Tests at collar: Dip 80° Bearing N 56° W

At 280.0' 79° N 62° W

At 776.0' 78° N 66° 30' W

Length: 311.5'

Cores: AXF

Started: Feb. 19-1960

Compl.: Feb. 27-1960

Logged by: P.K. Geisterfer

0.0 CASING

7.0 ALT'D DIORITE

7.0

The first 10.0' is fine to mod. gr., but then after the rock becomes co. gr. (well outlined), fairly homogeneous in appearance and main constituents are chl (sec.), qtz, (alt'd) feldsp., (mod. to H.) epidote and locally some carb's. The amount of the grayish clay mineral varies.

20.3 1.2' of diss. epidote qtz and some carb.

125.0-165.0 : Mod. carb'd.

192.0-197.0 : Sl. magnetic in places.

235.0-270.0 : Sl. magnetic in places.

291.1 6" of qtz carb epidote chl. Near contact sharp 45-50° to en.

Far contact missing.

300.0 The alt'd diorite becomes sl. magnetic in places. There are a few dotted sections. The rock is still co. gr., (f. well visible) but the amount of epidote decreases to mod. and also less homogeneous in appearance.

315.0 Decrease in epidote percentage to low.

337.0-385.0 : The rock is sl. to mod. carb'd. In places non-carb'd.

355.0 Increase in epidote'n to mod. to high and at 388.0, there is a slight decrease to mod. In general non-carb'd (after 388.0).

491.0-498.4 : Small very h. epid.'d sections.

540.0 2 1/2' ground core.

600.0 + or - low to nil in epidote. Sl. carb'd sections alternates with sl. carb'd ones.

647.0 6" qtz carb chl str, undulation at the contacts. Replacement?

653.8 1.2' ground core.

660.9 3 1/2" diss (bl.) qtz carb peppered with py. Near contact missing, far contact 65° to en.

660.9-668.0 : The h. carb'd alt'd diorite contains several qtz carb str's. In general 60-70° to en., except for the Norbeau vein which near's contact is 45° to en. Some scattered pyrite.

676.3

676.3 NORBEAU VEIN

Bluish qtz vein with at 676.6 a 2" of milky white qtz carb. About 2% pyrite and 2-4% of a fibrous brown mineral mostly in fine streaks. The last .8' is ground core. Near contact 45° to en., jointing? 30-35° to en. and far contact missing.

677.0 + or -

677.8 ALT'D DIORITE

Like 600.0

690.5 Patch of milky white qtz carb.

698.0-700.0 : Ground core.

710.0 Increase in carb'n to mod. Co. gr., not well preserved texture, mod. to dark green alt'd diorite. In homogeneous appearance, there are sections with the dotted tpe of a texture.

733.0 The alt'd diorite start to become locally sl. magnetic.
768.6 2nd bluish qtz with some epy. Contact is irregular to 30°
to cn.

800.0 The alt'd and mod. to h. carb'd diorite is non-magnetic.
The rock is cut by a few qtz carb str's.

826.1-826.7 : Diss. qtz-carb-chl, near contact sharp 65° to cn.,
far contact gradual, peppered by py xls.

826.7 Decrease in grain size to fine to mod. Still mod. to h.
carb'd.

841.5

841.5 END OF THE HOLE

P.K. GELSTOWER

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u>	<u>To</u>	<u>Sample</u> <u>Length</u>	<u>Au</u> <u>Oz/Ton</u>
N 1816	660.8	661.5	0.7	.020
N 1817	661.5	662.5	1.0	TR
N 1818	662.5	663.5	1.0	TR
N 1819	673.1	674.5	1.4	.010
N 1820	674.5	676.2	1.8	.010
N 1905	676.3	677.0	0.7	.060
N 1906	677.2	677.8	0.6	.010
N 1821	677.8	679.2	1.4	.010
N 1822	690.5	691.2	0.7	.010
N 1823	766.9	767.7	0.8	.010
N 1824	767.7	768.6	0.9	.010
N 1825	768.6	769.1	0.5	.010
N 1826	826.1	826.7	0.6	.010

SLUGS

N 1793	0	10	TR
N 1794	10	20	TR
N 1795	20	30	TR
N 1796	30	40	TR
N 1797	40	50	TR
N 1798	50	60	TR
N 1799	60	70	TR
N 1800	70	80	TR
N 1801	80	90	TR
N 1802	90	100	TR
N 1803	100	110	TR
N 1804	110	120	TR
N 1805	120	130	TR
N 1806	130	140	TR
N 1807	140	150	TR
N 1808	150	160	TR
N 1809	160	170	TR
N 1810	170	180	TR
N 1868	180	190	TR
N 1969	190	200	TR
N 1970	200	210	TR
N 1971	210	220	TR
N 1972	220	230	TR
N 1973	230	240	TR
N 1974	240	250	TR
N 1975	250	260	TR
N 1976	260	270	TR
N 1977	270	280	TR
N 1978	280	290	TR
N 1979	290	300	TR
N 1980	300	310	TR
N 1981	310	320	TR
N 1982	320	330	TR

N 1983	330	340	TR
N 1652	340	350	TR
N 1653	350	360	TR
N 1654	360	370	TR
N 1655	370	380	TR
N 1656	380	390	TR
N 1657	390	400	TR
N 1658	400	410	TR
N 1659	410	420	TR
N 1660	420	430	TR
N 1661	430	440	TR
N 1662	440	450	TR
N 1663	450	460	TR
N 1664	460	470	TR
N 1665	470	480	TR
N 1666	480	490	TR
N 1667	490	500	TR
N 1668	500	510	TR
N 1669	510	520	TR
N 1670	520	530	TR
N 1671	530	540	TR
N 1672	540	550	TR
N 1673	550	560	TR
N 1674	560	570	TR
N 1675	570	580	TR
N 1676	580	590	TR
N 1677	590	600	TR
N 1678	600	610	TR
N 1679	610	620	TR
N 1680	620	630	TR
N 1681	630	640	TR
N 1682	640	650	TR
N 1683	650	660	TR
N 1684	660	670	TR
N 1685	670	680	TR
N 1686	680	690	TR
N 1687	690	700	TR
N 1688	700	710	TR
N 1689	710	720	TR
N 1690	720	730	TR
N 1691	730	740	TR
N 1692			TR
N 1693			TR
N 1694			TR
N 1695			TR
N 1696			TR
N 1697			TR
N 1698			TR
N 1699			TR
N 1700			TR
N 1811	710	720	TR
N 1812	720	730	.020
N 1813	730	740	.020

D. D. H. N-65

Location: 10,736.03 N 10,939.71 E

Elevation 1331.21 (on the ice)

4-00' S on section line 10-00' NE

Bearing at collar: N 56° W

Dip at collar: 80°

Fajari test at 560.0' Dip 81° Bearing N 57° W

at 975.0' Dip 84° Bearing N 22° W

Length: 1118.5'

Core: ANT

Water depth at collar: 9.0'

Started: Feb. 2-1960

Comp. : Feb. 25-1960

Logged by: P.E. Geisterfer

0.0 CASINO

12.0

12.0 ALTD DIORITE

Fine to mod. gr., mod to dark green, dotted type of texture dominates. Main constituents are chlorite, quartz, a greyish clay (?) mineral and in places some carb's. Epidote percentage is low.

Tr of pyrite. There are a few qtz carb str's.

15.0 Mod to (local) co. gr. Section with and without dots.

150.0-165.0 : A few narrow qtz carb str's, 50-60° to cn.

175.0 The dots are not always clearly visible. In places a sl. increase in epidote amount to mod.

200.0 Dotted type of text. is sl. dominant.

340.0 Grain size decrease to fine.

344.0 Mod. to h. carb'd.

370.0 Mod. gr. with dark brown specks in the core axis direction.

Still mod. to h. carb'd.

380.0 Mod. to c. gr. Dots are dominant. Still mod. to h. carb'd.

400.0 h° bluish qtz carb some peppered with pyrite.

427.0 Mod. gr. and a gradual decrease in carb'n to mod.

450.0 Only sl. carb'd, in places even non carb'd.

501.0 Sl. to mod. carb'd. Dotted type of texture is dominant.

512.0 Calc carb'd in places. There seems to be a gradual increase in the amount of (mod.) epidote. Mod. to c. gr., fairly well outlined. Min'd.

550.0 Decrease in epidote percentage except for a few small, but h. epidote sections. In general with some quartz and carb. Mod. to co. gr. alt'd diorite.

591.0 1" qtz carb (chl) str. 30° to cn.

610.0 Like 560.0, dots becoming more abundant. Low to mod. amount of epidote, and only locally some carb'n.

675.0 Mod. to co. gr., in places sl. to mod. carb'd. A few narrow qtz carb str's or patches.

677.0 1.4' of diss epidote and a 2-3" qtz carb ep. str.

685.0 Sl. carb'd.

689.0-690.2 : Indication of shearing 50° to cn., (light green, narrow epidote str's) and the RR is mod. carb'd. NORDEAU ZON877

696.0-698.1 : Like 689.0. In between mod. carb'd.

698.1 Gradual decrease in carb'n to slight and from 700.0 on, only locally carb'd.

725.0 Sl. to mod. carb'd, in places not carb'd. Still the same kind of alt'd diorite, mod. to co. gr. and fairly well outlined min's.

A few qtz carb str's, cn. varies.

775.0 Non-carb'd and in places mod. carb'd.

- 804.0-825.0 : In places sl. magnetic.
807.0 1.0' of diss. epidote.
818.3 1/2" black green str. 55° to cn., h. magnetic and h. carb'd.
Some py and tr of po and cpy. The magnetic is caused by magnetite.
820.0 Mod. to co. gr., alt'd diorite. In places f. gr., also a few sections with dotted type of texture. Locally some carb'n.
850.0 1.6' of a patchy-like qtz carb chl str.
855.0 Irregular and small qtz carb chl str., 70-90° to cn and 120° to cn. Suspected replacement of HR by qtz carb.
862.0-864.0 : Some diss. epidote. OBT's are sharp 60° to cn.
870.0-890.0 : Sl. to mod. carb'd.
895.0 Gradual increase in epidote percentage to mod. (becoming well outlined).
900.7-907.7 : A few narrow orange qtz carb str's, 10-20° to cn.
910.0 The alt'd diorite is co. gr. and becomes sl. magnetic over small sections. Mod. to h. epidote percentage.
925.0 Not magnetic.
960.0 Sl. magnetic over a few inches.
905.0 Mod. to co. gr. (well and not well outlined), low epidote percentage and sl. to mod., in places even highly carb'd. The alt'd diorite is cut by a few qtz carb str's.
1002.0-1035.0 : Sl. sheared. Fol'n (elongated qtz eyes) 55-60° to cn.
1073.0-1081.0 : Sl. carb'd and scattered py xls especially near the J² (?) qtz str. at 1077.2. This milky white qtz carb str contains some py xls. Fol'n 65° to cn.
1081.0 Mod. carb'd and at 1100.0 decrease to sl. carb'd.
1113.0 W. fol'd 60-65° to cn.

1118.5

1118.5 END OF THE HOLE

P.E. CRISTENFER

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>As % / Ton</u>
	<u>Front</u>	<u>Top</u>		
N 1651	100.0	102.6	1.6	.020
N 1951	690.0	691.0	1.0	TR
N 1952	813.2	814.5	0.3	TR
N 1561	1023.3	1024.8	0.5	TR
N 1678	1175.0	1176.3	1.3	TR
N 1679	1176.3	1177.1	0.8	.010
N 1680	1177.1	1177.6	0.5	.150
N 1681	1177.6	1178.6	1.0	.100

S L U N G S

N 1175	30	40	TR
N 1176	40	50	TR
N 1177	50	60	TR
N 1178	60	70	TR
N 1179	70	80	TR
N 1180	80	90	TR
N 1181	90	100	TR
N 1500	100	110	TR
N 1137	110	120	TR
N 1138	120	130	TR
N 1139	130	140	TR
N 1140	140	150	TR
N 1141	150	160	TR
N 1142	160	170	TR
N 1143	170	180	TR
N 1144	180	190	TR
N 1145	190	200	TR
N 1146	200	210	TR
N 1147	210	220	TR
N 1148	220	230	TR
N 1149	230	240	TR
N 1150	240	250	TR
N 1551	260	270	TR
N 1552	270	280	TR
N 1553	280	290	TR
N 1554	290	300	TR
N 1555	300	310	TR
N 1556	310	320	TR
N 1557	320	330	TR
N 1558	330	340	TR
N 1559	340	350	TR
N 1560	360	370	TR
N 1561	370	380	TR

N 1729	394	400	TR
N 1730	400	410	TR
N 1731	410	420	TR
N 1732	420	430	TR
N 1733	430	440	TR
N 1734	440	450	TR
N 1735	450	470	TR
N 1736	470	480	TR
N 1738	480	490	TR
N 1739	490	500	TR
N 1730	510	520	TR
N 1741	520	530	TR
N 1742	530	540	TR
N 1743	540	550	TR
N 1744	550	550	TR
N 1745	560	570	TR
N 1746	570	580	TR
N 1747	580	590	TR
N 1748	590	600	TR
N 1749	600	610	TR
N 1750	610	620	TR
N 1751	620	630	TR
N 1752	630	640	TR
N 1753	640	650	TR
N 1754	650	650	TR
N 1755	660	670	TR
N 1756	670	680	TR
N 1757	680	690	TR
N 1758	690	700	TR
N 1759	700	710	TR
N 1760	710	720	TR
N 1761	720	730	TR
N 1762	730	740	TR
N 1763	740	750	TR
N 1764	750	760	TR

D. D. N. H-54
 Location: 10,582.21 W 10,663.51 E
 Elevation 1331.21
 2-00' S on section line S-00' NE

Started: Feb. 16-1960
 Compl. : Feb. 21-1960
 Logged by: P.H. Geisterfer.

Asimuth at collar: 0°
 Dip at collar: 90°
 Pajari test at 280.0' Dip 89° Bearing S 67°30' E
 Length: 309.0'
 Core: AXE
 Water Depth: at collar 20.0'

0.0 CASING

- 32.0 ALT'D DIORITE 32.0
 Mod. to dark gr., coarse gr., (well outline). Main constituents are chl, qtz, feldspar (alt'd?) and some epidote. A single qtz carb str and sl. carb'd.
 52.0-60.0 : broken core.
 132.0 The alt'd diorite becomes sl. carb'd, in places mod. to h.
 140.0 Mod. carb'd.
 165.0-185.0 : In places sl. agitic.
 200.0-210.0 : Mod to sl. carb'd.
 205.0 Fine to med. gr. A few sections with the dotted type of texture.
 210.0 Increase in carb'n to mod. to high in places even high.
 250.0 There are several qtz carb. str. On varies.
 271.4-282.5 : There are several narrow str's of bluish qtz and some carb with py and at 271.5 and 282.0 also tr of cpy. The cn. is steep 50-60° but the last str (15°) has only a cn. of 40°. The rk contain some disc. pyrite.
- 286.2
 The contact are missing. The first foot contain a rel. high amount of chl (HR7, 50° to cn.) and only 1-2% sulphides, py. Also a brownish colored min.
 286.2-288.1 : Ground core.
 287.2 Bluish qtz with several, very narrow, milky white qtz carb str's. About 10% sulphides, py and asp. Str's of py, 65° to cn.
 288.1-288.8 : Milky white qtz (carb) with py, asp and tr cpy, about 2-3% sul hides.
- 289.8
 289.8 ALT'D DIORITE
 Like at the near side of the vein, although up to 291.0.
 Contact contain patchy like str. of siderite. The diorite is h. carb'd and cut by a few qtz carb. str's.
- 309.0 END OF THE CORE 309.0

ASSAY RESULTS

Sample Number	Section of Hole		Sample Length	Au Gg/Ton
	From	To		
N 1187	271.4	272.0	0.6	TR
N 1188	272.0	273.0	1.0	TR
N 1189	273.0	274.0	1.0	TR
N 1190	274.0	275.0	1.0	TR
N 1191	275.0	276.0	1.0	TR
N 1192	276.0	278.0	2.0	TR
N 1193	276.0	280.0	2.0	TR
N 1194	280.0	281.0	1.0	TR
N 1195	281.0	282.0	1.0	TR
N 1196	282.0	282.4	0.4	TR
N 1197	282.4	285.0	0.6	TR
N 1198	285.0	286.2	1.2	TR
N 1183	286.3	287.2	1.0	.020
N 1184	287.2	288.1	0.9	.140
N 1562	290.0	291.0	1.0	TR
N 1563	295.0	296.0	1.0	TR
N 1198	302.6	303.5	0.9	TR

SLUDGES

N 1703	30	40	TR
N 1704	40	50	TR
N 1705	70	80	TR
N 1706	80	90	TR
N 1707	90	100	TR
N 1708	100	110	TR
N 1709	110	120	TR
N 1710	120	130	TR
N 1711	130	140	TR
N 1712	140	150	TR
N 1713	150	160	TR
N 1714	160	170	TR
N 1715	170	180	TR
N 1716	180	190	TR
N 1717	190	200	TR
N 1718	200	210	TR
N 1719	210	220	TR
N 1720	220	230	TR
N 1721	230	240	TR
N 1722	240	250	TR
N 1723	250	260	TR
N 1724	260	270	TR
N 1725	270	280	TR
N 1726	280	290	TR
N 1727	290	300	TR
N 1728	300	310	TR

D. D. N. N-63

Location: 4+00 S on section line 12+00 NE
 10,897.07 N 11,053.14 E
 Elevation 1331.21 (on the ice)

Started: Feb. 6-1960
 Compl. : Feb. 15-1960
 Logged by: P.K. Geisterfer.

Azimuth at Collar: 00
 Dip at Collar: 90°

Acid Tests		Fajeri Tests	
at 500.0'	83°	400.0'	S 90° E
1000.0'	58°	680.0'	S 60° N
		1150.0'	S 11° W
		1280.0'	S 11° W
			82°
			69°
			56°
			48°

Length: 1375.0'
 Core: AXT
 Water depth at set-up: 65.0'

0.0 CASING

83.0 ALT'D DIORITE

83.0

Mod. to dark green, fine gr'd, dotted type of text. Locally foliated by elongated dots. Slight chl percentage, non carb'd, only a few qtz carb str's and patches. Hardness less than a knife. Constituents are chlorite, quartz, carb, and a greyish mineral, clay. 105.0-108.8 : The colour becomes less dark; mod. green. Indication of fracturing, irregular and almost parallel the core. Several py xils.

118.0 Fairly sharp change into a mod. to dark green, alt'd diorite without the dotted type of texture. Fine grained, h. silicious, harder than a knife and a few qtz carb str's. In places some pyrite xils.

138.2 6" qtz carb siltite str. Irregular, far and near contact about 45° to cn.

146.4 1.0' of diss. epidote, qtz carb with some pyrite.

155.0-174.0 : There are several streaks and stringers of soft, dark green chlorite after with qtz carb and or py xils. Cn. varies.

176.0 1.0' of diss. py xils.

212.5 Patchy like, milky white qtz carb str., near contact irregular to 75° to cn., far contact missing.

213.0-214.3 : Carb qtz replaces rock. The alt'd diorite is al. to mod. carb'd.

215.4-217.0 : Ground Core.

242.0 Coming in of the dotted type of texture, although not yet dominant. Sl. to mod. carb'd in places.

255.0-258.0 : Indication of fracturing, almost parallel the core axis, and along a narrow qtz carb chl str.

274.0 Dotted type of text. In places the dots are orientated, (282.0: 65° to cn.). Fine to mod. gr. alt'd diorite. Several carb, qtz str's, and at 292.5 a carb qtz str, 50° to cn. of 1 1/2". The diorite is al. to mod. carb'd.

300.0 The diorite becomes mod. to highly carb'd.

314.5 1 1/2" bluish and white qtz str. No min'n.

325.0 The dotted type of texture becomes less conspicuous, the rock is h. carb'd. There is numerous carb qtz and qtz (some of which are bluish) str's.

- 336.6-338.6 : Composite bluish qtz carb vein with soft, green chlorite and H.R. inclusions. Less than 1% py xls.
- 341.3-342.9 : Like 336.6, 3-2% py xls.
- 348.5-349.2 : Like 336.6
- 349.2-354.0 : Several small composite qtz carb chl str's with 1-2% pyrite.
- 365.3-377.2 : Dotted type of text., fol'd 70° to cn., decrease in carb'n to mod. carb'd.
- 377.2 Like 325.0, non-dotted and only faintly dotted sections, f. to mod. gr., mod. carb'd. Several carb qtz str's. Locally faintly fol'd.
- 411.0-416.0 : Suspected shearing (narrow epidote str. 75-90-72° to cn)
- 478.0 In places faintly fol'd (s.o. by elongated dots) 60° cn. Still mod. carb'd. There is a gradual increase in grain size to mod. to coarse.
- 503.0 Mod. to coarse gr'd, (not well outline), mod. to dark green with greyish white spots (alt'd feldspar). H. chl and h. silica content, low (to nil) in carbonate. A few narrow carb qtz str's. In places a few epidote streaks or str's.
- 528.6 1" composite qtz carb (chl) str. 55-60° to cn.
- 556.0 3" of diss. epidote.
- 581.6 3" of diss. epidote.
- 584.4-587.5 : Dias. and str. of epidote.
- 597.4 1" qtz carb str., 20-50° to cn.
- 613.0 Within 1.0' change into a fine to mod. gr., mod. (bluish) green, alt'd diorite. Faintly dotted in places. Locally carb'd with a few qtz carb str's.
- 615.4-616.2 : Dias. and str. of epidote.
- 637.5 3" composite qtz carb (chl) str. 20° to cn.
- 657.0 Increase in grain size to mod. to coarse gr. (not well outlined). Fairly high epidote percentage. In places sl. carb'd.
- 675.0 2.0' epidote qtz carb'd rock.
- 677.2 1" qtz carb orange red adm. str., 30-35° to cn.
- 691.0 1 1/2" qtz carb (chl) str., 15-20° to cn.
- 711.1-712.1 : Epidot'd.
- 760.0-770.0 : Sl. to mod. carb'd.
- 770.0 Still sections which are and which are not (mod.) carb'd. In places dotted type of text.
- 810.0-813.0 : Fol'd 45° and indication of weak shearing.
- 813.0 Still the same kind of a rock, mod. gr., in places fine or coarse, mod. to dark green rock containing chlorite and quartz, probably some alt'd feldspar, with some epidote and possibly some carb's. The alt'd diorite is cut by a single, narrow qtz carb str.
- 835.0-836.2 : Ground care.
- 848.0-852.0 : M. Carb'd.
- 875.0 and 887.0 Sl. magnetic over a couple of inches.
- 925.0 Like 813.0. Locally mod. carb'd. With a high epidote percentage.
- 919.0-939.0 : Mod. Carb'd.
- 950.0 Two 1/2" qtz carb str.'s, 50° to cn with some py xls.

- 954.0-955.4 : W. sheared, fol'n 55-60° to cn.
- 960.4-963.4 : Composite qtz chl epidote carb actinolite str. without a pronounced direction, far and near contact are irregular. Orange red carb stringers are 20-35° to cn.
- 966.0 A few orange red qtz carb str's, 40-55° to cn.
- 998.0 Three narrow orange red qtz carb str's, 40-45° to cn.
- 1025.0 Fine to mod. gr'd alt'd diorite becomes dominant. In places mod to high carb'd.
- 1043.0-1079.0 : Sl. sheared with a sharp near contact 45° to cn and a gradual far contact.
- 1079.0 Mod. gr. alt'd diorite with coarse and f. gr. sections. In places a faint fol'n.
- 1091.0 Near contact (?) missing. The mod. gr. alt'd diorite becomes mod. green, probably due to the increase of (dias.) epidote. Mod. carb'd and faintly fol'd (1092.0 : 45° to cn.)
- 1113.0-1120.0 : Dark green, decrease in epidote percentage.
- 1120.0 Like 1091.0, although only faintly fol'd in places. There is also an increase in grain size to mod. to coarse, carb'd locally.
- 1133.0-1146.0 : In places sl. to mod. magnetic.
- 1146.0 Fol'n (elongated dots) 45° to cn. Decrease in epidote percentage, like 1079.0
- 1159.0-1167.0 : Sl. to mod. magnetic.
- 1171.4 W. fol'd, 50° to cn. and there is a gradual increase in carb'n to high.
- 1167.0 Fol'n 40° to cn.

1205.4

- 1205.4 "BLEACHED ZONE" Like footwall of the vein. H. carb'd, sil'd (10-15% py) and silicif'd. Grayish in colour, mod. to coarse gr., fol'n 40° to cn., is faintly visible and across this direction are a few qtz carb str's (45° to cn.). Both contact are gradual.

1212.8

- 1212.8 ALT'D DIORITE Mod. to dark green, fine to mod. gr., h. carb'd and silicif'd r.k. Cut by a few qtz carb str's.
- 1225.0 + or - End of the carb'd zone. The alt'd diorite is only locally carb'd. Increase in grain size to mod. Tr of pyrite.
- 1244.0 Fol'd, 45° to cn., over 1.0'.
- 1280.6 There is a gradual increase in epidote percentage and the alt'd diorite becomes mod. green in colour. Fine gr. texture with mod. gr'd sections in between. No carb'd.
- 1343.3-1346.6 : Coarse gr. section, h. epidot'd and less than 15 py.
- 1357.0 Change into c. to f. gr. alt'd diorite. Sl. magnetic.

1375.0

- 1375.0 END OF THE HOLE

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From:</u>	<u>Section of Hole</u> <u>To:</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Ob/Ton</u>
N 689	146.2	147.5	1.3	TR
N 740	159.4	160.0	0.6	TR
N 741	180.8	180.8	0.8	TR
N 742	180.8	181.9	1.1	TR
N 743	201.1	202.0	0.9	TR
N 744	314.2	315.0	0.8	TR
N 745	327.9	329.3	1.4	TR
N 746	336.6	337.2	0.6	TR
N 747	337.2	337.7	0.5	TR
N 748	337.7	338.8	1.1	.010
N 749	338.8	341.1	2.3	TR
N 933	341.1	341.9	0.8	TR
N 934	341.9	342.4	0.5	TR
N 935	342.4	342.9	0.5	TR
N 936	348.4	349.2	0.8	.010
N 596	350.8	351.8	1.0	TR
N 597	351.8	352.8	1.0	TR
N 598	352.8	353.7	0.9	TR
N 599	353.7	354.4	0.7	TR
N 600	357.8	358.7	0.9	TR
N 1351	362.0	362.5	2.5	TR
N 1352	414.5	415.0	0.5	TR
N 1467	925.0	925.4	0.4	.010
N 1468	960.4	961.5	1.1	TR
N 1469	961.5	962.0	0.5	.010
N 1470	962.0	963.6	1.6	TR
N 1531	1042.9	1044.3	1.4	TR
N 1532	1204.1	1205.4	1.3	TR
N 1533	1205.4	1207.4	2.0	TR
N 1534	1207.4	1209.4	2.0	TR
N 1535	1209.4	1211.0	1.6	TR
N 1536	1211.0	1211.9	0.9	TR
N 1537	1211.9	1212.9	1.0	TR
N 1538	1212.9	1214.1	1.2	TR
N 1539	1345.0	1345.8	0.8	TR

SLUGS

N 1328	230	240	.020
N 1329	240	250	TR
N 1330	250	260	.010
N 1331	260	270	TR
N 1332	270	280	TR
N 1333	280	290	TR
N 1334	290	300	TR
N 1335	300	310	TR
N 1336	310	320	TR
N 1337	320	330	TR
N 1338	330	340	TR
N 1339	340	350	TR
N 1342	440	450	TR
N 1340	450	460	.010
N 1341	460	470	.030
N 1353	470	480	TR
N 1354	480	490	TR
N 1355	490	500	TR
N 1356	580	590	TR
N 1357	590	600	TR
N 1358	600	610	TR
N 1359	610	620	TR
N 1360	620	630	TR
N 1361	630	640	TR
N 1362	640	650	TR
N 1363	650	660	TR
N 1364	660	670	TR
N 1365	670	680	TR
N 1366	680	690	TR
N 1367	690	700	TR
N 1368	700	710	TR
N 1369	710	720	TR
N 1370	720	730	TR
N 1371	730	740	TR
N 1373	850	860	TR
N 1372	860	870	TR
N 1296	750	760	TR
N 1297	760	770	TR
N 1298	770	780	TR
N 1299	780	790	TR
N 1300	790	800	TR
N 1401	810	820	TR
N 1402	820	830	TR
N 1403	830	840	TR
N 1404	840	850	TR
N 1405	850	860	TR
N 1406	860	870	TR
N 1407	870		TR

D. D. H. N-62

Location: 10.514.29 N 10.543.20E
 Elev. 1378.35
 2+00's on section line 6+00 NE

Started:

Compl. : Feb. 15-1960
 Logged by: P.K. Geisterfer.

Bearing at Collar: N 56° W

Dip at Collar: 90°
 at 500.0' 78°
 at 750.0' 73°30'

Pajeri Tests

at 500.0' Bearing South Dip 78°

Length: 850.0'

Core: AKT

0.0 CASING

27.0 ALT'D BIONITE

27.0

Mod. to dark green, mod. (in places coarse) gr., not well outlined, highly silicified and only locally mod. carb'd. Main constituents are chlorite, quartz, some feldspar (alt'd) and a varying amount of a soft greyish mineral (clay mineral?). A few carb-qtz str's., with at 33.4-34.3 numerous narrow ones, 10-30° to cn.

60.0 Mod. to h. carb'd.

75.0-79.0 : Sl. sheared 65-70° to cn., environment is weakly fol'd.

78.6-78.8 : qtz-carb (chl) str., 65° to cn. 2% pyrite xls.

93.5 Grain size decreases locally to fine to mod. Mod. to h. carb'd and only a few carb qtz str's.

100.0 In places dotted type of texture.

124.0-126.0 : Ground core.

126.0 Decrease in carb'n to mod.

127.0 Indication of (suspected) fracturing (due to a carb. qtz str.)

70-90-110° to cn.

240.0 Gradual increase in carb'n to high.

255.0 The alt'd and h. carb'd chlorite becomes sl. min'd, 1-2% pyrite. The rock is weakly sh'd.

258.7

258.7 NORDEAU QUARTZ VEIN

Near contact 65-70° to cn. and sharp, far contact gradual (?), the first 1.2' is ground core. Bluish quartz with some carb. and about 5% pyrite. No f.s. Near far and near contact west coloured narrow stringers, 60° to cn. (hardness less than a knife). These str's contain a large part of the pyrite and seem to replace the quartz. Tr of a metallic, h. reflecting tiny xl. mineral, probably asp.

259.8

259.8 BLEACHED ZONE

Near contact gradual (? lost core?), texture indicates some shearing, 65° to cn. and replacement. Main constituents are quartz, carb, chl, sericite (?) and a light violet brown mineral probably leucosene. Less than 5% pyrite and traces of asp. Pyrite in general in stringers. Mod. carb'd.

266.1

266.1 ALT'D BIONITE

Mod. green, mod. gr., h. chl'c rock. Softer than a knife, only sl. carb'n but numerous irregular qtz carb. str's, (cn. varies). In between fine and coarse grained sections.

290.0-302.5 : Dotted type of texture, mod. gr. and h. carb'd. A few carb qtz str's.

302.5 Like 266.1, mod. carb'd. Several carb qtz str's. Locally sections of the dotted type.

306.5 - 307.5 : Two 1 1/2" composite qtz carb str's, 50° to cn., 306.5-307.5, some py. Fractured along qtz carb str's (306.5-307.5) at 306.5-307.5.

320.4-322.4 and 325.3-326.0

- 326.0-327.8 : Two bluish qtz carb str's ($\frac{1}{2}$ " and $1\frac{1}{2}$ ") 20-50° to cn. with some pyrite.
- 335.0 $\frac{1}{2}$ " qtz carb str., 55° to cn. Tr of pyrite.
- 335.1 The alt'd diorite is still mod. gr'd and locally dotted, with a few coarse gr. section. Not well outlined. Mod. carb'd and several carb. qtz patches and str's. In places weak fol'd.
- 375.0-391.0 Sl. to non-carb'd.
- 388.6 There is an increase in sections with dotted type of texture. The dots have a pinkish to violet tinge.
- 427.0 Gradual change into a mod. to dark green, fine to mod. grained, f. fol'd, alt'd diorite. In general mod. carb'd, in places non-carb'd. The diorite is cut by several patchy like carb qtz str's running in almost every direction.
- 444.8-444.9 : Concentration of pyrite xls, 3-5%.
- 463.0 Fol'd, 50° to cn.
- 464.0 + or - - 472.0 + or - Weak sh'd, 50° to cn. The alt'd diorite is mod. gr.
- 472.0 + or - Mod. gr'd alt'd diorite, sl. carb'd. In places non-carb'd. Relatively high amount of (diss.) epidote.
- 495.0 Mod. to coarse gr. alt'd diorite, non to sl. carb'd in places. Locally individual grain becomes more visible. Mineral content as at 472.0. The diorite is cut by a few qtz carb str's.
- 511.4-516.0 Weak sh'd, 60° to cn.
- 517.4 $1\frac{1}{2}$ " qtz carb (chl) str., 60° to cn.
- 550.0 Like 495.0. Sections dotted type of texture in between. In general rel. h. epidote percentage.
- 600.0 In places indication of local (5-10") shearing.
- 612.3-615.0 : Ground core.
- 665.0-675.0 : The alt'd diorite becomes in places sl. magnetic.
- 686.0 Sheared, 55° to cn., over 1.0'. The alt'd diorite is sl. carb'd.
- 697.4 2" of qtz carb.
- 700.0 The diorite becomes coarse gr. (well outlined) with a high epidote percentage. Locally weakly fol'd.
- 710.0-720.0 : Locally sl. magnetic.
- 709.6 A few inches of carb. and qtz.
- 721.0-722.0 Several narrow qtz carb (orange) str's, 15-30° to cn.
- 730.0 Gradual decrease in epidote content to low, grain size decrease to mod. to coarse. (Not well outlined) In places mod. carb'd.
- 775.0-800.0 : Alt'd diorite.
- 800.0-825.0 : Alt'd diorite becomes fine grained.
- 825.7-850.0 : Fine grained dominant.

850.0

850.0 END OF THE HOLE

REMARK: TWO BOXES OF THE LAST 150.0' WERE RUN OVER BY THE TRACTOR. THE DRILLERS COULD NOT RECOVER WHICH ONE.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>	<u>Section of Hole</u>	<u>Sample</u>	<u>Au</u>
	<u>From</u>	<u>To</u>	<u>Length</u>	<u>Oz/Ton</u>
N 1343	256.1	257.8	1.7	TR
N 1344	257.8	259.0	1.2	.840
N 1345	259.0	260.0	1.0	.530
N 1346	260.0	261.0	1.0	.010
N 1347	261.0	262.0	1.0	.010
N 1348	262.0	263.0	1.0	TR
N 1349	263.0	264.0	1.0	TR
N 1350	264.0	265.0	1.0	.010
N 1271	265.0	266.2	1.2	.010
N 1272	266.2	267.2	1.0	TR
N 1273	267.2	268.2	1.0	.010
N 1274	268.2	270.0	1.8	TR
N 1275	270.0	272.0	2.0	TR
N 1276	272.0	272.0	2.0	.010
N 1277	306.5	307.6	1.1	TR
N 1374	544.8	546.0	1.2	
N 1375	547.0	547.0	0.8	

SLURGES

N 937	30	40		.020
N 938	40	50		TR
N 939	50	60		TR
N 940	60	70		.010
N 941	70	80		TR
N 942	80	90		TR
N 943	90	100		.010
N 944	100	110		TR
N 945	110	120		TR
N 946	120	130		TR
N 947	130	140		TR
N 948	140	150		TR
N 949	150	160		TR
N 950	160	170		TR
N 1301	170	180		TR
N 1302	180	190		TR
N 1303	190	200		TR
N 1304	200	210		TR
N 1305	210	220		TR
N 1306	220	230		TR
N 1278	250	260		.340
N 1279	260	270		.250
N 1280	270	280		.390
N 1281	280	290		.480
N 1282	290	300		.040
N 1283	300	310		.290
N 1284	310	320		.080

N 1285	320	330	.050
N 1286	330	340	.040
N 1287	340	350	.020
N 1288	350	360	TR
N 1376	350	360	.010
N 1377	360	370	TR
N 1378	370	380	TR
N 1379	380	390	.010
N 1380	390	400	.010
N 1381	400	410	TR
N 1382	410	420	TR
N 1383	420	430	TR
N 1384	430	440	TR
N 1385	440	450	.010
N 1386	450	460	TR
N 1387	460	470	.010
N 1388	470	480	TR
N 1389	480	490	.010
N 1390	490	500	TR
N 1391	500	510	TR
N 1393	510	520	TR
N 1394	520	530	TR
N 1395	530	540	TR
N 1396	540	550	.010
N 1397	550	575	TR
N 1398	575	590	.010
N 1399	590	600	.010
N 1400	600	610	.020
N 1522	630	640	TR
N 1523	640	650	TR
N 1524	650	660	TR
N 1525	660	670	TR
N 1526	670	680	TR
N 1527	680	690	TR
N 1528	690	700	TR
N 1540	710	720	TR
N 1541	720	730	TR
N 1542	730	740	TR
N 1543	740	750	TR
N 1544	750	760	TR
N 1545	760	770	TR
N 1546	770	780	TR
N 1547	780	790	TR
N 1548	790	800	TR
N 1549	800	810	TR

D. N. H. N-61

Location: 5-008 on section line 11-CORR
 10,952.25 N 11,100.89 E
 Elevation: 1331.21 (On the ice)

Started: Feb. 5-1960
 Compl. : Feb. 10-1960
 Logged by: B.E. Archibald and
 F.H. Geisterfer.

Dip at Collar: 90°
 at 500.0' 82° (Acid Test) ^{Point} 54° S 12° W
 1150.0' 75° S 37° 10' W
 1348.0' 71° S 21° E
 1495.0' 65° (Acid Test)

Length: 1495.5'

Core: AFT

Depth of water at set-up: 7

0.0 CASING

32.9 ALT'D DIORITE

32.9

Fine grained, dark green in colour, soft, high clay mineral, low epidote, nil carbonate, high chlorite, Tr py. Contains an occasional thin carb. chlorite vein.
 39.0 1/4" carb. vein 30° to cn.
 85.0-86.0 : Ground core.
 90.0-90.8 : Ground Core.
 97.1 1/3" milky qtz carb vein 30° to cn.
 98.6 3/4" carb. vein 30° to cn.
 99.6 1/2" carb vein 20° to cn.
 99.9 1 1/2" carb, chl. vein 5° to cn.
 100.9-101.2 : Few tiny milky qtz vein 30° to cn.
 139.8 1/2" milky qtz carb vein 25° to cn.
 139.6 2" milky qtz carb vein, near stot 15° to cn., far contact 10° to cn.
 156.3 - 1/2" milky qtz carb vein, flat lying.
 167.3-169.4 : A few tiny epidote stringers 70-90° to cn.
 173.0-174.0 : A few tiny epidote stringers.
 192.2 3" patch of carb, chlorite.
 201.0 Seems to be slight increase in the number of carbonate stringers.
 220.0-220.7 : Much carb chlorite, 1% disseminated pyrite.
 223.6 1" carb vein 20° to cn.
 225.0 Still the same type of rock. Alternation of non and well and sl. dotted type of texture of alt'd diorite. Dotted type is sl. dominant. Also alternation to fine and mod. grained sections. A few narrow qtz carb str's.
 250.0 Mod. gr. alt'd diorite becomes dominant. Dotted type of texture is dominant by now. A few qtz carb. str's 10-60° to cn.
 312.5 Locally mod. carb'd.
 369.0 Dotted type of text. is sl. dominant. Grain size still mod.
 337.0 Locally mod. carb'd.
 400.0-413.0 : Mod. carb'd.
 405.0 Mod. gr. alt'd diorite and only locally slightly dotted. A few narrow carb qtz str's.
 433.0 Rock becomes sl. darker green, core surface is smooth, supposed sl. increase in qtz percentage.
 442.1-444.0 : Concentration of epidote qtz and carb, 10-15° to cn.
 461.0 Like 433.0 but with dotted type of text., locally dark.
 467.0-468.4 : Ground core.

- 471.3-498.0 : In places, ground core probably due to the qtz carb str's 10-85° to cn. Texture is less dotted. No increase in min'n, only trace of sulphides and in this section and further down to 515.5, the dots are elongated and aligned, 75-85° to cn. (lineation or foliation).
- 515.0 About the end of the dotted type of texture. Core surface is pitted. Mod. gr'd, mod. green, alt'd diorite, the same qtz percentage and as 433.0. A few carb qtz str's and locally carb'd.
- 527.3 1½' Ground core.
- 544.0 1.0' Ground core.
- 548.0 1½' Ground core.
- 562.4 1.0' Ground core.
- 572.0 Some epidote.
- 572.0 Core surface becomes smooth. Mod. to coarse gr'd alt'd diorite. (Not well outlined).
- 581.5 1" qtz epidote carb (chl) str. about parallel to core axis.
- 586.5 A few narrow sp qtz carb str (with a orange red mineral) 10-50° to cn.
- 606.0 The same kind of a rock as 572.0 plus dotted type of text.
- 632.0-648.0 : A few epidote streaks and str's.
- 663.0-572.0 : Sl. to mod. carb'd.
- 676.0-684.0 : Mod. carb'd.
- 6 81.0 Implies a certain orientation of the dots, 50° to cn.
- 680.5 2" epidote qtz carb str., 50° to cn.
- 703.0-717.0 : Sl. to mod. carb'd.
- 730.0 Like 572.0 with sections with a faint dotted type of texture. In places sl. to mod. carb'd. A few carb qtz or epidote qtz carb str's, 10-50° to cn.
- 735.0 1" with some epidote.
- 742.0 2" with some epidote.
- 808.3 1½" qtz epidote carb (chl) str. 50-55° to cn.
- 817.0 1" qtz epidote carb (chl) str. 30-35° to cn.
- 854.0 1" " " " " " 35° to cn.
- 860.6 5" concentration of epidote qtz carb.
- 867.0 1½" qtz epidote carb str., 20-40° to cn.
- 867.2 Coarse grained type (well outlined). Relatively more disseminated epidote, low to non-carb'd.
- 875.0 Gradually the grains are less well visible.
- 880.3 7" qtz carb (chl) str., 20° to cn. to irregular, with a orange red spot (probably carbonate).
- 884.4 1" epidote qtz carb orange red min. str., 55-60° to cn.
- 892.0 1.0' Axinite qtz carb epidote (chl) str. Near contact 45°, ditto for contact.
- 896.6 1.0' Axinite qtz carb (chl) epidote str., near contact 40°, far contact irregular. In between these two axinitic str., high percentage of diss. epidote.
- 922.3 Still a fairly high percentage of epidote in the alt'd diorite and here a few inches light green alt'd diorite, almost 60% epidote. Carb'n is widespread, but discontinuous and varies in grade.
- 936.0-937.5 : Indication of weak shearing 45-55° to cn.
- 939.0 5" with 60% qtz carb.
- 975.0 Dotted type of text. becomes dominant.

- 1002.0 1" of mod. alt'd diorite, 15° to cn.
1025.0 From here on, only a few sections of dotted type of text.
In places, faintly fol'd.
1051.5 5" diss. epidote and a few narrow qtz carb str. 60-65° cn.
1070.7 1" qtz carb str., 60-65° to cn.
1087.0-1089.0 : Sl. carb'd section, suspected replacement. Patches
of qtz carb epidote. No min'n.
1089.4 Still the same kind of a rock with a homog. text., mod. and
coarse gr., visible and non-visible grains, dotted and non-dotted
text. and besides that in places a faint fol'n, carb'nis locally
and in general mod.
1127.0 A few narrow py streaks.
1140.0-1165.0 : Sl. to mod. magnetic.
1180.0-1182.0 : Ditto.
1182.0-1207.0 Dotted type of text. is dominant. Mod. to coarse gr'd.
In places mod. carb'd.
1200.0-1202.0 : Diss. sulphides, less than 1% in a fol'd (60-65° to
cn.) altered diorite. Sl. magnetic.
1207.0 Like 1089.4, coarse gr. (well outlined), dominant (rel.
high epidote percentage). In places sl. to mod. magnetic and local-
ly some carb'n.
1228.0-1246.0 Mod. magnetic.
1246.0 Alt'n of non and mod. magnetic section. Only locally a few
magnetic spots.
1300.0 Decrease in grain size to mod. to coarse (no grain bounde-
ries), with section of dotted type of texture. In places some
carb'n. There is a gradual decrease in the amount of diss. epidote.
1339.0 Dotted type of text. becomes dominant. In general no carb'n.
A few narrow qtz carb str's.
1375.0 Increase in carb'n to mod.
1384.0-1386.3 : Quartz zone. It slightly looks like the "bleached
zone" of N-63 at 1205-1212 though it contains too much chlorite and
there is only 2% of py (in fairly large xll's, .3"). This quartz
carb zone, without any specific direction, has fairly sharp contact,
near 55-60° to cn. and far about 80° to cn.
At 1388.9, 1390.0 and 1392.4, are also patchy like str's (?) of
quartz and carb sometimes with less than 1% pyrite. The rock is
sl. carb'd and fol'n 40-50° to cn. is faintly visible.
1402.4 Two 1" qtz carb str's, 15° to cn.
1403.0 + or - Fine to mod. gr. dark green rock with in places sec-
tions of dotted type of texture.
At 1413.0 and 1415.0 are a few inches of quartz carb and chl and
at 1417.1 is a 2/3" white qtz carb str., 30° to cn., with in the rock
some pyrite.
1433.0 2" qtz carb scinite (chl) str. 20-30° to cn.
1433.2 Fine gr'd alt'd diorite.
1447.0 Indication of local shearing 50-55° to cn. The alt'd diorite
is h. carb'd.
1451.0 + or - End of the carb'd section. In the meantime the grain
size increased to coarse (not well outlined).
1455.0 Gradual increase in epidote content, to mod. In general well
outlined.
1474.0 In places, several small patches of pyrite, 1.0' section
contain less than 2% pyrite.

1495.5

1495.5 END OF HOLE.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u>	<u>To</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Ca/Ton</u>
N 913	220.0	220.7	0.7	TR
N 890	196.7	198.3	1.6	TR
N 1530	1126.5	1127.2	0.6	TR
N 1529	1126.9	1129.4	2.5	TR
N 1471	1383.0	1384.1	1.1	.020
N 1472	1384.1	1385.0	0.9	TR
N 1473	1385.0	1386.0	1.0	TR
N 1474	1386.0	1387.0	1.0	TR
N 1475	1387.0	1388.0	1.0	TR
N 1476	1388.0	1390.0	2.0	TR
N 1477	1390.0	1391.0	1.0	TR
N 1478	1391.0	1392.0	1.0	TR
N 1479	1392.0	1393.0	1.0	TR
N 1480	1412.9	1413.5	0.6	TR
N 1481	1416.2	1417.6	0.7	TR
N 1953	1484.3	1485.3	1.0	TR

SLUGS

N 734	90	100		TR
N 735	100	110		TR
N 736	110	120		TR
N 737	120	130		TR
N 738	130	140		TR
N 739	140	150		TR
N 914	150	160		TR
N 915	160	170		TR
N 916	170	180		.020
N 917	180	190		.010
N 918	190	200		TR
N 919	200	210		TR
N 920	210	220		TR
N 921	220	230		TR
N 922	230	240		.010
N 923	240	250		TR
N 924	250	260		TR
N 925	260	270		TR
N 926	270	280		TR
N 927	280	290		.010
N 928	290	300		TR
N 929	300	310		TR
N 930	310	320		TR
N 931	320	330		TR
N 932	330	340		.010

N 891	400	410	TR
N 892	410	420	TR
N 893	420	430	TR
N 894	430	440	TR
N 895	440	450	TR
N 896	450	460	TR
N 897	460	470	TR
N 898	470	480	TR
N 899	480	490	TR
N 900	490	500	TR
N 1251	310	350	TR
N 1252	350	360	TR
N 1253	360	370	TR
N 1254	370	380	TR
N 1255	380	390	TR
N 1256	390	400	TR
N 1257	500	510	TR
N 1258	510	520	TR
N 1259	520	530	TR
N 1260	530	540	TR
N 1261	540	550	.010
N 1262	550	560	TR
N 1263	560	570	TR
N 1264	570	580	TR
N 1265	580	590	TR
N 1266	590	600	TR
N 1267	600	610	TR
N 1268	610	620	TR
N 1269	620	630	TR
N 1270	630	640	TR
N 1307	640	650	.010
N 1308	650	660	TR
N 1309	660	670	.020
N 1310	670	680	TR
N 1311	680	690	TR
N 1312	690	700	TR
N 1313	700	710	TR
N 1314	710	720	TR .020
N 1315	720	730	TR .020
N 1316	730	740	TR
N 1317	740	750	TR
N 1318	750	760	TR
N 1319	760	770	TR
N 1320	770	780	TR
N 1321	780	790	TR
N 1322	790	800	TR
N 1323	800	810	TR
N 1324	810	820	TR
N 1325	820	830	TR
N 1326	830	840	TR
N 1327	840	850	.010

N	1289	870	880	TR
N	1290	880	890	TR
N	1291	890	900	TR
N	1292	900	910	TR
N	1293	910	920	TR
N	1294	920	930	TR
N	1295	930	940	TR
N	1461	930	940	TR
N	1462	940	950	TR
N	1463	950	960	.010
N	1464	950	970	.010
N	1465	970	980	.010
N	1466	980	990	TR
N	1468	990	1000	TR
N	1409	1000	1010	TR
N	1410	1010	1020	TR
N	1411	1020	1030	TR
N	1412	1030	1040	TR
N	1413	1040	1050	TR
N	1520	1050	1060	TR
N	1510	1060	1070	TR
N	1511	1070	1080	TR
N	1512	1080	1090	TR
N	1513	1090	1100	TR
N	1514	1100	1110	TR
N	1515	1110	1120	TR
N	1516	1120	1130	TR
N	1517	1130	1140	TR
N	1518	1140	1150	.010
N	1519	1150	1160	TR
N	1550	1160	1170	TR
N	1488	1170	1180	TR
N	1521	1180	1190	.010
N	1429	1180	1190	TR
N	1432	1190	1200	TR
N	1433	1200	1210	TR
N	1434	1210	1220	TR
N	1435	1220	1230	TR
N	1436	1230	1240	TR
N	1489	1240	1250	TR
N	1484	1250	1260	TR
N	1485	1260	1270	TR
N	1486	1270	1280	TR
N	1487	1280	1290	TR
N	1488	1290	1300	TR
N	1489	1300	1310	TR
N	1490	1310	1320	TR
N	1461	1320	1330	TR
N	1462	1330	1340	TR
N	1463	1340	1350	TR
N	1499	1350	1360	TR
N	1200	1360	1370	TR
N	1701	1370	1380	TR
N	1702	1380	1390	TR

NORDBAU MINES (QUEBEC) LIMITED

D. D. H. N-60B

Location: 11,977.10 N 12,686.94 E
 Elevation 1331.21 (On the ice)
 6-00 S on section line 11+00 NE

Started: Feb. 9-1960
 Compl. : Feb. 28-1960
 Logged by: F. K. Geisterfer.

Azimuth: 304°
 Bearing: N 56° W
 Dip at collar: 50°
 at 97.0' 46°

Pajant test at 360.0' Dip 44° Bearing N 42° W

Length: 882.0'

Core: AET

Water depth at collar: 5.0'

Cemented to collar: 20 bags used.

0.0 CASING

85.0

85.0 ALT'D DIORITE

Med. green, fine grained and homogeneous in appearance. Sections with and without (pinkish) dotted type of texture alternates. In places mod. gr. No indication of banding. Harder than a knife, consisting of quartz, chlorite, (sericite?), carbonate, a pinkish alteration product, (tiny dots, 1 mm²) and traces of pyrite. The alt'd diorite is cut by several narrow qtz-carb. str's, 30-70° to cn., is mod. to local h. carb'd, although there are a few non-carb'd sections. (115.0-120.0 + or -)
 99.6 1" milky white qtz-carb. str., 15-20° to cn., with 20% py and py.
 161.0 1" qtz-carb str., 75° to cn., with some pyrite.
 175.0 Dotted type of texture dominates and the colour becomes light to mod. grey green. Mod. to h. carb'd and less silicif'd.
 200.0 The pinkish dots seem to become orientated. Fol'n is at 70° to cn. The (several) quartz carb. str's have a cn. between 70-80°.
 238.4 1" bluish qtz carb str., 70-80° to cn.
 260.0 Fol'n 60° to cn.
 262.6 1" bluish qtz carb str., 50-55° to cn. Tr of pyrite.
 300.0 Fol'n 65° to cn.
 305.0 The fol'n becomes less visible. The rock has the same constituents, is still h. carb'd but the tiny pinkish dots are decreasing in size and amount.
 315.0 Fol'n (nearly visible) 80° to cn.
 319.0 Branching 1" qtz carb str., 60° to cn., peppered with py, (10%).
 321.0-344.0 : Non or sl. carb'd.
 323.0 A few light grey green, mass. str's of (probably) chlorite and some carbonate. Soft and the ctct's 70-75° to cn., with the rock are very sharp.
 327.0-328.6 : Ground core. The rock is blocky and easy cleavable.
 329.0-330.1 : Milky quartz carb str., 55-60° to cn. (?) with some chlorite and greygreen material (323.0)
 330.1-342.0 : Like 323.0 with some ss in streaks or small lenses. Fairly sharp high qtz percentage and about 1% py (in general associated with the quartz). Fol'n is 70° to cn. Some ground core.
 342.0-343.4 : Quartz carb zone peppered with pyrite (less than 5%). Far contact 60° to cn., near contact missing.
 343.4 Like 305.0, also h. carb'd. A few patchy like qtz carb str., with some pyrite and also still some grey green stringers of (probably) chlorite (carb'd) composition.

TRANSITION ZONE

355.6 There is a gradual increase in grey green chl^{ic} (?) bands and a sharp decrease in carb'n to low (nil). Fol'n is 75° to cn. The (several) qtz carb, sometimes with some pyrite, str's are parallel the fol'n

370.0

370.0 ANILLITE

Dark grey, fine grained, well laminated 30° to cn. Main constituents are chlorite, qtz and graphite (?), there is some feldspar (sericite) and some pyrite. Several qtz carb pyrite str., parallel the lamination.

372.6 1/2" qtz carb str., 30° to cn., (diagonal to the lamination and pyrite str's 1) containing sphalerite (mod. red brown) and tr. cpy.
374.0-375.0 : Ground core.

375.0 The rock becomes h. graphitic and seems to be cut by num. qtz carb str's, sl. bluish, containing 5-10% pyrite and tr cpy.

392.0 + or -

392.0 : META-TUFF (?)

Dark grey brown, f. gr. with in places a faint lamination 65-70° to cn. Some layers contain a few white, sometimes square, minerals and feldspar. In places the core is partly made up of meta-tuff and partly (contact is 90° + or - to cn.) of a beccia. Tuff sections, however, dominate. High percentage of pyrite, up to 15%, and tr of cpy. There are a few qtz carb (py) str.

403.0 The rock cleaves at 50° to cn.

405.0

405.0 META-ARGILLITIC ROCK

In general finegr., dark grey to black. The laminae are undulating and are 70-90° to cn. Indication of brecciation. Still min'd, up to 10% pyrite and tr cpy. A few patches and str's of qtz and carb.

409.5

409.5 BRECC. ZONE

Light grey green, fine grained fragments, 1/2 to 1 1/2" in diameter, in a fine gr. dark grey matrix. Num small lenses of qtz carb. and tr of pyrite. Still min'd up to 10% pyrite (xils) and tr cpy. Some qtz and carb patches or str's. In the breccia zone are small sections sometimes only patches or stringers, of a mod. gr., gm. grey rock, fol'd parallel the fragments orientation in the breccia zone and in general highly carb'd, but not min'd. Non-sed. sections?

425.0 Only locally some py (xils) min'n, in streaks and lenses, ass. with qtz-carb., in general parallel the fol'n.

437.0-449.0 : A few milky qtz carb str's 20-45° to cn., diag. to the fol'n.

440.0 Elongated fragments orientated at 55° to cn. The rock starts to become sheared.

460.0

460.0 SHEAR ZONE

The fragments are elongated and to distinguish between elongated fragments and matrix is not as easy as before. This is partly due to a change in constituents. The rock is h. grey green, fine gr., well fol'd 45-50° to cn. and the main constituents are chl, carb, qtz, ser ?, with tr of pyrite. Num small lenses of qtz and carb, in general with tr of pyrite. The rock is probably of sed. origin, (meta-greywacke) because of the few small argillitic inclusions.

465.0 1" bluish qtz and carb. tr min'n.

474.0 1" more tuff's, irregular contacts.

494.4 1 1/2" more tuff's, 50° to cn., 5-7% pyrite.

512.0 The rock becomes bocciated like 409.5.

519.6

519.6 META ARKOSE ?

Sharp near (50° to en.) and far (65° to en.) contacts. Grey, mod. gr., containing quartz carb chl a black h. reflecting mineral (xl.) and tr of pyrite. Sl. carb'd.

519.9

519.9 META ARGILLITE

Like 405.0, but fine laminated. A few patchy like carb qtz str's with pyrite.

523.0

523.0 META ARKOSE

Mod. grey, mod. gr., faintly fol'd 70° to en., grading into a fol'n realized by elongated patches of qtz carb or argillite. The meta arkose is sl. to non carb'd, but cut by numerous narrow qtz carb str's.

534.4

534.4 META ARGILLITE

Like 405.0. Lamination 65° to en. Locally some pyrite.

545.0 The argillitic appearance is less well visible because of the qtz carb patches peppered with pyrite. Indication of slumping.

547.9

547.9 QUARTZ META ARGILLITE

Light grey, fine gr. and veined by very narrow carb'c str's. Peppered by pyrite (3-5%) and also some py-peppered qtz carb streaks. The quartz'c sed. is locally dark grey and has in places the appearance of a argillite. Contacts are fairly sharp, but irregular. The laminations are folded. The rock is min'd, almost only pyrite and tr cpy. About 5% sulphides.

561.0 The quartz'c rock grades, with interruptions, into a meta-greywacke. Still with a fair py-percentage (1-3%). In places, tr of a high reflecting metallic mineral, (564.0).

567.8-599.0 : Ground core

567.8-578.0 : Mainly argillitic with several feet of a quartz'c meta greywacke.

574.0 One red fragment of a mod. gr. rock containing quartz, red feldspar (?) and probably some chlorite.

578.0

578.0 QUARTZ CHL CARB ROCK

Light to mod. gr., laminated 75° to en., suspected to be a general characteristic, and fine grained. The rock is harder than a knife. (meta-greywacke). Still min'd but less than the foregoing section. Lots of qtz carb str's. The more quartz'c sections are sl. over-normal. (the hole caved between 609.0-619.0).

607.0 The rock becomes less quartz'c and more sericitic. Still fine to mod gr'd. F. fol'd 55-60° (also cleavage direction). Section of sl. different colours grades into each other. Tr. of sulphides.

610.0 The rock becomes sl. carb'c and at 618.0 the colour changes into mod. grey.

621.4

621.4 META ARGILLITE

Like 405.0. Carb'd. Laminated 60-65° to en. Tr of sulph. The colour is notes black as at 405.0 and the bedding is parallel the lamination. The argillite is cut by a few narrow milky qtz carb str's 15° to en. and diagonally to the lamination.

647.1

647.1 QTZ CHL CARB ROCK

Contact with the argillite is sharp 60° to en., because of the grain size and colour. It is a light grey, fine grained and a fairly mass. rock and harder than a knife. The colour changes suggesting a shift in mineral ratios. Main constituents are qtz sercite (alt'd feldsp?) and carb. Probably a greywacke in origin.

- 658.3 META ARGILLITE Near contact 60° to cn., sharp. Like 647.1, although sl. carb'd and cut by num. very narrow and branching qtz carb. str's, parallel the lamination but also (sl.) oblique to it. Far contact is gradual within 2'. Lamination is 60° to cn.
- 662.3 SEE QUARTZITE 662.3 Like 647.1, but more quartz, faintly fol'd 65-60° to cn. and the amount of carb's varies from nil to mod. Core surface is glossy (high qtz percentage). The colour is light grey or light green, in places patchy.
- 680.0 The quartzite becomes darker and argillitic quartzitic sections alternate with ser. quartzitic ones. (extrusive intercalations?)
- 680.1-682.0 : This rock is fol'd (lamination but also, parallel to contact, some shearing) 50-60° to cn.
- 722.5 Lamination 65° to cn.
- 727.0 META ARGILLITE 727.0 Like 658.3, there are only several qtz carb str's, there are a few more greynake-like sections in between. Lamination 50-60° to cn. Min'a nil.
- 735.3 GEL'G META ARKOSE 735.3 Near contact sharp (interrupting). Mod. grey, local more greenish, fine gr. with a discontinuous lamination (fol'n). The first 10' contain more greynake-like (carb.) intercalations. The meta-arkose is cut by quartz a lot narrower qtz carb str's.
- 763.0 OREY META ARKOSE 763.0 Mod. grey, strikingly homogeneous in colour and texture. Fine gr'd. Near contact missing. Several very narrow qtz carb str's.
- 770.4 (GEL'G) META ARKOSE 770.4 Like 735.3. Near contact missing, suspected to be parallel to the local lamination 55° to cn. The rock is mod. grey and gradually becoming light to mod. grey, is fine gr. and has in general a faintly visible lamination 50-55° to cn. Main constituents are quartz and (probably) feldspar.
- 772.0-775.0 : Indication of slumping with locally replacement by qtz carb.
- 791.0-790.0 : A few patchy like str. of qtz carb epidote.
- 791.5 There seems to be a slight decrease in percentage of qtz. Core surface is less glossy.
- 800.0-804.0 : W. shear-d, 45-50° to cn.
- 809.3 The meta arkose becomes less evenly coloured, contains from here on also po and starts to become more argillitic. Lamination 50° to cn. The rock is cut by num narrow qtz carb str's.
- 814.0 Traces of po and py. In strata parallel and oblique to the lamination, more po than py.
- 820.2 GEL. GRN QTZ FELDSPAR ROCK 820.2 Mod. to light green, fine gr. with mod. gr. porphyritic sections (graded bedding?). Main constituents are qtz chl ser and probably some feldspar. Tr of po and py. Near contact, some po and py, parallel the contact 50° to cn., and ass. with some carb qtz. Lamination 60° to cn.
- 833.0-853.0 : Several 1/8-1" qtz carb str's, 50-55° to cn, diagonally to the lamination of which most of them contain more po, opy and py and of which one at 844.6 also contains some sphalerite.
- 853.0 No more mod. to c. gr. sections.
- 855.0 The rock becomes sl. argillitic. Lamination 50-60° to cn.
- 882.0 END OF THE HOLE 882.0

ASSAY RESULTS

Sample Number	Section of Hole		Length	Au Oz/Ton
	From	To		
N 1153	99.4	100.0	0.6	TR
N 1152	161.0	161.9	0.9	TR
N 1151	231.1	231.8	0.7	TR
N 1152	265.5	263.1	0.6	TR
N 1154	312.8	314.6	1.8	TR
N 1155	329.6	330.6	2.0	.010
N 1156	336.4	337.6	1.2	TR
N 1157	337.6	336.8	1.2	TR
N 1158	338.8	339.4	0.6	TR
N 1159	341.9	343.3	1.4	.010
N 1601	359.7	360.0	1.3	TR
N 1602	360.0	361.0	1.0	TR
N 1603	361.0	362.8	1.8	TR
N 1604	362.8	365.8	3.0	TR
N 1605	365.8	368.0	2.2	TR
N 1606	368.0	370.0	2.0	TR
N 1607	370.0	372.3	2.3	TR
N 1608	372.3	372.7	0.4	TR
N 1609	400.0	407.0	7.0	TR
N 1622	401.4	402.5	1.1	.010
N 1609	400.0	402.0	2.0	TR
N 1600	402.0	404.0	2.0	TR
N 1623	408.5	404.0	4.5	TR
N 1624	404.0	405.0	1.0	TR
N 1611	404.0	406.0	2.0	TR
N 1625	406.0	407.0	1.0	TR
N 1612	407.0	408.0	1.0	TR
N 1626	407.0	409.0	2.0	TR
N 1613	408.0	410.0	2.0	TR
N 1627	409.0	411.0	2.0	TR
N 1614	410.0	412.0	2.0	TR
N 1628	411.0	413.0	2.0	TR
N 1615	412.0	414.0	2.0	TR
N 1629	413.0	415.0	2.0	TR
N 1616	414.0	416.0	2.0	TR
N 1630	415.0	417.0	2.0	TR
N 1617	416.0	417.4	1.4	TR
N 1631	417.0	419.0	2.0	TR
N 1618	417.4	419.0	1.6	TR
N 1619	419.0	421.0	2.0	TR
N 1632	419.0	421.0	2.0	TR
N 1620	421.0	423.0	2.0	TR

N 1633	421.0	423.0	2.0	TR
N 1634	423.0	425.0	2.0	TR
N 1635	423.0	425.0	2.0	TR
N 1636	425.0	426.0	1.0	TR
N 1637	425.0	427.1	1.1	TR
N 1638	427.1	428.6	1.5	TR
N 1639	430.6	440.0	1.4	TR
N 1640	441.2	443.2	1.9	TR
N 1641	451.0	452.7	1.7	TR
N 1642	455.0	457.0	2.0	.010
N 1643	457.0	459.0	2.0	TR
N 1644	465.0	465.5	0.5	TR
N 1645	483.1	483.8	0.7	TR
N 1646	513.6	514.6	1.0	.020
N 1647	521.8	522.3	1.0	TR
N 1648	522.3	523.7	0.9	.010
N 1649	523.7	525.1	1.3	.010
N 1650	537.6	538.9	1.3	
N 1651	538.9	539.5	0.6	TR
N 1954	513.1	515.0	1.9	TR
N 1955	515.0	516.5	1.5	TR
N 1956	516.5	518.1	1.5	TR
N 1957	518.0	520.0	2.0	TR
N 1958	520.0	521.1	1.1	TR
N 1959	521.1	523.0	1.9	TR
N 1960	523.0	523.9	0.9	TR
N 1961	523.9	525.0	1.1	TR
N 1962	525.1	527.1	1.0	TR
N 1963	527.1	528.3	0.9	TR
N 1964	570.7	571.3	1.1	.010
N 1965	590.0	591.8	1.0	TR
N 1966	599.0	600.0	1.0	.010
N 1967	602.7	603.7	1.0	TR
N 1982	635.0	636.0	1.0	.020
N 2100	677.4	678.0	0.6	.010
N 2101	680.7	681.5	0.8	TR
N 2103	710.4	711.2	0.8	TR
N 2123	801.4	802.0	0.6	.020

N 2124	814.0	815.9	0.9	.010
N 2125	820.0	820.7	0.7	TR
N 2126	820.7	821.6	0.9	.010
N 2127	833.2	833.7	0.5	TR
N 2128	844.0	844.6	0.6	TR
N 2129	844.6	846.0	1.4	TR

S L U D G E

N 1490	120	130		TR
N 1491	130	140		TR
N 1492	140	150		TR
N 1493	150	175		TR
N 1494	180	190		TR
N 1495	190	200		TR
N 1496	200	210		TR
N 1497	210	220		TR
N 1498	220	230		TR
N 1499	230	240		TR
N 1164	240	250		TR
N 1165	250	250		TR
N 1166	260	270		TR
N 1167	270	280		TR
N 1168	280	290		TR
N 1169	290	300		TR
N 1170	300	310		TR
N 1171	310	320		TR
N 1172	350	360		TR
N 1173	360	370		TR
N 1174	370	380		TR
N 1765	370	380		TR
N 1766	380	390		TR
N 1767	390	400		TR
N 1768	400	410		TR
N 1769	400	420		TR
N 1770	410	420		TR
N 1771	420	430		TR
N 1772	430	440		TR
N 1773	450	470		TR
N 1774	470	480		TR
N 1775	480	490		TR
N 1776	490	500		TR
N 1777	500	510		TR
N 1778	510	520		TR
N 1779	520	530		TR
N 1780	520	530		TR
N 1781	530	540		TR
N 1782	530	540		TR

NORBEAU MINES (QUEBEC) LIMITED.

N-60 A
Location: 16+008 on Section Line 22+00 NE
11,077.10 N 12,685.94 E
Elevation 1331.21' (on the ice)

Started: Feb. 6-60
Compl. : Feb. 9-60
Logged by: R.E. Archibald.

Dip: 15°
Bearing: N56°W
Core: AXF
Length: 106.0'

0.0 CASING 106.0

106.0 END OF HOLE

Abandoned in overburden.

HEMBRAU MINES (QUEBEC) LTD.

N-60

Location: 16-008 on Section Line 22-00 NE
11,077.10 N 12,436.94 E
Elevation 1391.21' (on the ice)

Started: Feb. 2-60
Compl. : Feb. 5-60
Logged by: D.H. Archibald.

Dip: 45°
Bearing: N 55° W
Core: AXF
Length: 112.0'

0.0 CASING 112.0
112.0 END OF HOLE

Abandoned in overburden.

NORANDA MINES (QUEBEC) LTD.

D. D. N. 59

Location: 10,897.09 N 11,053.14 E
 Elevation: 1331.21 (On the ice)
 4+00' South on section line 12+00 NE

Started: Jan. 30-1960
 Compl. : Feb. 6-1960
 Logged: D.E. Archibald.

Dip at Collar: 45°
 at 300.0' 33.5°
 at 640.0' 20°

Length: 650.0'
 Bearing: N 56° W
 Core: AXT

Cemented to collar, 23 bags used.
 Depth of water at set-up = 70.0'

- 0.0 CASING 0.0
- 151.2 TUFFT Very dark grey to black, aphanitic, highly silicious. Low carbonate. It contains a few tiny irregular carbonate stringers. Foliation 70° to cn., indicated by dark grey and black colored bands.
- 151.6 META-GRYSWACKE Contact missing, light grey green in colour. Fine grained, highly chloritized, high carb. It consists of tiny feldspar grains in a chloritic matrix. The percentage of these constituents vary from place to place. It contains tr. pyrite., patches high in carb.
- 157.5 ARGONNITE Contact sharp 75° to cn. Light grey in colour. It consists of many angular fragments up to 1/5" in diameter set in a chloritic matrix. The fragments consist of black slate and light grey green material, chert. High carb., tr py. It contains an occasional tiny carb. vein averaging 50° to cn. There is an indication of foliation 60° to cn., indicated by lamination of the black slate fragments.
 157.5-159.8 : 1/8 pyrite.
 159.8 Fragments get smaller.
- 160.7 ARGILLITE Contact sharp 65° to cn. Dark grey to black in colour, aphanitic. Medium carb content, contains many tiny irregular carb. stringers. Good indication of foliation 65-70° to cn., indicated by dark grey and black bands. Slightly graphitic.
 161.2 Small patch of pyrite.
 163.1-163.7 : Broken core.
- 165.6 META-GRYSWACKE Same as 151.6-157.5, contact missing, only contains carb. in patches.
 Tr. py.
 166.2 1/2" calcite vein 40° to cn.
 169.6 1/2" calcite vein 50° to cn.
 173.9 1/2" calcite vein 50° to cn.
- 178.3 ARGILLITE Same as 160.7-165.6
- 179.4 META-GRYSWACKE Same as 151.6-157.5, contact 50° to cn., but contains carb. only in patches. It contains many tiny irregular carb. stringers. Tr py.
 178.5 Indication of foliation 65° to cn., by light green and grey coloured bands.
 204.2 2" patch of calcite.
 206.7 Slight indication of foliation by banding 55° to cn.
 208.3 1/3" carb. chlorite vein 50° to cn. It contains 20% pyrite.

- 215.0-216.4 : Section lighter green, highly silicious, glassy, conchoidal fracture.
- 218.0-219.0 : Slight indication of foliation 60° to cn.
- 226.4 Indication of foliation by banding 60° to cn.
- 232.3-233.0 : Zone containing iron oxide.
- 232.8 Broken calcite vein, contains x'lls well formed, at one end, cavity filling.
- 237.0-237.8 : Ground core.
- 238.8 Good indication of foliation by banding 60° to cn.
- 238.4-239.8 : Highly silicious section as 215.0-216.4.
- 239.6-240.0 : Ground core.
- 241.8-242.6 : Lost core.
- 242.6-243.4 : Ground core.
- 243.4-245.0 : Lost core.
- 245.0-248.2 : Highly silicious section as 215.0-216.4
- 245.5-247.6 : Ground core.
- 251.6 Rock becomes nil in carbonate.
- 251.7-252.0 : Highly silicious section as 215.0-216.4
- 252.3-255.9 : Lost core.
- 257.1-257.6 : Lost core.
- 257.6 Rock becomes highly silicious as 215.0-216.4 with only a couple of small sections not silicious. It contains a few tiny irregular carb. veinlets.
- 260.7-262.0 : Lost core.
- 264.3-265.0 : Slight indication of foliation by banding 50° to cn.
- 267.7-270.0 : Lost core.
- 275.0-276.0 : Slight indication of foliation by banding 55° to cn.
- 281.5-282.0 : " " " " " " " " "
- 298.1-298.5 : " " " " " " " " 60° to cn.
- 301.1-301.9 : Good indication of foliation by banding 60° to cn.
- 315.0-316.1 : Lost core.
- 317.4-318.5 : Ground core.
- 318.5-319.1 : Lost core.
- 320.0-323.5 : Slight indication of banding 60° to cn.
- 338.0 15-20% of the core starts to become broken.
- 339.4-341.5 : Lost core.
- 341.6-345.0 : Many tiny vuggy carb. stringers.
- 350.0 Rock starts to contain an occasional tiny vuggy carb. str., and a few solid carb. stringers averaging 50-60° to cn.
- 357.5-360.0 : Lost core.
- 360.0 Rock becomes less silicious as 151.6-157.5 but contains a few short section high in silica.
- 373.3-375.0 : Lost core.
- 375.2 Rock begins to contain patches low in carbonate.
- 381.2-381.9 : Lost core.
- 382.8-383.7 : Lost Core.
- 385.0-386.0 : Lost Core.
- 391.1-391.9 : Lost Core.
- 400.9-402.5 : Lost Core.
- 404.8-405.8 : Lost Core
- 407.6-408.7 : Lost Core
- 409.8 Rock starts to become light green in colour, soft, very fine grained (becomes slightly talcose?).

411.3-411.6 : Lost core.

411.0 Rock becomes very light green almost buff in colour, soft, very fine grained (highly talcose?). Contains a little diss. py.

415.8 Good indication of foliation 45° to cn.

419.6 Rock becomes light gray.

421.2-422.3 : Contains many tiny py-carb. veins 50° to cn., paralleling the banding.

423.6-425.0 : Lost core.

427.6

427.6 ARDILLITE

Contact broken, Black in colour, very fine grained. Contains a few carb. stringers, which average 50° to cn., mostly paralleling the foliation, are partly or wholly replaced by pyrite.

433.1 Much of the rock becomes brecciated.

433.9-435.0 : Lost core.

435.0 Rock contains many carb. milky and blue qtz patches of which a few are partly or wholly replaced by pyrite.

437.3-438.5 : Lost core.

441.0-441.9 : Lost core.

444.0-445.0 : Lost core.

449.6

449.6 META-QUARTZITE

Contact missing, light grey in colour. Coarse grained. Made up mostly of qtz grains. Tr py.

450.5 $1/3$ " pyrite vein 50° to cn.

454.0

454.0 GREYWACKS

Contact very gradational, it becomes light green. Med. gr. similar to 151.6-157.5.

458.6 Starts to grade into finer grain.

462.0 Begins to contain an occasional carb or qtz carb vein, a few averaging 65° to cn., but most are very irregular.

478.9-479.1 : Milky qtz, chlorite vein upper contact 40° to cn., lower contact very irregular.

501.3 Slight indication of foliation 40° to cn., indicated by tiny light grey bands high in silica approaching quartzite.

511.0

511.0 ARKOSE

Contact very gradational, begins to contain less ferromagnesiums and is made up mostly of feldspar and some qtz. Med. grained, slightly sericitic. It breaks at 30° to cn. It is light to med. grey in colour.

516.0 Two tiny stringers of pyrite.

527.0 Good foliation 40° to cn., indicated by bands of different colour.

539.0

539.0 ARDILLITE

Contact very gradational, similar to 160.7-165.6, dark grey to black in colour, very fine grained, contains good indication of foliation $50-60^\circ$ to cn., bedding. Contains a few tiny irregular carb stringers and patches. In a few spots there are many tiny carb patches along the foliation. Contains an occasional tiny patch or stringer of pyrite.

544.4 $1/3$ " pyrite, carb vein 45° to cn.

585.8 1" milky qtz vein 40° to cn., 20% pyrite.

602.0-603.0 : Milky qtz carb vein, upper contact broken, lower contact very gradational, averaging $75-80^\circ$ to cn.

603.5 Small patch of graphite.

605.7-605.16 : Milky qtz carb vein, upper contact broken but believed to be about 40° to cn., contains a patch of graphite, lower contact broken but believed nearly flat lying.

608.0-608.5 : Milky qtz carb vein, contacts broken, it contains a patch of graphite.

608.8-610.0 : Lost core.

611.2-611.3 : Contacts and much of the qtz is broken. The upper four inches contains many patches of chlorite with a little graphite and a tinge of blue qtz.

611.3 : Tiny patch of epy.

612.4-613.2 : Lost core.

615.6 1" milky qtz carb vein 40° to cn.

621.3

621.3 ANKOSE

Contact sharp 60° to cn. Similar to 511.0-539.0, it is med. to dark gray in colour. Contains a few tiny irregular carb stringers averaging $0-30^{\circ}$ to cn. Contains indication of foliation by banding $50-55^{\circ}$ to cn.

626.2

626.2 ANGILLITE

Contact sharp 75° to cn., similar to 160.7-165.6, foliation $50-55^{\circ}$ to cn.

629.6-629.2 : 5% pyrite in patches.

630.6

630.6 ANKOSE

Contact mostly broken, but believed about 30° to cn., similar to 511.0-539.0, light to med. gray. Contains many tiny irregular carb stringers averaging $0-30^{\circ}$ to cn., an occasional tiny py stringer.

641.0-641.5 : Section highly silicious, glassy in appearance.

645.6-647.7 : Section similar to 641.0-641.5

649.8-650.0 : Section similar to 641.0-641.5

650.0

650.0 END OF HOLE

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole Front</u>	<u>Feet</u>	<u>Sample Length</u>	<u>Au Oz/Ton</u>
N 842	154.1	155.0	0.9	.010
N 850	157.1	158.0	0.9	TR
N 843	157.6	158.6	1.0	.010
N 844	158.6	159.6	1.0	TR
N 845	172.3	172.6	0.3	TR
N 846	188.8	189.6	0.8	TR
N 847	209.1	209.6	0.5	TR
N 848	220.7	221.3	0.6	TR
N 849	256.1	257.1	1.0	TR
N 901	418.1	418.4	0.3	.020
N 902	419.2	419.6	0.4	.010
N 903	421.5	422.5	1.0	.020
N 904	427.5	428.5	1.0	.010
N 905	435.2	435.6	0.4	.010
N 906	442.3	443.1	0.8	.020
N 907	443.1	444.1	1.0	.010
N 908	446.2	447.2	1.0	TR
N 909	585.5	586.0	0.5	.010
N 910	610.0	610.8	0.8	TR
N 911	610.8	611.4	0.6	TR
N 912	628.4	629.3	0.9	TR

SLUDGES

N 840	150	160	TR
N 841	160	170	TR
N 595	200	210	TR

NORSEMAN MINES (QUEBEC) LIMITED

D. D. H. 58

Location: 10,599.19 N 11,112.64 E
Elevation: 1405.92
600' S on section line 10-00 NE

Started: Jan 22, 1960
Compl: Feb 1, 1960
Logged by: M. Honey,
P.K. Geisterfer and
D. Atchibald.

Dip at Collar: 90°
at 400': 80°
at 600': 75°
at 1200': 70°

AZIMUTH: 0°
LENGTH: 1290.6
CORE: AKT

CEMENTED TO COLLAR BAGS USED

8.0 CASING

8.0 ALT'D BICHITE

8.0

C.g., soft, dark green. Highly chlor'd, high clay min, mod. to (locally) low secondary feld, mod. epidote, sil, mod. to low carb. Occas. irregular hairline epidote stringers. Occas. Carb - milky quartz stringer, gen. 10° to 50° to en. Tr. py.

8.0 - 15.0 : Joints rusty.

68.3 - 69.6 : Irregular (max. 1") epidote-milky quartz-carb-chlor stringers sub-parallel to core.

108.0 - 119.0 : Irregular epidote stringers common.

117.8 : 2" Irregular carb - epidote veinlet.

120.7 : 5" Zone irregular carb-chlorite-quartz (milky) veinlet.

122.0 : 1/2" Partially pink-stained carb stringers 10° to en.

123.0

123.0 ALT'D BICHITE

C.g., soft, dark green. Highly chlor'd, epid'd. Mod. secondary feld, sil. Low clay min, low to nil carb. Tr. py. Occas. carb - milky quartz veinlets.

131.6 : 2" Carb - epid - milky quartz veinlet. Contacts irreg.

132.7 : 2" Carb - epidote - veinlet. Contacts irreg.

149.2 : 3" Patch of irregular white carb - pink carb - milky quartz stringers surrounded by epid'd rock.

174.5 : 8" Chlorite - epidote - carb patch.

179.0

179.0 ALT'D BICHITE

Contacts gradational. Rk. as 8.0 to 123.0 but locally highly carb'd. Occas. irregular carb, epidote stringers. tr.py.

218.9 : 1" Cloudy patch carb.

221.8 : 2" Irreg. carb-milky quartz-chlorite veinlet.

233.0

233.0 ALT'D BICHITE

Contacts very gradational. C.g., soft, dark green. Highly chlor'd epid'd, high clay min, mod. to low secondary feld, carb. Tr. py. Occas. irregular epidote-carb-milky quartz stringers.

261.8 : 1st Carb - milky quartz veinlet 20° to cn.
 271.3 : 2nd Patch epid'd (30% epid) rk.
 279.1 - 279.7 : Patch epid'd (40%) rk.
 290.0 - 298.0 : Patches carb - chlorite common. Also patches co.
 rounded to irregular grains white to pink secondary (?) fold.

305.0

305.0 ALT'D DIORITE

Contact very gradational. As 123.0 to 179.0 . Occas. carb -
 milky quartz veinlets, generally 5° to 20° to cn. Tr. py.
 320.9 : 2nd Irregular carb - chlorite - veinlet.
 322.3 : 1/2 Irregular composite carb - chlorite - milky quartz
 veinlet.
 327.9 : 1/2nd Milky quartz - carb veinlet 20° to cn.
 340.0 : local patches of abundant co. secondary fold, generally
 white but in part pink-tinted.
 342.6 : 1st white carb veinlet at about normal to core.
 355.7 : 1/2nd Carb veinlet 10° to cn.
 356.0 - 376.0 : High percentage co. secondary fold. throughout.
 358.0 : 1st Carb veinlet 30° to cn.
 367.4 : 1/2nd Carb - chlorite veinlet 10° to cn.
 376.0 - 409.0 : Rk mainly extremely highly epid'd, sil'd. Very
 num. secondary fold.
 406.5 : 2nd Cloudy carb - chlor. veinlet.
 409.0 - 415.0 : Rk. in part f.g. - appearing, heavily carb'd.
 415.0 - 423.0 : As 376.0 to 409.0

423.0

423.0 ALT'D DIORITE

As 233.0 to 305.0 . Contacts gradational. Local patches co. second-
 ary fold. Occas. carb - chlorite - epidote - milky quartz veinlets
 Tr. py.
 438.0 - 439.0 : Irregular 1/2nd veinlet carb - chlorite - milky quartz
 sub-parallel to core.
 483.5 - 484.5 : Irregular patches, veinlets? of cloudy carb - chlor
 w. minor milky quartz.
 517.9 : 1st Cloudy carb-chlorite veinlet at about 20° to cn.
 519.0 : 2nd Cloudy carb-chlorite veinlet at about normal to core.
 522.4 : 2nd Irregular milky quartz - carb - chlorite veinlet.

524.0

524.0 ALT'D DIORITE

Contacts very gradational mainly f.g. in appearance but suspected
 to have been c.g., dark green, soft, highly chlor'd, carb'd, mod.
 clay min, mod. to low epid, low to nil secondary fold. Num. irreg.
 carb - milky quartz stringers. Tr. py.
 566.0 - 571.0 : Local sch. and shearing (?) at 40° - 50° to cn.
 marked irreg. of bands of chlor - carb.
 596.0 - 604.0 : Carb, percentage locally low.
 604.0 : Mod. carb'd. Alt'd diorite is coarse gr. type not well de-
 fined grain boundaries. Like 524.0
 640. - 641.6 : Local foliation at 70° - 80° to cn. shown by align-
 ment of clay minerals.

654.6

654.6 ALT'D DIORITE

Contact gradational coarse grained, soft dark green, highly chlor'd

moderate carbonate with patches high epidote, low clay minerals, low secondary feldspar. A few irregular carb. milky quartz stringers 30 - 63° to cn. Tr. py.

666.1 : 2ⁿ Milky and bluish quartz carb vein 40° to cn. 1 1/2 py.

666.4 : 2 1/2ⁿ Milky and bluish quartz carb vein 30° to cn. 2 1/2 py.

668.7 : 3ⁿ Quartz tourm., 50 - 45° to cn. Str. and some py.

671.6 - 673.9 : Fine gr'd section.

674.6 : 4ⁿ Bluish quartz stringer some py, 40° to cn.

695.5 - 698.0 : Lighter coloured "bleached" section. Light grey green, mod. gr'd, more ser'd than chl'd, mod. content of grey cl. minerals, sl. carb; silicified. Faintly fol'd (as the "HR") 45 - 50° to cn. Contains 3 bluish, but also milky, quartz stringer of 1/2 - 1 1/2ⁿ with varying amount of py. to 10%. Far contacts fairly sharp 45° to cn.

698.0 : Still the same kind of air alt'd diorite. Mod. coarse gr. mod. dark green, containing chlorite-quartz-carb-serocite (varying amount) - epidote (mostly confined to stringers) and traces of sulph. There are several quartz (bluish) with or without carb., str. 20-75° cn, the more wider are around 25-35° cn. Faint indication of fol'n suspected as 1/2ⁿ, 40° cn. Silicified and sl. carb'd. Increase in carb'n to mod. at 714.0.

712.0, 712.7 and 713.4 : Bluish qtz str. (1ⁿ-2ⁿ) 25-35° cn. of which only the last mentioned contains more than .5% py (nearly 50%)

711.0-713.0 : The rock contain more epidote.

715.6 1ⁿ qtz str., 25-30° cn. 5% py and tr. highly reflecting met. crystal mineral, supposed asp.

727.0 Fol'n disappears.

757.0 Patchy like str. of carb. and milky qtz almost parallel the core axis.

763.0 Dotted type of text. is gradually coming in. In places faintly fol'd (45-50°) cn. by the grey dots. The alt'd dio. seems to be less coarse, mod. to f. gr., mod. dark coloured, h. chl'd, only tr. carb'd. Silicified. Several barren patchy like qtz carb. str's.

809.0 Gradually change into mod. gr. type of text, locally appearing mod. coarse gr. by silicific'n (?). Sl. to non-carb'd. Grain boundaries do not to well defined. Colour is mod. gr. A few carb. qtz str's 10-45° cn.

846.4-867.3 : ground core.

882.0 The alt'd diorite becomes gradually mod. coarse gr. with rather well defined grain boundaries. Sl. fol'd in places. Far contact sharp 45-50° cn.

892.0 Fine gr d, dotted type of text. at 892.0. Become mod. gr. (irr. to gradual contact) still dotted.

903.0 Decrease in carb. to low.

922.8 Coarse gr. type of text., near contact sharp 50° cn. Well outlined gr. boundaries. In places less coarse (by alteration ?) and containing more epidote. Sl. carb'd.

929.0 Indication of slip (sp-chl. str's) over 2 1/2ⁿ at 40-45° cn.

934.0 1 1/2ⁿ qtz-carb. str., 40° cn., containing some dark green chlorite and an orange red min.

939.8 Fine gr. diorite type, dotted type of texture. Near contact fairly sharp 30-35° cn. Sl. carb'd.

- 956.1 Indication of slip (ep-chl-str's, qtz eyes) 55° on. over 4". Tr of sulphides.
- 958.0 Dotted type of text. is less pronounced.
- 963.5-981.0 : Coarse gr. type to text. with well outlined grains with a few fine gr. sections of alt'd diorite in between.
- 970.2 2nd ep-carb-qtz-str., 40-500cn.
- 981.0 Fine grained type of text., in places a few patches of pyrite. low carb. percentages.
- 996.0 Coarse gr. type. Well defined grains. Low to Moderate carbonate, high epidote content, a little secondary qtz inter-grain with the feldspar. High secondary feldspar in spots, it becomes porphyritic.
- 1010.5 Alt'd diorite, fine grained, contact missing but believed fairly sharp and flat lying. Moderate carbonate. Contains a few sections of coarse grained alt'd diorite.
- 1018.2 : 1st carbonate, chlorite vein 10° to cn. contains a couple of small veins of epidote.
- 1022.4 : 2nd carbonate, chlorite contact very irregular but seems to be nearly flat lying.
- 1023.4 : 1 1/2nd carbonate chlorite vein 10° to cn.
- 1024.3 : 1st carbonate chlorite vein irregular but seems to be nearly flat lying.
- 1024.8 : 1st carbonate chlorite vein 10° to cn.
- 1026.1 : 1st carbonate chlorite vein 20° to cn.
- 1028.3 : 1/2nd carbonate chlorite vein 30° to cn.
- 1036.3 : 1st patch of carbonate chlorite.
- 1039.8 : 1/2nd carbonate chlorite vein 30° to cn.
- 1047.8 : 1st Carbonate milky quartz vein 25° to cn.
- 1048.4 : 6th section indicating shearing at 75° to cn. by chlorite and carbonate veinlets it contains 1 1/2 py.
- 1048.6 : 2nd section very slight indication of shearing at 75° to cn. by carbonate chlorite veins.
- 1022. - 1049.8 : Rock is high in carb in patches but near a carb chlorite vein it is low to nil in carb.

1048.6

1048.6 ALT'D DIORITE

Rock seems to become slightly bleached to lighter green. Contact very gradational. High carb. increase in amount of pyrite. Contains many tiny quartz carb veins. Some of the blue but mostly it is milky.

- 1062. : 1st Milky quartz carbonate vein 70° to cn.
- 1065.6 : 1/2nd Blue quartz carbonate vein 35° to cn.
- 1063.6 : 1/3rd Blue quartz carb vein 25° to cn.
- 1073.4 : 1/3rd Irregular fine quartz carbonate vein 80° to cn.
- 1074.9 : 1st Blue quartz carb vein 30° to cn.
- 1076. : 1/2nd Blue quartz carb vein 45° to cn.

Rock becomes increasingly bleached as you approach the vein almost to a light grey.

1080.5 : Increase in pyrite to 2%.

1080.8

1080.8 NORSEAN VEIN

Upper contact missing, lower contact very irregular but seems to be 50 - 60° to cn. blue quartz 5 1/2 pyrite which seems to be mostly in tiny veinlets which run at about 35° - 45° to cn.

1081.9 : 1/3" pyrite vein 40° to cn.

1082.1 - 1082.9 : Slight indication of foliation at 40° to cn. indicated by tiny dark lines of py. and sericite ?

1082.9

Bleached to nearly light grey high carb. fine grained tr. py. Contains a few tiny irregular carb. veinlets.

1083.8 : 2" *one 13 pyrite.

1085.6

Contact missing but believed gradational fine grained, high carbonate becoming coarse grained in a few sections. Contains a few tiny milky quartz carb. veinlet. tr. py.

1091.4 : 5" Patch of carb. chlorite contacts irregular.

1097.5 : Fine grained alt'd diorite takes on sparkles appearance due to the tiny grey clay mineral.

1098.8 : 1/3" Milky quartz carb vein with a trace of blue quartz.

1101 : 2" Patch showing very slight indication of foliation by alignment of the clay minerals.

1102.8 : 2" Milky quartz carb vein upper contact very irregular. Lower contact 40° to cn.

1109.6 : 2" Zone containing patches of milky and blue quartz and a trace of py.

1116.7 : 1" Chlorite carbonate vein very irregular but averages 75° to cn.

1118.2 : 1" Zone rich in chlorite and carbonate.

1123. - 1126 : A section containing porphyroblasts of clay minerals and poorly formed feldspars.

1130.4 - 1134.9 : Same as 1123 - 1126.

1147.6 : 1 1/2" Patch of chlorite and carbonate.

1152.5 - 1157 : Section containing many carbonate chlorite patches.

1155.2 - 1155.6 : Section containing patch of carbonate chlorite and 1/2 py.

1155 : Rock loses most of it's speckled appearance with it only occurring in a few sections.

1193.1 : 1/3" Milky quartz carbonate vein 50° to cn.

1201 : 1/2" Chlorite carbonate vein 35° to cn.

1205.2 : Fine grained alt'd diorite becomes nil in carbonate.

1209 : 1" Chlorite carb vein 45° to cn.

1211.9 - 1212.6 : Lost core.

1213. : Rock becomes epidotized with a few small irregular epidot stringers occurring.

1215.7 : 1/2" Chlorite carbonate milky quartz stringer 15° to cn.

1224.6 : 1" Chlorite carbonate vein 10° to cn.

1233.

1233. ALT'D DIORITE

Coarse grained. Contacts gradational, dark green porphyritic texture destroyed by poorly formed porphyroblasts of secondary feldspars and blue quartz eyes, high epidote, highly silicious, nil carbonate. Contains a few traces of pyrite, low to med. clay minerals. It contains sections of the fine gr. alt'd diorite with nil carbonate.

1258.

1258. ALT'D DIORITE

Fine grained mil carbonate and epidote with a very occasional tiny epidote stringer. It contains a few tiny irregular carbonate stringer.

It contains a few short sections of coarse grained type.

1259.6 : 1/2" Carb chlorite vein 45° to on.

1256.7 : Two 1/3" Blue quartz vein 40° to on.

1280.4 : A few small patches of blue and milky quartz.

1281.6 : 1/4" Milky quartz, blue quartz and carbonate vein 45° to on.

1281.7 : 1/4" Milky quartz vein 10° to on.

1290.6

1290.6 END OF HOLE

D. Archibald.

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u>	<u>To</u>	<u>Sample</u> <u>Length</u>	<u>As</u> <u>Sn/Ton</u>
N 851	665.2	665.7	0.5	.010
N 852	668.5	669.4	0.9	.020
N 853	674.3	675.0	0.7	TR
N 855	711.7	713.4	1.7	.030
N 856	715.3	716.3	1.0	.030
N 854	772.0	773.0	1.0	.020
N 582	1056.7	1057.4	0.7	.020
N 584	1065.0	1065.7	0.7	TR
N 585	1067.4	1067.9	0.5	TR
N 586	1069.5	1070.0	0.5	TR
N 587	1071.0	1072.0	1.0	TR
N 588	1072.4	1073.0	0.6	TR
N 583	1072.0	1073.0	1.0	TR
N 589	1073.0	1073.7	0.7	TR
N 590	1074.6	1075.0	0.4	TR
N 591	1075.8	1076.6	0.8	TR
N 568	1079.0	1080.0	1.0	.010
N 569	1080.0	1080.8	0.8	.020
N 564	1080.0	1081.2	1.2	.040
N 565	1081.2	1081.8	0.6	.150
N 567	1081.8	1082.9	1.1	.200
N 570	1082.9	1084.0	1.1	.020
N 571	1084.0	1085.0	1.0	.020
N 592	1088.0	1088.5	0.5	TR
N 593	1089.3	1090.0	0.7	TR
N 594	1283.4	1284.0	0.6	TR

S L U D G E S

N 696	10	20	TR
N 697	20	30	TR
N 698	30	40	TR
N 699	40	50	TR
N 700	50	60	TR
N 715	60	70	TR
N 716	70	80	TR
N 717	80	90	TR

N 720	89	100	TR
N 721	100	110	.010
N 722	110	120	TR
N 617	120	130	TR
N 618	130	140	TR
N 619	140	150	TR
N 650	150	160	TR
N 751	160	170	TR
N 752	170	180	TR
N 752	180	190	TR
N 754	190	200	TR
N 755	200	210	TR
N 756	210	220	TR
N 757	220	230	TR
N 758	230	240	TR
N 759	240	250	TR
N 760	250	260	TR
N 761	260	270	TR
N 762	270	280	TR
N 763	280	290	TR
N 764	290	300	TR
N 765	300	310	TR
N 766	310	320	TR
N 767	320	330	TR
N 768	330	340	TR
N 769	340	350	TR
N 780	350	360	TR
N 781	360	370	TR
N 782	370	380	TR
N 783	380	390	TR
N 784	390	400	TR
N 785	400	410	TR
N 786	410	420	TR
N 787	420	430	TR
N 788	430	440	TR
N 779	440	450	TR
N 790	450	460	TR
N 781	460	470	TR
N 782	470	480	TR
N 783	480	490	TR
N 784	490	500	TR
N 785	500	510	TR
N 786	510	520	.010
N 787	520	530	.010
N 788	530	540	.010
N 789	540	550	TR
N 727	550	560	TR
N 822	600	610	TR
N 823	610	620	.010
N 824	620	630	TR
N 825	630	640	TR
N 826	640	650	TR
N 827	650	660	.010
N 828	660	670	TR

N 829
 N 830
 N 831
 N 832
 N 833
 N 834
 N 835
 N 836
 N 837
 N 838
 N 839
 N 840
 N 841
 N 842
 N 843
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NORANDA MINES (QUEBEC) LIMITED

D. D. H. N-57
 Location: 10,558.08 N 10,828.27 E
 Elevation: 1383.73
 4-00S on Section Line 8-00 NE

Started: Jan. 20/60
 Compl. : Feb. 6/60
 Logged by: F. L. Money,
 F. K. Geisterfer,
 D. E. Archibald.

Dip at Collars:	90°	Azimuths:	0°	
500.0'	71°	S 21° W)		Pajari Tests
1000.0'	50°	S 20° W)		
1170.0'	42°	S 22° W)		
1000.0'	51°	Acid Test		

Length: 1175.0'
 Core : AXT
 Cemented to collar, 20 bags used.

0.0 CASING 8.0

8.0 ALT'D DIORITE
 C.g., soft, equigranular, dark green, highly chlor'd, mod. to highly carb'd, high percentage clay min., low epid., sil. Occas. irreg. carb. stringers. Tr py.
 11.1 1" composite carb-chlor. vein, 70° cn.
 13.7 1" cloudy carb. veinlet 5° cn.
 54.0 1" carb. veinlet 50° cn.

78.8 ALT'D DIORITE
 Contacts gradational, c.g. to m.g., porphyroblastic, highly chlor'd, mod. clay min., highly epid'd., mod. to low feld as large irreg. fresh white porphyroblasts, mod sil'd, low to nil carb. Very occas. irreg. milky qtz-carb. stringers. Occas. blue qtz eyes. Num. irreg. epid. stringers.
 101.5 1" rose-tinted carb. veinlet 10° cn.
 114.5-118.0 : Most of feldspar replaced by co. aggregated clay min.
 130.0-145.0 : Mod. to high carb.
 175.0-175.3 : Epid'd zone, gradational contacts. About 50% epid.
 179.2-181.2 : " " " " " " " " , to 30% epid.
 180.1 2" milky qtz-carb-chlor. veinlet. Contacts irreg.
 197.4 1/2" milky qtz-carb. veinlet 15° cn.
 210.9 1" partially pink tinted qtz-carb. stringer 10° cn.
 214.2 1" cloudy patch carb.
 230.0-256.2 : Mod. Carb.

256.2 ALT'D DIORITE
 C.g., soft, equigranular, dark green, highly chlor'd, highly carb'd, high percentage clay min, mod. epid., occas. secondary feld. Numerous qtz-carb. stringers, irreg., various angles, many in range 50-80° cn. Tr py.
 279.2 1" milky qtz-carb. veinlet 50° cn.
 319.8 1" irreg. carb. veinlet.
 322.1 6" zone irreg. milky qtz-carb.-chlor. stringers.
 324.4 4" zone irreg. milky qtz-carb.-chlor. stringers.
 328.0-328.7 : Irreg. patches qtz-carb.
 331.5 3" irreg. patch carb-chlor.
 337.2 2" carb-minor qtz veinlet 100 cn.
 355.5-356.2 : Composite epid-carb-milky qtz-chlor irreg. veinlet-alteration zone.

- 392.3-393.0 : Irreg. $\frac{1}{2}$ " milky qtz-carb-chlor veinlet sub-parallel to core.
438.0-604.0 : Locally carb. low to mod., mod. clay min., secondary feld. quite common.
457.1 2" patch or irreg. veinlet epid-carb-milky qtz.
518.0-518.5 : Sev. irreg. ($\frac{1}{4}$ " max. dia.) blebs, xlls py.
537.0-542.0 : " " " " " " , xlls py, po (?).
558.0-565.0 : Irreg. blebs, xlls py occur frequently (about 1 per 3 core-inches). Always $\frac{1}{2}$ " max. diameter, or less, generally less.
576.9 5" composite stringer zone at about 45° cn. Consists of bands of carb. chlor with minor bluish qtz, milky qtz, epid.
591.0 4" carb-epid-chlor veinlet ? Very minor pale bluish and milky qtz.
593.9 4" epid'd zone (60% epid.) around irreg. pale blue qtz patch or stringer.
601.0 Num. irreg. carb-milky qtz stringers, veinlets.
611.5-613.7 : About 0.5% py as co. cubic xlls.
618.2-620.0 : Irreg. patches, stringers of carb and milky qtz and chlorite. Tr py.
633.3 2" blue qtz-carb veinlet at 70° cn. Tr py.
631.0-647.0 : Strong foliation in core at about 45° cn. Locally f. g. appearing rock due to shearing (?).
638.2 Irreg. blue qtz-milky qtz-carb stringer or patch.
646.3 2" dark blue qtz veinlet 50° cn. Minor white carb.
654.0 1" blue qtz veinlet 50° cn.
657.0-666.0 : Num. very dark blue qtz "eyes".
666.5 2" carb. veinlet 50° cn.
668.3 $\frac{1}{2}$ " irreg. blue qtz veinlet.
675.5-680.0 : Bleached zone. Highly carb'd. About 2% py throughout, 1% po., Tr epy, minor sphal (?), or siderite (?). Irreg. very pale blue to milky qtz stringers at 677.0 and 678.5, both less than $\frac{1}{2}$ " at the widest. Equivalent to the Horbeau vein ???
695.4-696.9 : About 2% py.
697.0-699.0 : Sev. irreg. blue qtz-milky qtz-carb. veinlets, stringers.
700.0-707.7 : Num. patches, irreg. stringers milky and blue qtz, white and pink carb. with about 1% assoc. py, po.
707.7-711.0 : Stringers, patches, py, po as 700.0 to 707.7. Rock bleached, highly carb'd.
711.0
U.S. broken, missing. Vein consists of mottled dark blue to light blue to locally milky qtz. Minor pink to white carb. cementing fractures. Tr py except where noted.
711.0-712.3 : Num. pink carb. stringers. Minor py, epy, po, apparently not assoc. with carb.
713.1-713.5 : About 2% py.
714.2-715.1 : About 1% py.
715.1 At least 1% py throughout. Local sections of 5% to 10% py stringers and coarse cubic py (up to $\frac{1}{2}$ " diameter).
719.0 4py stringer.
720.0-720.5 : Minor epy as small xlls, in stringers.
724.7-725.9 : About 1% epy, as irreg. stringers.

711.0 HORBEAU VEIN

728.5-730.5 : Minor spy, tr siderite or sphal., cpy. Usual minor py.

730.5

730.5 ALT'D DIORITE

U.C. irreg. but about 50° cn., lg appearing, pale grey, soft, bleached, carb'd. In part highly mineralised. Sev. irreg. blue qtz stringers.

730.5-731.0 : About 20% spy, minor po, sphal or siderite.

731.0-731.9 : Minor spy, siderite?, py.

731.9-733.h : About 2% py, 1% sphal. or siderite, the latter as elongate stringers, the former as stringers, coarse cubic xls.

733.h-734.h : Minor py.

734.h

734.h ALT'D DIORITE

Coarse grained type, not well defined gr. boundaries. H carb'd, silicif'd and still some py (tr to .5%). In places patches of patchy-like str's of bluish qtz.

745.0 3" bluish qtz str, near ctct 60° cn., far ctct 20° cn. No py.

745.8 1" bluish qtz str, 35-10° cn. no py.

747.0 There is a decrease in grain size to mod. gr'd, h. alt'd diorite, still h. carb'd.

750.h-752.1 : Patches of bluish qtz and 5% po.

754.0 Alternation of fine grained and mod. gr. sections out by several qtz carb. str's (various cn's) and mod. carb.

770.0 + - Decrease in carb'n to sl., in places mod. Still several to num. arb. qtz. patchy like stringers.

794.0 The same alt'n, coming in of the dotted type of text. Carb. is sl., locally mod. to high. Several to num. carb. qtz str's.

797.5 Indication for slipping 65° cn.

818.5 End of dotted type of text. Mod. dark green, fine gr'd type of alt'd diorite. Mod. to high carb'd, only a few carb qtz str's. Patchy like str's of epidote between 819.0-825.0 with intergranular epidote at 824.0 with 15-30° cn. Sp. stringers.

833.h-834.h : Section of coarse grained alt'd diorite, medium green, soft, highly chloritized, moderate carbonate, high epidote, mod. clay minerals, moderate secondary feldspar, trace py., contacts sharp, upper one irregular, lower 50° cn.

835.6-836.1 : Another section of coarse grained alt'd diorite same as 833.h-834.h, contacts sharp, U.C. 70° cn. L.C. 80° cn.

837.3-838.2 : A section of coarse grained alt'd diorite same as 833.h-834.h, contacts sharp, U.C. 65° cn. L.C. irregular.

851.5-857.5 : A section is similar to 833.h-834.h but up to 855.h, it is mod. gr. with slight carb. except in one 2" section at 852.2. Contacts sharp. U.C. 40° cn. L.C. 50° cn.

857.5-857.9 : Indication of foliation by tiny chlorite-epidote veinlet 45° to cn.

860.2-862.6 : Similar to 833.h-834.h but med. grained med with slight to mod. carb'd. U.C. 50° cn. L.C. broken.

864.h 3" section similar to 833.h-834.h, contacts sharp, U.C. 65° cn. L.C. irregular.

865.h 1/2" section similar to 833.h-834.h. Contacts sharp and at 45° to cn.

867.1 1" section similar to 833.h-834.h. Contacts sharp at 30° to cn.

868.h 2" inch zone indicating foliation at 30° cn. by epidote? chlorite veinlets.

867.7-874.h : A few irregular epidote stringers.

- 873.4 $\frac{1}{2}$ " inch chlorite carbonate vein at 35° to cn. bounded on either side by an epidote stringer.
880.3 1" carbonate vein 30° to cn.
880.6 Core takes on a speckled appearance due to tiny white clay minerals.
881.3 Tiny pyrite veinlets 50° to cn.
887.2-889.9 Section similar to 833.4-834.4 but has less carbonate epidote, and clay minerals, more secondary feldspar. Contacts sharp at 30° to cn.
890.3-891.1 Section similar to 833.4-834.4 but has less carbonate and epidote.
893.3 $\frac{1}{2}$ " carbonate vein contacts irregular but averaging 40° cn.
901.3 1" carbonate, chlorite vein at about 10° cn.
904.8-905.4 : Coarse grained section similar to 833.4-834.4 but less clay minerals. Contacts sharp, U.C. at about 70° to cn., but irregular. L.C. at about 15° to cn.
908.7 $\frac{1}{2}$ " carbonate, siderite vein 10° to cn.
912.2 1" carbonate, chlorite vein 15° to cn.
915.5 $2\frac{1}{2}$ " carbonate, chlorite vein containing 2% py.
916.0 1" zone showing indications of foliation at 55° to cn., by tiny epidote?, chlorite veinlets.
916.7-917.4 : A zone containing much calcite, chlorite.
917.5 2" zone coarse grained similar to 833.4-834.4 but low clay minerals content. Contacts seem to be fairly gradational.
919.0-922.5 : A medium to coarse grained section, dark green, soft, med. to high carb., highly chloritized, high epidote, high secondary feldspar. Contacts gradational.
921.8 A 1" carbonate, chlorite veinlet 15° to cn.
926.2 1" inch carbonate, chlorite vein 15° to cn.
932.4 1- $\frac{1}{2}$ " qtz carb. vein 20° to cn.
933.7 1 $\frac{1}{2}$ " chlorite carb. L.C. irregular, U.C. 45° to cn.
937.0-938.0 : Zone showing foliation at 70° to cn., indicated by epidote?, chlorite veinlet, slight indication of shearing.
956.0 1" carb., chlorite vein at 60° to cn.

957.8 ALT'D DIORITE

957.8

- C. grained, contact gradational over a couple of inches, low to nil carb., tr py. High epidote. Contains a couple of sections of fine gr. rock.
962.3 3" zone showing indication of shearing which is realized by the chlorite, epidote?, stringers at 50° to cn.
965.7 Rock becomes highly silicified, contains a few qtz eyes.
965.3 $\frac{1}{2}$ " section indicating shearing at 10° to cn., indicated by chlorite epidote veinlets.
972.9 1" calcite vein, contacts irregular.
979.9 Alt'd diorite, fine grained, with a few small sections of coarse grained, contacts fairly sharp but irregular, low to nil carbonate.
993.4 $\frac{1}{2}$ " section carrying 1 $\frac{1}{2}$ % pyrite.

1000.6 ALT'D DIORITE

1000.6

- Coarse grained, high epidote, highly silicified, containing many qtz eyes. Nil carbonate. Contacts fairly gradational but at about 45° to cn. It contains a few sections of fine grained alt'd diorite.
1000.6-1007.6 : Many tiny irregular epidote veinlets

1013.5

- 1013.5 ALT'D DIORITE Fine grained. Contacts fairly sharp, irregular but averaging 10° to cm. Nil carbonate. Contains a few small blebs of py.
1020.7 1/4" chlorite carbonate vein at 60° to cm.
- 1021.6 ALT'D DIORITE Contacts gradational, highly silicified, contains a few tiny eyes of blue qtz, nil carbonate, high epidote, high secondary feldspar. Tr. pyrite. It contains a couple of short sections of fine grained alt'd diorite. Contains a few tiny irregular carbonate veinlets.
- 1043.6 ALT'D DIORITE Contacts gradational, fine grained, soft, nil carbonate, contains a few tiny blebs of pyrite. Contains a few irregular chlorite veinlets. Contains a few short sections of coarse grained alt'd diorite.
- 1096.5 ALT'D DIORITE Coarse grained, nil carbonate, high epidote, tr py. Slightly to med. silicified. With a couple of short sections of coarse gr. dk. 1100.2 Milky qtz carb. vein 50° to cm. Contains a red mineral. 1100.8-1101.4 : A number of milky qtz carb., red mineral? patches and veins.
- 1104.6 ALT'D DIORITE Fine grained contacts gradational, nil carb. 1105.5 1/2" qtz carb. vein 50° to cm.
- 1107.1 ALT'D DIORITE Medium grained, contacts gradational over 1/2", nil carb. Contains a few sections of fine grained.
- 1118.6 ALT'D DIORITE Coarse grained, contacts gradational over 2". Good zills outlined, slight to moderately silicified. Contains a few short sections of fine to med. gr. 1122.0-1122.5 : Highly epidotized and highly silicified. Containing many eyes of milky qtz.
- 1124.5 ALT'D DIORITE Fine grained type. Contacts broken but seems to be about 10° to cm. Once fairly sharp. Nil carbonate, an occasional tiny bleb of pyrite about one in every 10" inches of core. It contains a few short sections of coarse grained diorite. 1127.6-1128.0 : Coarse grained section. U.C. fairly short 30° to cm. L.C. gradational. 1134.0-1134.6 : A very faint indication of foliation at 35° to cm., by a few tiny chlorite, epidote? stringers. 1135.5 An increase in the amount of epidote with a few tiny epidote veinlets beginning to occur. 1137.7-1138.3 A section containing 2% py. 1160.6 1/3" qtz carb. vein 70° cm. 1160.4-1161.8 : Section containing 1% py. 1169.4 2" patch of milky qtz and carb. with many tiny epidote stringers. 1181.4 1/3" milky qtz carb. vein 10° to cm. 1182.2-1183.2 : Milky qtz vein. U.C. irregular but averages 60° to cm. L.C. very irregular. 1191.0-1196.6 : Section containing 1% py, Tr opy. 1205.5 1/2" irregular qtz carb vein but contacts averages 70° to cm., surrounded by much epidote. 1206.1-1206.3 : A few tiny milky qtz carb. stringers 50° to cm.

- 1230.4-1232.5 : Broken core.
- 1224.0 Disappearance of tiny epidote veins.
- 1233.9 Rock becomes high in carbonate.
- 1246.1 1/2" milky qtz carb vein very irregular but average 60-70° to cn.
- 1249.0-1250.0 : Patches of large feldspar porphyroblasts.
- 1249.9-1250.2 : Patch of milky qtz and carbonate.
- 1256.5 A few tiny milky qtz carb. stringers, begins to occur.
- 1261.2-1262.4 : Coarse grained section.
- 1266.3 1/3" milky qtz vein with a trace of blue qtz and carb., very irregular, but averages 60-70° to cn.
- 1266.3 1/2" milky qtz carb vein 10° to cn.
- 1268.1 1" milky qtz carb. vein 15° to cn.
- 1271.2 1/2" milky qtz vein with tr. of blue qtz 55° to cn.
- 1272.9 1/2" milky qtz carb. vein 50° to cn. It contains much pyrite.
- 1273.7 1/3" blue qtz carb. vein 50° to cn. It contains 1% pyrite.
- 1273.8 1/3" blue qtz vein 50° to cn. It contains 1% pyrite.
- 1275.6 Two tiny qtz veins 80° to cn.
- 1277.2-1277.7 : Section carrying 1% pyrite.
- 1278.6 Small patch of blue and milky qtz.
- 1290.3 Rock becomes nil in carbonate.
- 1296.8 1/2" milky and blue qtz vein irregular, but averages 35° to cn.

1294.6

1294.6 ALT'D NICHITE

Med. to coarse grained, contacts very gradational, dark grey, nil carbonate, moderately silicious, highly chloritized, low clay minerals, high secondary feldspar.

1305.0

1305.0 ALT'D NICHITE

Coarse grained, contacts very gradational, dark green, mottled, highly chl'd, highly silicious. High secondary feldspar with it becoming slightly porphyritic in places, poor crystal outlines. Low clay mineral, epidote, tr. py. Contains a few short sections of fine gr. type which are also nil in carbonate.

1305.8-1306.1 : Fine grained type.

1313.6 1/2" vein of qtz carb.

1321.5-1323.2 : Fine grained type.

1326.9-1328.3 : Section high in epidote. Contains many tiny carbonate stringers averaging 45° to cn., and many small patches of milky and blue qtz.

1357.2-1359.7 : Section of fine grained type.

1373.6-1374.0 : Patch rich in epidote.

1377.0 1/2" calcite vein containing a few patches of milky qtz 60° to cn.

1377.5-1378.5 : Green core.

1378.3 1/2" calcite vein containing patches of milky quartz.

1413.5 1/2" broken milky qtz vein.

1425.8 1" milky qtz carb vein 70° to cn.

1426.1

1426.1 ALT'D NICHITE

Fine grained speckled type. Contacts very gradational. High clay minerals, med to low epidote. High carb. although patches are low to nil. Contains a few tiny carb. stringers 30-50° to cn.

1447.0 Slight indication of foliation 45° to cn. increasing with depth, shearing?

1451.0 Good indication of foliation 45° to cn., shearing?

- 1152.2 1/3" blue qtz carb vein 50° to en.
- 1151.1 1/3" blue qtz carb vein 70° to en.
- 1151.0-1151.4 : many blue qtz, carb patches.
- 1152.0 Good indication of foliation 85° to en.
- 1152.2 Rock becomes brecciated and contains many blue qtz, carb patches.
- 1152.0 Rock loses brecciated appearance and speckled appearance.
- 1159.1 1/3" blue qtz vein 50° to en.
- 1173.0 2" patch of carbonate.

1175.0 END OF HOLES

ASSAY RESULTS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>As Oz/Ton</u>
	<u>From</u>	<u>To</u>		
N 800	611.3	614.0	2.7	.010
N 801	618.0	620.0	2.0	TR
N 802	633.0	634.0	1.0	TR
N 803	638.0	639.0	1.0	.010
N 804	646.0	647.0	1.0	.010
N 805	653.2	654.2	1.0	TR
N 806	675.5	677.5	2.0	.050
N 807	677.5	679.5	2.0	.010
N 808	695.5	697.0	1.5	.010
N 809	697.0	699.0	2.0	TR
N 893	700.0	702.5	2.5	.020
N 894	702.5	705.0	2.5	.010
N 895	705.0	707.5	2.5	TR
N 896	707.5	710.0	2.5	.010
N 897	710.0	711.0	1.0	.050
N 898	711.0	713.0	2.0	.050
N 899	713.0	715.0	2.0	.040
N 900	715.0	717.0	2.0	.290
N 723	717.0	719.0	2.0	1.590
N 724	719.0	721.0	2.0	.150
N 725	721.0	723.0	2.0	.750
N 726	723.0	725.0	2.0	.440
N 728	725.0	727.0	2.0	.240
N 729	727.0	729.0	2.0	.240
N 730	729.0	730.5	1.5	.100
N 731	730.5	731.5	1.0	.240
N 732	731.5	733.0	1.0	.070
N 733	733.0	735.0	2.0	.010
N 857	735.0	737.5	2.5	TR
N 858	737.5	740.0	2.5	.010
N 859	740.0	741.2	1.2	TR
N 860	741.2	742.9	1.7	TR
N 861	742.9	745.0	2.1	TR
N 862	745.0	745.8	0.8	.040
N 863	745.8	747.2	1.4	TR
N 864	747.2	750.7	3.5	TR
N 865	750.7	752.2	1.5	.020
N 866	915.0	915.7	0.7	TR
N 574	1137.6	1138.5	0.9	TR
N 576	1256.6	1267.1	0.5	.050

N 577	1267.9	1268.4	0.5	.030
N 578	1271.1	1271.4	0.3	.020
N 579	1272.8	1273.3	0.5	.070
N 580	1273.6	1274.2	0.6	.030
N 581	1274.2	1275.0	0.8	.010
N 575	1275.0	1275.4	0.4	.020
N 572	1325.9	1328.2	2.3	.010
N 573	1331.3	1331.7	0.4	.020
N 575	1449.3	1450.0	0.7	TR
N 576	1452.0	1452.7	0.7	TR
N 577	1452.7	1453.5	0.8	TR
N 578	1453.5	1454.0	0.5	TR
N 579	1454.0	1455.0	1.0	TR
N 880	1455.0	1456.7	1.7	TR
N 881	1462.2	1463.2	1.0	TR
N 882	1463.2	1464.2	1.0	TR
N 883	1464.2	1465.0	0.8	TR
N 884	1465.0	1465.9	0.9	TR
N 885	1465.9	1466.9	1.0	TR
N 886	1467.9	1468.0	1.1	TR
N 887	1468.0	1469.0	1.0	TR
N 888	1469.0	1469.0	1.0	TR

S L I D E S

N 631	0.0	20.0		TR
N 632	20	30		TR
N 633	30	40		TR
N 634	40	50		TR
N 635	50	60		TR
N 636	60	70		.010
N 637	70	80		.010
N 638	80	90		TR
N 639	90	100		TR
N 640	100	110		TR
N 641	110	120		TR
N 642	120	130		.010
N 643	130	140		.010
N 644	140	150		TR
N 645	150	160		.020
N 646	160	170		.050
N 646	170	180		TR

B. D. N. 56

Location: 405.0' E on section L, 53.5' N
 10,064.52 N
 10,753.09 E
 1402.89

Started: Jan 6, 1960
 Completed: Jan 20, 1960
 Logged: F.L. Money

Dip at Collar: 90°
 at 650': 80°
 at 1335': 65°

Cores: AXF
 Length: 1337.0

ORIENTED TO COLLAR 21 DAVE BRID.

0.0 CASING

6.0 ALT'D BIORITE

6.0

C.g., or porphyroblastic, dark green, soft. Consists of 10% - 15% co. irreg. grains of white feld, with minor clay minerals and blue quartz eyes set in a matrix of dark green minerals which are apparently in part c.g., in part f.g. Green minerals mainly chlorite with perhaps minor amphibole or pyroxene and 2 - 3% epidote. Carb. low to med. Very occas. epidote, carb, chlorite, stringers in combination of these, generally irregular. Tr. py.

6.0 - 31.0 : Joints rusty, slightly leached.

20.3 - 21.0 : Several irregular carb-epidote stringers.

30.3 - 32.4 : Irregular epidote-carb-minor quartz stringers sub-parallel to core. Weak shearing?

39.7 : 1" Irregular carb-epidote-minor quartz stringer.

47.3 : 2" Irregular carb-epidote stringer. Abt 50° to cn.

60.0

60.0 ALT'D BIORITE

As above but feldspars replaced by aggregates of clay minerals. About 5% blue quartz eyes and rock has low to moderate carb. Num. irregular hairline carb and epidote stringers. General weak shearing or schistosity 50° to 70° to cn.

70.3 - 70.7 : Rusty shear 7 place 80° to cn.

70.7 - 71.1 : Core missing.

99.5 : 2" Patch 50% epidote at about 40° to cn.

106.1 - 109.1 : Blk. highly epidotized. C.g., light green hard. Contacts irreg. Consists of elongate chlorite grains or chlorite amphibole with random orientation (15%), blue quartz eyes (10%) and clay min (5%) set in a matrix of epidote (70%). Proportions minerals vary somewhat.

109.1 : 1" irreg. white qtz stringer with minor carb, epid.

127.8-130.6 : Irreg. patch white qtz-blue qtz-carb sub-parallel to core axis.

140.0-177.0 : carb. content moderate to high.

175.3-176.5 : Patchy, irreg. carb-white qtz-blue qtz stringers or stringer in main sub-parallel to core.

196.0 : Irreg. 2" composite blue quartz-white quartz-carb -chlor -epidote (?) veinlet at about 20° to cn.

223.6 : 1" Irregular epidote-quartz-carb veinlet at about 10° to c

224.1 - 224.3 : Highly epidotized (60%) rock. Num. blue quartz eyes mod. carb.

227.2 : 2ⁿ Irregular carb-epidote stringer. Blue quartz eyes with epidote.
 234.5 - 237.8 : Rk. moderately (near 234.5) to highly (about 236.0) epidotized. At greatest intensity epidote resembles 106.1 - 109.1.
 245.1 - 247.0 : Irregular patchy epidote-calcite-blue quartz-white quartz stringers.
 253.3 : 1ⁿ White quartz-carb-blue quartz-chlorite-epidote veinlet at 75° to cn.
 277.0 - 301.0 : Epidote content in general about 5 - 10% , a few secondary fld. present, percentage clay minerals slightly less?
 301.0 - 308.0 : Num. secondary fld. grains.
 310.2 : 2ⁿ Chlor.-carb shear (?) zone 55° to cn.
 342.0 - 344.5 : Chloritized shears at 70-85° to cn. Minor quartz - carb stringers assoc. with these.

362.5

362.5 ALT'D DIORITE

In part exactly as last unit - but secondary feldspars on the average more abundant - perhaps make up 5% of the rock and locally 20%.
 Very occas. carb stringers, tr. py.

395.0

395.0 ALT'D DIORITE

Contacts gradational, c.g., dark green, soft. Consist of 5% - 10% large irreg. fresh grains secondary fld, 10% interstitial epidote, almost nil clay min, carb, occas. quartz eyes. Remainder mainly chlorite. Tr. py., occas. carb, quartz stringers gen. 20 - 30° to cn.
 397.3 - 397.6 : Num. irreg. epid. stringers.
 399.1 - 399.4 : Num. irreg. epid. stringers.
 413.8 : 1ⁿ Carb - chlorite- veinlet normal to core.
 436.5 : 1ⁿ Irregular carb - epidote - minor quartz stringer.
 442.2 : 2ⁿ Irregular epid. stringer or patch.

453.5

453.5 ALT'D DIORITE

As last but epidote content probably averages 20%.
 457.2 : 3ⁿ Highly (50%) epidotized zone at 10° to cn.
 459.6 : 4ⁿ Highly (40%) epidotized zone. Contacts indefinite.
 472.0 : lens-like stringer (maximum width 1/2") Milky quartz sub-parallel to core.

479.0

479.0 ALT'D DIORITE

Contacts gradational as 362.5 to 395.0. Occas. carb stringers. tr. py.
 516.8 : 3ⁿ Patch carb-chlorite.
 527.1 : 3ⁿ Patch carb.

542.7

542.7 ALT'D DIORITE

F.g., medium green, soft, highly chlor, mod. epidote (?) mod. to low carb, clay min. Tr. py. Occas. carb stringers. Contacts gradational.

546.0

546.0 ALT'D DIORITE

Upper contact gradational. Rock, c.g., soft, dark green, highly chloritized, carbonitized, mod. clay min, low in epidote. Occas. quartz eyes. Tr. py. Foliation and weak sch. 50 - 65° to cn. Num. carb (with minor quartz) stringers, in part parallel to the foliation in part irreg.

568.4 - 576.9 : Large cubic xls py. common. Locally amount to 1%.
569.3 : $\frac{1}{2}$ " Blue quartz vein 10° to cn.
570.5 - 576.7 : Occas. irregular blue quartz - carb stringers.

576.9

576.9 MORSELA VEIN

U.C. missing. Vein described below.

576.9 - 577.3 : Blue quartz, fracture cemented by carb. Tr. py.
577.3 - 579.3 : Mainly milky quartz, locally mottled to blue quartz.
Occas. large py. grains, tr. ep (?), a few stringers 45°-60° to cn.
of brown sphalerite or siderite.
579.3 - 584.0 : Mottled blue to milky quartz, the latter predominating.
Cen. tr. py. White carb. stringer in fractures.
580.1 : Tr. arsenopy. on fracture plane.
580.8 - 584.0 : Siderite or brown sphal. stringers present at about $\frac{1}{2}$ " intervals. Minor assec. py.
582.7 - 583.9 : About 1% py, tr. arsenopy, ep (?)
583.9 - 584.0 : Streaks brown sphal. or siderite make up 30% of core.
About 5% py, 1% arsenopy, tr. ep. (?)

584.0

584.0 ALT'D DIORITE

Upper contact at 55° to cn. Rk., e.g., green, highly carb chloritized, weakly sericitized (?), mod. clay min, low epidote, quartz ?
Tr. py. throughout.

584.0 - 584.5 : Weak sch. at 40° to cn.

584.0 - 594.0 : Occas. irreg. blue quartz-carb stringers.

601.3 - 622.0 : Num. carb - milky quartz stringers, generally 45° to 60° to cn.

628.3

628.3 ALT'D DIORITE

Sim. to above unit, upper contact gradational. e.g., soft, dark green, high percentage (20 - 30%) clay min, highly chlorite, carb, only tr. epid. quartz. Occas. carb-chlor. stringers, various angles and irreg. Tr. py., pyrrhotite as cubic xls.

649.0

649.0 ALT'D DIORITE

Upper contact arbitrary, gradational. Rk., as above but to only minor clay min, local clumps of co. xls white secondary(?) feld. Occas. carb - quartz hairline stringers. Tr. py. Probably porphyroblastic rather than c.g. texture.

675.7 : 2" Irreg. patch chlor - calcite - milky quartz.

679.1 : 4" Irreg. patch chlor - calcite - milky quartz - blue quartz.

Aht 1% assec. py, minor po.

681.0

681.0 ALT'D DIORITE

Upper contact arbitrary, gradational. Rk. similar to last but aht. 5% - 10% epid, locally more. Highly chlor, clumps irreg. grains secondary feld, only minor clay min, mod. carb. Occas. irreg. epidote and carb - chlorite - milky quartz stringers. Grain size locally varies to f.g., comp. quite variable over inches. Tr. py. Texture in part equigranular c.g., in part porphyroblastic in appearance.

696.0

696.0 ALT'D DIORITE

Contact arbitrary. Rk. c.g., to m.g., highly chlor, high epidote (10 - 30%), tr. to minor clay min, secondary feld, minor carb. Occas. blue quartz eyes. Occas. irreg. epidote, carb-chlorite stringers.
Tr. py.

735.5 - 746.9 : Pink-tinted $\frac{1}{2}$ " or less carb stringer at 6 to 15° to cn. common.

749.7

749.7 ALT'D DIORITE

As above unit in alteration but f.g. Upper contact gradational.
755.2 - 759.0 : Bk. c.g., contacts gradational. About 30% epidote.
759.0 - 759.3 : About 20% large white grains secondary feld.
768.6 : 1" Veinlet red-stained carb at 10° to cn.
769.0 - 770.5 : Bk. epidotized (10 - 20% epid.).
775.4 - 776.7 : Bk. c.g., U.C. missing, L.C. gradational. Abt 30% epid, 60% chlor, remainder clay min, secondary feld, minor quartz eyes.
781.9 : $\frac{1}{2}$ " Irregular red-stained carb stringer.

786.1

786.1 ALT'D DIORITE

Contacts gradational as 696.0 to 749.7 . Num irregular epidote stringers. Tr. py., po (?) . Very occas. carb stringers.

799.8

799.8 ALT'D DIORITE

F.g., dark green, highly chlorite, high clay min, low to nil carb, med. to high epidote. Occas. carb, epidote stringers. Tr. py.
800.5 : 2" Irreg. patch qtz-carb.

816.5

816.5 ALT'D DIORITE

Contacts gradational. As 696.0 to 749.7 . Occas. carb stringers. Tr. py.

821.9

821.9 ALT'D DIORITE

Similar to 799.8 to 816.5 .
822.5 - 824.0 : Weak shearing 50° to cn., about 1% co. cubic py, num. patches quartz (white to blue), carb sub-parallel to shearing.

824.7

824.7 ALT'D DIORITE

U.C., as 696.0 to 749.7 . Contacts gradational.
833.2 : $\frac{1}{2}$ " Pink tinted carb stringer.

835.0

835.0 ALT'D DIORITE

As 749.7 to 786.1 : Upper contact gradational. Very occas. irreg. epidote stringers.
836.1 - 836.5 : Bk., c.g., contacts sharp, non-intrusive, U.C. 50° to cn, L.C. irreg.
840.5 - 841.6 : Irreg. patches c.g. rock.
845.0 - 845.9 : Bk. c.g., contacts gradational through m.g. rock (over several inches).
850.0 - 853.0 : Num. irreg. epidote stringers.
853.6 : Bk. grades locally to m.g.
872.9 - 874.0 : Bk. sheared at 65° to cn. Minor carb, tr.py.
876.5 - 880.0 : Bk. c.g., contacts gradational.
883.9 - 885.1 : Bk. c.g., U.C. sharp, non-intrusive at 25° to cn, L.C. irreg.
892.0 : 1" Pink-tinted carb veinlet 15° to cn.
898.4 - 906.4 : Sand c.g. rk. About as the f.g. material. Contacts irregular, non-intrusive.
915.4 - 916.9 : Epidotized shear zone 65° to 70° to cn. Unmin.
928.6 : 1" Irregular patch. white quartz.

930.0

930.0 ALT'D BIORITE

Position of contact about it vary. Change actually quite gradational. Rk. f.g., dark green, chloritised, slightly to mod. carb'd, mod. clay min replacing feld, mod. secondary feld, probably low epidote content, locally grades to m.g. and c.g. rock. Occas. irreg-carb stringers. Tr. py.

942.5 - 944.7 : Rk. c.g., alt. as above, contacts gradational.

963.6

963.6 ALT'D BIORITE

Upper contact irregular rk. c.g., dark green highly chlor'd epidotized, generally mod. to low secondary feld, minor to nil clay min, carb. Tr. py. Occas. epidote, chlorite, carb, milky quartz stringers, gen. irregular.

975.9 : 2ⁿ Epidotized zone (60% epidote). U.C. 55° to cn, L.C. irregular.

1010.6-1016.5 : Core badly ground due two poor drilling practice. (Not sheared or schistose, no evidence of leaching, etc.).

1032.1 : 1ⁿ Milky quartz veinlet 10° to cn.

1037.0 - 1050.6 : Rk. c.g., alt. much as large but locally very large (to 1/2") irregular grains white fresh-appearing probably secondary feld.

1061.6 - 1071.5 : Num. irregular carb-white (milky) quartz minor blue quartz stringers and patches.

1071.5

1071.5 ALT'D BIORITE

Upper contact gradational, f.g., dark to medium green, soft. Highly chlor'd, carb'd, low sil, epidote, clay min. Num. irregular carb stringers (with minor quartz). Tr.py, in part as large euhedral xls. Very weak foliation at 40-50° to cn ??.

1076.5 - 1084.7 : Num. irregular carb stringers, some with blue quartz. Occas. irregular blue quartz stringers. Rk. locally grades to c.g., with high percentage pink-tinted clay min.

1084.7 - 1091.0 : Rk. all f.g., low clay min, carb and quartz stringers as above.

1091.0 - 1094.1 : Blue and white quartz vein. Sheared (?) at 45° to cn. About 1% py (unusually abundant). About 0.5% spy at 1091.7 to 1093.0 .

1094.1 - 1100.0 : Bleached, brecciated, sil'd, carb'd zone. 2% py. throughout, locally 5% py. Tr. spy bet. 1094.1 - 1095.0 and 1093.0-1099.7 .

1100.0 - 1106.5 : Sim. zone but less bleaching. Contains irregular blue quartz stringers, scattered py. Tr. spy. at 1105.5 .

1106.5 - 1109.2 : Blue quartz vein. U.C. missing, L.C. 45° to cn. Local patches co. py. Fractures filled by white carb stringers.

1109.2

1109.2 Alt'd BIORITE

F.g., dark green, highly chlor'd, mod. epidotized, low to nil carb, clay min. Occas. irregular chlorite stringers, co. py. cubes.

1113.4 : 1ⁿ Blue quartz veinlet 40° to cn. Tr. py.

1124.6 : 1ⁿ Irregular blue quartz-white carb stringers about 20° to cn.

1130.7 - 1139.0 : Num. irreg. milky quartz-carb stringers. Carb. has a pale green tint, (calcite ?).

1141.0

1141.0 ALT'D DIORITE

U.C. obscured by quartz stringer, L.C. sharp, irregular, non-intrusive. C.g., highly chlor'd, mod. epidotized, num. blue quartz eyes, mod. secondary fold, minor clay min, carb. Ir. py.

1141.9 : 3" Irreg. milky quartz vein (minor carb). Several xls. co. cubic py with this.

1143.2 - 1143.7 : Irregular patch milky quartz-carb. Minor assoc. py.

1144.4 : 1" Milky quartz-carb veinlet 30° to cn.

1145.4 : 1" Blue quartz -carb veinlet 10° to cn.

1147.3

1147.3 ALT'D DIORITE

As 1109.2 to 1141.0 . Local patches e.g., rk . as above with sharp, non-intrusive contacts at various angles.

1151.8

1151.8 ALT'D DIORITE

C.g., as 1141.0 to 1147.3 .

1152.2 - 1153.1 : Sil'd zone around 1" milky quartz veinlet (at 1152.4). About 1/4 py.

1154.0 : 2" Milky quartz veinlet at 50° to cn. 2" sil. zone on either side. About 1/4 py.

1156.1 - 1156.7 : About 1/3 co. cubic py.

1161.0

1161.0 ALT'D DIORITE

f.g., as 1109.2 to 1141.0. Local patches e.g., rock at various angles with sharp but non-intrusive contact. Occas. irreg. hair-line chlor - carb stringers. Ir. py.

1179.1 : 1" Milky quartz veinlet about 10° to cn.

1181.5 - 1185.8 : C.g., zone. Contacts about 15° to cn.

1188.8 : 1" Irregular milky quartz-carb stringers.

1190.8

1190.8 ALT'D DIORITE

C.g., as 1141.0 to 1147.3 . U.C. Irreg. somewhat gradational. Occasional irregular rose to white carb stringers. Ir. py. Highly carb'd towards 1201.2 .

1201.2

1201.2 ALT'D DIORITE

U.C. missing (broken core), f.g., dark green, highly chlor'd, carb'd, mod. clay minor epidote, sil. Numerous irregular carb-chlorite stringers. Ir. py. throughout.

1223.4 : 1" Milky quartz-carb veinlet, irreg. but about 30° to cn.

1234.2 : 3" Milky quartz-pale yellow carb veinlet at 25° to cn.

1255.0 - 1255.8 : Band of c.g., alt'd diorite, both contacts missing alt. as f.g. rock.

1270.4 - 1271.8 : Irregular patch milky quartz-carb-chlorite w. minor blue quartz. No. min.

1271.5 : Irregular about 1" milky quartz veinlet or patch.

1290.0 - 1305.0 : High percentage clay min.

1305.0

1305.0 ALT'D DIORITE

F.g., dark green, soft, highly chlor'd, high clay min, mod. epidote (?), low to nil carb. Occas. irregular epidote-carb stringers.

1324.3 - 1325.0 : C.g. band, contacts gradational, alt. as
f.g. rock.

1337.0

1337.0 END OF HOLE

Peter L. Money

PIPE & CASING PULLED

<u>Sample Number</u>	<u>Section of Hole From</u>	<u>To</u>	<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Co</u>
245	127.5	128.7	1.2	TR		
246	175.0	176.5	1.5	.010		
247	195.9	196.4	.5	TR		
248	227.0	228.0	1.0	TR		
249	241.0	242.0	1.0	TR		
250	253.0	254.0	1.0	TR		
547	568.4	570.0	1.6	.010		
548	570.0	572.0	2.0	.010		
549	572.0	573.5	1.5	.010		
550	573.5	575.0	1.5	TR		
551	575.0	576.9	1.9	.010		
552	576.9	578.0	1.1	.110		
553	578.0	579.0	1.0	.120		
554	579.0	580.0	1.0	.675		
555	580.0	581.0	1.0	.100		
556	581.0	582.0	1.0	.060		
557	582.0	583.0	1.0	.095		
558	583.0	584.1	1.1	.320		
559	584.1	586.0	1.9	.010		
560	586.0	588.0	2.0	TR		
561	588.0	590.0	2.0	.010		
562	590.0	592.0	2.0	TR		
563	592.0	594.5	2.5	TR		
471	679.0	680.0	1.0	TR		
651	1089.6	1090.6	1.0	.020		
652	1090.6	1092.0	1.4	.740		
653	1092.0	1093.1	1.1	.020		
654	1093.1	1094.1	1.0	.270		
655	1094.1	1095.0	.9	.110		
656	1095.0	1096.2	1.1	.060		
657	1096.1	1098.0	1.9	.040		
658	1098.0	1099.7	1.7	.020		
659	1099.7	1102.5	2.8	.010		
660	1102.5	1103.2	.7	.020		
661	1103.2	1104.7	1.5	.020		
662	1104.7	1105.7	1.0	.010		
663	1105.7	1106.8	1.1	TR		
664	1106.8	1108.0	1.2	.010		
665	1108.0	1109.3	1.3	TR		
666	1109.3	1110.7	1.4	.010		
810	1135.8	1136.4	.6	TR		

Sample Number	Section of Hole From	To	Sample Length	As	Ag	Co
811	1140.7	1141.7	1.0	TR		
812	1141.7	1142.7	1.0	TR		
813	1142.7	1143.7	1.0	.050		
814	1143.7	1145.0	1.3	TR		
815	1145.0	1145.0	1.0	.050		
816	1152.0	1153.0	1.0	TR		
817	1153.0	1153.8	.8	TR		
818	1153.6	1155.0	1.2	.020		
819	1178.8	1179.4	.6	TR		
820	1183.8	1184.4	.6	TR		
821	1188.5	1189.1	.6	TR		

SLUGS

ASSAYS

143	0	20		TR		
144	20	30		TR		
145	30	40		TR		
146	40	50		TR		
147	50	60		TR		
148	60	70		TR		
149	70	80		TR		
150	80	90		TR		
155	90	100		.010		
525	100	110		TR		
526	110	120		TR		
527	120	130		TR		
528	130	140		TR		
529	140	150		TR		
233	150	160		TR		
234	160	170		.020		
235	170	180		.015		
236	180	190		TR		
237	190	200		TR		
238	200	210		TR		
239	210	220		.020		
240	220	230		.010		
241	230	240		.010		
389	240	250		TR		
390	250	260		TR		
391	260	270		TR		
392	270	280		TR		
393	280	290		TR		
394	290	300		TR		
395	300	310		TR		

SAMPLES ASSAYS

Sample Number	Section of Hole From	To	Sample Length	In	Ag	Co
396	310	320		TR		
397	320	330		TR		
398	330	340		TR		
399	340	350		TR		
400	350	360		TR		
458	360	370		.010		
459	370	380		.015		
460	380	390		.010		
461	390	400		TR		
462	400	410		TR		
463	410	420		TR		
464	420	430		TR		
465	430	440		TR		
466	440	450		TR		
537	450	460		TR		
538	460	470		TR		
539	470	480		TR		
540	480	490		TR		
541	490	500		TR		
542	500	510		TR		
543	510	520		TR		
544	520	530		TR		
545	530	540		TR		
546	540	550		TR		

NORDEAN MINES (QUEBEC) LIMITED

D.D.N. 55

Location: 10, 129.94 N
 10, 625.46 E Elev. 1440.89
 442.0' N on section K, 23.5' N.

Started: Dec. 29-59
 Compl. : Jan. 18-60
 Logged by: P.L. Honey

Dip at Collar: 90°
 at 600.0' 79°30'
 at 1200.0' 77°

Core : AXE
 Length: 1365.0'

CEMENTED TO COLLAR 22 BAGS USED.

0.0 CASING

7.1 ALP'D DIORITE

7.1

C.g., soft, dark green, composed of large rounded to irreg. white xls secondary feld. (5-10%), 10% large irreg. grains clay min., occas. small grains epid., blue qtz eyes, tr py., minor to nil carb., the remainder chlorite with perhaps some relict amphiboles and/or pyroxenes. Very occas. carb. stringers.

7.1-24.0 : Joints rusty, slight leaching.

25.0-31.0 : Locally weak lamination clay min. about 50° en.

35.5-37.9 : Badly broken core, probably poor drilling.

38.0-38.7 : Rock has high epid. content (30%), num qtz eyes.

42.2-43.4 : Rock retilized, extremely c.g. with elongate amphibole needles up to 1/2", cc. secondary feld.

45.6 1" carb. stringer 40° en.

48.0-49.3 : Strong lamination clay min. 40-50° en.

68.0 Epid. content increasing, prob. averages 5% from here. Clay min. content drops slightly, probably about 5%.

87.0-89.7 : Num. irreg. patches epid. carb.-milky to grey qtz.

93.3-95.1 : About 30% epid., 20% secondary feld, sev. elongate saph. laths.

102.5-103.1 : Possible weak shearing 50° en.

104.2 3" composite qtz-epid-carb. stringer 15° en.

112.3 1" milky qtz vein 30° en.

119.5 6" zone of epid-carb-qtz stringers at 10-200° en.

129.4 1/2" carb. stringer 10° en.

141.1 1" irreg. patch epid-minor blue qtz.

142.4 1/2" salmon pink carb. veinlet 15° en.

146.5-147.2 : Band of 50% epid., remainder mainly elongate saph. laths and blue qtz eyes. Upper contact sharp 20° en. L.O. sharp, somewhat irreg. 10° en.

148.0-167.5 : Large irreg. to rounded white grains secondary feld. are locally prominent.

155.7 1" irreg. chlorite-calcite stringer.

164.3 3" of 30% white secondary feld.

168.0-174.2 : Num. irreg. patches white qtz, minor blue qtz, carb. slight shearing sub-parallel to core, possibly slight brecciation of rock.

195.5 For 5" an irreg. white qtz vein about 1" wide sub-parallel to core.

222.5-227.0 : Sev. 1/2" to 1" white carb. veinlets 10 to 25° en.

- 23k.4 : 1" white carb-quartz veinlet 50° to cn.
- 237.1 : 1" white carb-quartz veinlet 10° to cn.
- 242.5 - 243.0 : Carb-chlorite composite vein. Contacts abt 10° to cn.
- 246.7 : Irreg., (abt 1/2") white quartz-blue quartz stringer sub-parallel to core. Tr. py.
- 253.3 : 3" zone irreg., epid., and milky qtz-calcite stringers.
- 251.0 - 251.5 : Hk., abt 25% epid., around irreg., 1/4" white quartz-carb stringer.

262.6

262.6 ALT'D DIORITE

Contact gradational, rock c.g., medium green composed of abt 10% elongate chlorite amphibole needles with random orientation set in a groundmass consisting mainly of large epidote grains with minor fresh (? secondary feldspars and large blue quartz "eyes").
Tr. py. throughout.

- 272.1 : 2" white qtz-carb vein at 15° to cn.
- 272.9 : 1" carb-chlorite veinlet 10° to cn.
- 275.6 - 278.3 : Num. irreg., hairline white qtz-carb-epidote stringers.
- 281.0 : Epidote content becomes less, white feldspars increase to make up about 40% of rock.
- 290.5 - 298.5 : Epidote content 70% to 90% num., irreg., patches white quartz-carb and blue quartz-carb, num., blue quartz "eyes."

298.5

298.5 ALT'D DIORITE

Upper contact gradational. Hk., c.g., soft, dark green, composed of large rounded to irreg., white xls secondary feld., (10-15%); 10% to nil epid., occas., blue quartz eyes, tr. clay min, tr. to nil carb, the remainder chlorite with perhaps some relict sapphires and/or pyroxenes. Very occas., carb-milky quartz stringers. Tr. py. throughout.

- 305.3 : 2" Milky quartz veinlet at abt 10° to cn., somewhat irreg.
- 315.0 - 333.0 : Occas., carb veinlets, generally 15° - 25° to cn.

347.0

347.0 ALT'D DIORITE

Contact very gradational. Hk., f.g., soft, dark green, apparently composed mainly of chlorite, very occas., large grains white feld., blue quartz eyes, low to mod. carb, only minor clay min, minor to nil epid., except as noted otherwise. Num., hairline carb, stringers various angles but dominantly 10° to 30° to cn. Tr. py. throughout.

- 350.9 : 1/4" Irreg., carb-chlorite vein. Tr. py.
- 351.5 : 3" Irreg., carb-chlorite vein. Tr. py.
- 392.1 : 2" carb-chlorite veinlet at 25° to cn.

403.0

403.0 ALT'D DIORITE

Contact very gradational. As last unit but carb., percentage generally high, num., carb veinlets, generally 10-30° to cn. Mod., clay minerals. Minor white to (rarely) blue quartz assoc., with some of the carb veinlets.

- 411.7 : 2" Milky quartz-carb chlorite veinlet. Quartz older than carb as always. Abt 20° to cn., but somewhat irreg.
- 414.3 : 1" white quartz-carb veinlet much as last. Abt 10° to cn.
- 430.7 : 2" white (milky) quartz-carb-chlorite veinlet. Irreg.
- 454.5 : Irreg., lens-like py., stringer 60° to cn.
- 455.7 : 3" Band c.g., rock, alt., as f.g., rock, contacts gradational

458.6 : 7th Band as above but with a few quartz eyes, minor secondary field?

466.3

466.3 ALT'D DIORITE

Rk. sim. to above but mainly c.g., moderate num. blue quartz eyes, locally large grains secondary field. Contact gradational.

471.5 - 473.0 : Abt 30% large irreg., grains white secondary field.

473.6 : 2nd milky quartz vein abt 10° to en. Minor carb in fractures.

473.8 - 474.8 : Several quartz veins (milky) w. minor carb at 10° to 30° to en.

477.0 : 2nd Grey quartz vein 25° to en.

479.4 - 480.0 : Last core (?).

481.9 : 2nd Grey quartz stringer 20° to en.

483.4 : 1st Grey-blue quartz-carb vein 20° to en. - abt 1% assec. py, arsenopy.

485.4 : 1st Blue-grey quartz vein 10° to en. Tr. carb, py. in fractures

490.6 - 491.2 : Several small blue quartz-carb stringers w. minor assec. py.

496.1 - 497.6 : Silicified zone, very num. quartz eyes - several blue quartz, white quartz stringers.

498.1 - 498.7 : 3 milky quartz veinlets at 50° to en.

499.7 : 1st 2 milky quartz-grey quartz veinlet at 50° to en. Minor field (?).

500.5 - 502.2 : Num. irreg. milky quartz-carb stringers.

503.9

503.9 ALT'D DIORITE

F.g., dark green, soft, highly chloritised, carbonized, high to mod. clay min, very occas. quartz eyes, tr. to nil epidote. Very occas irreg. carb stringers. Tr. py.

511.5 : Occas. fresh co. white grains secondary field.

516.4 - 517.0 : Patchy epidote-carb.

551.8 - 553.0 : Abt 10% co. irreg. grains secondary field.

554.0 - 554.3 : Do

556.0 - 559.0 : Abt 5% co. irreg. grains secondary field.

559.0 - 563.7 : Abt 10% epidote, num. quartz eyes (5% ?), occas. grain secondary field.

563.7

563.7 ALT'D DIORITE

F.g., dark to medium green, soft, very similar to above but abt 5% - 10% epidote, low to nil carb. Num. irreg. chlorite stringers. Tr. py.

596.0

596.0 ALT'D DIORITE

As 503.9 to 563.7 : Num. carb, chlorite-carb and chlorite stringers, generally irreg. Tr. py.

611.2 : 1st Irreg. carb veinlet.

671.2

671.2 ALT'D DIORITE

F.g., dark green, soft, highly carb, chlorite, minor epidote clay min, occas. quartz "eyes". Occas. carb stringers. Occas. large cubic xls py. becoming more abundant towards 678.8 and amounting to abt 1% there.

678.8 - 681.2 : Rk. similar to above but grey instead of green. Occas. irreg. blue quartz stringers.

661.2

661.2 NORDRAU VEIN

U.C. missing, ground core, L.C. 50° to cn. Mainly blue quartz, locally mottled to milky white. Cut by hairline irreg. white carb stringers. Minor py., tr. arsenopy (?) throughout. No Au seen. - Elongite streak siderite or brown sphalerite along footwall.

661.9

661.9 ALT'D DIORITE

F.g., dark green, soft, highly chlorite, carb, only tr. to nil clay min, epidote, sil. Num. irreg. carb stringers. Occas. cubes py. Occas. irreg. milky quartz stringers.

707.0

707.0 ALT'D DIORITE

As last but mod. to high percentage clay min. Num. irreg. carb stringers, occas. irreg. milky quartz stringers. Tr. py. Carb high to moderate.

710.7 - 755.0 : Local sections c.g., rock - as f.g. in composition. Contact gradational.

755.0

755.0 ALT'D DIORITE

C.g., U.C. missing, dark green, soft. Consists of irreg. fresh secondary (?) feldspars, (20%), occas. blue quartz eyes in a green matrix composed mainly of chlorite but with several percent epidote. Mod. to low carb, trace clay min. Occas. irreg. carb, epidote stringers. Tr. py.

772.0

772.0 ALT'D DIORITE

Similar to above unit but about two - thirds of the secondary feld. replaced by co. aggregates of clay minerals. Occas. carb-white quartz stringers. Tr. py. throughout.

788.0 - 810.0 : Local f.g. sections, contacts gradational alteration, comp. as c.g. rock.

825.9

825.9 ALT'D DIORITE

Contacts gradational f.g., soft, dark green, highly chlorite, carb, high in clay min, low epidote, occas. blue quartz eyes. Occas. hairline carb-chlorite stringers, generally irreg. Tr. py. Local sections c.g., contacts gradational, sbt as the f.g., rock.

849.9 - 858.2 : Rk. c.g., alt. as above, contacts gradational.

867.0 - 878.0 : Occas. co. grains white secondary feld.

878.0

878.0 ALT'D DIORITE

F.g., dark green, soft, very similar to above but low to nil carb, about 5% - 10% epidote, slightly lower percentage clay min. Occas. hairline epidote stringers. Tr. py. Local c.g. sections, sbt as above.

901.2 - 902.1 : Rk. c.g., contacts fairly sharp but not intrusive apparently, U.C. 70° to cn., L.C. 50° to cn. Alt., comp. as f.g. rock.

906.4 - 909.5 : As 901.2 to 902.1. Contacts irreg., similar to 901.2 902.1 in appearance.

915.7 : Irreg. 1st zone of epidote-white feld. stringers.

939.0 - 939.5 : Irreg. epidote-chlorite-carb stringers at sbt 80° to cn. A few quartz eyes, tr. py.

941.8 - 942.9 : Rk. c.g., as 901.2 to 902.1. Contacts irreg. but sbt 50° to cn.

945.2 - 947.5 : Rk. banded f.g. to c.g., contacts gradational where distinct at 40° - 50° to cn.

- 950.7 : Rk. begins to become coarser-grained.
- 951.3 - 951.9 : Rk. m.g.
- 952.1 : Rk. Has graded back to f.g. again.
- 953.0 : Slight coarsening in grain size, by 953.5 m.g., then grading back to f.g. by 954.1 .
- 955.4 - 957.4 : Rk., c.g., contacts fairly sharp, irreg. but seeming by not intrusive.
- 958.3 - 961.0 : As 955.4 to 957.4
- 963.5 - 964.3 : As 955.4 to 957.4 but contacts very gradational with m.g. zone surrounding this c.g. zone.
- 965.5 : 1" Cloudy patch carb-chlorite.
- 965.0 - 975.5 : Rock locally grades to m.g. and back to f.g.
- 980.0 - 986.7 : C.g. highly epidotized band, U.C. gradational Z.C. sharp, irreg. apparently not intrusive. Rk. 30% to 50% epidote, remainder mainly flatly xlls chlorite, minor clay min, blue quartz eyes, a few large irreg. white grains secondary feld. Near end of section.
- Tr. py.
- 1001.0-1001.5 : Rk. f.g., epidotized - abt 40% epid. Contacts irreg. 1/2" white carb stringer 10° to cn at 1001.1
- 1003.7 - 1006.1 : Num. irreg. hairline epid. stringers.
- 1006.2 - 1006.5 : Epidotized zone (40% epid.) w. minor chlorite, carb, milky quartz.
- 1007.1 - 1008.5 : Rk. very c.g., contacts sharp, non-intrusive. U.C. 60° to cn., L.C. irreg. Rk. consists of a matrix of epidote (abt 50%) and minor feld. in which are set large flatly xlls of chlorite, (abt 50%) minor co. secondary feld. clay min. aggregates.
- 1010.2 - 1010.5 : As 1007.1 to 1008.5. Contacts obscured by carb-chlorite stringers at 10 - 15° to cn.
- 1011.2 - 1015.0 : Contacts indistinct, sim. to 1007.1 to 1008.5 but generally only 5% to 20% epidote, 75% chlorite, 20% feld. although much local variation. May possibly be fairly fresh, unaltered rock.
- 1015.0 - 1025.0 : Occas. irreg. chloritic stringers.
- 1040.8 - 1043.1 : Irreg. patches of c.g. appearing epidotized rock - possibly re-xllized.
- 1045.9 - 1048.7 : Rk. c.g., abt 30% epidote, contacts gradational. Occas. blue quartz eyes. Re-xllized ?? or originally coarse ??.
- 1052.3 - 1061.4 : C.g., rock, consisting mainly of epidote, chlorite, co. secondary? white feldspars. Occas. blue quartz eye. U.C. irreg. fairly sharp, non-intrusive, Z.C. gradational.
- 1052.4 - 1055.0 : Broken zone.
- 1082.0 - 1105.0 : Occas. irreg. carb-chlorite stringers.
- 1093.5 : 1" carb stringer 50° to cn.
- 1101.0 - 1105.0 : Rk. c.g., num. co. grains secondary feld.

1100.0

1100.0 ALP'D CHLORITE

- Generally f.g., and soft, dark green, highly chlorite, carb, high percentage clay min, low epidote. Occas. carb-chlorite stringers. Tr. py.
- 1109.4 - 1120.5 : Epidotized zone (20% epid) around irreg. milky quartz stringers.
- 1114.2 : 1" white quartz-carb veinlet 50° to cn.
- 1118.0 - 1120.0 : Num. irreg. carb-chlorite-quartz stringers, abt 1 1/2" py.

- 1120.0 - 1122.1 : G.g., rock, contacts gradational, alt. as the f.g., material.
- 1123.3 - 1124.8 : Num. irreg. quartz-carb stringer. Tr. py.
- 1135.8 - 1136.1 : Several cubic xls py.
- 1136.3 - 1141.4 : Carb-quartz stringers, irreg. various angles are numerous.
- 1146.4 - 1149.5 : Carb-quartz (in part blue) stringers very numerous, unusually irreg. Minor assoc. py. po.
- 1153.3 : 1" blue quartz (minor carb) veinlet 10° to cn. Abt 1/4 py. for 2" either side of this.
- 1153.4 - 1155.8 : Occas. irreg. blue quartz stringers.
- 1155.8 - 1157.3 : Abt 5/8 co. py.-assoc. w. patches quartz - carb.
- 1158.5 - 1160.8 : Abt 5/8 co. py. tr. arsenopy. rk. slightly bleached irreg. blue quartz stringers.
- 1160.8 - 1165.0 : Abt 1/4 py., occas. irreg. quartz-carb stringers, rock moderately bleached.
- 1165.0 - 1170.5 : Rk. strongly bleached, occas. irreg. blue quartz stringers, tr. py., arsenopy.
- 1170.5 - 1173.2 : Rk. very strongly bleached - more so than usually in the zone associated with the Nordean vein. Pale greyish cream in color. Extremely highly carb. Occas. irreg. blue quartz stringers, abt 1/4 py., tr. arsenopy.
- 1173.2 - 1176.5 : Breccia zone - shear zone. Rk. bleached as above, in part brecciated and cemented by py., arsenopy. and siderite (?) or sphal. (?), in part sheared at 70° - 80° to cn., with elongite streaks of sphal. or siderite plus minor py., spy. Abt 5/8 siderite or sphal., 2/4 py., 1/4 spy. Irreg. patches quartz present also.
- 1176.5 - 1177.6 : White to greyish quartz vein at about 80° to cn. True width probably about 2" to 3" . Fractures filled by carb stringers.
- 1177.0 - 1178.3 : Breccia zone as 1173.2 - 1176.5 .
- 1178.3 - 1185.1 : Num. quartz stringers patches rk/ partially bleached, carbonatized. Occas. irreg. carb-chlorite stringers. Possible local weak shearing 50° - 70° to cn. Tr. py. throughout.
- 1184.3 - 1185.1 : Elongite brown streaks siderite or sphal. at 50 - 70° to cn.
- 1185.1 - 1194.5 : Rk. has num. quartz and quartz - carb stringers and veinlets, generally with minor to 1/4 associated py.
- 1187.7 : 2" Irreg. patch blue quartz-carb.
- 1189.4 : 4" Irreg. patch blue quartz-carb. Tr. py.
- 1194.5 - 1199.6 : Extremely num. irreg. blue-quartz-carb veinlets.
- 1197.1 : 1" blue quartz veinlet 50° to cn.
- 1200.5 - 1246.0 : Milky quartz stringers common, usually with minor calcite. Generally irreg. (Major veins and veinlets observed below).
- 1206.7 : Irreg. milky veinlet about 1" wide.
- 1209.0 : Irreg. milky veinlet about 1/2" wide.
- 1226.2 - 1227.9 : Carbonatized - silicified zone of c.g., appears. Tr. py.
- 1226.3 : 2" Milky quartz-carb veinlet at about 50° to cn.
- 1227.0 : 2" Milky quartz-epidote (?) veinlet at 45° to cn.
- 1227.6 : 2" Milky quartz-epidote (?) veinlet at 40° to cn.
- 1233.4 : 1" Milky quartz veinlet at 45° to cn.
- 1240.7 : 2" Milky quartz veinlet (minor carb) at 30° to cn.
- 1241.6 : 1" Blue quartz veinlet at about 45° to cn. Tr. py.
- 1243.2 : 1" Milky quartz veinlet at about 40° to cn.
- 1247.8 - 1251.0 : Bleached zone (pale grey) extremely highly carbonatized. Cut by hairline and larger blue quartz stringers. Tr. py.

- 1248.0 : 3rd Irreg. blue quartz veinlet.
1249.5 - 1250.6 : Blue quartz stringer sub-parallel to core. Estimated true thickness 2". Carb stringers in fractures. Tr. py.
1255.8 : Rk., slightly to highly bleached has a weak foliation 30° - 50° to cn., for most part. Highly carbonatized.
1255.9 - 1257.6 : Num. irreg. stringers, patches blue quartz. About 2% assoc. py.
1257.6 : 2nd Irreg. dark blue quartz veins; minor white carb, Tr. py.
1262.8 - 1263.6 : Perphyroblastic (,) rock with strong foliation abt 40° - 50° to cn. Num. sugar - like slightly pinkish grains or aggregates of clay min (?). Num. irreg. blue quartz stringers or patches. Abt 2% py.
1267.7 - 1268.5 : Irreg. blue quartz stringers . About 0.5% py.
1269.1 - 1269.4 : Irreg. blue quartz stringers. About 0.5% py.
1269.6 - 1271.2 : Mottled blue to milky quartz vein. Contacts irreg. b but about 50° - 80° to cn., hence true thickness less than indicated. White carb-filling fractures. Tr. py.
1271.2 - 1272.0 : Num. irreg. blue quartz stringers. About 1% assoc. py.
1274.2 - 1274.7 : Irreg. blue quartz stringers. Tr. py.
1277.7 - 1279.0 : Num. irreg. blue quartz stringers, about 1% py. Rk. bleached, almost nil carb.
1280.0 - 1281.9 : Bleached zone around deep blue irreg. quartz veinlet (1280.5 - 1281.9) nearly parallel to core.
1282.2 - 1297.8 : Occas. narrow bleached zones which apparently lack quartz stringers. Nil carb.
1297.8 - 1314.7 : Bleached zone around a series of quartz veinlets and stringers. Amount bleaching various with proximity stringers as a general rule. Rk. nil to mod. carb'd. Less alt'd portions appear as g., from 1304.5 on and are characterized by pinkish grains clay min (?) set in a chlor'd dark green matrix. Local mod. well developed foliation 25° - 35° to cn. (Weak shearing ?).
1298.2 - 1299.2 : Irreg. milky to dark blue quartz veinlet sub-parallel to core. About 1% assoc. py. in wall - rock.
1301.3 : 1st Blue quartz veinlet 6° to cn. Tr. py.
1304.6 - 1306.2 : Numerous irreg. blue quartz stringers, 5% py.
1308.4 - 1309.4 : Numerous irreg. blue quartz stringers, 1% py.
1312.4 - 1314.5 : Occas. irreg. blue quartz stringers. Tr. py.
1314.7 - 1335.0 : Rk. dark green, chlor'd, m.g., w. numerous grains pinkish - tinted clay min (?). Low to nil carb. Occas. irreg. milky quartz stringers, very occas. bleached zones w. trace blue quartz. Minor py.
1326.1 - 1328.7 : Core badly ground (Broken core barrel).
1321.3 - 1329.5 : Occas. thin blue quartz stringers, mainly irregular to 70° - 85° to cn.
1331.5 - 1334.5 : Several blue quartz stringers up to 1/2" wide at 60° - 80° to cn. Minor py.
1335.0 - 1365.0 : Rk. dark green to medium green, hithly carb'd, chlor'd, still m.g., in appearance with high percentage clay minerals. Very numerous irregular small calcite - milky quartz stringers. Tr. py.
1356.0 : 1st Irregular milky quartz - carb stringer.
1359.5 : 2nd Irregular patch carb - pale blue quartz.

1360.4 : $\frac{1}{4}$ " Milky quartz - carb stringer 50° to en.
1361.3 - 1362.0 : Irregular cloudy patches carb.

1365.0

1365.0 END OF HOLE

P.L. Honey

PIPE AND CASING PULLED.

Sample Number	Section of Hole From	To:	Sample Length	Au	Ag	Co
284 N	61.6	62.6	1.0	TR		
285	65.6	66.6	1.0	TR		
286	87.6	88.6	1.0	TR		
287	88.6	89.6	1.0	TR		
288	116.2	117.2	1.0	TR		
289	119.4	120.0	.6	TR		
369	168.0	170.0	2.0	TR		
370	170.0	172.0	2.0	TR		
371	172.0	174.2	2.2	.010		
507	272.0	273.0	1.0	TR		
508	275.7	276.7	1.0	TR		
509	276.7	277.7	1.0	TR		
510	290.4	292.5	2.1	TR		
511	292.5	295.0	2.5	TR		
512	295.0	297.0	2.0	TR		
513	297.0	299.0	2.0	TR		
412	410.5	412.5	2.0	TR		
413	412.5	414.5	2.0	.010		
414	430.5	431.5	1.0	.015		
467	473.5	475.0	2.0	.010		
468	483.0	484.0	1.0	TR		
469	496.2	497.7	1.5	TR		
470	497.7	498.7	1.0	.010		
530	500.5	502.2	1.7	.020		
531	675.7	678.7	2.0	.010		
532	678.7	680.0	1.3	TR		
533	680.0	681.1	1.1	.020		
534	681.1	681.9	.8	.070		
535	681.9	682.9	1.0	.030		
536	682.9	685.0	2.1	TR		
601	822.5	824.0	1.5	TR		
602	1118.6	1120.0	1.4	TR		
603	1123.3	1125.0	1.7	TR		
604	1146.2	1148.2	2.0	TR		

Sample Number	Section of Hole From	Section of Hole To	Sample Length	As	Ag	Co
605	1145.2	1150.0	1.8	TR		
606	1153.0	1154.0	1.0	TR		
607	1155.0	1157.0	2.0	TR		
608	1157.0	1158.5	1.5	TR		
609	1158.5	1160.0	1.5	.010		
610	1160.0	1162.0	2.0	.020		
611	1162.0	1164.0	2.0	.010		
612	1164.0	1166.0	2.0	.010		
613	1166.0	1168.0	2.0	.015		
614	1168.0	1170.0	2.0	.020		
615	1170.0	1172.0	2.0	.030		
616	1172.0	1173.5	1.5	.010		
617	1173.5	1175.0	1.5	.070		
618	1175.0	1176.3	1.3	.090		
619	1176.3	1177.3	1.0	.120		
620	1177.3	1178.3	1.0	.030		
621	1178.3	1182.0	3.7	.010		
622	1182.0	1184.0	2.0	TR		
623	1184.0	1185.5	1.5	TR		
624	1185.5	1187.5	2.0	TR		
625	NO SAMPLE					
626	1187.9	1190.0	2.1	TR		
627	1190.0	1192.5	2.5	TR		
628	1192.5	1195.0	2.5	TR		
629	1195.0	1197.5	2.5	TR		
630	1197.5	1200.0	2.5	TR		
472	1240.5	1242.0	1.5	.010		
473	1247.8	1248.9	1.1	TR		
474	1248.9	1250.0	1.1	.010		
475	1250.0	1251.0	1.0	.020		
476	1255.9	1256.9	1.0	.050		
477	1256.9	1259.9	3.0	.030		
478	1262.8	1263.8	1.0	.055		
479	1264.5	1266.0	1.5	.010		
480	1266.0	1267.5	1.5	.010		
481	1267.5	1269.0	1.5	.010		
482	1269.0	1270.0	1.0	.020		
483	1270.0	1271.2	1.2	TR		
484	1271.2	1273.0	1.8	.030		
485	1273.0	1275.0	2.0	.030		
702	1277.8	1278.8	1.0	.020		
701	1280.5	1282.0	1.5	.040		
703	1293.0	1294.6	1.6	.010		

Sample Number	Section of Hole From	To	Sample Length	As	Ag	Co
704	1302.5	1302.5	2.0	TR		
705	1302.5	1304.5	2.0	.010		
706	1304.5	1306.2	1.7	.020		
707	1306.2	1307.5	1.3	TR		
708	1307.5	1309.5	2.0	.020		
709	1309.5	1312.0	2.5	.020		
710	1312.0	1314.4	2.4	.025		
711	1328.3	1328.0	1.7	.020		
712	1328.0	1329.5	1.5	.010		
713	1331.5	1333.0	1.5	.010		
714	1333.0	1334.5	1.5	.010		

SLURGES ASSAYS

290	40	50		TR		
291	50	60		TR		
292	60	70		TR		
293	70	80		TR		
294	80	90		TR		
295	90	100		TR		
296	100	110		TR		
297	110	120		TR		
298	120	130		TR		
299	130	140		TR		
300	150	160		TR		
225	170	180		TR		
226	180	190		.010		
227	190	200		.010		
228	200	215		TR		
229	215	230		TR		
230	245	260		TR		
231	260	275		TR		
232	275	290		TR		
372	310	320		TR		
373	320	330		TR		
374	330	340		.010		
375	340	350		.010		
376	350	360		TR		
377	360	370		.010		
378	370	380		TR		
379	380	390		TR		
380	390	400		TR		

Sample Number	SLICES		ASSAYS			
	Section of Hole From	To	Sample Length	As	Ag	Co
381	430	440		TR		
382	440	450		TR		
383	450	460		TR		
384	460	470		TR		
385	470	480		TR		
386	480	490		.015		
387	490	500		TR		
388	500	510		.010		

D.D.H. 54

Location: 10,114.97 N
 10,529.22 E Elevation 1472.39'
 510.0' N on section C

Started: December 14-1959
 Compl. : December 22-1959
 Logged by: P.L. Money and
 P. Geisterfer

Dip at collar: 90°
 at 450.0' 79°
 at 900.0' 70°

Pajeri	Amizuth	Dip
At 450.0'		80°30'
At 900.0'	S 12° W	72°

Amizuth: 0°

Length: 999.0'

Core: ANT

0.0 CASING

7.0 ALT'D DIORITE

7.0

Mod. dark green, not evenly coloured, mod. to coarse grained with visible grain boundaries. Hardness less than a knife. Quartzified, also quartz eyes and slightly carb'd with a single carb-qtz (epidote-chl.) str. 30-45° cn.

Constituents are: dark green chlorite (part could be still (?) amphibole), light green epidote, greyish quartz, light grey and soft ? (clay mineral?) and in places patchy-like feldspar which seems to secondary. Traces of (xin) py, in general scattered patches, but also in joints (?) and in carb. qtz str.

27.3-28.5 : Local increase of inter granular epidote (second after feldspar?), also in patches (?) in combination with qtz and carb. Do at 32.2 and 37.2

41.0 Coming in of the so called dotted type of alt'd diorite. Contact between the type and the foregoing is not well visible. Mod. dark green, matrix is evenly coloured, fine to mod. gr. and dotted by tiny spots; light grey in colour and very soft, probably a alteration product (clay mineral).

Constituents are dark green chlorite, amphibole (possible alt'd into chlorite), quartz, a greyish clay mineral (?) and scattered patches etc. of py. There is no, or only slightly in places, carb'n. Patches and str's of dark green chlorite. This type does not contain much epidote (in comparison with the mod. gr. type at 7.0)

85.4 Like 7.0, but relatively more light greenish epidote up to 95.0. Near ctet sharp 40-45° cn.

97.6-99.2 : Indication of dragging (shear) 55-65° cn., characterized by sch. chlorite and locally quartz eyes.

103.5-107.0 : Grey white feldspar instead of light green epidote and the end of the coarse gr. zone is characterized by quartz and carb. str., like patches. Non carb'd.

108.0-116.3 : Fine grained type. Non carb'd.

116.3-131.8 : Coarse gr. type with a few qtz carb. str's 20° cn. and fracturing 20° cn. from 125.0-125.0. These qtz carb. str. contain between 128.8-130.0 that orange red coloured mineral. Non carb'd.

131.0-131.8 : Concentration of quartz-carb-epidote.

131.8 Fine gr. type. In places some epidote str's 55-60° cn., some chlorite patches and str. 10-45° cn., qtz calc str. 10-55° cn. (a single) and tr. of py. (associated with the carb-qtz).

164.2-191.6 : Coarse gr. type, sl. carb'd. At the contact a quartz (carb.) - py str. 60° cn. (composite) and more py on the first 2' (2-3%). Far contact irregular 10-30° cn.

- 191.6-199.0 : Fine gr. type. Non carb'd.
199.0-201.0 : Coarse gr. alt'd diorite, far contact transitional.
201.0-232.0 : Fine gr. type, in places mod. gr. appearing and also faintly a dotted type of texture in places.
201.7 Composite bluish grey quartz-carb-chl. str., 50-60° cn., 1 - 1½" and 10-15% pyrite.
202.2 Ground core over 1'.
209.0 : 1" milky white qtz-carb. str., 40-45° cn. containing some chl.
232.0-280.0 : Coming in of the dotted texture. Non carb'd. A few carb. qtz. str. 20-45° cn. (232.0-255.0).
There is a gradual increase (to several) in carb. qtz. str's, 10-50° cn., in general 20-30° cn. In places the texture seems to be coarse grained, but this is faintly visible.
276.5 Slipping at 75° cn. over 1"
280.0-318.0 : the fine gr. type
280.6 Indication of slipping, 65-70° cn., local py concentration.
288.0-290.7 : Suspected coarse gr. type. Nearly visible.
298.0 Local concentration (.1') of py in combination with carb-qtz str. and carb'n.
299.8-303.0 : Suspected coarse gr. type, texture faintly visible. Contacts are also faintly visible.
303.0 There is a gradual decrease in carb'n and the intensity could vary from place to place. A few carb. str's 30-45° cn. Scattered patches of py.
315.8 1" composite qtz-carb-chl str. 75° cn.
318.0-343.2 : Dotted type of texture. Mod to h. carb'd.
319.7-323.7 : Coarse grained section?
335.0 Mod. carb'd.
334.0-343.0 : Badly drilled core. Diameter varies and core is broken
343.2-344.8 : Indication of slip, visible due to very narrow epidote str's 55-60° cn.
344.8-379.0 : Coarse gr. type. Grain boundaries nearly visible. A few carb'd str's 10-55° cn. Traces of (scattered) py.
360.0-379.0 : Indication of shearing, very narrow epidote stringers 55-65° cn.
379.0-395.7 : Coarse gr. type. Carb'n al. in places, mod. feldspar still visible and not yet wholly epidotized.
386.2-395.7 : Occas. irreg. white carb-chl patches. Tr. assoc. py.
394.2 Irreg. white to pale bluish ½" qtz stringers. Tr assoc. py.
395.7-403.1 : Contact gradational, mod. f.g. type, highly chlor., mod. white specks clay minerals (?), mod. sli., only slight carb., epid. Occas. co. py. xls, to py throughout.
396.5 Epid., chl., probable shear zone about 1" wide at 50-80° cn.
398.8-400.0 : Sec. surfaces about 60° cn to sub-parallel to core. Minor py. assoc. carb.
403.1-442.0 : At 403.1 above rock type grades into a similar rock type but with higher epidote content, occas. irreg. epid. stringers, carb-chlor. stringers, fairly num. blue qtz eyes. The usual str. py in part assoc. with epidote stringers.
413.0-444.3 : Num. vague sub-parallel epid. stringers 20-40° cn.
430.9 2" section e.g. similar rock around irreg. epid. stringer zone (approx 50-60° cn.).

- 442.0-449.6 : Rock c.g., contact obscured by irreg. epid., carb., white qtz stringers. About so much as last but clay mineral present only locally. Texture equigran., generally. Occas. co. xls py.
- 449.6-450.8 : Rock sim. to above but mainly f.g.
- 450.8-451.6 : Rock sim. but c.g. Contact gradational.
- 451.6-454.2 : Rock f.g. Occas. carb. stringers.
- 454.2-457.6 : Rock c.g., contacts gradational at about 20-30° cn.
- 457.6-465.7 : Rock f.g., occas. carb. stringers.
- 465.7-466.3 : Rock c.g., contacts gradational, irreg., occas. carb. stringers.
- 466.3-480.2 : Rock f.g., occas. carb. stringers, epid. stringers
1/2" white carb. stringer 200 cn.
- 480.2-488.6 : Rock c.g., sim. but occas. grains white secondary fold.
- 488.6 3" white to bluish qtz stringer, U.C. 300 cn., L.C. irreg. tr. py.
- 489.0-500.6 : Rock f.g., is like 466.3-480.2
- 500.6-506.5 : C.g., contacts gradational, rock very highly epidotized.
- 506.5-526.0 : F.g., otherwise as above. Local c.g. section up to 3" wide.
- 515.8 1" milky qtz vein 500 cn. Barren.
- 526.0-542.7 : Rock c.g., generally as last, gen. highly epid., locally moderately, locally very high epid. Num. elongate chlor. sph. xls. locally blotchy secondary fold. Tr py as grains, elongate lenses, stringers.
- 542.7-567.0 : Rock f.g., sim. to above but probably only moderate epidote. Usual tr py., occas. carb. and epid. stringers, gen. irreg.
- 543.3 2" white carb. stringer at 20° cn.
- 552.1-553.5 : Irreg. epid.-qtz-carb-chlor stringer zone
- 567.0-576.0 : Rock f.g., sim. to last but mod. to high carb., prob. low epid., gen. mod. clay min. occas. low. Occas. carb. veinlets, gen. irreg.
- 576.0-609.5 : Rock sim. to above but generally low carb. content. White barren carb.-qtz stringers generally normal to wavy to 300 cn. quite common. Usual tr. py.
- 586.7 1" milky qtz vein, tr. carb. 80 irreg., L.C. 150 cn.
- 588.1 5" barren milky qtz vein. Contacts irreg.
- 588.9 1" irreg. barren milky qtz vein. Contacts irreg.
- 589.5 1" " " " " " white carb. vein
- 593.0 3" barren milky qtz vein-white carb. vein
Carb. definitely later. Contacts 100 cn.
- 594.0 2" irreg. grey carb.-milky qtz vein.
- 594.3 1" irreg. milky qtz vein.
- 585.3 3" irreg. patch grayish carb. milky qtz, chlorite salmon pink (stained?) carb.
- 598.2 6" white carb.-milky qtz vein. Contacts irreg. but about 200 cn.
- 603.6 3" white carb. vein 100 cn.
- 609.5-624.0 : Rock f.g. to c.g., with qtz eyes, secondary fold?, alteration much as above. Min. milky qtz and white carb. stringers, generally irreg. but in part 5-400 cn. Tr co. py.
- 610.0 Co. arsenopy in a 1" irreg. qtz stringer (milky qtz)

- 620.1 5" irreg. patch milky qtz, chlorite. Tr py.
- 623.2 2" irreg. vein milky qtz-calcite-chlor.
- 624.0-666.0 : Rock is like above but only occas. milky qtz or carb. veins and stringers.
- 631.7 1" long lens pyrite.
- 633.1 2" carb.-qtz-chlor. vein. Contacts irreg.
- 639.0 3" carb.-milky qtz-chlor. vein. Contacts irreg. but about 20-35° en.
- 647.9 1" milky qtz-carb. vein 25° en.
- 648.8 1" milky qtz vein. Contact irreg.
- 649.4 2" milky qtz vein. Contact 40° en.
- 666.0-707.0 : Rock all f.g., of uniform texture, apparently equigran. Highly chlor., high to mod. carb., mod. clay min., apparently only minor or no epid. sil. Occas. hair line irreg. calcite and calcite chlor. stringers. Tr. py.
- 666.3-687.4 : Num. irreg. carb. stringers.
- 699.4 Rock begins to become slightly coarse grained.
- 706.0 1" white carb. stringer. U.C. 500, L.C. 30° en.
- 707.0-740.4 : Rock becomes m.g. at 707.0'. Has been gradually increasing in grain size since 699.4. Otherwise as previous.
- 711.2 2" white carb.-chlor. vein. Contacts about 10° en. but slightly irreg.
- 718.5 2" white carb.-chlor. vein sub-parallel to core.
- 720.3-740.4 : Carb. stringers quite num. Gen. 10-40° en.
- 740.4-748.6 : Rock gray rather than green, high in clay min., extremely high carb., mod. qtz (?) probably low in chlorite. In part somewhat bleached. Occas. irreg. patches stringers blue vein qtz, higher than average py.
- 743.9 1/8" irreg. blue qtz stringer.
- 747.3 1" blue qtz stringer, 1/2" band siderite at 50° en.
- 747.4-748.5 : Rock sheared, brecc., shearing at 45-55° en. Sev. blue qtz-carb. veinlets parallel to shearing. Tr py, cp.
- 748.5-750.3 : C.g. rock, dark green, large grains clay min., highly chlor., only tr. carb. epid., sil.
- 750.3-781.0 : F.g., sim to above, contacts gradational. Highly chlor., high clay min., low to nil carb., prob. mod. sid., epid. Only very occas. irreg. carb. stringers and tr py.
- 781.0-782.2 : C.g., sim. but num qtz eyes, secondary feld., contacts sharp, irreg. but do not seem to be intrusive.
- 782.2-783.3 : F.g. as 750.3 to 781.0
- 783.3-790.5 : C.g. sim. to 781.0-782.2 but in part highly epid. Contacts about 10° en., sharp but not intrusive.
- 790.5-815.6 : F.g. sim to 750.3-781.0 but low in clay min. Mod. carb.
- 815.6-844.3 : F.g. as 780.3-781.0. Contacts gradational.
- 830.0 Rock has increases to mod. to high epid., mod. to low clay min from here.
- 844.3-845.0 : Rock c.g., alteration as above. Contacts sharp 10° en., but not intrusive.
- 845.0-848.5 : As 815.6-844.3
- 848.5-851.7 : As 844.3 to 845.0, contacts miscing.
- 851.7-867.9 : F.g. as 790.5 to 815.6
- 867.9-870.0 : Rock c.g., highly chlor., much secondary feld., no clay min., minor epid., qtz, nil carb. Contacts sharp, irreg. but probably not intrusive.
- 870.0-901.8 : F.g. as 790.5 to 815.0

NORSEAN VEIN

901.8-903.4 : Rock o.g., as 867.9-870.0. Contacts sharp but not
intrusive 20° cn.
903.4-918.4 : Rock f.g. as 790.5 to 815.6. Occas. very fine irreg.
stringers py.
918.4-921.4 : C.g. as 901.8-903.4 but very high percentage epid.,
only mod. secondary feld. U.G. irreg., L.G. missing.
921.4-944.2 : Sim. to 790.5-815.6. Occas. no. grains secondary feld.
944.2-975.0 : Rock f.g., dark green, soft (as above), highly chlor.,
high clay min., mod. to minor epid., sil., tr. to nil carb.
946.7 3" irreg. patch milky barren white qtz.
953.0-975.0 : Local sections have mod. to low clay min.
975.0-985.9 : Rock sim. to above but generally low in clay min.,
occas local sections with high clay min. A few chloritic stringers.
985.9-986.2 : Rock o.g., nature of contacts obscure but apparently
not intrusive. Rock highly epid., minor secondary feld, blue qtz
eyes.
989.2-999.0 : as 975.0-985.9.

999.0 END OF HOLE

999.0

F.L. HONEY

CEMENTED TO COLLAR 22 BAGS USED

<u>Sample Number</u>	<u>Section of Hole From</u>	<u>To</u>	<u>Sample Length</u>	<u>As</u>	<u>Ag</u>	<u>Co</u>
10823	85.0	87.3	2.3	.015		
10824	97.5	99.3	1.8	.010		
256 N	130.7	131.7	1.0	TR		
257 N	164.1	165.8	1.7	TR		
258 N	206.6	207.4	0.8	TR		
259 N	286.0	281.1	1.1	TR		
260 N	297.4	299.1	1.7	TR		
110 N	393.8	394.8	1.0	.010		
116 N	488.4	489.6	1.2	.015		
137 N	552.0	553.5	1.5	TR		
311 N	582.5	585.0	2.5	.010		
312 N	585.0	587.5	2.5	TR		
313 N	587.5	590.0	2.5	.010		
314 N	590.0	592.5	2.5	.010		
315 N	592.5	595.0	2.5	.015		
316 N	595.0	597.5	2.5	.010		
317 N	597.5	600.0	2.5	TR		
318 N	600.0	602.5	2.5	TR		
319 N	602.5	605.0	2.5	TR		
320 N	605.0	607.5	2.5	TR		
321 N	607.5	610.0	2.5	.055		
322 N	610.0	612.5	2.5	.010		
323 N	612.5	615.0	2.5	.015		
324 N	615.0	617.5	2.5	.065		
325 N	617.5	620.0	2.5	TR		
326 N	620.0	622.5	2.5	.010		
327 N	622.5	625.0	2.5	TR		
328 N	631.3	632.3	1.0	.010		
329 N	647.5	650.0	2.5	.010		
401 N	735.0	739.0	4.0	TR		
402 N	739.0	740.4	1.4	TR		
403 N	740.4	741.3	0.9	.015		
404 N	741.3	742.6	1.3	.060		
405 N	742.6	743.8	1.2	.050		
406 N	743.8	745.0	1.2	.020		
407 N	745.0	746.0	1.0	TR		
408 N	746.0	747.3	1.3	.010		
409 N	747.3	748.9	1.6	.010		
410 N	748.9	750.0	1.1	TR		

SLUDGE ASSAYS

Sample Number	Section of Hole From	To	Sample Length	Au	Ag	Co
10793	20	30		TR		
10794	30	40		TR		
10795	40	50		TR		
10796	50	60		TR		
10797	60	70		TR		
10798	70	80		TR		
10799	80	90		TR		
10800	90	100		TR		
205 N	100	110		TR		
10835	110	120		TR		
10836	120	130		TR		
10837	130	140		TR		
10838	140	150		TR		
10839	150	160		.010		
10840	160	170		TR		
10841	170	180		TR		
10842	180	190		TR		
10843	190	200		TR		
10844	200	210		TR		
10845	210	220		TR		
10846	220	223		.010		
10847	223	240		.010		
10848	240	255		.010		
10849	255	270		TR		
10850	270	280		TR		
106 N	280	290		TR		
107 N	290	300		TR		
108 N	300	310		TR		
109 N	310	320		TR		
274 N	320	330		TR		
139 N	330	340		TR		
275 N	340	350		TR		
276 N	350	360		TR		
277 N	360	370		TR		
278 N	390	405		TR		
279 N	405	420		TR		
140 N	420	435		TR		
280 N	435	450		TR		
281 N	450	465		TR		
282 N	465	480		TR		
283 N	480	490		TR		
141 N	490	500		TR		
142 N	500	510		TR		
143 N	510	520		.010		
144 N	520	530		.010		
145 N	530	540		.010		

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample</u>	<u>As</u>	<u>Ag</u>	<u>Co</u>
	<u>From</u>	<u>To</u>	<u>Length</u>			
146 N	540	550		TR		
147 N	550	560		TR		
148 N	560	570		TR		
149 N	570	580		TR		
150 N	580	590		TR		
221 N	590	600		TR		
222 N	600	610		TR		
223 N	610	620		TR		
224 N	620	630		TR		
330 N	620	630				
331 N	630	640		.015		
332 N	640	650		.010		
333 N	650	660		TR		
334 N	660	670		TR		
335 N	670	680		TR		
336 N	680	690		TR		
337 N	690	700		TR		
338 N	700	710		TR		
339 N	710	720		TR		
340 N	720	730		TR		
341 N	730	740		.020		
342 N	740	750		.020		

U.D.H # 52

Started: December 3/59
Completed: December 9/59
Logged: P. L. Money

LOCATION: 19,335.00 Elevation: 1571.26
19,416.89

195.0' L on station "Q"

Length

195'

300'
200'

72'
60'

Length: 805'
Core : 412'

O. O. Casing

6.0

6.0 ALT'D DIORITE

C.g., dark green, soft, equigranular, composed of amph, feld, highly chlor., Moderate silicification (qtz. eyes) num. fresh rounded grains feld. (secondary?) Mod. clay minerals, epid. Locally highly epidotized. Only tr. carbonate. Very occas. py. grains.

6.0 - 15.0: Points rusty

25.0 - 26.7: About 50% epid, a few irreg. white qtz. stringers, some blue qtz. eyes. No min., Contacts irreg.

30.9: 1" zone as above at 60° cn.

33.8 - 36.0: Sev. small zones as above - irregular.

39.3: 1/2" irreg. epid-qtz. zone as above.

75.2 - 76.5: Sev. irreg. epid - white qtz. stringers.

88.6 - 89.2: About 75% epid around sev. milky white qtz. stringers at 5° to 20° cn. 15% blue qtz. eyes with epidote.

90.6: Salmon pink stained irreg. carb. stringer.

96.8: 1" irreg. patch mauve or reddish purple hard min. with a good cleavage - possibly oxinite or a manganese epidote.

107.9 - 108.8: Rk mod. sheared at 50-60° cn. About 5% py., tr. cp. &

128.4 - 131.4: Rk. f.g., alt'd., comp. apparently as the c. g. rock. Contacts gradational.

146.5 - 147.0: Irreg. patch epid. white qtz.

149.4: 3" irreg. white calcite stringer.

158.3 - 160.5: Zone of about 40% epid., num. blue qtz. eyes (30%)

212.8

212.8 ALT'D DIORITE

Upper contact gradational, f. g. locally m. g. dark green, soft. Heavily chlor., mod. carb., mod. to low clay min., low epid., ril. Texture locally prophyoblastic (?) due to large grains white secondary (?) feld. Tr. py. Occas. carb. stringers and carb - chlor stringers, mainly at 30-50° cn.

230.4: 1" carb. - chlor. veinlet 50° cn.

232.4: 1" irreg. carb. veinlet.

235.6: 1/2" carb-chlor. veinlet 65° - 70° cn.

237.2: Num. carb. chlor. veinlets, the majorite 30-60° cn.

245.6

245.6 ALT'D DIORITE

U.C. gradational, s.g., soft, dark green. Alteration similar to 212.6 - 245.6 but mod. sil. (blue qtz. "eyes") mod. to (locally) high clay min. Occas. carb. veinlets gen. 10-30° cn.

255.4 - 255.9: Rk. mod. sheared 60° cn. About 20% carb., tr. py. minor qtz.

267.2: 1" white qtz. veinlet cut by carb. stringers. Normal to core approx.

271.2

271.2 ALT'D DIORITE U.C. gradational. F.G. or f. g. appearing, dark green, soft, consisting orig. of feld., amph? New highly chlor., carb., minor clay minerals, silification. Occas. irreg. white carb. stringers, generally accompanied by a few grains euhedral cubic py.

283.2 - 287.6: About 1% py. - mainly as euhedral xlls.

287.6 - 287.8: Irreg. white carb. stringers with inches wall rock.

287.8: 1" mineralized and sheared zone - composed of elongate, streaks soft brown min. (siderite?) blue qtz., call rock at 20° cn. About 20% py. partly as cubic xlls. and partly in elongate streaks parallel to the other minerals. †

287.8

287.8 QTZ VEIN

Contacts missing. Dark blue to milky quartz, mottled but either type dominant in certain sections. Fractures in qtz. cemented by white calcite stringers. Py., cp., po. arsenopy. and native gold locally (see below)

287.5 - 288.7: Mainly blue qtz. Tr. py., cp., po. as small stringers (in fractures), small xlls.

288.7 - 290.8: Mainly milky qtz. Only tr. py.

290.8 - 301.0: About 50% blue qtz. 50% white (Milky) qtz. mottled.

Generally a tr. py.

290.9: 3 very small specks native Au.

292.1: At least 8 fairly large grains native Au. (up to 1/10" across) on a joint or fracture surface assoc. with py. Should assay several oz. between 292.0 and 293.0.

292.4: Sev. specks native Au.

301.0 - 301.7: Highly chlor., carb. sil. incl. wall rock. About 5% py.

301.7 - 303.1: Qtz. mainly blue, tr. py. cp. (?)

303.1

303.1 ALT'D DIORITE F. G. appearing, highly sil., carb. sericitized? soft, dark grey. Co. py. throughout.

303.1 - 304.3: Highly mineralized, weakly sheared (?) at 45° cn. About 20% arsenopy., 20% py., tr. cp., 8% of soft reddish brown min. (siderite?) sev. patches qtz., carb., a few grains of a soft (?) mauve min.

304.3 - 305.1: About 5% py. - mainly as. co. cube

316.0

316.0 ALT'D DIORITE Above rock grades into a dark green, soft c. g. rock containing mainly of chlor. amphibole laths with a marked lineation sub-parallel to the core and haclinized feldspars. Tr. py., cp.? as co. grains. A few carb. stringers, the thicker ones at 40-60° cn. The heclin (or other clay min.) for the most part is pink. Occas. blue qtz. eyes, mod. to high carb.

353.0

353.0 ALT'D DIORITE U.C. indeterminate, gradational. Rk. is almost identical to that between 316.0 to 353.0 but is highly carb., medium grained, and has only minor amounts of the clay min. and a mod. high percentage (up to 20%) of an opaque slightly magnetic black min. (ilmenite? - suggesting the "clay min." mentioned above may be, in part at least "leucoxene".)

363.5: 3" irreg. white qtz. carb. chlor stringer. Approx. 50° cn. Tr. py.

368.0

368.0 ALT'D DIORITE U.C. extremely gradational. c.g., dark green, soft. As 245.6 to 271.2. Occas. carb. veinlets, mainly 40-70° cn. Tr. co. cubic py.

376.8

376.8 ALT'D DIORITE Similar to 368.0 but high percentage (10-15%) clay min., high. to mod. carb., locally blue qtz. eyes, moderate epidote. Tr. py., occas. carb. stringers. "few secondary? feldspar grains.

380.5 - 383.0: Weak to mod. shearing 50-60° cn. Sev. carb. chlor str.

440.8 - 450.4: Num. carb. qtz. stringers, in part irreg., in part 20-30° cn. No min.

466.4: Irreg. patch blue qtz. cut by carb. stringers. Barren.

470.0

470.0 ALT'D DIORITE F. G., soft, dark green, contact gradational, highly chlor., high percentage white to mauve clay min. or "leucoxene" mod. to low carb., very minor epid., sil. Tr. py. Only occas. carb stringers.

476.5: 1" carb. - chlor. veinlet 60° cn.

481.1: 1" irreg. patch carb.

484.5: 1" carb. veinlet about 50° cn.

498.2: 3" carb. chlor. vein 60° cn.

502.8

502.8 ALT'D DIORITE F.G., soft, dark green, highly chlor, carb. moderate sil. to clay min. or leucoxene, very minor epid, Tr. py., po., Occas. carb. stringers at various angles. Abt. 10% of a band black opaque as elongate grains which sometimes are aligned to produce a lination parallel to the core to 50° cn.

542.7: 3" of abt. 30% po. as irreg. grains

548.2 - 549.6: Sev. irreg. white and bleu qtz. stringers. Tr. py.

530.0: From here occas. irreg. blue qtz. stringers occur blue qtz. eyes, minor epid. ?

551.8 - 552.8: About 3% co. cubic py., 3% po. assoc. with a 1/2" qtz. stringer at 80° cn.

610.8: Po. carb. stringer at 55° cn.

616.3 - 617.0: Sev. irreg. po. - carb. stringers.

631.2 - 632.9: Mottled blue and white qtz. vein. U. C. missing, L.C. 40° cn. Cut by white calcite stringers following fractures and a series of sub-parallel (40-50° cn) po. stringers, the latter with minor assoc. py., cp.

632.9 - 633.5: Sil. bleached zone with num. blue qtz. stringers.

5% po., 2% cp., some py. in stringers 30° - 50° cn.

633.5 - 635.7: Rk. slightly bleached, occas. qtz. stringer. Tr py., po., cp.

635.7 - 636.5: Mottled blue and white qtz. vein. U. C. irreg., L. C. 50° cn., tr. py., po., cp. as stringers and separate xls and grains.

636.0 - 640.0: Rk. slightly bleached, occas. irreg. bleu qtz. strin.

640.0 - 668.8: Occas. irreg. blue qtz., milky qtz. and carb. stringers.

668.8

668.8 ALT'D DIORITE Alteration as above, rock c. g., equigranular. Upper contact gradational. Occas. blue qtz. white qtz., carb. stringers, generally irreg. Bleached zones assoc. with the qtz. stringers. Tr. py.

Magn. or ilmenite locally abundant.

675.0: 1" white qtz. veinlet 40° cn. Tr. py. Cut by carb. stringers.

675.3: 1" grey to white qtz. veinlet 40° cn. Tr. py. Cut by white carb. stringers.

682.0

682.0 ALT'D DIORITE As 502.8 to 668.8. Occas. irreg. blue qtz. stringers, white qtz. and white carb. stringers. Tr. py. assoc. with these and bleached zones around the blue qtz. stringers.

702.5: 1" barren blue qtz. vein 40° en.

713.5: 1" milky qtz. vein 10° en. No min.

714.7: 3" blue qtz. white carb. vein at 25° en. Inclusions wall rock, Tr. py. Carb. is later than qtz.

715.0 - 716.8: Num. elongate blue qtz. eyes and black opaque grains w. parallel alignment producing a lincation at 50-60° en.

722.0 - 722.8: Irreg. blue qtz. white carb. stock work. Tr. py.

723.0 - 723.1: Num. irreg. white carb. stringers.

728.0: 1/2" to 1" carb. stringer - somewhat irreg. but about 50-70° en.

728.1

728.1 ALT'D DIORITE U.C. observed by carb. stringers, L. C. very gradational. Bk. soft, e.g. dark green, alt. as above apart from only mod. carb., comp. as unit above. Cut by a very few white carb. blue qtz. stringers at various angles.

730.8: 1" white qtz. carb. veinlet 30° en.

732.1: 3/4" carb. veinlet 15° en.

732.5

732.5 ALT'D DIORITE F.C., dark green, soft, highly carb., high. clay mineral, highly chlor, only minor sil., epid., opaques. Occas. irreg. carb. str. Tr. fine to co. cubic py.

737.7: 1" carb. chlor. stringer at about 10° en.

740.4: 1" shear zone (?) 60° en. Elongate streaks chlorite.

741.1 - 741.5: Sev. slicken sided chlor. surfaces at 60-70° en.

771.2: 1" carb. chlor stringer at 20° en., a little irreg.

773.5* 774.1: Num. blue qtz. eyes, white fresh probl. secondary feld. giving a e.g. appearance

776.1: 3" of rock as above.

790.0 - 794.0: Sim. to above but consists epid. also, and co. chlorite (re-silized probably)

798.2: 1" carb. chlor. veinlet at about 50° en. (a little irreg.)

805.0

805.0 END OF HOLE

WELL LOGS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Gr</u>
	<u>From</u>	<u>To</u>		
10642	281.2	283.0	1.8	Tr
10643	283.0	285.0	2.0	.010
10644	285.0	286.8	1.8	.010
10645	286.8	287.8	1.0	.020
10646	287.8	288.9	1.1	Tr
10647	288.9	290.0	1.1	Tr
10648	290.0	291.0	1.0	Tr
10649	291.0	292.0	1.0	Tr
10650	292.0	293.0	1.0	.510
11111	293.0	295.0	1.0	.770 (quartered)
10672	293.0	294.0	1.0	Tr
11111	294.0	294.0	1.0	.010 (quartered)
10672	294.0	295.0	1.0	.010
11111	294.0	295.0	1.0	.010 (quartered)
10673	295.0	296.0	1.0	.115
11111	295.0	296.0	1.0	.010 (quartered)
10674	296.0	297.0	1.0	.020
11111	296.0	297.0	1.0	.010 (quartered)
10675	297.0	298.0	1.0	4.010
10676	298.0	299.0	1.0	.030
10677	299.0	300.0	1.0	.020
10678	300.0	301.0	1.0	.020
10679	301.0	302.0	1.0	.020
10680	302.0	303.1	1.1	.020
10681	303.1	305.0	1.9	.120
10682	305.0	307.0	2.0	.020
10683	307.0	309.0	2.0	Tr
10684	309.0	311.0	2.0	Tr
10685	311.0	313.0	2.0	.010
10686	313.0	315.0	2.0	.010
10687	315.0	317.0	2.0	Tr
10688	317.0	319.0	2.0	Tr
10689	319.0	321.0	2.0	Tr
10690	321.0	323.0	2.0	Tr
10691	323.0	325.0	2.0	Tr
10692	325.0	327.0	2.0	Tr
10693	327.0	329.0	2.0	Tr
10694	329.0	331.0	2.0	Tr
10695	331.0	333.0	2.0	Tr
10696	333.0	335.0	2.0	Tr
10697	335.0	337.0	2.0	Tr
10698	337.0	339.0	2.0	Tr
10699	339.0	341.0	2.0	Tr
10700	341.0	343.0	2.0	Tr
10701	343.0	345.0	2.0	Tr
10702	345.0	347.0	2.0	Tr
10703	347.0	349.0	2.0	Tr
10704	349.0	351.0	2.0	Tr
10705	351.0	353.0	2.0	Tr
10706	353.0	355.0	2.0	Tr
10707	355.0	357.0	2.0	Tr
10708	357.0	359.0	2.0	Tr
10709	359.0	361.0	2.0	Tr
10710	361.0	363.0	2.0	Tr
10711	363.0	365.0	2.0	Tr
10712	365.0	367.0	2.0	Tr
10713	367.0	369.0	2.0	Tr
10714	369.0	371.0	2.0	Tr
10715	371.0	373.0	2.0	Tr
10716	373.0	375.0	2.0	Tr
10717	375.0	377.0	2.0	Tr
10718	377.0	379.0	2.0	Tr
10719	379.0	381.0	2.0	Tr
10720	381.0	383.0	2.0	Tr
10721	383.0	385.0	2.0	Tr
10722	385.0	387.0	2.0	Tr
10723	387.0	389.0	2.0	Tr
10724	389.0	391.0	2.0	Tr
10725	391.0	393.0	2.0	Tr
10726	393.0	395.0	2.0	Tr
10727	395.0	397.0	2.0	Tr
10728	397.0	399.0	2.0	Tr
10729	399.0	401.0	2.0	Tr
10730	401.0	403.0	2.0	Tr
10731	403.0	405.0	2.0	Tr
10732	405.0	407.0	2.0	Tr
10733	407.0	409.0	2.0	Tr
10734	409.0	411.0	2.0	Tr
10735	411.0	413.0	2.0	Tr
10736	413.0	415.0	2.0	Tr
10737	415.0	417.0	2.0	Tr
10738	417.0	419.0	2.0	Tr
10739	419.0	421.0	2.0	Tr
10740	421.0	423.0	2.0	Tr
10741	423.0	425.0	2.0	Tr
10742	425.0	427.0	2.0	Tr
10743	427.0	429.0	2.0	Tr
10744	429.0	431.0	2.0	Tr

Sample Number	Section of Hole		Sample Length	In
	From	To		
10745	665.0	667.5	2.5	.020
10746	667.5	670.0	2.5	.010
10747	670.0	672.5	2.5	Tr
10748	672.5	675.0	2.5	Tr
10390	675.0	678.0	1.0	Tr
10400	678.4	680.0	1.6	.020
10391	681.0	61.5	1.5	.010
10392	681.5	683.0	1.5	Tr
10393	683.0	684.3	1.3	Tr
10394	691.9	693.5	1.6	.010
10395	693.5	695.0	1.5	.010
10396	695.0	697.0	2.0	.010
10397	697.0	698.5	1.5	.010
10398	698.5	700.0	1.5	.110
10749	701.2	705.1	1.0	.010
10750	711.6	715.2	.6	.010
10699	721.7	723.1	1.4	.020

CURT. ARRAYS

292.0	293.0	6.0	.966
292.0	305.0	13.0	.461

SHALLOW ARRAYS

10636	10	30	.030
10637	30	30	.010
10638	30	40	.010
10639	40	50	Tr
10640	50	60	Tr
10641	60	70	.010
10608	90	100	Tr
10609	100	110	Tr
10610	110	120	Tr
10611	120	130	Tr
10612	130	140	Tr
10613	140	140	Tr
10614	160	160	Tr
10615	180	220	Tr
10616	220	265	Tr
10617	265	290	Tr
10618	290	300	.030
10723	310	32	.370
10724	320	330	.090
10725	330	340	.010
10726	340	350	.050
10727	350	36	.010
10728	380	390	Tr
10729	390	400	Tr
10730	400	410	.020
10731	420	430	Tr
10732	430	440	Tr
10733	440	450	Tr

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Gr</u>
	<u>From</u>	<u>To</u>		
10734	450	460		
10735	460	470		
10736	470	480		
10737	480	490		
10738	490	510		
10691	505	520		
10692	520	540		
10693	540	555		.010
10694	555	570		.010
10695	570	585		.010
10696	585	600		.010
10697	600	615		.035
10698	615	630		.020

LOCATION: 9999.19 N Elevation: 1480.26
10,247.05 E

251.0' E on Section "0"

Depth	Dip
300'	85 $\frac{1}{2}$ '
600	82 $\frac{1}{2}$ '

Length: 665'
Core : ALT

O.O. Casing

- 7.0
7.0 ALT'D DIORITE C.G., dark green, soft, composed mainly of chlorite. Orig. (?) consisted of elongate amph. laths, interstitial feld. Heavily chlor., mod. epid., locally blue qtz. eyes, mod. clay min., low in carb.
7.0 - 15.8: Points rusty.
18.9 - 19.2: Irreg. patch 40% py. on one side of core.
30.3: 2" layer (1/4") py. xls.
- 36.6
36.6 ALT'D DIORITE F.C. or f.g. appearing, dark green, soft, heavily chlor., mod. epid., clay minerals, silica, only tr. of carb. Occas. hairline calcite str. Tr. py.
62.7: 1 $\frac{1}{2}$ " epid-chlor. veinlet 40° cn.
67.5 - 69.0: Scattered irreg. patches calcite qtz. No min.
84.0: Slight increase in grain size - but still f.g.
- 87.9
87.9 ALT'D DIORITE Contacts gradational. c.g., dark green, consists of elongate lathlike amph. (chloritized) interstitial feld. (epidotized), fresh rounded feld. (secondary ?) occas. blue qtz. eyes., minor to mod. clay min., tr. carb. Texture non-directional. Tr. py.
- 92.2
92.2 ALT'D DIORITE As 36.6 to 87.9. Contacts gradational.
- 97.5
97.2 ALT'D DIORITE As 87.9 to 92.2
102.5 - 147.2: Rk. extremely high in epid., highly silicified (blue quartz eyes.) num. large grains, clusters of grains of secondary (?) white feld.
122.1 - 122.3: About 3% irreg. grains py.
124.4 - 126.2: About 60% epid. around a 1" qtz. stringer.
125.7: 1" white qtz. stringer 40° cn.
- 147.2
147.2 ALT'D DIORITE Contacts gradational. As 36.6 to 87.9.
147.8 - 148.3: Tr. py. assoc. with qtz. stringers
- 150.3
150.3 ALT'D DIORITE F.G., dark green, soft, heavily chlor., epid., sil, mod. clay min., only tr. carb. Occas. irreg. epid qtz. stringers. Tr. py. as co. grains., aggregates.
180.2 - 180.9: Shear zone, heavily epidotized. Shearing 50-60° cn.
- 185.7
185.7 ALT'D DIORITE U.C. gradational, irreg. Rk pale green, c.g., consists of elongate amph. laths, random orientation set in a ground mass. of epid. (replacing feld.) Num. large blue qtz. eyes. Rk. much lower in chlor than usual.

/ D.D.H. # 51

188.2

188.2 ALT'D DIORITE U.G. gradational. Texture porphyroblastic, f.g. soft chlor dark green ground mass. with large rounded to irreg. white xlls prob. secondary feld and occas. epid. grains and blue qtz. eyes. Tr. py/

190.0

190.0 ALT'D DIORITE U.C. gradational. As 150.3 to 185.7, locally very highly epidotized. A few epid stringers and chlor stringers. Tr. py.

220.0

220.0 ALT'D DIORITE U.C. irreg., sharply gradational. As 185.7 to 188.2 but occas. grains clay min. (?)

231.7

231.7 ALT'D DIORITE U.C. gradational at about 60° cn. As 150.3 to 185.7.
235.7 - 236.6: Rk as 185.7 to 188.2. Contacts sharply gradational 40-60° cn.
242.5 - 243.1: Sec. irreg. epid-chlor. stringers.
246.0 - 247.4: Rk. as 185.7 to 188.2. Contacts irreg. gradational.
253.8: 3" c.g. band as 185.7 to 188.2. Contacts missing.
258.9 - 259.4: Large rounded grains secondary feld. and large grains clay min. (?)
260.6: 1" bleb. py.
262.2 - 262.9: Large rounded white grains of probably secondary feldspar.
271.2 - 271.7: Rk. as 185.7 to 188.2. Contacts gradational, irreg. although fairly sharp.

286.1

286.1 ALT'D DIORITE C.G., dark green, soft, equigranular. Orig. (?) main minerals amphibole, feld.- Heavily chlor., mod. sil (blue qtz. eyes), minor clay minerals (?) only tr. epid. carb. Tr. py.
298.5 - 299.0: Num. irreg. carb. stringers.
301.8: 1/2" barren milky qtz. veinlet, 5° cn. Cut by carb. stringers.
302.4: 3" vein as above at 5°-10° cn (somewhat irreg.) cut by white carb. stringers.
305.9: 1" carb. chlor veinlet at 40° cn. About 1% assoc. co. cubic py.
306.8: 1/2" veinlet as 301.8 at 10° cn.
309.3: 2 1/2" vein as 301.8 at 20° cn approx. Somewhat irreg.
310.8: 1" veinlet at 15° cn as 301.8
312.0: 2" vein as 301.8 with large incl. wall rock/ Contacts irreg.
314.3: 1/2" white carb. qtz. stringer 5° cn.
314.4: 1/2" white carb. qtz. stringer (irreg.)
315.7: 1" white qtz. veinlet at 15° -20° cn as 301.8 (with carb. str.)
315.9: 6" milky qtz. vein as 301.8. Irreg. carb. str. Contacts 20-30° cn. Angle between this and last vein about 40°.

317.1

317.1 ALT'D DIORITE F. G. dark green, soft, highly chlor., baly minor carb., sil., epid., clay min. Occas. large irreg. masses py. assoc. with irreg. carb. str.
319.2: From here about 30% clay min., rock has mod. to high carb. content.
324.3 - 328.9: Weak shearing at 45-60° cn, becoming strong towards 328.9. Elongate streaks soft reddish brown min. near 328.9.

325.9 QTZ VEIN

325.9

Contacts missing. Mainly deep blue qtz., locally pale blue to milky white. Fractures cemented by white carb. Occas. grains, stringers py., cp. arsenpy. Sev. very small grains native Au.

326.6 - 327.2: About 2% cp. as large irreg. grains. Ore extremely small, possible speck visible Au. Sev. large grains py., tr. (?) arsenpy.

330.5 - 330.9: Sev. large grains py. - some euhedral.

333.0 - 334.0: Sev. small specks visible Au., stringers arsenpy. A few large py. grains.

334.0 - 335.0: Num. stringers arsenopy. perhaps forming 1% of vein.

335.4 - 336.5: Num. carb. stringers in fractures in qtz. vein.

336.5

336.5 ALT'D DIORITE

F. G., soft, dark grey, high (30-40%) in clay minerals (?) chlor.? Very low in epid., cast. sil? Tr. py. as irreg. grains, small euhedral xlls. A few irregular patches carb. qtz. Tr. magnetite.

355.0

355.0 ALT'D DIORITE

F. G., soft, dark green, highly chlor., high in clay min., only tr/carb. No epid., sil? Occas. grains py. Tr. magnetite.

373.7 - 448.0: About .5% to 1% py., mainly as euhedral cubic xlls. Carb. percentage slightly higher? (still low)

380.9: 1" blue qtz. veinlet, contacts irreg.

383.5 - 384.5: White to grey qtz. vein. U. C. irreg.

L.C. sharp at 35° cn. Tr. assoc. py.

387.9 - 388.6: Qtz. vein, mainly white qtz., locally mottled grey or blue. Tr. py. Contacts irreg.

389.8 - 390.3: Qtz. vein, blue qtz., tr. py. speck native Au. U.C. irreg., L. c. missing

392.6: 1" irreg. white to grey qtz. vein. Tr. py.

397.7: 2" irreg. white qtz. vein. Tr. py.

401.1: 1" irreg. blue qtz. stringer

402.0 - 402.7: Irreg. blue to white patch qtz.

405.6: 1" white qtz. stringer 50° cn.

412.2 - 412.6: 3" sub parallel blue qtz. stringers at 40-50° cn. Tr. py.

413.5: 1" qtz. stringer. U.C. irreg., L. C. 30° cn. Tr. py.

413.8 - 414.6: Blue qtz. vein, irreg. but sub-parallel to core. About 2" thick. Tr. py.

416.0: 2" blue qtz. vein, contacts irreg. but nearly normal to core. Tr. py.

416.3 - 417.5: Blue and white (mottled) qtz. vein. U.C. 30° cn., L.C. 80° cn. (approx.). About 1% py.

420.7 - 422.6: Several 1/2" to 1/7" blue qtz. stringers 40-50° cn.

425.5: 2" blue qtz. vein 40-50° cn. Tr. py.

427.0 - 431.7: Sev. 1/4" to 1/2" blue qtz. stringers at various angles. Tr. py. w. wash.

432.3: 1" blue qtz. veinlet 50° cn. Tr. py.

438.8: 1" blue qtz. veinlet 60° cn. Tr. Py.

444.3: 1/2" blue qtz. veinlet 70° cn.

447.0: 3" blue qtz. vein. U.C. 50° cn., L.C. 30° cn.

Tr. py.

448.0: Local core. of py. as elongate stringers, lenses. Locally 5%. Overall perhaps 1% to .5%

450.9: 1" irreg. blue qtz. veinlet. Tr. py.

455.1: 1/2" irreg. blue qtz. Tr. py.

467.5: 2" blue qtz. vein. 30° cn. Tr. py.

472.0: 1/2" blue qtz. veinlet 60° cn. Tr. py.

- 476.5: 1" blue qtz. veinlet, 20° cn. Tr. py.
- 487.6: 1/2" blue qtz. vein, white carb. veinlet 20° cn.
- 492.2: 1" blue qtz. vein at 20-30° cn Tr. py.
- 495.0 - 500.0: Rk. in part possibly originally c. g. - a few possible outlines large xlls. Too alt'd to be definite.
- 500.3 - 503.0: Rk. irreg. c. g. Alteration as rock above. Occas. rounded fresh white secondary feld., a few grains magnetite.
- 500.6: 1/2" barren blue qtz. veinlet at 15° cn.

506.5

506.5 ALT'D DIORITE F.G., soft, dark green, highly chlor., carb., med. clay mineral, little or no epid., sil. Tr. py., magnetite. Occas. irreg. carb. stringers.

- 526.3 - 540.1: Rk. has c. g. appearance, apparently mainly due to presence of num. large blue qtz. eyes. Carb. stringers fairly common.
- 530.3: 1" irreg. white qtz. stringer.
- 535.5: 1/2" irreg. white qtz. stringer.
- 541.0: 1/2" irreg. white qtz. stringer, 1% py. At about 40-60° cn.
- 548.5: Small specks white clay minerals (?) or "leucoxene" (?) become abundant.

553.0

553.0 ALT'D DIORITE F. G., soft, dark green, sim. to above but 10-15% (high) clay minerals (?), only minor carb. Occas. carb. qtz. stringers at various angles. Tr. py. as grains, small stringers.

- 542.5 - 543.8: Irreg. patches blue qtz. cut by white carb. No min.
- 544.1 - 544.4: "near zone?" at 60° cn. Heavily chlor., minor quartz calcite, well foliated.
- 580.7: 1" irreg. blue qtz. carb. stringer. Carb. later than qtz. Unmin.
- 581.1 - 597.0: Occas. 1/2" to 1" white carb. - chlor veinlets normal to core to 30° cn.
- 595.6: Any min. becomes minor or indistinguishable.
- 598.0 - 601.2: Num. blue qtz. eyes, occas. cr. rounded fresh white feldspars. (secondary probably) / These give rock a c.g. appearance Sev. large grains "ilminite?"
- 603.3 - 604.3: As 598.2 to 601.2 but chlor. also occurs in co. grains,
- 609.0: Carb. becomes moderate to (locally) high .
- 614.2: 2" carb. chlor. patch / about normal to core.
- 620.0 - 622.6: Clay min. (?) carb. both abundant.
- 623.2: 2" barren white qtz. vein 50° cn. Cut by carb. stringers.
- 630.6 - 633.3: Rk. c. g. or c. g. appearing, contacts indistinct sim. to 603.3 - 604.3.
- 632.2: 2" irreg. white barren qtz. vein about 10° cn.
- 633.9: 2 1/2" irreg. white barren qtz. vein about 30° cn.

665.0

665.0 END OF HOLE

CEMENTED TO COLLAR - CEMENT USED 7 BAGS

Gold Assays

Sample Number	Section of Hole		Sample Length	Au
	From	To		
10407	18.3	19.6	1.3	.010
10408	121.9	123.0	1.1	Tr
10405	124.4	126.1	1.7	Tr
10406	147.6	149.6	2.0	.010
117N	298.0	300.0	2.0	Tr
118	300.0	302.5	2.5	Tr
119	302.5	305.0	2.5	Tr
120	305.0	307.5	2.5	Tr
121	307.5	310.0	2.5	Tr
122	310.0	312.5	2.5	Tr
123	312.5	315.6	3.1	Tr
10351	315.6	316.5	.9	Tr
10352	316.5	317.3	.8	.010
10353	317.3	318.8	1.5	.020
10354	318.8	320.0	1.2	.020
10355	320.0	322.0	2.0	Tr
10356	322.0	323.6	1.6	.010
10357	323.6	325.0	1.4	.010
10358	325.0	325.9	.9	Tr
10359	325.9	326.7	.8	.010
10360	326.7	327.7	1.0	.120
10361	327.7	329.0	1.3	.020
10362	329.0	330.0	1.0	.010
10363	330.0	331.0	1.0	.230
10364	331.0	332.1	1.1	.350
10365	332.1	333.1	1.0	1.430
10366	333.1	334.0	.9	1.150
10367	334.0	335.0	1.0	.260
10368	335.0	336.5	1.5	.010
10369	336.5	337.5	2.0	.020
10370	338.5	341.0	2.5	Tr
10651	372.6	375.0	2.4	.010
10652	375.0	377.0	2.0	.050
10653	377.0	379.0	2.0	.020
10654	379.0	380.8	1.8	.010
10655	380.8	381.4	.6	.070
10656	381.4	383.4	2.0	.030
10657	383.4	384.5	1.1	.010
10658	384.5	386.7	2.2	.010
10659	386.7	388.9	2.2	.240
10660	388.9	389.7	.8	.020
10661	389.7	390.6	.9	.360
10662	390.6	392.6	2.0	.030
10663	392.6	395.0	2.4	.010
10664	395.0	397.5	2.5	.220
10665	397.5	398.8	1.3	.030
10666	398.8	400.0	1.2	.020
10667	400.0	400.8	.8	.030
10668	400.8	402.7	1.9	.030
10669	402.7	405.0	2.3	.090
10670	405.0	407.5	2.5	.030
10671	407.5	410.0	2.5	.010
10672	410.0	411.8	1.8	Tr
10673	411.8	412.7	.9	.020
10674	412.7	413.4	.7	.010

CORR. ASSAYS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>
	<u>From</u>	<u>To</u>		
10675	413.4	414.6	1.2	.020
10676	414.6	415.9	1.3	.010
10677	415.9	417.5	1.6	.100
10678	417.5	420.0	2.5	.020
10679	420.0	421.7	1.7	.010
10680	421.7	422.7	1.0	.070
10681	422.7	425.0	2.3	.020
10683	425.0	425.9	.9	.030
10684	425.9	427.9	2.0	.090
10685	427.9	429.0	1.1	.050
10686	429.0	430.7	1.7	.010
10687	430.7	432.4	1.7	Tr
10688	432.4	435.0	2.6	.010
10689	435.0	437.0	2.0	.015
10690	437.0	438.4	1.4	Tr
10691	438.4	439.4	1.0	.010
10692	439.4	441.5	2.1	.015
10693	441.5	444.0	2.5	Tr
10694	444.0	445.0	1.0	.010
10695	445.0	445.9	1.9	Tr
10696	446.9	447.2	.3	Tr
10697	447.2	450.0	2.8	Tr
10698	450.0	452.5	2.5	Tr
10699	452.5	455.0	2.5	Tr
10700	455.0	457.5	2.5	Tr
10701	457.5	460.0	2.5	Tr
10702	460.0	462.5	2.5	Tr
10703	462.5	465.0	2.5	.040
10704	465.0	467.5	2.5	.030
10705	467.5	470.0	2.5	.020
10706	470.0	472.5	2.5	Tr
10707	472.5	475.0	2.5	Tr
10708	475.0	477.5	2.5	.010
10709	477.5	480.0	2.5	Tr
10710	480.0	482.5	2.5	Tr
10751	482.5	485.0	2.5	.015
10752	485.0	487.5	2.5	.020
10753	487.5	490.0	2.5	Tr
10754	490.0	492.5	2.5	Tr
10755	492.5	495.0	2.5	.010
10756	495.0	497.5	2.5	.020
10757	497.5	500.0	2.5	Tr
124	530.0	532.5	2.5	Tr
125	532.5	535.0	2.5	Tr
126	535.0	537.5	2.5	Tr
127	537.5	540.0	2.5	Tr
128	540.0	542.5	2.5	.050
129	540.0	542.5	2.5	.010
130	542.5	545.0	2.5	.020
131	545.0	547.5	2.5	Tr
132	547.5	550.0	2.5	Tr
133	550.0	552.5	2.5	Tr
134	552.5	555.0	2.5	Tr
135	555.0	557.5	2.5	Tr

DATA AS 413

<u>Sample #</u> <u>Number</u>	<u>Section of Hole</u>		<u>Sample</u> <u>Length</u>	<u>As</u>
	<u>From</u>	<u>To</u>		
136	597.5	600.0	2.5	.010
301	600.0	602.5	2.5	Tr
302	602.5	605.0	2.5	Tr
303	605.0	607.5	2.5	.015
304	607.5	610.0	2.5	.010
305	610.0	612.5	2.5	Tr
306	612.5	615.0	2.5	Tr
307	615.0	617.5	2.5	.010
308	617.5	620.0	2.5	.010
309	620.0	622.5	2.5	Tr
310	622.5	625.0	2.5	.010

CORE AVERAGES

	330.0	335.0	5.0	.668
	325.9	336.5	10.6	.356
	326.7	337.5	10.8	.146

SLUDGE ASSAYS

10249	10	20		.010
10250	20	30		.010
10251	30	40		Tr
10252	40	50		Tr
10253	50	60		Tr
10253	50	60		.010
10254	60	70		.020
10255	70	80		Tr
10256	80	90		Tr
10257	90	100		Tr
10258	100	110		.010
10259	110	120		Tr
10260	120	130		Tr
10500	140	150		.020
10631	150	160		Tr
10632	160	170		.010
10633	170	180		.010
10600	180	190		.010
10634	190	200		Tr
10635	200	210		Tr
10419	210	230		.010
10420	230	250		Tr
10421	300	320		.040
10701	320	330		.190
10702	330	340		.040
10703	350	360		.035
10704	360	370		.040
10705	370	380		.260
10706	390	400		.720
10707	400	410		.140
10708	410	420		.160
10709	420	430		.270
10710	430	440		.070
10711	440	450		.050

SLURRY ASSAYS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Ass</u>
	<u>From</u>	<u>To</u>		
10712	470	480		.090
10713	460	470		.030
10714	470	480		.080
10715	480	490		.010
10716	490	500		.010
10717	500	510		.030
10718	510	520		.010
10719	520	530		Tr
10720	530	540	540	.040
10721	540	550		.020
10722	550	560		Not enough sample
10682	560	570		.020
10683	570	580		.015
10684	580	590		.020
10685	590	600		.010
10686	600	610		.010
10687	610	620		Tr
10688	620	630		Tr
10689	630	640		Tr
10690	640	650		Tr

LOCATION: 10,309.25 N
10,497.91 E Elevation 1417.57

275' E on Section "0"

North Azimuth Dip

0' 90°

Length: 559'
Core : AXV

O. O. Casing

- 7.4 ALT'D DIORITE 7.4
C.G., equigranular, soft, dark green, consists of fairly short amph. xls., rounded grains fresh white feldspar (secondary?) chlor, epid. Heavily chlor., epid., only very slightly carb. locally, occasional blue qtz. "eyes", local soft white clay minerals (?) replacing feld.? Occasional grains py. and a few epid. white qtz. and carb.-chlor. stringers - irreg. and various angles but dominantly 10° - 30° en.
7.4 - 16.0: Joints rusty, slight leaching
44.6: 2" carb. chlor. veinlet 20° en.
48.5: 3" of carb.-chlor-qtz. stringers 10-40° en.
48.9: Irreg. 2" qtz. epid carb. stringer.
56.2 - 57.0: Zone blue qtz. eyes, irreg. epid. stringers.
65.8: Irreg. patch white calcite blue qtz.
71.8 - 73.3: Heavily epid and silicified zone - about 30% epid., 10% white and blue qtz.
73.3: 3" milky qtz. vein. Contacts irreg.
74.0 Irreg. 1" calcite veinlet with incl. chlor., carb., wall rock.
74.4: 75.0: Epido. sil. zone. About 40% epid.
75.0: The clay minerals (?) or "leucoxene" (?) become fairly abundant and the fresh looking feldspars become rare except locally.
85.0: From here local sections core f. g. in appearance - contacts extremely gradational. The "f.g." rocks are more heavily chlor., haolinized (?) and are prob. due to alteration.
85.9- 97.2: Num. irreg. epid. stringers.
86.8 - 96.2: Joints rusty, slightly leached.
115.3 - 120.0: zone of num. blue qtz. eyes and more than average epidote.
121.3 - 135.4: Rock is mainly f. g. appearing as noted above.
140.5 - 142.0: Zone as 115.3 to 120.0 with about 5% of the clay min. (?) or "leucoxene" as well.
144.1 - 144.5: Num. rounded white grains feld. (prob. secondary)
156.4: Sev. blue qtz "eyes."
156.4 - 171.0: Rounded grains fresh white (secondary?) feldspars locally abundant.
173.0 - 174.4: Pale green rock with high percentage epid., clay min. (?) blue qtz. eyes.
175.3 - 196.0: White fresh rounded grains (secondary?) feld. common.
178.8 - 179.0: As 173.0 to 174.4
193.6: 1" white carb. stringer 10° en.
- 196.0
196.0 ALT'D DIORITE Rock mainly f. g. to m. g. in appearance. Equigranular, local co. white feld., blue qtz. eyes. Dark green, soft, alteration as above rock.
208.2 - 209.4: C. g. appearing section. Contacts gradational.

211.0 - 213.0: Tr. py. assoc. with irreg. qtz. carb. epid. stringers.
 224.7: 1" carb. chlor, stringer 10° cn.
 240.0: 4" carb. chlor. stringer zone 30° cn.
 242.5: 3/4" carb. stringer 20° cn.
 245.9: 3" carb. chlor. stringer 40° cn. Inclusions carb. chlor. wall rock.

251.3: 3" very pale green highly epid. patch around epid. qtz. str.
 252.4: 1" carb. veinlet 10-30° cn.
 252.7 - 253.5: Irreg. white qtz. carb. vein with incl. chlor, carb. sil wall rock. No py.
 253.9 - 260.4: Rk. gen. pale green, very high epid. content (max. 60%) Occas. qtz. epid. veinlet. No py.
 268.3: Rk. becoming coarser grained, is c. g. at 269.2 then grades back to f. g. again at 270.0.

270.9

270.9 ALT'D DIORITE U.C. fairly sharp at about 20° cn., but does not seem to be intrusive. L.c. gradational. Rk. c. g. soft, dark green, consists of short to elongate amphibole laths, anhedral to euhedral stubby feld., laths, partially epid., chlor. Minor clay min. (?) occas. blue qtz. eyes. Carb. very uncommon. Tr. py. Local finer grained sections with gradational boundaries.

282.9

282.9 ALT'D DIORITE Essentially as above but f. g., only very minor fresh feld., fairly low in epid. U.c. gradational,
 286.8 - 287.6: Rk c. g. as above. Contacts gradational.
 288.9 - 289.2: As 286.8 - 287.6
 290.2 - 290.7: As 286.8 - 287.6
 295.9: 1/4" white calcite soft brick red min. (hematite?) stringer 20° cn.
 298.7: 1" stringer 15° cn as above, two small min. stringers immediately after this.
 313.9: 3" barren calcite veinlet at 30° cn.

323.4

323.4 ALT'D DIORITE U.C. gradational. Rk. as 270.9 to 282.9.
 336.1: 1" irreg. patch of a hard mauve min. with a good cleavage. (oxinite (?) or a magnese epidote e.g. thilite, piemonte (?)
 338.4: 2" irreg. barren white qtz. carb. stringers.
 338.7 - 339.4: Sev. small stringers/
 10-20° cn. of calcite and a soft brick red mineral.

347.5

347.5 ALT'D DIORITE As 282.9 to 323.4. U.C. gradational.
 350.6 - 351.1: About 60% epid. around irreg. patch blue to white qtz. No min.
 357.1: 2" zone as above.
 369.4: 3" zone as above.
 374.4: 3" zone as above.
 375.0 - 400.0: Core jumbled. Mainly as above, local c. g. sections, a part moderately to highly carb. A very few carb. chlor. stringers.
 400.0(?) - 410.7: Orig. c.g.?, large grains clay min. or "leucoxene" abundant, blue qtz. eyes common.
 410.7: Grades to f. g. rock with abundant clay min. or "leucoxene"

422.3

422.3 ALT'D DIORITE P.G. appearing, dark green, soft, very highly chlor., barb. Locally silicified. Cut by mm. blue qtz. stringers and white calcite veinlets, 10-50° cn, some irreg.

426.0 - 426.4: About 1% fine disseminated py.
 426.4 - 428.8: Rock such as above, but slightly paler green, weakly schistose 45 - 50° cn prob. due to shearing. About 1% py., throughout and very num. carb. and qtz. stringers mainly and parallel to sch. from 402.6 sch. much stronger.
 428.8 - 435.2: Qtz. vein. Mainly blue qtz. - locally white qtz. both contacts missing (ground core) Fractures in qtz. filled by fine calcite stringers, py., po. cpy. arsenopy., and native gold.
 430.1: Irreg. py., arsenopy. stringer.
 431.8: Possible speck native Au.
 432.0 - 433.6: Several specks native Au.
 435.0 - 435.2: Sev. grains, veinlets of cpy., po.
 435.2 - 436.1: Rk. pale grey, in part weakly sheared at 40-50° cn. Contains about 2% py., minor cpy., po. and elongate streaks of a soft brown to purplish brown min. (siderite?) sphalerite (?)
 436.1: Rk. mainly the normal deep green colour, f.g. to locally e.g. appearing and carb. stringers. Highly carb., sil., locally qtz. eyes. about 1% py. to 437.8 as small xls.

446.0

446.0 ALT'D DIORITE F.G., soft dark green to medium green, Heavily chlor. mod. sil, Only very minor carb. clay min. Num. irreg. carb. stringers. Tr. py.
 480.1: 4" irreg. patch carb.

495.0

495.0 ALT'D DIORITE As 446.0 to 495.0 but moderately to highly carbonitized.
 503.1: 1" irreg. carb. stringer.

504.7

504.7 ALT'D DIORITE U.C. gradational?, c.g. soft dark green, equigranular, consists mainly of chlorite with fairly num. blue qtz. eyes., aggregated clay minerals (?) or "leucoxene" Carbonitization, moderate to low. Numerous hairline carb. - white qtz. str. generally normal to core to 30° cn.
 Rock locally f. g. - contacts gradational. Tr. cubic py.
 509.0: 3/4" barren white qtz. carb. stringer, 15° cn.
 514.8: 3" barren white carb. veinlet 50-60° cn.
 519.7: 2" barren carb. chlor. veinlet about 10° cn.

523.0

523.0 ALT'D DIORITE U.C. gradational, f. g., soft, dark green, heavily chlor., mod. carb. clay minerals (?) mod. to low sil, No fresh fold. Occas. hairline carb. stringers, at various angles. Very occasional py. cubes.
 553.7L 3" irreg. carb. chlor stringer.

559.0

559.0 END OF HOLE

CEMENTED TO COLLAR - CEMENT USED 9 BAGS

CORE ASSAYS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
	<u>From</u>	<u>To</u>				
10550	111.0	113.0	2.0	Tr	.100	
10574	425.0	426.0	1.0	Tr		
10575	426.0	427.4	1.4	Tr		
10576	427.4	428.8	1.4	Tr		
10577	428.8	430.0	1.2	.050		
10578	430.0	431.0	1.0	.080		
10579	431.0	432.0	1.0	.120		
10580	432.0	433.0	1.0	1.190		
10581	433.0	434.0	1.0	.590		
10582	434.0	435.2	1.2	.650		
10583	435.2	436.0	.8	.040		
10584	436.0	437.0	1.0	Tr		
10585	437.0	437.9	.9	Tr		
10586	437.9	439.5	1.6	Tr		

CORE AVERAGES

431.0	435.2	4.2	.638
430.0	435.2	5.2	.531
428.8	436.0	7.2	.396
428.8	435.2	6.4	.441

SLUDGE ASSAYS

10329	20	30	Tr
10330	30	40	Tr
10331	40	50	Tr
10332	50	60	Tr
10333	60	70	Tr
10334	70	80	Tr
10335	80	90	Tr
10336	90	100	.010
10337	100	110	.010
10338	110	120	Tr
10339	120	130	Tr
10340	130	140	Tr
10341	140	150	.010
10342	150	160	Tr
10551	200	210	Tr
10552	210	220	.010
10553	220	230	Tr
10554	230	240	Tr
10555	240	250	Tr
10556	250	260	Tr
10557	260	270	Tr
10558	270	280	Tr
10559	280	290	Tr
10560	290	300	Tr
10561	300	310	Tr
10562	310	320	Tr
10563	320	330	Tr
10564	330	340	Tr
10565	340	350	Tr

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
	<u>From</u>	<u>To</u>				
10566	350	360		Tr		
10567	360	370		Tr		
10568	370	380		Tr		
10569	380	390		Tr		
10570	390	400		Tr		
10571	400	410		Tr		
10572	410	420		Tr		
10573	420	430		Tr		
10587	430	440		.080		
10588	440	450		.030		
10589	450	460		.040		
10590	450	460		.060		2 samples
10617	470	480		.030		
10618	480	490		.040		
10619	490	500		.035		
10620	510	520		.040		

D. D. H. #49

Started: November 22, 1959
 Completed: November 29, 1959
 Logged: P. L. Money

Location: 10.091.85 N Elevation: 1465.45
 10.266.21E

<u>Depth</u>	<u>Dip</u>
0'	90°
350'	89°
750'	83°
Length: 773'	

Core: AXF

Note: In describing the alt'd diorite in this and following holes the following terms will be used to describe the alteration: Stage 1, diorite altered but most of original grain boundaries preserved; Stage 2, some of original grain boundaries destroyed but enough present to indicate original grain size; Stage 3, all or nearly all original grain boundaries destroyed.

- 0.0
- 0.0 CASING
- 5.0
- 5.0 ALT'D DIOR:
- dark green, soft, f.g. to m.g. (original texture preserved?) highly carb, chlor, silicified, occas. irreg. carb stringers. Local sections contain large rounded grains white feld (?) - rextillization Tr. py, - fine dissem. py + occas. large cubes, irreg. grains.
- 5.0 - 35.0: Joints rusty, slightly leached
- 15.0-15.8: Alt. 0.5% co. cubic py
- 27.2-27.6: Sev. large irreg. py grains
- 30.1-30.6: " " " " "
- 33.4-57.4: Num. irreg. carb stringers. Gen. orig. text. completely destroyed
- 62.5-76.0: Occas. carb stringers. In part irreg. but generally normal to core to 40° cn.
- 76.0-103.3: Carb. stringers mainly irreg. or 30° - 60° cn.
- 83.3: 1" carb-chlor vein 10-20° cn.
- 83.4-84.3: Alt. 0.5% dissem. co. py
- 82.7: 1" carb. chlor stringer 50° cn
- 94.4: 1" irreg. carb stringer 10-20° cn
- 96.5: 1" carb chlor stringers 10° cn.
- 98.4: 1" irreg. carb-chlor stringer
- 109.3: Very num. carb stringers gen. 20° - 30° cn.
- 117.5-118.4: Sev. large euhedral py xls.
- 126.9-127.3: Num. large py xls. Perhaps 5% py
- 155.7
- 155.7 ALT'D DIOR:
- Medium to dark green, generally m.g. to c.g. locally f.g. mainly highly silicified, epidotized, chloritized, very minor carbonate locally minor chlor rk consists of amphibole laths w/interstitial qtz, epid. + a few large irreg. qtz. grains + occas. blue qtz. eyes. A very few carb and carb-chlor stringers, gen 10°-40° cn. Local carb. patches
- 180.0: Rk grades to f.g. but same type alt'd.
- 201.6: 1" carb-qtz-epid. stringer 40° cn.

202.0: 2" white qtz-epid stringer 40°-50° cn
203.0: 1" white qtz. vein 10° cn.
205.0-213.2: Sev. epid. and qtz-epid stringers, various orientation
215.1-215.4: Epid-qtz-carb stringer w/irreg. boundaries
215.5-215.8: Irreg. white qtz vein w/inclus. wall-rock
215.8-216.1: Patch of a hard mauve mineral with a good cleavage. (Oxinite or possibly a manganese epidote - e.g. piemontite, thulite, etc.)
216.9: 4" stringer at 10° cn. of pink feldspars and white calcite
217.0: Rock grades to c.g. again, epid. stringers quite frequent - gen. 50° - 60° cn.
220.7-224.3: Abt. 0.5% py, num. epid. stringers
226.0-228.0 Num. irreg. epid. patches
226.9: Rock grades to f.g. again, heavily chlor, epid, sil (?) almost no carb. A few chlor-carb and qtz-carb stringers gen. 40° - 50° cn.

272.0 ALT'D. DIOR: 272.0
Rock looks very similar to 226.9-272.0 but contains moderately carbonate and has numerous small white specks of the soft white clay mineral (?).
283.3: 1" carb-chlor stringer at 50° cn.
284.5: Rk locally has large grains composed of aggregates of the clay mineral (?)
286.2-288.3: Abt .5% py as large cubic grains

292.0 ALT'D DIOR: 292.0
In part as above but mainly more altered aphanitic-appearing dark green rock with a very high carbonate content. Specks of the white clay mineral uncommon.
300.1-305.0: f.g. appearing alt'd dior as previous. Very high chlor, carb. Abt 1% co. py xls.

305.0 QTZ VEIN 305.0
Qtz vein. Blue qtz. a few hair like carb stringers in fractures, tr py, ep (?) Upper contact missing (ground core), lower contact sharp at 50° cn.

306.6 ALT'D DIOR: 306.6
306.6-307.8: Weakly brecciated zone (?) Rk very pale grey, bleached, containing carb and qtz stringers and minor to 0.5% po w/ep, py, in elongate lenses, stringers, etc.
307.8-312.3: Rk f.g. appearing but not aphanitic, highly chlor, carb, soft, the white clay (?) mineral makes up 20% of the rock. Color paler than normal grading to the normal dark green rock at the end of the section. Occas. carb-chlor. stringers - generally at 40° - 50° cn. Possibly weak shearing 40° cn. at beginning of section
312.3-322.7: Rk as above but normal dark green color.
322.7: Above rock grades into an aphanitic-appearing rock lacking the specks of white clay mineral (?) here highly chlor. (?) Occas. carb-chlor. stringers. Local sections low in carb but with same appearance.
337.4: 3" carb-chlor stringer w/indistinct contacts.
356.2-372.5: Occas. clusters py grains (assoc. w/ carb. stringers ?) Up to 5% py over 3" generally 1% or less over 2" or less.

379-382.2: c.g. appearing rock w/longer grains of the soft white clay mineral (?). Contacts gradational, about normal to core.
 382.2-385.4: f.g. appearing rk w/abt 20-30% of the clay min. (?) occurring as small specks. Lamination sub-parallel to core.
 385.4-388.1: v.g. rk as 379.2-382.2. Lower contact quite sharp at 30° cn.
 388.1-396.2: rk as 382.2 to 385.4
 395.7-396.2: abt 2% py, rk slightly bleached ?
 396.2-396.6: Banded, prob. sheared zone composed mainly of streaks of a soft dark brown to brown-purple mineral (siderite?) w/qtz + inclusions wall-rock. At 30° to 50° cn. Tr. py + arsenopy.
 396.6-397.2: Blue + white vein qtz. Calcite stringers in fracture Tr. py, cp, po. Sev. specks free gold. Contacts 50° cn.
 397.2-397.9: Same as 396.2-396.6 with 15% py, Tr cp, po.
 397.9-407.3: Rk f.g. appearing, pale grey (bleached) highly sil, chlor, sericitized (?), local carb. Occas. large blebs py assoc. w/carb.
 407.3-423.0: Rk c.g. appearing, highly chlor, epid. Has carb stringers as above w/min.
 407.3: 2" qtz. stringer (blue qtz) w/tr. py, cp. at 50° cn.
 417.9: 2" blue qtz stringer 30° cn. Tr py
 421.5: 2" irreg. blue qtz. stringer. Tr py
 422.5: 2" blue qtz. stringer 40° cn. Tr py

423.0

423.0 ALT'D DIOR:

rk f.g. appearing, dark green, highly chlor, moderately carb, clay mineral very abundant, weakly silicified, fairly high epid. content. Irreg. carb. stringers quite common
 444.3: 1" blue qtz vein 10° cn. abt 2% py
 445.4: 1" blue qtz vein normal to core 1% py
 446.7: 2" " " " 20° cn. Tr py
 447.0-447.5: Sev. irreg. blue qtz stringers
 448.9-449.8: Sev lensing qtz.carb-epid. stringers at 40° - 50° cn. Tr. py.
 452.1: 2" qtz. vein (blue) 40° cn. Tr py
 455.1: 1" blue qtz vein 20° cn. " "
 456.5: 1" blue qtz vein 30° cn. 2% py
 460.1: 1" irreg blue qtz. carb vein
 465.1: Rk. qtz eyes and large carb grains. Rk looks c.g. when dry because of them.
 468.8: 1" irreg. blue qtz. vein Tr. py
 472.1: 4" zone of carb stringers abt 20° cn. abt 2% py for 6" on either side of this.

477.2

477.2 ALT'D DIOR:

Contact gradational f.g. appearing, dark green, heavily chlor, carb, minor sil, clay minerals, no epid. A few carb stringers in various directions, some irreg.
 524.4: Brecciated zone 6" long at 60° cn. cemented by calcite.
 525.0: The clay mineral (or "leucoxene") becomes more abundant and makes up 10 - 15% of the core for the rest of this unit.

536.0

536.0 ALT'D DIOR:

Almost as above unit but some epidote present. Considerable carbonate but less than in above unit.

- 550.4
550.4 ALT'D DIOR: Similar to above unit but mainly s.g. to c.g. local f.g. sections. Essentially equigranular dark green, soft, heavily chlor, mod. epid. carb. silicified, about 5-20% of clay minerals (or "leucoxene" num. carb stringers, Tr py.
555.6: Fairly sharp contact 45° cn between f.g. and c.g. bands. The c.g. rock has num. blue qtz. eyes
556.0-574.0: Host of carb stringers normal to core to 20° cn.
560.4: Carb percentage becomes very low except immediately around carb stringers.
- 574.4
574.4 ALT'D DIOR: As 477.2 to 536.0 but about 5 - 10% of clay mineral or "leucoxene" Tr py as small grains elongate stringers. Occasional irreg. small carb stringers, a very few qtz-epid. stringers.
- 606.9
606.9 ALT'D DIOR: Composition as 574.4 to 606.9 but equigranular, c.g. Upper contact gradational (?) lower contact missing. Tr py as stringers, large xls. (2" or so generally).
- 615.7
615.7 ALT'D DIOR: As 477.2 to 536.0
617.7: 1" carb veinlet normal to core
620.1: 1½" carb veinlet 20° cn.
630.4-631.8: Num. qtz. (white) and calcite stringers - locally 1½ py
631.8-633.4: Abt 60% replaced by white qtz. minor carb. Abt 5% py.
- 633.4
633.4 ALT'D DIOR: c.g. consisting mainly of elongate amph xls. interstitial feld. Texture non-directional prob. re-crystallized. Highly chlor, mod. carb, highly sil (num. blue qtz. eyes), minor epid. mod. clay min. Tr py as cubic xls, irreg masses, stringers throughout.
634.7: 1" white qtz vein 30° cn. Abt 1½ py
636.2: 1" white qtz-pale green epid veinlet 40° cn. Abt 1½ py around this.
- 638.7
638.7 ALT'D DIOR: Upper contact sharp (intrusive (?)) at 50° cn. Lk f.g. mod. green, soft, highly chlor, mod. sil ?, low in to mod. carb. lacking epid? moderate to high percentage clay min.
639.5-640.0 Sev. irreg. white qtz-chlor stringer w/tr py.
643.0-643.9: Peculiar rk consisting of crumpled, incomplete chlorite-rich dark layers and pale soft kaolinized or sericitized layers. Num. blue qtz. eyes. Tr. carb, py.
643.9: 4" white to pale grey qtz vein. Contacts somewhat irreg. but abt 20° - 30° cn. Tr py.
644.2: From here rock grey rather than green, slightly coarse-grained (although still f.g.) has about 40% of the clay min. very low in carb.
644.3: 3" grey to white qtz vein. Contacts 30° - 40° cn. 1½ py
647.3-647.9: Abt 20% co. cubic py
647.3: 3" white qtz stringer 50° cn. (upper contact) lower contact missing
652.2: 1" irreg. white qtz stringer w/1½ py
654.0: 1½" white qtz stringer 40° cn. Tr py

655.3: 1" white qtz. stringer 45° cn. Tr. py
 657.1: ½" " " " 40° cn. 2% py
 658.0: Rk as above but normal dark green color rather than grey.
 667.1-667.5: c.g. prob. re-xitized rk. Contacts irreg.
 668.6-669.2: rk as 667.1 to 667.5. Irreg. carb stringers
 676.0-677.8: rk as 667.1 to 667.5. Gradational contacts?

697.8 ALT'D DIOR

697.8

U.C. sharp at 40° cn, L.C. gradational? at 35° and 45° cn. Rk c.g. equigranular, consisting orig. of feld laths and stubby pyroxene laths? now alt'd to amphibole, chlor, clay min? secondary feld?, heavily carb, chlor, silicified. Tr py, occas. hairline, irreg. carb stringers.

713.6 ALT'D DIOR

713.6

as 658.0 to 697.8.

721.2-725.0: Badly ground core. Very heavily carb.
 724.0-725.8: Occas. irreg. patches carb, blue qtz. Tr py
 726.4-727.0: Band c.g. appearing rk. U.C. irreg. but of 50° cn gradational?, LC missing
 731.0: Irreg. py stringers
 736.5: Carb-chlor-qtz veinlet, Irreg.
 739.5: 1" epidotized patch at 50° cn around hairline blue qtz. stringers
 742.0-773.0: Almost all of carb, carb-qtz and carb-chlor stringers and veinlets are normal to core to 20° cn.
 759.0: Irreg. patch c.g. appearing equigran. diorite
 759.6: " " " " epidotized diorite

767.2 ALT'D DIOR

767.2

Contact very gradational c.g. equigranular, dark green orig. feld & pyroxene??? or + amphibole??. Now consists of amph. feld? heavily chlor, carb, moderately sil, mod. clay min. Tr py

773.0

773.0 END OF HOLD

CONNECTED TO COLLAR 9 ½ bags cement used

CORE ASSAYS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
	<u>From</u>	<u>To</u>				
10248	136.3	137.6	1.3	Tr		
10246	201.5	202.5	1.0	.020		
10243	212.1	213.6	1.5	.030		
10247	215.0	216.5	1.5	Tr		
10145	220.8	222.3	1.5	Tr		
10146	222.3	224.4	1.1	Tr		
10143	286.0	287.0	1.0	Tr		
10144	287.0	288.3	1.3	Tr		
10451	300.0	302.0	2.0	Tr		
10452	302.0	303.5	1.5	Tr		
10453	303.5	305.0	1.5	Tr		
10454	305.0	306.6	1.6	.055		
10455	306.6	307.8	1.2	.020		
10456	307.8	308.8	1.0	.030		
10457	308.8	310.0	1.2	.010		
10244	363.3	366.8	1.5	.010		
10245	370.6	372.4	2.2	Tr		
10462	394.3	396.2	1.9	Tr		
10463	396.2	396.6	.4	.080		
10464	396.6	397.2	.6	5.105		
10465	397.2	398.0	.8	.210		
10466	398.0	398.9	.9	Tr		
10467	398.9	400.0	1.1	.010		
10468	400.0	401.2	1.2	.010		
10469	401.2	402.8	1.6	.200		
10470	402.8	405.0	2.2	.016		
10471	405.0	405.8	.8	Tr		
10472	405.8	406.8	1.0	Tr		
10473	406.8	407.7	.9	.010		
10474	407.7	409.5	1.8	Tr		
9949	409.2	411.1	1.9	Tr		
9950	411.1	412.1	1.0	.020		
10475	416.1	417.6	1.5	.010		
10476	417.6	418.6	1.0	.030		
10477	418.6	420.0	1.4	.140		
10478	420.0	421.1	1.1	.010		
10479	421.1	422.1	1.0	.030		
10480	422.1	423.4	1.3	.010		
10458	435.0	437.0	2.0	Tr		
10459	437.0	439.0	2.0	Tr		
10460	439.0	441.0	2.0	Tr		
10461	441.0	443.1	2.1	Tr		
10481	443.3	444.0	.7	.110		
10482	444.0	445.0	1.0	.170		
10483	445.0	446.1	1.1	.020		
10484	446.1	447.6	1.5	.095		
10485	447.6	449.8	2.2	.010		
10486	449.8	450.0	.2	Tr		
10487	450.0	450.9	.9	.010		
10488	450.9	451.6	.7	.040		
10489	451.6	453.3	1.7	.010		
10490	453.3	455.0	1.7	.010		
10149	455.0	456.6	1.6	.110		
10150	456.6	458.3	1.7	.010		

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>As</u>	<u>Ag</u>	<u>Cu</u>
	<u>From</u>	<u>To</u>				
9945	458.3	459.5	1.2	Tr		
9946	459.5	462.0	1.5	Tr		
9947	465.9	467.0	1.1	.010		
9948	467.0	469.2	2.2	Tr		
10601	630.3	631.5	1.2	Tr		
10602	631.5	632.9	1.4	.020		
10603	632.9	633.9	1.0	.025		
10604	633.9	635.0	1.1	.010		
10605	635.0	636.0	1.0	Tr		
10606	636.0	637.0	1.0	Tr		
10607	637.0	638.2	1.2	.010		
10608	638.2	640.0	1.8	.010		
10609	640.0	641.4	1.4	Tr		
10610	641.4	642.9	1.5	Tr		
10611	642.9	643.7	.8	Tr		
10612	643.7	645.0	1.3	Tr		
10613	645.0	647.0	2.0	.010		
10614	647.0	648.5	1.5	.010		
10615	648.5	649.5	1.0	Tr		
10762	675.0	677.5	2.5	Tr		
10763	677.5	680.0	2.5	Tr		
10764	680.0	682.5	2.5	.010		
10765	682.5	685.0	2.5	Tr		
10766	685.0	687.5	2.5	.010		
10767	687.5	690.0	2.5	Tr		
10768	690.0	692.5	2.5	Tr		
10769	692.5	695.0	2.5	.010		
10770	695.0	697.5	2.5	.010		
10771	697.5	700.0	2.5	Tr		
10772	717.5	720.0	2.5	Tr		
10773	720.0	722.5	2.5	Tr		
10774	722.5	730.0	2.5	.010		

CORE AVERAGES

396.2	398.0	1.8	1.813
396.2	402.8	6.6	.546
443.3	445.0	1.7	.145
443.3	447.6	4.3	.096

SLUDGE ASSAYS

10	20	Tr
30	40	.010
40	50	.020
50	60	.010
60	70	Tr
70	80	Tr
80	90	.010
90	100	Tr
100	110	Tr
110	120	Tr
120	130	Tr
130	140	Tr
140	150	Tr

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u> <u>To</u>	<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
	150	160	Tr		
	170	180	Tr		
	180	190	Tr		
	190	200	.010		
	200	210	.020		
	210	220	.020		
	220	230	.010		
	230	240	Tr		
	240	250	Tr		
	250	260	Tr		
	260	270	Tr		
	270	280	No Sample		
	280	290	Tr		
	290	300	Tr		
	300	310	.020		
	310	320	.210		
	320	330	.060		
	330	340	.040		
	340	350	Tr		
	350	360	Tr		
	360	370	.030		
	370	380	.010		
	380	390	Tr		
10543	390	400	Not enough sludge		
10491	400	410	.270		
10544	410	420	.090		
10545	420	430	.010		
10546	440	450	.060		
10547	450	460	.050		
10548	460	470	.030		
10549	470	480	.010		
10492	500	510	.010		
10493	510	520	Tr		
10494	520	530	Tr		
10495	530	540	Tr		
10496	540	550	Tr		
10497	550	560	Tr		
10498	560	570	Tr		
10499	570	580	Tr		
10343	580	590	Tr		
10344	590	600	.020		
10345	600	610	Tr		
10346	610	620	.010		
10347	620	630	Tr		
10350	650	660	.030		
10401	660	670	.010		
10402	670	680	Tr		
10403	680	690	Tr		
10591	690	700	Tr		
10592	700	710	Tr		
10593	710	720	Tr		
10594	720	730	Tr		
10595	730	740	Tr		
10596	740	750	Tr		
10597	750	760	Tr		
10598	750	760	Tr		
10599	760	770	Tr		

D. B. N. #48

Started: November 18, 1959

Location: SECTION I - 290' E of AB Line
 10.141.65 N Elev. 2461.08
 10.380.06 E

Completed: November 24, 1959
 Logged by: P. L. Money

Dip at Collar: 90°
 at 200' : 89°
 at 400' : 89°30'

Length: 440'

Core: AXI

0.0

0.0 CASING

7.7

7.7 ALT'D. DIOR:

Mainly f.g. appearing, dark green, soft, heavily carbonitized chloritized, silicified (blue qtz eyes) numerous irregular carb, stringers. Occas. rounded, white xls. feld (?) (secondary) Tr. py throughout - in part assoc. w/carb stringers
 7.7-25.0: Local sections c.g. or m.g. appearing rk. Rusty, leached along some joints
 15.8: 1" white carb. (calcite) vein 20° cn.
 24.8: Orig. texture partially preserved ? m.g. elongate amph. laths, interstitial feld. Perhaps rock re-xlized.
 25.0: Slightly more alt'd, carb stringers becoming more num,
 52.3: From here on occas. large euhedral py xls. rk very highly carb, sil, chlor.
 56.5: 1" irreg. carb-qtz. stringer
 60.4: 1/2" to 1" do. Abt. 50° cn.
 61.5: lensing do. Abt 1/2" at thickest at 50° cn.
 69.3-72.0: Section of m.g. to c.g. alt'd dior. contacts definitely gradational, at abt 45° cn. c.g. rk also highly carb. chlor, sil. Occ. specks co. py.
 73.7: 1/2" carb. stringer 30° cn.
 74.2: 1/2" carb. stringer 40° cn. Tr py
 82.0: 1/4" carb. stringer 40° cn
 83.4: slightly rusty chlor joint
 89.6: another rusty chlor. joint(?) some leaching
 95.4-99.7: Unusually num. irreg. carb veinlets. No more than average py.
 122.1: Abt 2" irreg. carb. stringer w/heavily chlor. inclusions country rk.
 126.0-136.0: Slightly more py than usual as co xls and blebs still well under 1% Tr py (?)
 170.0-173.4: Num. large white rounded to irreg. grains feld secondary ? Num. blue qtz. eyes.
 170.4-171.0: Sev. large blebs py.
 175.6-177.0: As 170.0-173.4. Local sections like this abundant due to re-xlization. No contacts between this rock and the f.g. type - one grades into the other.
 200.5-202.6: Abt 1 1/2" py assoc. w/irreg. carb. stringers (minor qtz.) Py in co blebs, short lenses
 237.6: 3/4" carb stringer 35° cn. Minor chlor.
 261.0: Py stringer 55° cn.
 269.1: 3" carb. stringer w/incl. wall rock. Irreg. but about 10-30° cn.

- 272.6-274.6: Abt. 1/2% py assoc. w/ a series of sub-parallel (30-40° on.) lensing narrow carb. stringers.
- 309.0-323.0: Sev. very thin epid-qtz stringers 10-40° on. mainly in addition to usual carb and carb chlor stringers.
- 323.5-324.2: c.g. re-xilized rk consisting of rounded white feld, epid, elongate green ampb. laths w/random orient. Contacts gradational.
- 325.7-337.0: As 323.5-324.2
- 326.0-350.4: Almost all of carb stringers normal to core to 20° on.
- 337.8-352.0: f.g. appearing alt'd dior like most of hole to this depth. The white clay(?) mineral (soft opaque-looking) becoming quite prominent forms 10-20% of rock. Not much carbonate.
- 350.3: 1/2" carb. stringer (calcite) 10-20° on.
- 352.0: 1/4" chlor shear (?) along joint at 60° on. - sev. large py xls. assoc. with this.
- 352.0-359.0: rk. dark green as above but rounded large white grains secondary (?) feldspar (?) medium grained to coarse grained rock, num. elongate amphibole laths distinguishable. Prob. re-xilized. Less carb than usual.
- 355.7: 1" carb. stringer w/inclusions wall-rock at about normal to core to 10° on.
- 358.3: 1" carb-stringer w/chloritic streaks, inclus. wall-rock. Contacts 20° - 30° on.
- 359.9: 1" carb. stringer (calcite) abt normal to core (slightly irre.)
- 360.7: 1/2" carb. stringer as last
- 366.2: 3" highly alt'd. zone w/network irreg. carb. stringers
- 366.0: white mineral (clay min.) very scarce, considerable carbonate generally.
- 375.7-382.1: Rk f.g. appearing, highly carb, soft, numerous irreg. carb. stringers, slightly paler green than usual (?)
- 382.1-389.8: Rk paler than above, more highly carb. abt 2% py throughout - mainly as small euhedral xls. but also as irregular aggregates of xls. Several small carb. chlor veinlets.
- 385.0: For 2" sub-parallel white calcite veinlets at 40° on. Rk weakly sheared parallel to veinlets strongly chlor, carb. Sev. large py grains occurring with veinlets.
- 385.8: 2" of almost massive py (composed of num. small irreg. grains) with selvages or inclusions of wall-rock, silicified, carb. chlor. Hard brown min. also present. Strong foliation (perhaps due to shearing) 45° - 50° on.
- 386.-390.3: Qtz vein. Upper contact missing (ground core) dark blue qtz with num. highly chlor inclusions wall-rock. Cut by num. hairline irreg. to regular white calcite stringers, apparently occupying fractures in the qtz. Occas. large patches white calcite. Mineralization consists of occas. small specks to stringers py occurring in the fractures. Lower contact irreg. (?)
- 387.2-387.8: (within above) white calcite veinlet within above. Upper contact irreg. but abt 40° on. lower contact irreg. but abt. 55° on. Small inclusions blue qtz. irreg. masses py (5%) within.
- 387.8-390.0: (within above) Fractures in qtz. (and carb. stringers) mainly at 40° - 50° on. Another set at 60 - 70° on almost at right angles to first set. Second set displaced about 1/10" along the first at 388.1.
- 388.2: Grain of visible gold.
- 390.3-391.5: Irr eg. patch white calcite w inclusions blue vein qtz. bleached wall rock. A few later (?) stringers and lenses glassy qtz. Abt. 1% irreg. py. Wall-rock in this section pale grey, highly sil. rather low in carb., strongly sheared at 40° to 60° on. shearing outlined by elongate streaks of soft brown min. parallel alignment small py grains, qtz. stringer, etc. Abt. 3% py.

391.5-395.7: Wall-rock medium grey, not usual green color, highly sil (?) chlor, quite soft, low in carb. although a few irregular carb stringers present. At lower end grades into pale green rock.
391.5-393.6: Abt 5% py as irreg. aggregate and stringers composed of small grains.
391.6: Patch py abt 1" across assoc. with irreg. carb. stringer
395.7-401.4: Pale green (paler than normal) fine-grained appearing soft alt'd. dior. Highly chlor rather low in carb although a few very thin carb. stringers. Tr. py as cubic xls. assoc. w. carb.
401.4-426.0: Mainly f.g. appearing alt'd. dior, local areas c.g. (original texture?) rk, equigran. w. white feld, green amph. (?).
405.9-416.9: Much than average py - still under 0.5%. Assoc. w. carb stringers?
426.0-440.0: Rk partly as above, mainly c.g. appearing w. orig. text. (equigran) preserved. Comparatively fresh but chlor, carb. sil.
430.0: Carb chlor stringer 50° cn. w. several cubes py.
432.5: 2" carb-chlor stringers 50° cn.

440.0

440.0 END OF HOLE

Cemented to collar: 5 bags used

CORE ASSAYS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Co</u>
	<u>From</u>	<u>To</u>				
10531	200.5	202.6	2.1	Tr		
10532	272.6	274.6	2.0	Tr		
10209	376.0	378.0	2.0	Tr		
10210	378.0	380.0	2.0	Tr		
10211	380.0	381.9	1.9	.010		
10212	381.9	384.0	2.1	.010		
10213	384.0	385.8	1.8	Tr		
10214	385.8	387.3	1.5	.060		
10215	387.3	387.0	.6	.010		
10216	387.9	388.9	1.0	.550		
10217	388.9	390.3	1.4	.050		
10218	390.3	391.4	1.1	.030		
10219	391.4	392.5	1.1	.010		
10220	392.5	394.0	1.5	.010		
10221	394.0	395.0	1.0	Tr		
10222	395.0	396.5	1.5	Tr		
10223	396.5	398.0	1.5	Tr		
10224	398.0	400.0	2.0	.010		
10147	405.9	408.0	2.1	Tr		
10148	408.0	410.0	2.0	Tr		

CONE AVERAGES

385.8	390.3	4.5	.159
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SLUDGE ASSAYS

10205	10	20	Tr
10206	20	30	.190
10207	30	40	.090
10208	40	50	.010
	55	65	Tr
	65	75	Tr
	75	80	Tr
	80	90	Tr
	90	100	Tr
	100	110	Tr
	110	120	Tr
	120	130	.010
	130	140	.010
	140	150	Tr
	150	160	.010
	160	170	Tr
	170	175	Tr
	185	195	.020
	195	205	.010
	205	215	Tr
	215	225	.010
	225	235	.020
	235	245	.010
	245	255	Tr

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Co</u>
	<u>From</u>	<u>To</u>				
255	265			Tr		
265	275			.010		
275	285			Tr		
285	295			.010		
295	305			Tr		
315	325) 2 samples		.010		
315	325			Tr		
325	335			.010		
335	345			Tr		
345	355			Tr		
355	365			Tr		
400	410			Tr		

135.0 : 1st qtz-crb-ctr. 135.0 to 136.0, with some py.

136.0 : No more sections with a dotted form. Constituent are chlorite, quartz, alb'd feldspar. Suspected amphibole (only in places) and that slight (?) mineral. Sl., carb'd and tr. of py. A few qtz-crb-ctr's 135.50 to 136.0.

137.0 : 1st calc.-quartz-ctr. 137.0 to 138.0, with some py.

138.0 : Coming in of the evenly med. dark green alb'd diorite with a dotted (slay mineral?) form. The transition is gradual. There seems to be an increase in epidote content, while carb'n diminishes. The grain boundaries are not good visible.

The rock contains a grayish soft mineral chlorite, quartz, suspected amphibole, epidote (alb'd feldspar) and traces of pyrite. Evenly med. dark green giving the impression of a fine gr. rk. The amount of qtz-crb-ctr., is negligible.

139.0 : A few, scattered py., patches.

137.0 : Sl. carb'd. 55° to 60°, over 60°.

138.0 - 139.0 : The (epidote) -carb-quartz-ctr., (only a few).

Starts to contain dark green chlorite in streaks and bands. Outside this str., dark green chlorite patches etc. are also found. General direction of the stringers is 20-30° to 40°.

138.0 : A section of 1.0' containing several patches of py. Also two small qtz-crb-ctr's. 90-95° to 100°.

139.0 : There is a gradual and intermittent transition into the altered diorite with the gabbroid texture.

140.5 : Med. green, coarse grained, massive and not as hard as a knife. Texture is gabbroid and the colour changes into med. dark gr., with white patches of probably a mixture of quartz and feldspar. The rock contains chlorite, quartz, epidote and feldspar but also that light grayish mineral (but not as visible as in the dotted type of texture). In places some amphibole sl., to med., carb'd, traces of pyrite. In between sections of the dotted type of altered diorite.

141.5 : Short the end of the gabbroid, coarse grained type and the fine grained, dotted type of altered diorite with the same constituents, and med. dark green in colour, becomes dominant. The grayish mineral is not so pronounced. Also patches and even stringers

(141.5 : 1st 130° to 140°) of dark green and soft chlorite. Carb'n is slight to med.

There are a few qtz-crb (chl) str. and patches of gabbroid type.

(probably intermediate quartz-feldspar.)

Traces of py.

142.3-142.7 : Coarse grained, med. to light gr. section, like 141.5 with a sharp near contact at 142.0 to 142.5, and probably also a sharp far contact (not well recognized). Tr. of py.

142.8 : 1st calc. quartz-ctr. 142.8 to 143.0

143.0 : Like 142.8 but slightly coarser in places, fine to med. gr. Tr. of pyrite. Slightly to non-carb'd, patches and streaks of dark green chl.

143.0-143.5 : Like 142.8, near and far contact fairly sharp 90° to 100°.

143.5-144.5 : Like 142.8, near contact not recognized, far contact fairly sharp and irregular. In the first 6', interstratified (?) feldspar and qtz. These coarse grained sections contain fair amount of that light grayish mineral.

514.4 : 1" of rock like interbedded quartz-carb., with least some
most rock and dark gr., chlorite. The "boundary" is characterized
by a brown red mineral, heavier than a knife.

514.9 : The fine or fine to med. grained alb'd diorite with the
dotted type of texture does contain only a little or no calcite.

515.0-515.9 : The fine grained type contains several dark green
chlorite streaks, patches or stringers, 20-30° to cm., the first
25° these after string about 15-20° to cm. Some quartz and or epide-
rite could be in association with the chlorite.

516.5 : Two quartz-carb and 1 epide patches. In places dotted type of
texture. Sl., carb'd.

516.0-516.2 : Section of the fine grained type of alb'd diorite h.
alb'd., containing composite quartz-carb., epidote stringers, 30-40°
to cm., up to 1/2" wide. In places some black amphibole and at 516.1
some light purple.

517.1-517.9 : Like 517.1 - Near contact fairly sharp 50° to cm. Far
contact fairly sharp, 15-20° to cm. Traces of py. and non-carb'd
(in places sl.).

518.0 : The fine grained type is still dominant. With in places
dotted type of text. As usual quartzified, but only some (to locally
sl.) carb'd. Several streaks and patches of dark green chlorite.

518.4 : 1" Stringer of the coarse, gabbroid type of alb'd diorite
20-30° to cm. Traces of py.

518.0-518.5 : Coarse grained type. Near contact about 30° to cm.,
characterized by a 1/2" band of dark green chlorite, far contact ir-
regular and fairly sharp. Several chl., patches and streaks.

518.0 : A few scattered py. Kils.

516.5-517.5 : 2 narrow epidote stringers, 70-75° to cm. (They are
not parallel).

518.5 : The fine grained type with patches etc., of dark green chl
rite, 15-20° to cm. No carb'd.

518.0-518.0 : Faint indication of shearing.

518.5-518.5 : A few inches of slightly magnetic alb'd diorite.

519.0 : Coming in of the dotted type of texture. Lengths are
the same. A few carb.-quartz-str's., with at 519.1 also that redd
coloured mineral.

519.5 : Composite qtz-carb-epidote chlorite stringer, far contact
30° to cm., near contact 15° to cm., containing a little py and
chlorite is developed perpendicular to the far contact (so, in ge
neral, the Schöner).

520.0 : Long structure over 1' consisting of a mixture of quartz-
carb and or epidote-chl. with traces of quartz.

521.0-521.0 : A few carb-quartz stringers, 20-30° to cm., 1/2-1/4"
wide containing dark green chlorite or (rare) possibly the contact
or perpendicular to a contact.

522.0 : Transition, gradually, from the dotted type of text to the
fine grained with in places a faint indication of possible shearing
A few scattered py. crystals.

In places slightly magnetic and there is a gradual increase, to 2"
to med., in carb'd from 520 cm.

517.0 : V.S. or cuttings from the 1st (hard gr. alb'd sl.)

518.0 : V.S. or cuttings from the 1st (hard gr. alb'd sl.)

636.0 : Coming in of the dotted text. The alt'd diorite is also softer probably less quartzified. The rock still contains patches etc., of dark green chl., a few very narrow carb-quartz-str., and a few scattered patches of py.

641.0 - 643.0 : Probably highly alt'd coarse grained section with fairly sharp contacts 50-55° to cm. In places highly quartzified. Traces of py.

643.0 : In the meantime carb'n increases to med. Amount of str's is still "a few".

644.2 : Traces of py associated with py.

676.0 : There is a gradual increase in stringers and carb., impregnated stringers. (Stringers which still show host rock in left. Not pure quartz carb.), 20-30° to cm., to "several". Also increase in carb'n to "highly carb'd". There is a slight increase in pyrite associated with the carb. quartz-str's.

692.0 : Increase in min'n. Discontinuous py., (peppered) and also in patchy - like stringers in or with the carb-quartz-str's.

692.0-699.0 : 2-5° to py., with the higher percentage from 692.0 - 694.0 : 7-10% py.

693.0 - 693.7 : Two bluish quartz-carb composite str's, 15-50° to cm 1-1 1/2" wide, containing py., green chlorite, and a brownish coloured, interstitial mineral.

693.3 : Like 693.0, 65° to cm., 1".

694.0 : 1" - Milky quartz-carb, str., 10-30° to cm., locally bluish grey. These quartz-carb'n str's have a small end (693.0)-713.0 both 15° to cm.)

697.1

697.1 : Bluish fractured quartz veined by a few very narrow calc., str., and patches and streaks, also very narrow py. In places some green chlorite. "Ground cov. Length is only approximately.

698.0

698.0 : Like before the quartz zone, highly carb'd, several to num., carb-quartz-str's 55-60° to cm. In the fine grained (with in places remnants of the dotted type of text.) Alt'd diorite. There is a decrease in min'n.

715.0 - 715.0 : Small section of coarse grained, tr. carb'd alt'd di. Irregular contacts.

716.0 : Dotted type of text., H. carb'd, and only a few to a single carb-quartz str. Gradually decrease in carb'n.

727.5 : 1" coarse gr. type with one 1" py. patch. Sharp contacts 15° to cm.

733.0 : 9" of G. gr. rock. Sharp contacts, but irregular, 15-55° to cm.

744.4 : 1" chl-quartz, sh. 50° to cm., with some py.

745.1 : 8" c.gr. type with 2 py. patches. Near contact 30-40° to cm. Far contact 0-10° to cm.

746.5 : The fine gr. type of alt'd di. (T.I. the dotted type without data). H. carb'n. It seems to be that the dotted type is more carb'd than the non dotted fine gr. alt'd di. Both contain streaks and patches of soft, dark green chl. Locally some py., in (patches or) very narrow str's.

767.5 - 773.3 : More (med.) carb'd than the environment with relatively more py., at the end.

697.1 QUARTZ ZONE

698.0 ALT'D DIORITE.

Friday - Friday & Friday night party...
party, stay in, perhaps with...
...of...

1940 - 1941 : G. S. ... contacts ... to last but not
the secondary field.

1941 - 1942 : as 1940 to 1941 contacts large gradual.

1942 - 1943 : as 1941 to 1942 ... on ...
1943 : 2' white (yellow) ... 2.4' long. ... to ...

1943 - 1944 : Iron, ... contacts ... possibly with
... to ...

1944 - 1945 : as 1943 to 1944 ...
1945 - 1946 : Several very large ... very pale.

1946 - 1947 : Several more large, ... very
...
1947 - 1948 : No. 4.5, contacts gradual but quite deep
at 1 - 1.5' to ... to ... but about 1.5' white ...
secondary field, in ...

1948 - 1949 : as 1947 - 1948
1949 - 1950 : as 1948 - 1949 contacts grad. ...
1950 - 1951 : as 1949 - 1950
1951 - 1952 : Iron, ...
1952 - 1953 : as 1951 - 1952 but less secondary field.
contacts very gradual.

1953 - 1954 : as 1952 to 1953
1954 - 1955 : Iron, ... contacts ...
1955 - 1956 : as 1954 - 1955
1956 - 1957 : last ...
1957 - 1958 : as 1956 - 1957 some large, ... contacts
...
1958 - 1959 : No. 4.5, ... secondary field, contacts grad-
... at ... to ...
1959 : as 1958 - 1959 some ... contacts ...
1960 - 1961 : Some ... secondary field
1961 - 1962 : ...
1962 - 1963 : No. 4.5, ... contacts ...
... of ...
1963 - 1964 : as 1962 - 1963
1964 - 1965 : No. 4.5, ... contacts ...
...
1965 - 1966 : No. 4.5, ... contacts ...
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1966 - 1967 : No. 4.5, ... contacts ...
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1967 - 1968 : No. 4.5, ... contacts ...
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1968 - 1969 : No. 4.5, ... contacts ...
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1969 - 1970 : No. 4.5, ... contacts ...
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1970 - 1971 : No. 4.5, ... contacts ...
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1971 - 1972 : No. 4.5, ... contacts ...
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1972 - 1973 : No. 4.5, ... contacts ...
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1973 - 1974 : No. 4.5, ... contacts ...
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1974 - 1975 : No. 4.5, ... contacts ...
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1975 - 1976 : No. 4.5, ... contacts ...
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1976 - 1977 : No. 4.5, ... contacts ...
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1977 - 1978 : No. 4.5, ... contacts ...
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1978 - 1979 : No. 4.5, ... contacts ...
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1979 - 1980 : No. 4.5, ... contacts ...
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1980 - 1981 : No. 4.5, ... contacts ...
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1981 - 1982 : No. 4.5, ... contacts ...
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1982 - 1983 : No. 4.5, ... contacts ...
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1983 - 1984 : No. 4.5, ... contacts ...
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1984 - 1985 : No. 4.5, ... contacts ...
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1985 - 1986 : No. 4.5, ... contacts ...
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1986 - 1987 : No. 4.5, ... contacts ...
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1987 - 1988 : No. 4.5, ... contacts ...
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1988 - 1989 : No. 4.5, ... contacts ...
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1989 - 1990 : No. 4.5, ... contacts ...
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1990 - 1991 : No. 4.5, ... contacts ...
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1991 - 1992 : No. 4.5, ... contacts ...
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1992 - 1993 : No. 4.5, ... contacts ...
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1993 - 1994 : No. 4.5, ... contacts ...
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1994 - 1995 : No. 4.5, ... contacts ...
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1995 - 1996 : No. 4.5, ... contacts ...
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1996 - 1997 : No. 4.5, ... contacts ...
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1997 - 1998 : No. 4.5, ... contacts ...
...
1998 - 1999 : No. 4.5, ... contacts ...
...
1999 - 2000 : No. 4.5, ... contacts ...
...

1071.1-1071.2 : Sh. sil., to 1071.5 to 1071.8 but exceptionally highly epidote, quite num., irreg., epidote stringers.
 1071.5-1071.7 : Num. irreg. stringers silby quartz.
 1071.5-1071.8 : Possible showed some normal to core w. num. chlorite streaks epidote, barren quartz.
 1071.1-1071.2 : Sh., f.g., high percentage secondary fold., epidote mod. quartz, high chlorite, traces to sil carb, clay min. Contacts gradational.
 1071.2-1177.2 : Sh., as 1071.0 - 1071.1. Fairly num., irreg., epidote stringers, occas., blue quartz "eyes". Only slight trace of feldite.
 1071.1-1071.4 : Chloritized possible brown., num. Contacts irreg., but about 45-50° to core.
 1111.0-1111.0 : Several irreg., patchy epidote - white quartz-blue quartz stringers.
 1111.2 : 2nd irreg., patch epidote-blue quartz at abt 50° to core.
 1111.8 : Irreg., epidote-fold-blue quartz veinlet or patch.
 1111.2 : As 1111.8
 1111.5 : Irreg., 1st patch epidote.
 1111.3-1111.7 : Several irreg., epidote-patches.
 1150.0 : Occas., irreg., blue quartz-carb-epidote patches, stringers. Major ones described below.
 1150.7-1151.2 : At 50° epidote replacing rk.
 1151.2-1151.9 : Irreg., patch or series irreg., veinlets of epidote w. minor carb., blue quartz. Apparently num. sil.
 1160.2-1160.8 : Several 2nd or less epidote-quartz stringers (blue or white quartz.) Irregular to normal to core to 20° to core. Barren.
 1170.2-1171.1 : At 30° epidote replacing fold. Sev., irreg., blue quartz, carb, stringers less than 2nd side.
 1171.5 : 3rd composite epidotized non-carb-blue quartz irreg., stringers. At normal to core. No mineralization.
 1177.2-1180.5 : Sh., f.g., contact w. last gradational, soft dark green highly chlorite, mod., to highly carb, mod. to high clay min. only trace to sil epidote, sil. Carb-quartz stringers, patches, veinlets fairly common, irreg., various angles, but dominantly 30-50° to core. No mineralization.
 1180.6-1180.1 : Num., large rounded grains fresh white secondary fold., occas., blue quartz eyes, a few large grains clay min., Sh., perhaps orig. Contacts gradational.
 1180.2-1191.2 : Num., random 2nd or less carb-minor blue quartz stringers.
 1180.5-1191.8 : Sh., exactly as 1177.2-1180.5 as regards alteration mag. to c.g. Contacts gradational. In part weak lineation of clay min., 25-30° to core.
 1180.2 : 2nd barren white quartz-carb vein 40° to core.
 1180.2-1180.5 : Sh., as 1177.2 to 1180.5
 1180.2 : 2nd carb-blue quartz veinlet 30° to core. Barren.
 1180.5 : Sh., as above as regards alteration but grades from f.g., to mag., and back again over a few inches. Back to mod. lineation of clay min 25-30° to core, in parts. F.g. rock appears to be slightly more quartz than mag. and high, but the difference is not great.
 1180.7 : 2nd somewhat irregular, patchy blue quartz-carb stringers at about 30-50° to core. Barren.
 1197.2-1197.5 : A few large grains fresh-looking prob., secondary fold.

1201.5-1202.0 : Occas., large blue py.
 1202.0-1203.0 : Several irreg., 1/2" blue quartz-carb. stringers.
 1203.0-1204.0 : Several irreg., 1/2" blue quartz and white quartz-carb stringers.
 1206.0 : Irreg., 1/2" blue quartz-carb stringers.
 1207.5 : 1/2" blue quartz-carb veinlet 50° to on.
 1210.7 : 2" Milky quartz-blue quartz-carb vein at about 50° to on.
 1215.5-1216.4 : Several white quartz-blue quartz-carb stringers, irreg., and various angles but generally about 30-40° to on.
 1225.6-1237.0 : Bl., very highly carb, occas., irreg., carb stringers.
 1226.8 : Irreg., stringers blue quartz.
 1230.1-1230.7 : Several patches white carb.
 1232.0-1235.7 : Several irreg., carb veinlets.
 1235.4-1236.3 : Num., irreg., carb-white quartz stringers.
 1237.0-1239.2 : Bl., looks like above but very low in carb.
 1239.2-1247.2 : Bl., o.g., dark green, soft, contacts gradational. Consists of white rounded to irreg., secondary feld., 10-30%, some blue quartz eyes, traces epidote, carb, clay min, remainder mainly chlorite-possibly w some relict amphiboles or pyroxenes.
 1243.6 : 1/2" white carb stringers 60° to on., surrounded by a 1" carb, f.g. appearing zone.
 1243.5-1245.2 : Heavily epidote zone (30-60%) w. several irreg., blue quartz stringers and quartz eyes.
 1246.7 : 1" Irreg., epidote zones.
 1247.2-1247.6 : F.G. rock. Alt., apparently as above.
 1247.6-1248.6 : Bl., as 1239.2 to 1247.2. Contacts irreg., fairly sharp but apparently not intrusive.
 1248.6-1250.3 : Bl., f.g., as 1247.2 to 1247.6
 1250.3-1261.0 : Bl., o.g., contact gradational, consists of 10-30% secondary feld., 10-40% epidote, the rest chlorite and amphibole. Texture essentially equigran. Very fresh appearing rock.
 1250.3-1261.0 : 80% epidote replacing rock.

1261.0

1261 END OF HOLE

P.L. Money

CEMENTED TO COLLAR 16 bags used.

Well No	Depth of Hole Feet	Sample Length	Gr	Ag	Co
151 N	32.3	33.9	1.0	TR	
152	39.4	40.0	.6	TR	
153	50.5	51.9	1.4	TR	
154	136.3	137.7	1.4	TR	
155	137.7	140.0	2.3	TR	
201 N	208.0	208.8	.8	TR	
202	218.5	219.2	.7	TR	
203	281.9	282.7	.8	TR	
204	351.8	353.0	1.2	TR	
10810	511.8	513.3	1.5	TR	
10811	513.3	515.2	1.9	TR	
10812	588.5	589.4	.9	TR	
10813	598.9	600.0	1.1	TR	
10814	600.0	602.4	2.4	.101	
10815	602.4	604.2	1.8	.015	
10816	623.7	625.0	1.3	TR	
10817	625.0	625.2	1.2	.010	
10818	626.2	627.5	1.3	TR	
10819	627.5	628.8	1.3	TR	
10820	636.1	637.1	1.0	TR	
10821	637.1	638.6	1.5	.015	
10822	642.6	643.3	.7	.015	
182 N	661.2	662.1	.9	TR	
183	645.8	667.0	1.2	.010	
184	676.1	677.8	1.7	TR	
185	682.4	684.4	2.0	TR	
186	688.3	690.0	1.7	TR	
187	690.0	691.0	1.0	TR	
188	691.0	692.4	1.4	.010	
189	692.4	693.3	.9	.010	
190	693.3	693.9	.6	.015	
191	693.9	695.0	1.1	.010	
192	695.0	696.0	1.0	.020	
193	696.0	697.1	1.1	.020	
194	697.1	698.0	.9	.010	

Sample Number	Section of Soil From	Soil Wet	Sample Length	As	Ag	Ca
195	695.0	699.0	1.0	.015		
196	699.0	703.0	1.0	.020		
197	700.0	701.0	1.0	.010		
198	702.0	702.0	1.0	TR		
199	702.0	703.0	1.0	TR		
200	703.0	704.0	1.0	.010		
251	704.0	705.0	1.0	.010		
252	705.0	706.0	1.0	.010		
253	706.0	707.0	1.0	TR		
254	717.4	718.3	1.1	.010		
255	772.3	773.3	1.0	TR		
138	812.7	813.7	1.0	.010		
358 N	1112.5	1115.0	2.5	TR		
359	1115.0	1116.4	1.4	TR		
360	1116.4	1118.6	2.2	TR		
361	1118.6	1120.0	1.4	.010		
362	1121.5	1122.5	1.0	.010		
363	1126.2	1127.3	1.1	TR		
364	1130.0	1131.0	1.0	TR		
428	1153.0	1155.0	2.0	TR		
429	1160.0	1161.0	1.0	TR		
430	1170.3	1171.3	1.0	TR		
431	1172.4	1173.9	1.5	.010		
432	1176.8	1177.8	1.0	.010		
433	1181.4	1190.0	1.6	TR		
434	1190.0	1191.8	1.8	TR		
435	1194.0	1195.0	1.0	TR		
428	1153.0	1155.0	2.0	TR		
429	1160.0	1161.0	1.0	TR		
436	1170.3	1171.3	1.0	TR		
431	1172.4	1173.9	1.5	.010		
432	1176.8	1177.8	1.0	.010		
433	1181.4	1190.0	1.6	TR		
434	1190.0	1191.8	1.8	TR		

Sample Number

Location of Core From

Sample Length

Age

Age

Age

435	1194.0	1195.0	1.0	TR		
436	1196.0	1197.2	1.2	TR		
437	1202.8	1203.8	1.0	TR		
438	1205.2	1206.2	1.0	TR		
439	1206.2	1207.4	1.2	.010		
440	1207.4	1208.4	1.0	.015		
441	1210.3	1211.3	1.0	TR		
442	1213.5	1214.5	1.0	TR		
501 B	1226.7	1227.6	.9	TR		
502	1230.0	1231.0	1.0	TR		
503	1232.0	1233.1	1.1	TR		
504	1235.4	1236.3	1.4	TR		
505	1243.5	1245.0	1.5	TR		
506	1245.0	1246.0	1.0	TR		

10/11/72

101 B	10	20		.020		
102	30	30		.010		
103	40	40		.010		
104	50	50		TR		
105	60	60		TR		
10779	60	60		.015		
10780	60	70		TR		
10781	70	80		.010		
10782	80	90		TR		
10783	90	100		TR		
10784	100	110		TR		
10785	110	120		TR		
10786	120	130		TR		
10787	130	140		TR		
10788	140	150		.010		
10789	150	160		.020		
10790	160	170		.010		
10791	170	180		TR		
10792	180	190		TR		
10793	190	200		TR		
10794	200	210		TR		
10795	210	220		TR		
10796	220	230		TR		
10797	230	240		TR		
10798	240	250		TR		
10799	250	260		TR		
10800	260	270		TR		

Sample Number	STATION		ASSAYS	Au	Ag	Co
	Section of Hole From	To	Sample Length			
269	770	780				
270	780	790		TR		
271	790	800		TR		
272	800	810		TR		
273	810	820		TR		
343	820	830		TR		
344	830	840		TR		
345	840	850		TR		
346	850	860		TR		
347	860	870		.015		
348	870	880		.010		
349	880	890		TR		
350	890	900		TR		
351	900	910		TR		
352	910	920		TR		
353	920	930		TR		
354	930	940		.010		
355	940	950		.015		
356	950	960		TR		
357	960	970		TR		
411	970	980		TR		
412	980	990		TR		
413	990	1000		TR		
414	1000	1010		TR		
415	1010	1020		TR		
416	1020	1030		TR		
417	1030	1040		TR		
418	1040	1050		TR		
419	1050	1060		TR		
420	1060	1070		.015		
421	1070	1080		.030		
422	1080	1090		TR		
423	1090	1100		TR		
452	1110	1120		.010		
451	1120	1130		TR		
453	1130	1140		TR		
454	1140	1150		TR		
365	1150	1160		TR		
366	1160	1170		TR		
367	1170	1180		TR		
369	1180	1190		TR		
425	1200	1210		TR		
426	1210	1220		TR		
427	1220	1230		TR		

182.0-194.0: In part only weakly carb. original (?) texture preserved
f.g. to m.g. with mm. elongate amphibole laths.
185.0-188.0:

194.0

194.0 ALT'D. DIOR: f.g. to m.g. dark green consisting of elongate amphibole laths with
interstitial feld. Some chloritization, only very minor silicification
carbonatization except locally. Much less alt'd. than rock before this
Tr. py. (stage 1 & 2?)
195.8-198.3: Num. sub-parallel (30-40° on) hairline qtz and calcite
stringers. Rock sil, carb., noticeably paler green
200.5-201.1: Sev. qtz. chlor, carb veinlets 20° on. Rk slightly brecc
222.5: 4" of irreg. qtz-carb-chlor. stringers. Wall rock heavily chlc
carb. sil.

224.0

224.0 END OF HOLE

Hole cemented to collar: Bags used - 4

Casing and pipe pulled

Sample Number	Section of Hole	Sample Length	AS	AS	AS
---------------	-----------------	---------------	----	----	----

OVER AVERAGE

	145.6	148.3	2.7	.251	
	145.6	152.5	6.9	.201	
Quartered	145.6	148.3	2.7	.236	
"	145.6	152.5	6.9	.134	
	170.0	173.5	3.5	.207	

SLICE ASSAY

10057	30	30		.140
10058	30	40		.020
10059	40	30		.020
10060	30	60	Tr	
10061	60	70		.030
10062	70	80		.020
10063	80	90		.010
10064	90	100		.020
10065	100	110		.020
10066	110	120		.020
10067	120	130	Tr	
10068	130	140	Tr	
10069	140	145	1.410	
10070	145	150	.930	
10071	150	155	.280	
10072	155	160	.090	
10073	160	165	.180	
10074	165	170	.030	
10075	170	175	.025	
10076	175	180	.180	
10077	180	185	.170	
10078	185	190	.030	
10079	190	200	.080	
10080	200	210	.080	
10081	210	220	.030	

D. D. H. 246

Location: 10.122.69N Elev. 1433.95
10.161.29 E

Started:
Completed: November 20, 1959
Logged by: P. L. Muesy

Section H - 100' E of A.B. Line

Depth	Azimuth	Dip
0	-	90°
300.0'	S 25° E	87°
600.0'	S 16° E	85°

Length: 707'

Core: AXI

Note: In describing the alt'd diorite in this and following holes the following terms will be used to describe the alteration: Stage 1, diorite altered but most of original grain boundaries preserved; Stage 2, some of original grain boundaries destroyed but enough present to indicate original grain size; Stage 3, all or nearly all original grain boundaries destroyed.

0.0 CASING

- 6.5
6.5 ALT'D DIOR: dark green, f.g. appearing or f.g. rk. (stage 3?). Heavily chlor. sil., carb. abt. 10% of soft white opaque appearing min. Tr. by A few hairline qtz. carb stringers. Num. tiny elongate eph (?) needles
8.2: 1" leached and oxidized zone at 10° on
16.1: abt 5° cubic py over an inch
- 16.4
16.4 ALT'D DIOR: s.g. to c.g. dark green contact gradational, consists of elongate amphibole laths, interstitial feld. Abt 50% feld. eph chlor., feld now mainly alt. to epidote. Rk moderately carb, sil (stage 1?)
Abt 5% of opaque-appearing white min.
- 22.9
22.9 ALT'D DIOR: as 6.5 to 16.4 Contacts gradational. Stage 3 or originally f.g.
- 25.2
25.2 ALT'D DIOR: as 16.4 to 22.9. Contacts gradational
- 26.2
26.2 ALT'D DIOR: as 6.5 to 16.4. A few large subhedral py grains. Weak lamination (?), 30° on. Occas. 1/2" or less qtz-carb stringers 10° to 40° on. Towards end local sections of s.g. stage 1 (?) rock as 16.4-22.9.
- 54.9
54.9 ALT'D DIOR: Upper contact gradational, lower contact gradational but fairly sharp at 50° on. C.g. dark green, consists of elongate amphiboles interstitial feld, fresh-looking subhedral feld (secondary?), strongly chlor., weakly silicified, carbonitized. Minor epid. Stage 1? A few subhedral py xls.

62.2: 3" carb. stringer 20° en. Tr. py
62.5: 4" " " 30° en. Tr. py
62.6: 3" " " 10 - 20° en. Tr. py

- 62.9 ALT'D DIOR: 62.9 Similar to 6.5 to 16.4 but moderately chloritized very little carb qts. Stage 3? or originally f.g. Tr. py
69.8: 1-2" qts-carb vein 10° en. Tr. py
- 77.7 ALT'D. DIOR: 77.7 as 54.9 to 62.9. U.C. missing. Weak foliation (?) 30° en. Stage 1 (?) Tr. py.
- 82.2 ALT'D. DIOR: 82.2 f.g or fine grained appearing equigranular dark green rock such as 62.9 to 77.7. Upper contact sharp at 50° en but believed to be gradational. Rk slightly chloritized very minor carb. qts. mod. amount epid. suggesting it may have been originally f.g and is stage 1 rather than stage 3.
82.6-83.3: 4 parallel qts-carb stringers at 30° en. Tr. py
84.0-84.7: Patch of the c.g. diorite with very irreg. boundaries
87.6-88.2: c.g. diorite, contacts gradational at abt 50° en.
90.3-93.0: Several thin qts-carb stringers 10° to 70° en. Unmin. to tr. py.
93.7-94.2: Carb. vein w/minor qts. Unmin. Contacts abt 30° en.
97.5: 1" Carb. stringer at 20° en.
99.0: 1/2" by 1/4" composite grain py. No other mineralization.
99.9: 1/2" Carb-qts stringer 20° en.
103.5: 3" Carb. Stringer 10° en. Unmin.
109.3: 6" carb. stringer 10-15° en. Minor qts. incl. wall rock
112.4: Local highly epidotized zone around 1/2" carb. stringer 25° en.
116.5: 3" carb. stringer 15° en. Unmin. but a few large py.
- 119.4 ALT'D. DIOR: 119.4 Originally c.g. to m.g. re-killed dark green as 54.9 to 62.9. Upper contact 50° en, seems to be sharp gradational. Texture non-directional, elongate amphibole laths at random w/interstitial feld (now mainly epidote), tr. py. Sil, chlor, minor carb but apparently only mod. alt'd.
- 122.5 ALT'D. DIOR: 122.5 f.g., much as 82.2 to 119.4. Epidote along contact which is at 50° en.
123.7: 4" carb. stringer w/inclus. wall rock. at 15° en Tr. py.
- 126.5 ALT'D. DIOR: 126.5 Like 119.4 to 122.5 U.C. 50° en, L.C. 70° en. a few large fresh irreg. grains feld. (secondary?).
- 127.4 ALT'D. DIOR: 127.4 as 82.2 to 119.4. A few carb. stringers 10-30° en. 1/4" carb. stringer at 35° en. along L.C.
- 129.1 ALT'D. DIOR: 129.1 as 126.5 to 127.4 A few chloritic and carb. stringers
131.7-132.2: Sev. irreg. carb. stringers, patches. Rk appears f.g. in immed. vicinity, is highly carb.

120.0-125.0: ...
125.0-126.5: ...

140.2 ALT'D. DIOR:

140.2

Like 119.4 to 119.4. U.C. contact gradational irregular. A few chlorite and carb-chlorite stringers, mod. highly carb. weakly silicified.

145.9: 1/4" carb stringers. U.C. 20" en, L.C. 15" en. Chlor. incl. wall rock

154.0-155.3: Much carb., minor qtz in irreg. patches, veinlets

155.3-156.4: As above Abt 4% py replacing carb.

157.4-159.0: As above. Breccia some(?) Abt 1% py

160.3-161.3: As above. Abt 2% py

161.5 - 161.8: Sev. irreg. patches carb.

166.2

166.2 ALT'D. DIOR:

Like 126.5 - 127.4. A few scattered lg. py. cubes. Highly carb. and sil. despite co. grain.

181.7-182.3: Irreg. patchy carb.

188.3: 2 py. xls. 1/4" across.

188.5: Fk. locally f.g. from here. apparently due to alt. Alterati part. carb. increasing. Sev. small qtz. carb. stringers, scattered lg. py. cubes, feldspare alt'd. to aggregates of carb and white opaque looking min. (clay min.?)

198.0

198.0 ALT'D. DIOR:

Contact missing, dark green, f.g. or f.g. appearing, soft, heavily chlor., carb. sil. (blue qtz eyes). Abt. 3% soft white min. dissem. throughout (clay min.?). A few qtz-carb. stringers, mainly 10-30" en but several 60-70" en. Tr. py.

207.9-208.8: Abt 2% py as small irreg. lenses and stringers composed of small subhedral to euhedral grains.

NORDBAU VEIN →

208.8-211.2: Qtz. vein. Blue qtz. generally quite dark. Contacts missing (ground core). Cut by a few hairline white carb. stringers. Contains highly silicified carb. and chlor. inclusions of wall rock. Tr. py. Visible Au near end of section.

211.2-212.5: Sil. breccia zone. In part identical with above. Blue qtz. minor carb. cementing brecc. highly alt'd. wall rock. Abt 3% py in large and small irreg. to subhedral grains. Tr. arsenopyrite (?)

212.5-213.8: Above zone grades into sheared, highly sil, chlor. carb. diorite at 212.5. Shearing at 45°-50° en. Abt 3% py.

213.8-217.4: n.g. appearing comparatively fresh looking diorite. Heavily chlor., sil, carb. Throughout. Dissem. py. throughout.

217.4-220.2: Fk as above, abt 1% to 2% py as irreg. elongate stringers and lenses.

220.2-223.6: Breccia zone consisting sil, carb. chlor. diorite cemented by qtz (white and blue) and carbonate. Abt 2% py dissem, as stringers and lenses, abt 1% arsenopyrite (?) very fine, silvery grey, xls striated. Qtz-carb stringers, gen. 30°-40° en although irreg.

223.6-224.8: Comparatively fresh-looking f.g. dior. Mod. carb, sil. strongly chlor. Strong foliation 70° - 90° en. Tr. to 1% py in small lenses elongate parallel to foliation

224.8: Foliation disappears. F.g. diorite as last. Mod. carb. silicified, chlor. Tr. py.

247.0-248.7: Mod. thin irreg. carb. stringers. Fk highly carb. Only tr. py.

250.0-251.7: Core badly ground. Only tr py, not particularly sheared. Prob. poor drilling
 252.7-254.2: As above
 286.5: 2" irreg. carb. stringers

286.7

286.7 ALT'D. DIOR:

Mainly m.g. to c.g. Contacts gradational. Dark green, highly carb chlor. some blue qtz (eyes) Tr py. Large grains subhedral to euhedral fresh-looking white feld (secondary?), elongate amph. laths, interstitial partly ser.(?) feld.

289.0

289.0 ALT'D. DIOR:

f.g. or f.g. appearing diorite w/num. thin irreg. carb stringers Highly carb. chlor, sil. Only tr py generally as large euhedral xls. A few small patches m.g. to c.g. diorite
 293.0-304.0: Sev. small patches m.g. to c.g. dior. with blotches of white, fresh looking probably re-crystallized feldspar. Contacts gradational
 302.1: 2" of about 1/2 % py in elongate irreg. lenses assoc. w/ vague carb. stringers
 307.8: 2" irreg. carb stringer w/inclusions wall-rock
 308.9: elongate patch py cut by carb. stringer
 313.9: Small vug in carb. stringer lined w/ calcite xls.
 336.3: 1" carb stringer 10° en. tr. py
 346.4: 1" carb. stringer 30% en. tr. py
 348.0: 1" irreg. carb. stringer incl. wall-rock
 351.7-372.8: Py unusually abundant as blebs, small stringers. Perhaps 0.25%. Rock apparently slightly coarser-grained although still fine-grained. Carb. stringer generally 20-50° en, often contains chlorite.
 373.0-375.4: Rk apparently re-crystallized. A few large rounded grains white feld. (or qtz?)
 376.0-398.0: More than average py, perhaps 0.5% as co blebs and small stringers.
 392.5-397.1: Partly co. grained re-crystallized(?)
 401.5-419.0: Occas. large blebs or elongate stringers py in part assoc. w/qtz carb stringer.
 407.7: 1" carb-chlor. stringer 30° en. Tr py
 412.5: 1/2" carb. stringer 40° en. 5% py.
 419.0: 1" carb. stringer, irreg. but about normal to core.
 422.0: 1/2" carb. stringer 20% en.
 425.8-434.0: Irreg. qtz. carb. stringers (mainly carb) Unusually abundant. Tr. py assoc. with these
 434.0-477.0: Num carb-qtz. stringers. Not so abundant as in above section, however. Majority of stringers irreg. but many 30° - 60° en. Generally mineralized.
 477.0: Still for most part highly carb. chlor, sil, but only a few carb. veinlets
 480.4: Abt 2% py for 2" assoc. w/carb. stringer
 498.8: 1" carb.-chlor stringer normal to core.
 507.0: Small specks, irreg. grains of a soft very white min. become common-form 1% of rock.
 507.5-508.1: A series of ill-defined carb stringers and chlorite stringers with bleached and carb. wall rock at 10-15° en.
 509.0: White min. (see 507.0) not present for 6" in some carb stringers, irreg. to 20° en.
 514.2-524.8: Rk possibly originally c.g. as indicated by vague xls outlines, contains numerous large skeletal grains of the soft white mineral (clay mineral replacing feldspar?).

524.8-535.0: Rk apparently f.g. again. Still highly carb. chlor, sil. White mineral occurs in patches only

525.4: 2nd zone at 15-25° on consisting of white carb. vein and pale highly carb. zone.

527.8: 1/2nd carb. chlor. stringer 50° on.

532.5: 1/2 irreg. di.

535.0-564.0: Rk as above but lacks soft white opaque-appearing mineral. A few carb. (calcite) chlorite stringers.

558.2: Py stringer 50° on.

560.0-561.0: Ground Core

561.4-562.0: " "

562.7-564.0: " "

564.0-587.0: Soft opaque-appearing white min. forms 10% - 25% of rock. Rk not quite as highly carb. as above appears f.g. to m.g. Chlor-carb stringers fairly common. Local patches large skeletal xls. of white min.

581.1-583.0: Sev. carb.chlor stringers 25° - 45° on. Tr. assoc. py

587.0: Above rock type grades to f.g. appearing rock lacking the white min. and slightly more carb. Irreg. - thin qtz. carb stringers quite common, also fine dissem. py.

600.3-606.4: Sev. blue qtz and carb stringers w/consid. assoc. py perhaps 1% overall. In part irreg. but gen. 40° - 50° on.

606.4-608.6: Sil. and carb. zone around blue-qtz. white qtz. and carb. stringers. Abt 2% py overall.

608.6-607.6: Abt 1% dissem. py.

609.6-610.4: Qtz. vein, white to blue qtz. Barren

610.4-611.5: Abt 1% dissem. py

611.5-615.7: Rk bleached, sil, chlor. carb around stringers blue qtz. gen abt 30° - 50° on. Local sections unbleached - abt 1% py throughout.

615.7-624.0: Scattered grains py

618.3: 3rd sin. blue qtz-carb stringer c. 30° on. Abt 2% py

619.6: 2nd do

624.0-646.0: Gen. f.g. appearing alt'd. diorite highly carb, chlor, sil. A few qtz-carb. veinlets different angles. Tr. py

646.0-690.8: Rk partly as above, in part poorly preserved xil outlines indicate original c.g. These sections have large skeletal xls. opaque-appearing soft white mineral. Contacts gradational.

690.8-667.5: Rk has c.g. large irreg. to rounded white fold. partially altered to above mat. ind. soft white min. Contacts gradational. Local sections f.g. appearing rock. Highly chlor, carb, sil but less alt'd than last.

661.8: 1/2nd carb.chlor stringer 30° on.

667.5-670.9: f.g. appearing rk. Fairly fresh-looking consists of cellular amphiboles (mainly orientated) subvertical fold. Partially alt'd to chlor, epid, minor carb, qtz. Occas. epid-qtz stringers.

672.8-673.6: 3 epidote-qtz stringers, 1st to 3rd, irreg. to abt 40° on.

690.3-707.0: Bands f.g. and m.g. comparatively fresh-appearing but still highly alt'd. dior. f.g. rk as last, c.g. without overly fold xils in matrix ground-mass (?) Contacts gradational but gen. abt. 40° on. Chlor, fold part alt'd. Rk not quite min. epid, minor carb, blue qtz. Tr py. A very few skeletal (hard) stringers

690.3-691.4: Abt. 5% ce. py assoc. with qtz-carb. veinlets.

707.0

707.0 END OF HOLE

Commented to Collar - 7 bags cement required

ANALYSIS

Sample Number	Section of Hole		Sample Length	Gr	As	Sb
	From	To				
10014	155.3	156.4	1.1	Tr		
10015	157.3	158.4	1.1	Tr		
10016	158.4	159.7	1.3	.010		
10017	160.2	161.4	1.2	Tr		
10018	187.6	188.7	1.1	Tr		
10019	192.7	193.8	1.1	Tr		
10020	191.6	193.8	2.2	Tr		
9936	207.9	208.8	.9	.070		
9937	208.8	210.0	1.2	.060	.200	
9938	210.0	211.2	1.2	5.290	1.660	
9939	211.2	212.6	1.4	.030	.260	
9940	212.6	213.1	.5	.070	.330	
9941	213.1	214.0	.9	.030		
10226	214.0	215.7	1.7	.010		
10227	215.7	217.4	1.7	Tr		
10005	217.4	218.6	1.2	.080		
10006	218.6	220.0	1.4	.080		
9942	220.0	221.4	1.4	.150	.270	
9943	221.4	222.7	1.3	.140	.250	
9944	222.7	223.6	.9	.040		
10228	223.6	225.0	1.4	Tr		
10225	207.9	208.8	.9	.010	(9936 quartered)	
10236	208.8	210.0	1.2	.065	(9937 " "	
10237	210.0	211.2	1.2	1.010	(9938 " "	
10238	211.2	212.6	1.4	4.410	(9939 " "	
10239	212.6	213.1	.5	.040	(9940 " "	
10240	213.1	214.0	.9	.010	(9941 " "	
10241	220.0	221.4	1.4	.110	(9942 " "	
10242	221.4	222.7	1.3	.135	(9943 " "	
10309	222.7	223.6	.9	.030	(9944 " "	
10021	224.3	227.2	.9	Tr		
10022	227.2	228.4	1.2	Tr		
10023	234.6	237.7	1.1	Tr		
10024	247.9	250.0	2.1	Tr		
10025	250.0	251.8	1.8	Tr		
10026	262.2	265.0	2.8	Tr		
10027	265.0	267.5	2.5	Tr		
10028	267.5	270.0	2.5	Tr		
20029	270.0	272.5	2.5	Tr		
10030	272.5	275.0	2.5	Tr		
10031	277.3	280.0	2.7	Tr		
10032	280.0	282.3	2.3	Tr		
10033	282.2	285.0	2.8	Tr		
10034	285.0	287.5	2.5	Tr		
10035	287.5	290.0	2.5	Tr		
10036	290.0	292.5	2.5	Tr		
10037	292.5	295.0	2.5	Tr		
10038	295.0	297.5	2.5	Tr		
10039	297.5	300.0	2.5	Tr		
10040	300.0	302.5	2.5	Tr		
10041	302.5	305.0	2.5	Tr		
10042	305.0	307.5	2.5	Tr		

<u>Sample Number</u>	<u>Section of Hole</u> <u>From</u> <u>To</u>		<u>Sample Length</u>	<u>Gr.</u>	<u>Sp.</u>	<u>Co.</u>
10043	307.5	310.0	2.5	TT		
10044	310.0	312.5	2.5	TT		
10045	312.5	315.0	2.5	TT		
10046	315.0	317.5	2.5	TT		
10047	317.5	320.0	2.5	TT		
10048	320.0	322.5	2.5	TT		
10049	322.5	325.0	2.5	TT		
10050	325.0	327.5	2.5	TT		
10095	327.5	330.0	2.5	TT		
10096	330.0	332.5	2.5	TT		
10097	332.5	335.0	2.5	TT		
10098	335.0	337.5	2.5	TT		
10099	337.5	340.0	2.5	TT		
10100	340.0	342.2	2.2	TT		
10151	342.2	345.0	2.8	TT		
10152	345.0	347.5	2.5	TT		
10153	347.5	350.0	2.5	TT		
10154	350.0	352.5	2.5	TT		
10155	352.5	355.0	2.5	TT		
10156	355.0	357.5	2.5	TT		
10157	357.5	360.0	2.5	TT		
10158	360.0	362.5	2.5	TT		
10159	362.5	365.0	2.5	TT		
10160	365.0	367.5	2.5	TT		
10161	367.5	370.0	2.5	TT		
10162	370.0	372.5	2.5	TT		
10163	372.5	375.0	2.5	TT		
10164	375.0	377.5	2.5	TT		
10165	377.5	380.0	2.5	TT		
10166	380.0	382.5	2.5	TT		
10167	382.5	385.0	2.5	TT		
10168	385.0	387.7	2.7	TT		
10169	387.5	390.0	2.5	TT		
10170	390.0	392.5	2.5	TT		
10171	392.5	395.0	2.5	.030		(#10616 (quartered
10616	392.5	395.0	2.5	.010		(#10171 quartered)
10172	395.0	397.5	2.5	.060		
10173	397.5	400.0	2.5	.010		
10190	400.0	402.5	2.5	TT		
10191	402.5	405.0	2.5	TT		
10192	405.0	407.5	2.5	TT		
10193	407.5	410.0	2.5	.010		
10194	410.0	412.5	2.5	.060		
10195	412.5	415.0	2.5	.080		
10196	415.0	417.5	2.5	.015		
10197	417.5	420.0	2.5	.010		
10198	420.0	422.5	2.5	.080		
10199	422.5	425.0	2.5	TT		
10251	425.9	427.2	1.3	TT		
10252	427.2	428.6	1.4	TT		
10253	428.6	430.0	1.4	.080		
10254	430.0	431.4	1.4	.010		
10255	431.4	432.4	1.0	TT		
10256	432.4	434.1	1.7	TT		
10257	434.1	435.7	1.6	TT		
10258	435.7	437.9	2.2	TT		

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
	<u>From</u>	<u>To</u>				
10513	580.0	582.5	2.5	No Assay		
10514	582.5	585.0	2.5	"		
10515	585.0	587.5	2.5	"		
10516	587.5	590.0	2.5	"		
10517	590.0	592.5	2.5	"		
10518	592.5	595.0	2.5	"		
10519	595.0	597.5	2.5	"		
10520	597.5	600.0	2.5	"		
10174	600.0	602.0	2.0	.010		
10175	602.0	603.7	1.7	.020		
10176	603.7	605.0	1.3	.010		
10177	605.0	606.4	1.4	.020		
10178	606.4	608.6	2.2	.060		
10179	608.6	609.5	.9	.010		
10180	609.5	610.6	1.1	.010		
10181	610.6	611.8	1.2	.030		
10182	611.8	613.1	1.3	Tr		
10183	613.1	614.5	1.4	Tr		
10184	614.5	615.8	1.3	.310		
10185	615.8	617.5	1.7	.020		
10186	617.5	618.5	1.0	.010		
10187	618.5	620.0	1.5	Tr		
10188	620.0	622.5	2.5	Tr		
10189	622.5	625.0	2.5	Tr		
10521	625.0	627.5	2.5	No Assay		
10522	627.5	630.0	2.5	"		
10523	630.0	632.5	2.5	"		
10524	632.5	635.0	2.5	"		
10525	635.0	637.5	2.5	"		
10526	637.5	640.0	2.5	"		
10527	640.0	642.5	2.5	"		
10528	642.5	645.0	2.5	"		
10529	645.0	647.5	2.5	"		
10530	647.5	650.0	2.5	"		
10533	650.0	652.5	2.5	"		
10534	652.5	655.0	2.5	"		
10535	655.0	657.5	2.5	"		
10536	657.5	660.0	2.5	"		
10537	660.0	662.5	2.5	"		
10538	662.5	665.0	2.5	"		
10539	665.0	667.5	2.5	"		
10540	667.5	670.0	2.5	"		
10541	670.0	672.5	2.5	"		
10542	672.5	675.0	2.5	"		
10308	691.5	694.5	3.0	.010		

ZONE AVERAGES

	210.0	212.6	2.6	2.899	.906
	207.9	213.1	5.2	1.182	
	207.9	222.7	14.8	.594	
	220.0	222.7	2.7	.145	.260
Quartered	210.0	212.6	2.6	2.810	
"	220.0	222.7	2.7	.182	

SLURK ASSAYS

9925	10	20	.00
9926	20	30	.00
9927	30	40	.00
9928	40	50	.00
9929	50	60	.00
9930	60	70	.00
9931	70	80	.00
9932	80	90	.00
9933	90	100	.00
9934	100	110	.00
9935	110	120	.00
	120	130	.00
	130	140	.00
	140	150	.00
	150	160	.00
	160	170	.00
	170	180	.00
	180	190	.00
	190	200	.00
	200	210	1.00
	210	220	.910
	220	230	1.470
	230	240	1.590
	240	250	1.680
	250	260	1.680
10007	260	270	1.680
10008	270	280	1.680
10009	280	290	1.680
10010	290	300	1.680
10011	300	310	1.680
10012	310	320	1.680
10013	320	330	1.680
10014	330	340	1.680
10015	340	350	1.680
10016	350	360	1.680
10017	360	370	1.680
10018	370	380	1.680
10019	380	390	1.680
10020	390	400	1.680
10021	400	410	1.680
10022	410	420	1.680
10118	420	430	1.680

No Assay

Sample Number	Section of Hole		Sample Length	Gr	Li	Be
	From	To				
10119	430	440				.010
10120	440	450				.100
10121	450	460				.200
10122	460	470				.100
10123	470	480				.105
10124	480	490				.090
10125	490	500				.090
10126	500	510				.070
10127	510	520				.065
10128	520	530				.070
10129	530	540				.020
	540	550				.060
	550	560				.020
	560	570				.020
	570	580				.035
	580	590				.140
	590	600				.290
	600	610	No Assay			
10201	630	640				.440
10202	640	650	No Assay			
10203	650	660	"			
10204	660	670	"			
	670	680				W
	680	690				W
	690	700				W

W. D. H. 145

Started: November 6, 1959
Completed: November 13, 1959
Logged by: P. L. Money

Location: Section J 50' East of AB Line

<u>Azimuth</u>	<u>Dip</u>	<u>Depth</u>
90°	89°	250'
87°	89°	500'

Length: 504.5'

Core: AXT

Note: In describing the alt.'d. diorite in this and following holes the following terms will be used to describe the alteration: Stage 1, diorite altered but most of original grain boundaries preserved; Stage 2, some of original grain boundaries destroyed but enough present to indicate original grain size; Stage 3, all or nearly all original grain boundaries destroyed.

0.0 CASING

8.7.

8.7 ALT'D. DIORITE: m.g to c.g, dark reen, heavily chloritized, slicified (blue (mainly stage 2) qtz. eyes), carbonatized, local minor epidote. Mainly stage 2, locally stage 3. Tr fine dissem. py. throughout. Small amounts opaque white to pale purplish mineral in subhedral to small irreg. patches. A few fresh looking euhedral feldspars (secondary?)

8.7-9.0: Several rusty bleached zones along joints.

17.8: Leached rusty along joint (?).

24.7: 2" epidotized zone at 20° cn.

31.1: 1" irreg. rusty bleached zone.

31.2: 1/4" qtz-carb. stringer 35° cn.

66.0-78.0: Occas. 1/8" to 1/4" py. grains.

68.5-69.0: Abt. 2% py. assoc. w. weak shearing 70° cn. to // to core.

72.8: Irreg. 1/4" qtz-carb stringer at 35°cn. w/large grain py.

78.0-99.8: Num. irreg. patches and stringers of qtz-carb. About 1% assoc. co. py. Tr. cpy. Stringers at various angles but dominantly 50° to 70° cn.

99.8

99.8 ALT'D DIOR.: dark green, fine-grained appearing but a few preserved xll (mainly stage 3) outlines indicate an originally m.g to c.g rk. Highly chlor., sil. (blue qtz eyes), carbonatized. Joints chlor. Mainly stage 3, locally stage 2. Some grains soft white opaque mineral (clay mineral?) Num. wispy qtz-carb. stringers with irreg. outlines, vague boundaries throughout. Abt 1/2 to 1% py. throughout, mainly as euhedral grains up to 1/4" dia.

108.0: 6" of abt 5% py.

117.0: rk. becoming paler green

120.0: rk. medium green

123.0: rk. becomes dark green again

127.2-127.5: Qtz vein, also cut by a network of white carbonate stringers. Abt 1% py, apparently in part. assoc. with carb. U.C. 40° cn. L.C. missing, ground core.

130.0-131.8: Brecciated zone cemented by qtz-carb. Abt 2% py
Long streaks of a soft brown mineral (siderite?) at 40° to 80° cn.

130.2: Leached and rusty along joint (?) abt. perpendicular to core.

131.8-134.0: Brecc. zone grades into a schistose highly chlor., carb., sil. zone. Sch. at abt. 60° cn. but variable.

132.2-132.9: Abt 10% py as large euhedral xls

134.0

134.0 ALT'D DIOR.
(stage 1?)

dark green, m.g to c.g, composed mainly of elongate amphiboles, feldspar, Chlor., sil. and carb. but relatively fresh-looking. Possibly actually re-xlized. Strong lineation roughly parallel to the core due to alignment of the amphiboles (Primary?). Tr. py as small irreg. to euhedral grains.

136.5: irreg. 1/2" leached and rusty area

136.8: 1/2" qtz-carb stringer 60° cn

140.8: 2" qtz-carb stringer 0° cn only tr. py.

157.0

157.0 ALT'D DIOR
(mainly stage 2)

dark green, m.g to c.g strongly sil, chlo., carb, mainly stage 2, locally stage 1.

157.2: Py stringer at 55° cn.

165.0: Diorite still Stage 1 and stage 2 but num. small patches soft white to purple min. (perhaps clay minerals replacing feld.) rk. high in carbonate.

181.5: Diorite highly chlor, carb, sil but no more of above white mineral. Mainly stage 2, minor stage 1.

190.0-198.0: Num. irreg. white to colorless qtz + carb. stringers. Tr. py.

204.2: Diorite mainly stage 2, much of white mineral from here chlor, sil, carb. as usual

206.2-207.3: Several qtz. carb stringers of 1% py. Stringers at 40° - 45° cn. Some brecc. (?)

216.2-217.0: Sev. very irreg. qtz.-carb stringer 1% py.

225.0-236.2: Num qtz-carb stringers with 3% to 5% py. Many irreg. but sev. at 60° - 75° cn.

250.5-272.3: Abt 1% cubic py scattered throughout, very fine small qtz-carb stringers to 10 to 80° cn. Rock mainly stage 2 and stage 1 equigranular to strongly lineated sub-parallel to core. The white to purple opaque mineral quite abundant.

281.6: Rd grades to mainly stage 3, minor stage 2. Still strongly carbonatized, chlor, silicifical. The soft opaque white mineral still present but much less common. This section contains an exceptional am't. of carbonate.

291.0: 2" irreg. qtz carb. vein. 2% py

308.0: 1" barren qtz-carb. stringer 40° cn.

311.7-315.6: Num. patchy stringers qtz-carb. tr. py.

318.2: 1/2" qtz-carb stringers 35° cn. 1% py.

325.9-330.1: Abt 5% py in irreg. masses and forming stringers at 60° - 70° cn. Sev. qtz-carb stringers but py does not seem to be assoc. with these.

stage 3.

390.4: Rock mainly stage 3. Some elongate dark green top 1% grains - prob. secondary. Occas. py. cubes, hairlike qtz-carb stringers.

380.9-383.1: Num. qtz.-carb. stringers, gen. 30° - 50° cn abt. 5% py

383.1-387.2: Abt 3% to 5% pyrite as blebs, euhedral xls. Rk has very weak foliation 50° cn - Rk stage 3 locally stage 2

400.8-401.9: Abt 3% cubic py at 401.5 a 1/2" qtz-carb stringer at 70° cn.

412.1-414.0: Abt 2% py assoc. with qtz-carb stringers at 30° cn to perpendicular to core

419.0-422.0: Abt 1% cubic py. Rock more heavily carbonatized than usual (?).

419.7: 1" qtz-carb. stringer at 10° cn.

427.5: Rk contains num. elongate amphibole needles - prob. re-xlled.

425.2: Rk grades to stage 3 again. Chlor., sil, and carbonatize as usual. Some patches of stage 1 or re-xlled rock with elongate amphiboles.

432.0: The soft opaque white min. present again - forming up to 15% of rock.

435.0

435.0 ALT'D DIOR
(stage 1?)

dark green, m.g to c.g, either re-xlled or original texture preserved, texture for most part non-directional. Rk consists of amphibole laths in a network surrounding interstitial euhedral feldspar. Abt 10-20% of the soft opaque-looking white min. apparently replacing feld. Heavily chlor, but only minor qtz. carb. except locally around qtz-carb stringers which are scarce and generally orientated 30° cn to normal to core although occasionally almost parallel. Tr. py. Locally fresh unalt'd feld which looks secondary. Minor epidote.

441.2: 2" irreg. patch qtz. carb. Tr. py

440.0: 2" irreg. patch qtz carb Tr. py

445.7: 4" patch as above

448.3-449.5: 1/2" irreg. qtz-carb stringer sub-parallel to core.

485.9: 1/2" qtz-carb vein at 50° cn. Tr. py

496.6: 1" " " " at 20° cn. Tr. py

498.4: 1" " " " at 20° cn. Tr. py

501.2: 1" qtz-carb. vein at 10° - 20° cn. Tr. py.

504.5 END OF HOLE

Hole cemented with 11 bags of cement

Pipe and casing pulled

ANALYSIS

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Co</u>
	<u>From</u>	<u>To</u>				
9965	80.2	81.1	.9	Tr		
9966	81.1	82.0	.9	.010		
9967	82.0	82.8	.8	.010		
9968	82.8	84.0	1.2	.030		
9969	84.0	84.7	.7	.010		
9970	84.7	85.7	1.0	.015		
9971	85.7	86.5	.8	.010		
9972	96.3	97.3	1.0	Tr		
9973	97.3	98.4	1.1	.02		
9974	98.4	99.4	1.0	.01		
9901	105.0	107.8	2.8	Tr		
9902	107.8	108.6	.8	Tr		
9903	108.6	110.0	1.4	Tr		
9904	110.0	113.0	3.0	Tr		
9905	113.0	115.0	2.0	.010		
9906	115.0	115.8	.8	Tr		
9907	115.8	119.0	3.2	Tr		
9908	119.0	120.0	1.0	.010		
9909	120.0	122.5	2.5	Tr		
9910	122.5	124.5	2.0	.020		
9911	124.5	125.5	1.0	Tr		
9912	125.5	126.5	1.0	.040		
9913	126.5	127.5	1.0	.120	.240	.010
9914	127.5	128.5	1.0	.070	.150	.020
9915	128.5	129.5	1.0	.105	.140	Tr
10320	124.5	125.5	1.0	Tr	(#9911 Quartered)	
10321	125.5	126.5	1.0	Tr	(#9912	"
10322	126.5	127.5	1.0	.045	(#9913	"
10323	127.5	128.5	1.0	.050	(#9914	"
10324	128.5	129.5	1.0	.120	(#9915	"
10325	129.5	130.0	.5	.010	(#9916	"
10326	130.0	130.5	.5	.090	(#9917	"
10327	130.5	131.6	1.1	.010	(#9918	"
10328	131.6	132.2	.6	.030	(#9919	"
9916	129.5	130.0	.5	.010		
9917	130.0	130.5	.5	.110		
9918	130.5	131.6	1.1	.020	.250	
9919	131.6	132.2	.6	.010		
9920	132.2	133.0	.8	Tr		
9921	133.0	134.0	1.0	Tr		
9922	134.0	136.1	2.1	Tr		
9923	136.1	136.8	.7	Tr		
9924	136.8	138.0	1.2	Tr		
9953	191.5	192.2	.7	Tr		
9954	192.2	193.0	.8	.010		
9955	193.0	194.2	1.2	(Not Assayed)		
9956	194.2	195.0	.8	Tr		
9957	195.0	195.8	.8	Tr		
9958	195.8	196.8	1.0	Tr		
9959	196.8	198.0	1.2	Tr		
9960	198.0	199.0	1.0	(Not assayed)		

Sample Number	Section of Hole		Sample Length	Area	AG	Co
	From	To				
9961	225.0	226.2	1.2	Tr		
9962	226.2	227.2	1.0	.26		
9963	227.2	228.5	1.3	.06		
9964	228.5	230.0	1.5	Tr		
9975	250.6	251.1	.5	Tr		
9976	251.1	253.1	2.0	.010		
9977	253.1	254.3	1.2	.010		
9978	254.3	255.0	.7	Tr		
9979	255.0	256.6	1.6	Tr		
9980	256.6	258.6	2.0	.010		
9981	258.6	260.0	1.4	.010		
9982	260.0	261.1	1.1	Tr		
9983	261.1	262.1	1.0	.010		
9984	262.1	262.7	.6	.020		
9985	262.7	263.7	1.0	Tr		
9986	263.7	265.0	1.3	.010		
9987	265.0	266.2	1.2	Tr		
9988	266.2	267.5	1.3	.010		
9989	267.5	268.2	.7	.010		
9990	268.2	270.0	1.8	.020		
9991	270.0	272.4	2.4	.010		
9992	325.8	327.0	1.2	.010		
9993	327.0	328.0	1.0	.020		
9994	328.0	329.2	1.2	.290		
9995	329.2	330.0	.8	.010		
9996	330.0	331.1	1.1	1060		
10230	331.1	333.2	2.1	.020		
10231	333.2	335.0	1.8	Tr		
10232	335.0	337.0	2.0	Tr		
10233	337.0	338.8	1.8	.120		
9997	338.9	340.1	1.2	.050		
9998	340.1	340.7	.6	.200		
9999	340.7	341.7	1.0	.400		
10000	341.7	342.9	1.2	.010		
10001	400.7	401.9	1.2	.050		
10004	411.7	412.6	.9	.030		
10003	412.6	413.5	.9	.020		
10002	413.5	415.0	1.5	Tr		

~~SECRET~~

<u>Sample Number</u>	<u>Section of Hole</u>		<u>Sample Length</u>	<u>Au</u>	<u>Ag</u>	<u>Co</u>
	<u>From</u>	<u>To</u>				
(Quartered)	126.5	129.5	3.0	.098	.177	
	126.5	129.5	3.0	.072		
(Quartered)	126.5	130.5	4.0	.089		
	126.5	130.5	4.0	.066		
(Quartered)	125.5	130.5	5.0	.083		
	125.5	130.5	5.0	.053		
	340.1	341.7	1.6	.324		

SLUDGE ASSAYS

9951	120	125	.120
9952	125	130	.020