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52K14NW0026 63.3648 SOUTH OF OTTER LAKE

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SELCO MINING CORPORATION LIMITED

REPORT ON DIAMOND DRILLING

UNDER

MEAP AGREEMENT CONTRACT RL-72

1979

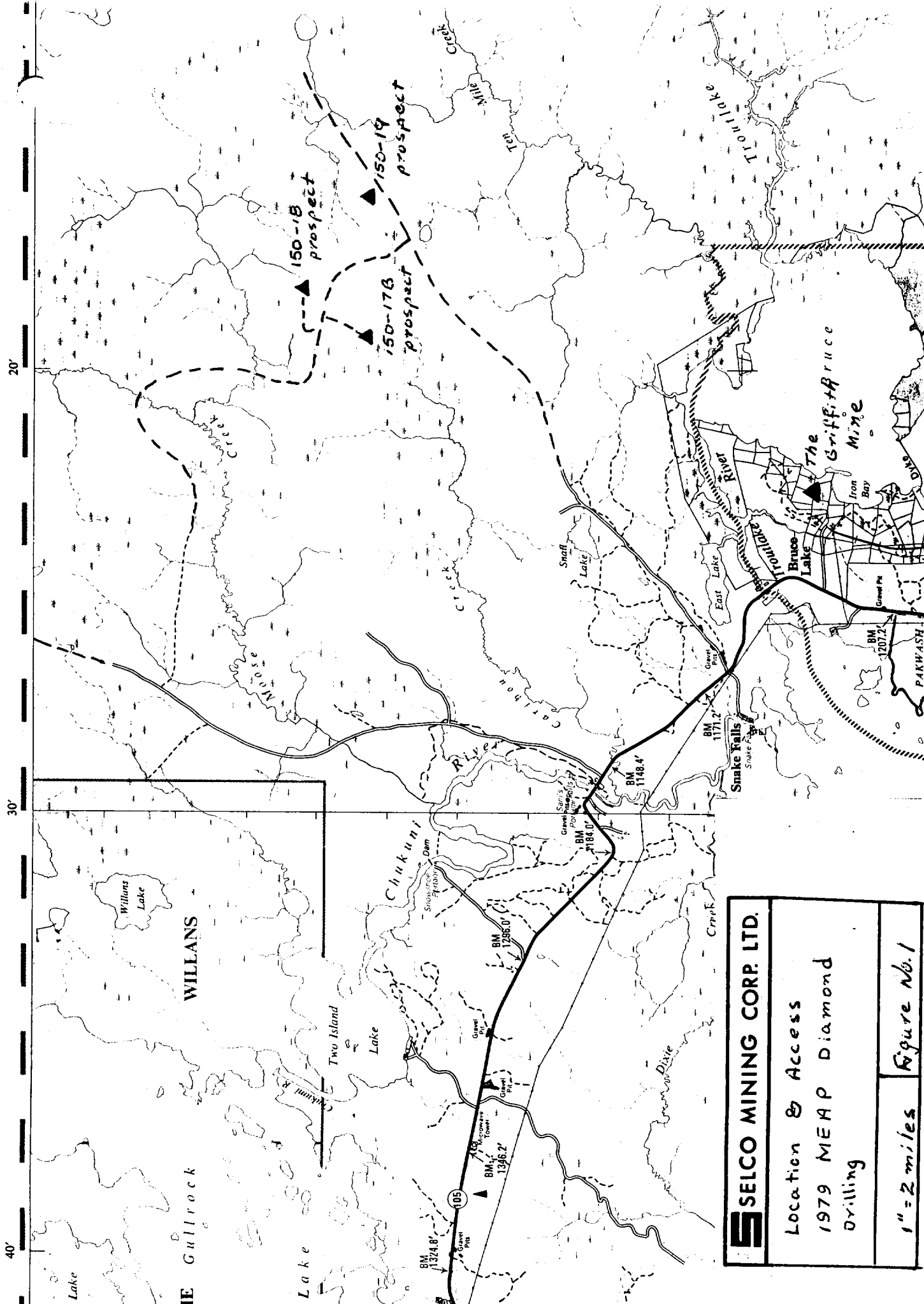
DIXIE PROJECT AREA


BLOCKS 150-17B, 18 and 19

A.P. Pryslak,  
January, 1980.



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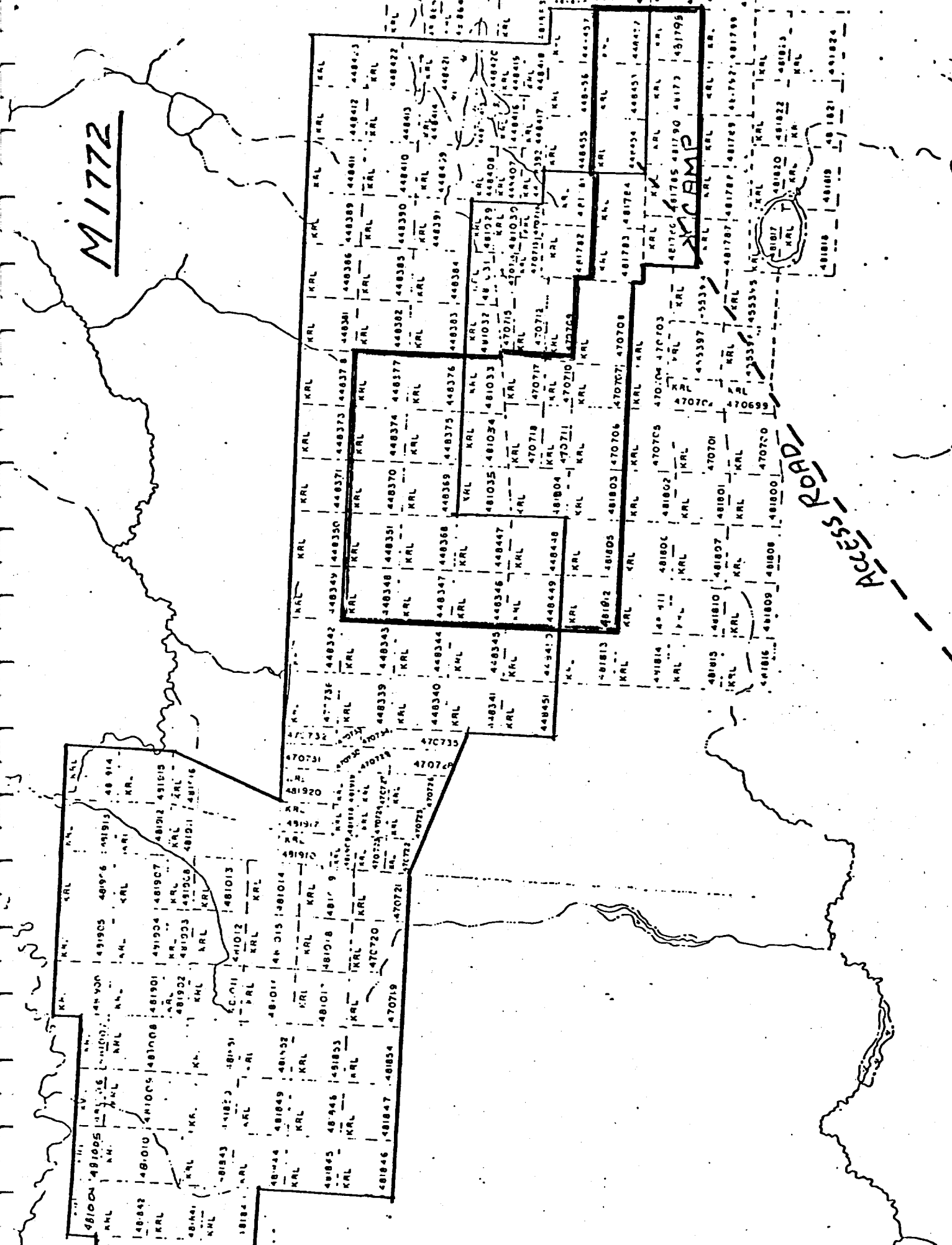
 <b>SELCO MINING CORP. LTD.</b>	
Location & Access 1979 MEAP Diamond Drilling	
1" = 2 miles <b>Figure No. 1</b>	

CLAIMS COVERED BY MEAP AGREEMENT RL-72

ALL LOCATED ON CLAIM MAP M-1772, RED LAKE DIVISION

KRL 448346	KRL 448447	KRL 470717	KRL 481 798
KRL 448347	KRL 448448	KRL 470718	KRL 481803
KRL 448348	KRL 448449	KRL 481033	KRL 481804
KRL 448351	KRL 448452	KRL 481034	KRL 481805
KRL 448368	KRL 448453	KRL 481035	KRL 481812
KRL 448369	KRL 448454	KRL 481783	
KRL 448370	KRL 470706	KRL 481784	
KRL 448374	KRL 470707	KRL 481785	
KRL 448375	KRL 470708	KRL 481786	
KRL 448376	KRL 470710	KRL 481790	
KRL 448377	KRL 470711	KRL 481791	

M1772



XCAMP

ACCESS ROAD

48100A 481005

48100B 481006

48100C 481007

48100D 481008

48100E 481009

48100F 481010

48100G 481011

48100H 481012

48100I 481013

48100J 481014

48100K 481015

48100L 481016

48100M 481017

48100N 481018

48100O 481019

48100P 481020

48100Q 481021

48100R 481022

48100S 481023

48100T 481024

48100U 481025

48100V 481026

48100W 481027

48101A 481028

48101B 481029

48101C 481030

48101D 481031

48101E 481032

48101F 481033

48101G 481034

48101H 481035

48101I 481036

48101J 481037

48101K 481038

48101L 481039

48101M 481040

48101N 481041

48101O 481042

48101P 481043

48101Q 481044

48101R 481045

48101S 481046

48101T 481047

48101U 481048

48101V 481049

48101W 481050

48102A 481051

48102B 481052

48102C 481053

48102D 481054

48102E 481055

48102F 481056

48102G 481057

48102H 481058

48102I 481059

48102J 481060

48102K 481061

48102L 481062

48102M 481063

48102N 481064

48102O 481065

48102P 481066

48102Q 481067

48102R 481068

48102S 481069

48102T 481070

48102U 481071

48102V 481072

48102W 481073

48103A 481074

48103B 481075

48103C 481076

48103D 481077

48103E 481078

48103F 481079

48103G 481080

48103H 481081

48103I 481082

48103J 481083

48103K 481084

48103L 481085

48103M 481086

48103N 481087

48103O 481088

48103P 481089

48103Q 481090

48103R 481091

48103S 481092

48103T 481093

48103U 481094

48103V 481095

48103W 481096

48104A 481097

48104B 481098

48104C 481099

48104D 481100

48104E 481101

48104F 481102

48104G 481103

48104H 481104

48104I 481105

48104J 481106

48104K 481107

48104L 481108

48104M 481109

48104N 481110

48104O 481111

48104P 481112

48104Q 481113

48104R 481114

48104S 481115

48104T 481116

48104U 481117

48104V 481118

48104W 481119

48105A 481120

48105B 481121

48105C 481122

48105D 481123

48105E 481124

48105F 481125

48105G 481126

48105H 481127

48105I 481128

48105J 481129

48105K 481130

48105L 481131

48105M 481132

48105N 481133

48105O 481134

48105P 481135

48105Q 481136

48105R 481137

48105S 481138

48105T 481139

48105U 481140

48105V 481141

48105W 481142

48106A 481143

48106B 481144

48106C 481145

48106D 481146

48106E 481147

48106F 481148

48106G 481149

48106H 481150

48106I 481151

48106J 481152

48106K 481153

48106L 481154

48106M 481155

48106N 481156

48106O 481157

48106P 481158

48106Q 481159

48106R 481160

48106S 481161

48106T 481162

48106U 481163

48106V 481164

48106W 481165

48107A 481166

48107B 481167

48107C 481168

48107D 481169

48107E 481170

48107F 481171

48107G 481172

48107H 481173

48107I 481174

48107J 481175

48107K 481176

48107L 481177

48107M 481178

48107N 481179

48107O 481180

48107P 481181

48107Q 481182

48107R 481183

48107S 481184

48107T 481185

48107U 481186

48107V 481187

48107W 481188

48108A 481189

48108B 481190

48108C 481191

48108D 481192

48108E 481193

48108F 481194

48108G 481195

48108H 481196

48108I 481197

48108J 481198

48108K 481199

48108L 481200

48108M 481201

48108N 481202

48108O 481203

48108P 481204

48108Q 481205

48108R 481206

48108S 481207

48108T 481208

48108U 481209

48108V 481210

48108W 481211

48109A 481212

48109B 481213

48109C 481214

48109D 481215

48109E 481216

48109F 481217

48109G 481218

48109H 481219

48109I 481220

48109J 481221

48109K 481222

48109L 481223

48109M 481224

48109N 481225

48109O 481226

48109P 481227

48109Q 481228

48109R 481229

48109S 481230

48109T 481231

48109U 481232

48109V 481233

48109W 481234

48110A 481235

48110B 481236

48110C 481237

48110D 481238

48110E 481239

48110F 481240

48110G 481241

48110H 481242

48110I 481243

48110J 481244

48110K 481245

48110L 481246

48110M 481247

48110N 481248

48110O 481249

48110P 481250

48110Q 481251

48110R 481252

48110S 481253

48110T 481254

48110U 481255

48110V 481256

48110W 481257

48111A 481258

48111B 481259

48111C 481260

48111D 481261

48111E 481262

48111F 481263

48111G 481264

DIXIE PROJECT

REPORT ON DIAMOND DRILLING

MEAP AGREEMENT - CONTRACT NO. RL-72

INTRODUCTION

The diamond drilling programme conducted under the current MEAP Agreement consisted of thirteen holes and one extension for a total of 8154 feet. The drilling was carried out in the periods June 28 to August 25 and November 20 to December 11, 1979.

The drilling was carried out to test for extensions of known small Cu-Zn sulphide deposits which were discovered in 1977; to test an I.P. anomaly and several DEEPEM anomalies. The three base metal sulphide deposits are known as the 150-17B, 150-18 and 150-19 prospects.

Figures showing the Dixie claim group and contract drilling costs are appended to this report.

LOCATION AND ACCESS

Claims covered by this agreement are located in the Red Lake Mining District in the east part of Claim Map M-1772, South of Otter Lake.

The claim block covered by the agreement lies approximately 25 miles east-southeast of the town of Red Lake. Access is by a series of logging roads which connect with Highway 105 at a junction 23 miles south of Red Lake, near the north end of Pakwash Lake. The access roads and location of the three base metal prospects are shown on Figure No. 1.

#### HISTORY OF EXPLORATION

The current drilling program was another attempt at evaluating the known base metal deposits discovered in 1977. Two earlier drill programs were also under the MEAP Agreement and these reports serve as useful background information (Contracts No. RL-52 and RL-57).

Various geophysical surveys have been carried out over the deposits and adjacent areas during 1978-79. These surveys included mise à la masse, downhole resistivity, Surface Pulse E.M. (DEEPEM) and Drill Hole Pulse E.M. Results of the surveys identified a number of anomalies which were the subject of the current drilling programme. Other drilling targets were established on a geological basis. Drilling under MEAP Agreement RL-72 is summarized in Table No. 1.

TABLE NO. 1

SUMMARY OF DIAMOND DRILLING

PROSPECT	D.D.H. NO.	FOOTAGE	PURPOSE OF D.D.H.
150-17B	17B-6	390	H.L.E.M. Target
	17B-7	422	To test for extension of the known zone on a steep easterly plunge.
150-18	18-15 Extn.	577-858	To test for the extension of the known zone at depth from re-interpretation of stratigraphy.
	18-21	682	To test for extension of the known zone to the east.
	18-22	542	To test a DEEPEM target
	18-23	720	To test a DEEPEM target and the west extension of the main mineral-bearing horizon.
	18-24	992	To test the extension of the main mineral zone on a steep easterly plunge.
150-19	19-4	662	To test an I.P. anomaly and the east extension of the main zone.
	19-5	499	To test for extension of the main zone at depth.
	19-6	572	To test for extension of the main zone at depth.
	19-7	502	To test for extension of the main zone at depth.
	19-8	512	To test for extension of the main zone to the west.
	19-9	626	To test a DEEPEM target
	19-10	752	To test for extension of the south zone to the east.



DIXIE PROSPECT 150-17B

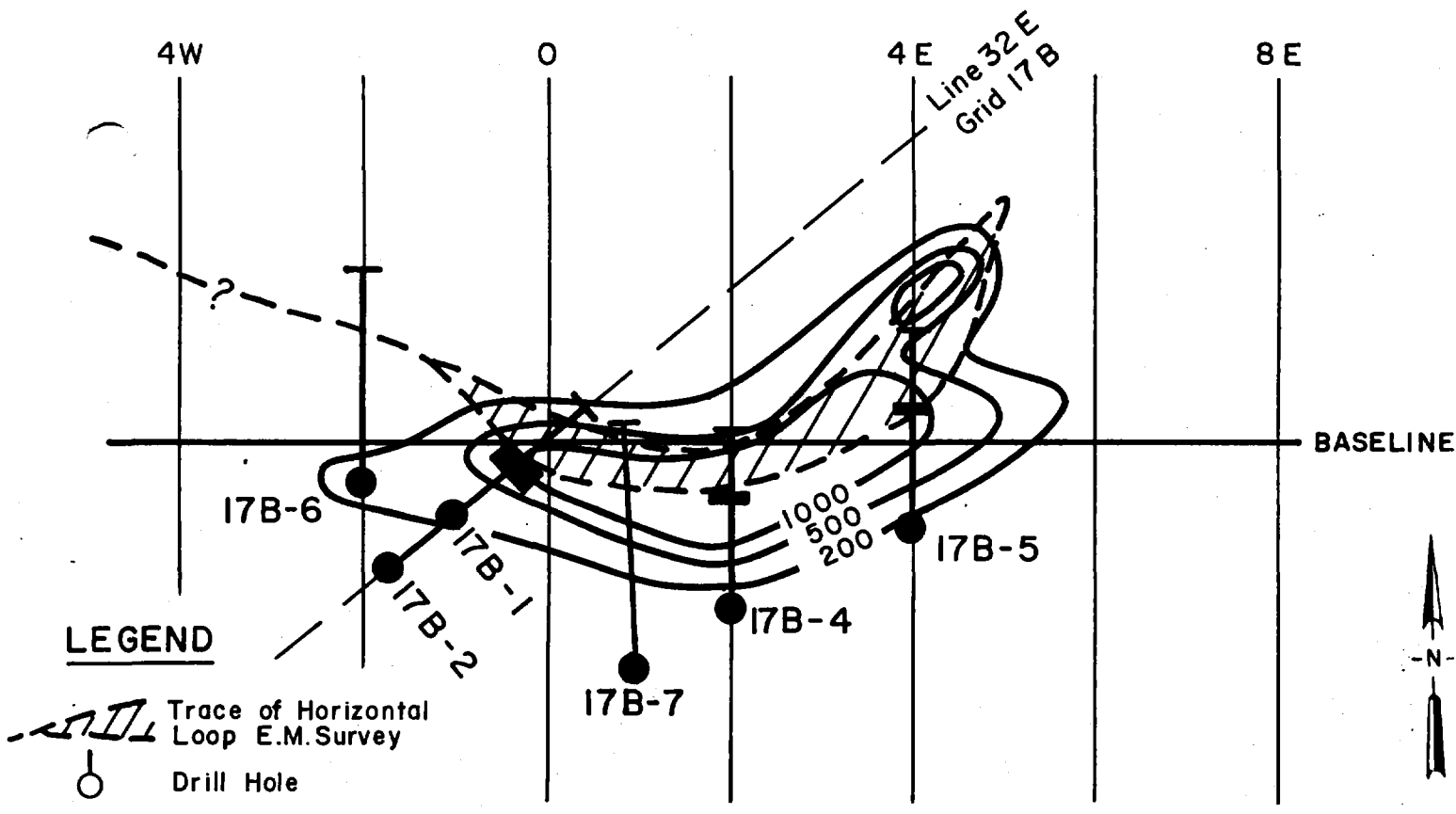
(a) Geology

There are no exposures of bedrock in the vicinity of Grid 150-17B. Regional geology is interpreted largely from magnetic data. This shows that the felsic to intermediate metavolcanics which host the 150-17B prospect, extend eastward to the area of Grid 150-19 as a narrow belt, intruded both to the north and south by metagabbro. Minor bodies of granite intrude both the metavolcanics and the metagabbro.

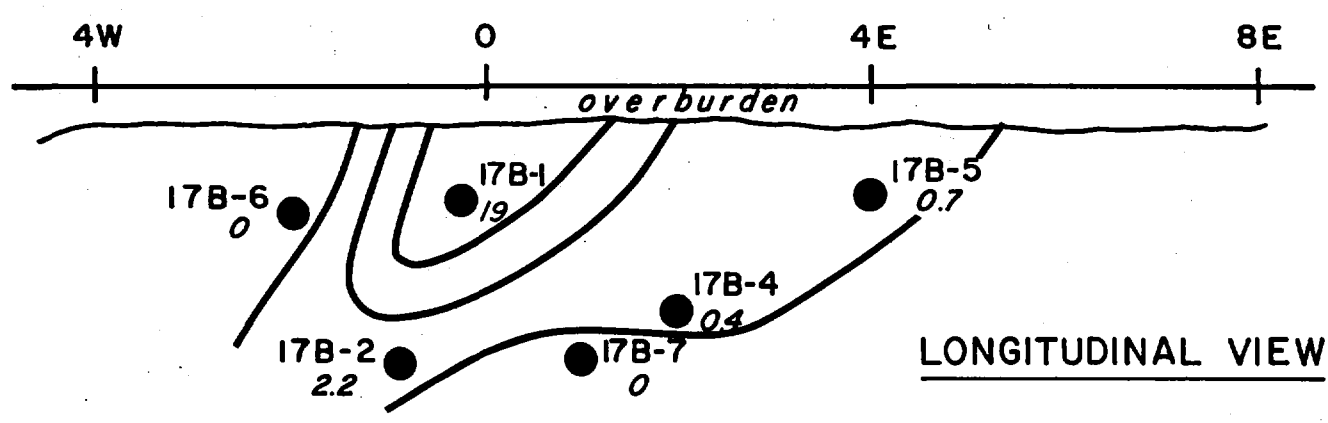
The 150-17B prospect occurs in altered felsic tuffs. The dominant alteration consists of granitization associated with the intrusion of granite and pegmatite dikes. However, primary hydrothermal alteration, identified by the development of chlorite, biotite and anthophyllite, is locally preserved.

(b) Diamond Drilling Results

Two drill holes were put down in the vicinity of the 150-17B prospect. D.D.H. 17B-6 was to test a weak H.L.E.M. conductor extending west from the deposit and D.D.H. 17B-7 was to test for the extension of the massive sulphide lens on a steep easterly plunge. Neither of the drill holes intersected



**SUMMARY PLAN - GEOPHYSICS - DRILL HOLES**



**LONGITUDINAL VIEW**

**LEGEND**

- 17B-2  
2.2 Drill Hole Number  
Thickness of Sulfide Zone  
(feet)



**DIXIE PROSPECT**

**GRID 150-17 B**

sulphide mineralization but did encounter highly altered felsic to intermediate metavolcanics. The massive sulphide lens is interpreted as having a moderate westerly plunge as illustrated in Figure 30.9.79.

DIXIE PROSPECT 150-18

(a) Geology

The 150-18 deposit is a small lens-like body of massive sulphides that occurs within a sequence of metavolcanics that range from mafic to felsic. The massive sulphides consist of pyrrhotite, pyrite, sphalerite and chalcopyrite and occur as a sub-vertical, east striking lens within highly altered felsic pyroclastics. The alteration consists of chlorite, biotite, anthophyllite and stringers of sulphides. Magnetite is locally abundant.

(b) Diamond Drilling Results

Hole 18-21 was drilled to test for an easterly extension of the base metal zone and intersected 4.9 feet of massive sulphides grading 0.64% Cu, 15.09% Zn and 0.47 oz/ton Ag.

D.D.H. 18-15 was extended after a re-study of the geology showed that the stratigraphic unit hosting the base metal deposit had not been penetrated. This drill hole intersected the highly altered felsic pyroclastics but it did not intersect any sulphide mineralization.

D.D.H. 18-24 was drilled to test for an extension of the massive sulphide zone along a steep easterly plunge. Again, although the alteration zone persists, no sulphide mineralization was intersected.

Two drill holes, 18-22 and 18-23 were drilled to test DEEPEM anomalies located on lines 8+00W and 8+00E, respectively. The conductors proved to be caused by pyrrhotite within meta-sediments occurring 200 to 300 feet stratigraphically south of the felsic formation which hosts the 150-18 deposit. D.D.H. 18-23 was extended to intersect the felsic unit. It was only weakly altered and contained no massive or stringer sulphide mineralization.

#### DIXIE PROSPECT 150-19

##### (a) Geology

The 150-19 deposit lies within a narrow belt of felsic to intermediate pyroclastics that are bounded to the north and

south by large bodies of metagabbro. Both the metavolcanics and metagabbro are intruded by a series of highly irregular bodies of granite and pegmatite dikes.

Mineralization occurs as massive, semi-massive and stringer sulphides. The sulphides consist of pyrrhotite, pyrite, sphalerite and chalcopyrite. Magnetite is locally abundant. Drilling to date has identified two zones of mineralization. Mineralization in the north lens extends over a length of 800 feet and to a depth of 450 feet. The massive sulphide lens strikes east-west, dips  $80^{\circ}$ S and has a maximum thickness of 8.8 feet. The second lens occurs approximately 350 feet south of the first lens and has been penetrated only by a single drill hole, D.D.H. 19-9.

(b) Diamond Drilling Results

Hole 19-4 was drilled on an I.P. anomaly occurring 300-400 feet south of the 150-19 sulphide deposit. It was extended to intersect the main zone at a depth of 500 feet. The cause of the I.P. anomaly was not identified and the main zone of mineralization had been cut-off by a gabbro intrusion. The next series of drill holes, 19-5, 6, 7 and 8 were put down to test for extensions of the main sulphide lens both at depth and to the west. The drill results show that the zone does improve

somewhat with depth but is not considered to be of economic character. The results are summarized in Table No. 2.

DEEPEM and drill hole pulse E.M. surveys showed the presence of a conductor beneath D.D.H. 19-4. D.D.H. 19-9 was put down to test the Pulse E.M. anomaly and intersected a zone of disseminated, stringer and massive sulphides grading 0.49% Cu, 3.84% Zn and 0.24 oz/t Ag over a core length of 24.3 feet. D.D.H. 19-10 was drilled to test for the easterly extension of this zone but it failed to encounter any sulphide mineralization.

TABLE NO. 2

Drill Hole Results on Drilling in the Vicinity of Prospect 150-19

<u>D.D.H. NO.</u>	<u>CORE LENGTH</u>	<u>THICKNESS</u>	<u>% Cu</u>	<u>% Zn</u>	<u>Silver oz/t</u>
19-5	11.6 ft.	8.8	1.49	6.33	0.70
19-6	5.7 ft.	4.4	0.20	4.95	0.41
19-7	3.2 ft.	2.3	1.61	0.18	2.45
19-9	24.3 ft.		0.49	3.84	0.24


9/.....

RECOMMENDATIONS

The 150-17B prospect appears to have very limited potential. Several lines of DEEPEM should be attempted both to the east and to the west of the deposit to see if other massive base metal-bearing sulphide deposits lie buried at depth.

The 150-18 prospect appears to have been completely delineated by diamond drilling. A final geological analysis is required before any other work is attempted.

The 150-19 prospect area holds a high potential for hosting an economic base metal deposit. The felsic metavolcanics show extensive hydrothermal alteration and although the north lens has been adequately explored, the south lens and areas east and west of both lenses should be explored by DEEPEM for additional drill targets. Also, Down-hole Pulse E.M. should be carried out on D.D.H. 19-9 to establish the geometry of the mineralized zone intersected by this drill hole, prior to additional drilling being carried out.

  
GENERAL MANAGER - EXPLORATION  
A.P. Pryslak.

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DIAMOND DRILL RECORD  
JOURNAL DE SONDAGE DE DIAMANT

HOLE NO. 17B-6

NO. DU TROU

SHEET NO. 1 of 3

NO. DE FEUILLE

LOCATION 2400W

ENDROIT 0450S

PROPERTY

PROPRIETE

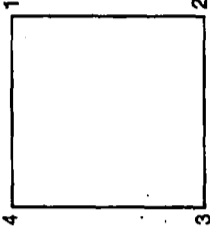
DIXIE LAKE PROSPECT 150-17

BEARING Grid N

DIRECTION

DIP -56°

PENTE

ELEVATION  
ELEVATION

TOTAL DEPTH 390'

PROFONDEUR TOTALE

CORE SIZE BQ

DIMENSION DE CARROTE

STARTED Aug. 16, 1979

COMPLETED Aug. 20, 1979

TERMINE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES
0	57.0	OVERBURDEN								
57.0	58.6	MAFIC INTRUSIVE Mottled white and greenish black, fine-medium grained, moderately hard, predominantly feldspar and chloritized amphiboles with minor biotite. Weak foliation at 50-55° to core axis. Weakly magnetic.								
58.6	167.4	ACID TO INTERMEDIATE METAVOLCANIC Sharp upper contact at 50° to core axis. Grey, ash-sized siliceous fragments in a fine-grained sericite-biotite-chlorite matrix. Upper two feet are medium-grained and would appear to have been recrystallized by the mafic intrusive above. Commonly well foliated at 55-60° to core axis. Generally the unit has a very inhomogeneous texture varying from fragmental to recrystallized fragmental to migmatized. Coarse-grained anhedral granitic sections would appear to have been injected along fractures and gives the unit a greyish intrusive appearance locally (ex. 83.1-86.5). These migmatized sections account for 10-25% of the unit. Local recrystallization lends a fine to medium-grained subhedral granular appearance locally. 61.7: Fault at 80° to core axis. lcm clayey gouge along slip faces. Unit is cut by numerous mafic zones possibly representing dykes or recrystallized bands of more mafic volcanics. Contacts are sharp suggesting dykes. ex.: 70.5-70.8 87.3-88.2 95.9-96.6 116.2-117.7: Highly altered tuffaceous interval 45-50% combined biotite-chlorite. Well foliated at 25-30° to core axis.								
TROPARI TESTS										
		Depth	Azimuth	Corr. Az.	Dip					
		180'	345.0°	338.5°	-51°					
		340'	356.5°	350.0°	-47°					
		Very good Core Recovery Fair to good R.Q.D. 2-4 fractures/foot commonly parallel to foliation with some limonitic staining locally.								
		Some recrystallized zones may actually be intrusives but contacts are vague and inconclusive.								
		Heavily fractured interval.								

DRILLED BY

ST. LAMBERT DRILLING

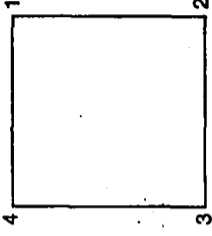
SIGNED

DATE SIGNATURE



**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



DIXIE LAKE PROSPECT 150-17

PROPERTY  
PROPRIETE

BEARING  
DIRECTION  
DIP  
PENTE

STARTED  
COMMENCE LE  
COMPLETED  
TERMINE LE

HOLE NO. 17B-6  
NO. DU TROU

SHEET NO. 2 of 3  
NO. DE FEUILLE

LOCATION 2+00W  
ENDROIT 0+50S

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
58.6	167.4	ACID TO INTERMEDIATE METAVOLCANIC (Continued) 117.7-118.5: Migmatized interval 118.5-142.5: Unit regains its tuffaceous texture with some slightly recrystallized intervals. 142.5-152.1: Moderately altered recrystallized interval 35-40% biotite & chlorite predominantly in bands at 50° to core axis and throughout matrix. 152.1-167.4: Highly recrystallized interval with some mafic banding at 50° to core axis.							
167.4	175.2	ANDESITE Sharp upper contact at 50° to core axis. Referred to as mafic volcanic in 17-4, more properly a pervasively altered (chlorite) intermediate volcanic. Indistinct felsic ash-sized fragments in a fine-grained matrix. Weak foliation at 55-60° to core axis. Sharp lower contact at 40° to core axis.							Very good Core Recovery Very good to Excellent R.Q.D. 1 fracture/foot at high angles to core axis.
175.2	255.2	ACID TO INTERMEDIATE METAVOLCANIC Similar to interval from 58.6-167.4 with a more uniformly recrystallized appearance and more granitization or migmatization. Granitization varies locally from 15-30% of unit. Overall composition is granitic to granodioritic. Moderately foliated at 30-45° to core axis. 176.2-182.3: Similar to andesite above but less altered and slightly coarser grained. 207.0-208.2: Interval is very similar to andesite from 167.4-175.2. Sharp but irregular contacts at high angles to core axis. Probably a mafic dyke.							Very good Core Recovery Very good R.Q.D. 1-2 fractures/foot commonly at high angles to core axis.

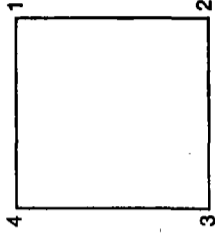
DIAMOND DRILL RECORD  
JOURNAL DE SONDAGE DE DIAMANT

HOLE NO. 17B-6  
NO. DU TROU  
SHEET NO. 3 of 3  
NO. DE FEUILLE  
LOCATION 2+00W  
ENDROIT 0+50S

PROPERTY DIXIE LAKE PROSPECT 150-17  
PROPRIETE

BEARING DIRECTION  
DIP PENTE

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



COMPLETED  
TERMINE LE

STARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES
175.2	255.2	ACID TO INTERMEDIATE METAVOLCANIC (Continued) 208.2-255.2: Highly variable interval with short highly granitized zones. Variation in mafic content locally from 10-30%. Cut by granitic pegmatite dykes at low angles to core axis (ex. 238.0-240.0 and 242.4-243.4).								
255.2	332.5	GRANITE TO GRANODIORITE Sharp upper contact at 90° to core axis. Relatively homogeneous, fine to medium grained. Variable from pink to grey depending on K-spar content. Near upper contact unit is granitic but K-spar gradually decreases with depth. Local pegmatitic phases (280.6-282.0 and 306.8-308.5). 320.3: Unit becomes moderately foliated at 60° to core axis.								Fair to good Core Recovery Poor to good R.Q.D. 1-5 fractures/foot commonly at high angles to core axis, locally with carbonate along slip faces (ex. 274.2) NOTE: 267.7-281.1, very heavily fractured, poor R.Q.D.
332.5	390.0	MAFIC INTRUSIVE Sharp upper contact at 50° to core axis. Similar to unit from 57.0-58.6 but finer-grained. Relatively homogeneous, massive, moderately magnetic. Contact zone is characterized by numerous granitic dykes or inclusions at variable angles to core axis. Some K metasomatism or granitization within mafic intrusive along some dyke contacts. 365.0-366.8: Granitic dykes in this interval contain 1-2% fine-medium grained molybdenite as well as minor pyrite along slip faces. 381.3-390.0: Chloritization increases to 10-15%.								Slight chilling within some granitic dykes would indicate that the granite is younger.
	390.0	END OF HOLE								

DRILLED BY

SIGNED

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 17B-7

NO. DU TROU

SHEET NO. 1 of 5

NO. DE FEUILLE

LOCATION 1+00E

ENDROIT 2+50S

PROPERTY DIXIE LAKE PROSPECT 150-17

PROPRIETE

Grid N

BEARING  
DIRECTION

-56°

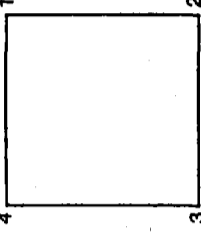
DIP  
PENTE

STARTED Aug. 22, 1979

COMMECE LE

COMPLETED Aug. 26, 1979

TERMINE LE



ELEVATION  
ELEVATION

TOTAL DEPTH 422'  
PROFONDEUR TOTALE

CORE SIZE BQ  
DIMENSION DE CARROTE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVRE	ASSAYS ANALYSES	REMARKS REMARQUES
0	0	OVERBURDEN							
50.0	104.9	ACID TUFF (RHYODACITE) Grey, moderately hard. Predominantly felsic ash-sized fragments in a moderately chloritized fine-grained matrix. Massive, possibly slightly recrystallized locally. Alteration is variable throughout unit as follows: 50.0-81.5: 5-10% pervasive, fine-grained matrix chlorite. 81.5-90.3: 10-15% chlorite and 2-3% green, fibrous amphibole (tremolite?). 90.3-91.7: 10-15% chlorite with 15-20% pervasive biotite. 91.7-104.9: 25-30% combined pervasive chlorite-sericite. Zones of increased alteration mask primary features. 95.2-95.9: 5-10% ghost-like lapilli-sized clasts. 104.9-105.6: Pegmatite dyke. Very coarse tourmaline-muscovite-plagioclase-quartz bearing dyke at 50° to core axis.							TROPARI TESTS Depth Azimuth Corr. Az. Dip 180' 353.0° 346.5° -55° 340' 353.5° 347.0° -49°  Excellent Core Recovery Very good to excellent R.Q.D. 1-2 fractures/foot commonly at high angles to core axis. Subordinate joint set at 50° to core axis. 50.5: Fault at 50° to core axis 2-3mm gouge on slip faces
104.9	135.2	RHYOLITE BRECCIA 55-60% stretched bomb sized fragments up to 5cm in width in a fine-grained pervasively chloritized matrix. Fragments appear to have a slightly granular, recrystallized texture and comprised predominantly of quartz with lesser feldspar. Elongation of fragments and parallel alignment at 60° to core axis gives the unit a banded appearance.							Very good Core Recovery Excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis. Many bands are not continuous and upon rotation of core fragment outline is obvious locally.
135.2	152.1	ALTERATION ZONE Alteration increases rapidly from 5-10% pervasive chlorite at top of zone to 65-70% chlorite with lesser biotite at 137.0. Alteration minerals are fine to medium grained and lend a greenish colour to the unit							

DIAMOND DRILL RECORD  
JOURNAL DE SONDAGE DE DIAMANT

HOLE NO. 17B-7

NO. DU TROU

SHEET NO. 2 OF 5

NO. DE FEUILLE

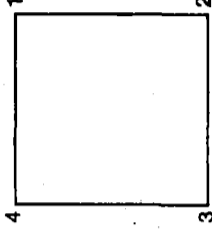
LOCATION 1+00E

ENDROIT 2+50S

PROPERTY

PROPRIETE

DIXIE LAKE PROJECT 150-17

BEARING  
DIRECTIONDIP  
PENTEELEVATION  
ELEVATIONTOTAL DEPTH  
PROFONDEUR TOTALECORE SIZE  
DIMENSION DE CARROTECOMPLETED  
TERMINE LESTARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
135.2	152.1	ALTERATION ZONE (Continued) which is moderately soft. Primary features are des- troyed except for isolated lapilli or bomb sized sili- ceous fragments which have resisted alteration. Last few inches of interval (151.2-152.1) contain up to 30% medium-grained biotite.							Very good Core Recovery Very good R.Q.D. 1-2 fractures/foot at high (70-80°) angles to core axis possibly repre- senting a foliation plane which has been masked by alteration.
152.1	155.7	INTERMEDIATE METAVOLCANIC Dark greenish black in colour, moderately hard, tuffa- ceous in appearance. Weakly foliated at 50° to core axis. 10-15% pervasive chlorite alteration near upper contact with 4-5% fine-grained garnet decreasing gradually with depth. Towards lower contact biotite (10-15%) replaces chlorite as the predominant alteration mineral.							Generally very good Core Recovery (5-10% loss from 162.0-172.0). Fair R.Q.D. in area of granitic dyke (162.4-167.3). Good R.Q.D. otherwise 2-5 fractures/foot commonly at high angles to core axis.
155.7	170.5	TONALITE Sharp upper contact at 50° to core axis with slight chill margin. Mottled dark grey in colour, fine to medium grained (1-3mm) quartz and plagioclase with fine-grained intergranular biotite (10-15%). Moderate foliation at 60-65° to core axis. Locally 3-4% K-spar. 162.4-167.3: Cut by numerous coarse granitic dykes at variable angles to core axis. Moderate amount of K-metasomatism along dykes. Sharp lower contact at 65° to core axis.							Good Core Recovery Good to very good R.Q.D. 2-3 fractures/foot commonly at high angles to core axis.
170.5	217.4	INTERMEDIATE METAVOLCANIC (ANDESITIC) Similar to the lower (biotitic) portion of the interval from 152.1-155.7. Local minor recrystallization due to felsic intrusive above. Numerous minor dykes of gra- nitic to granodioritic composition at variable angles to core axis throughout.							

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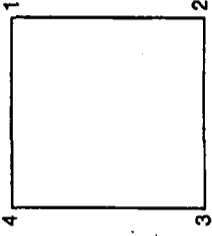
**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 17B-7  
NO. DU TROU  
SHEET NO. 3 of 5  
NO. DE FEUILLE  
LOCATION 1+00E  
ENDROIT 2+50S

PROPERTY DIXIE LAKE PROJECT 150-17  
PROPRIETE

BEARING  
DIRECTION  
DIP  
PENTE

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



COMPLETED  
TERMINE LE

STARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
170.5	217.4	INTERMEDIATE METAVOLCANIC (ANDESITIC) (Continued) 177.9: 1-2% molybdenite in granodioritic veinlet. 180.8-184.6: Granodioritic dyke. Similar to dyke from 155.7-170.5 but slightly more granodioritic in composition (10-15% K-spar). Both contacts sharp; upper at 60° to core axis, lower at 90° to core axis. Moderately foliated at 60° to core axis. 184.6-205.0: Unit appears less recrystallized, more tuffaceous. Recrystallization and resulting gabbroic appearance is limited to areas adjacent dyke contacts. Locally a strong schistose texture is developed at 50° to core axis (ex: approx. 190.0-192.0). 205.0-212.9: Tonalite dyke similar to interval from 155.7-170.5. Sharp contacts; upper at 30° to core axis, lower at 50° to core axis. Strong foliation at 60° to core axis.							191.6: Fault zone at 50° to core axis with 3-4mm clayey gouge.
217.4	317.0	ACID INTRUSIVE Relatively sharp upper contact at 50° to core axis with slight chill margin. Overall composition varies from granitic to granodioritic. As a result colour is strongly variable from mottled grey & white to pinkish grey to pink. Weak to moderate foliation typically from 40-45° to core axis but locally as low as 20° to core axis (ex. 252.0). Grain size varies from medium grained (2-4mm) up to very coarse grained. Pegmatitic phases are composed of sericite-plagioclase-K-spar-quartz + garnet. 1-2% molybdenite locally in pegmatitic phases. Variations in colour, texture and grain size make for a very heterogeneous looking rock.							Very good Core Recovery Poor (268.8-271.0) to generally good R.Q.D. 2-3 fractures/foot commonly at high angles to core axis. 268.8-271.0 heavily fractured.  Euhedral garnets may measure up to 1" in diameter (ex: 307.0).

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 17B-7

NO. DU TROU

SHEET NO. 4 of 5

NO. DE FEUILLE

LOCATION 1+00E

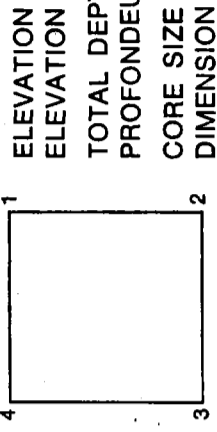
ENDROIT 2+50S

PROPERTY DIXIE LAKE PROJECT 150-17

PROPRIETE

BEARING DIRECTION

DIP PENTE



COMPLETED TERMINE LE

STARTED COMMENCE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES	
217.4	317.0	ACID INTRUSIVE (Continued) Locally (ex: 270.5-270.9) some magmatically stoped tuffaceous inclusions.									
317.0	350.4	ALTERED DACITE TUFF TO LAPILLI TUFF Sharp upper contact at 40° to core axis. From contact to 319.2 unit is very heavily altered. Alteration consists of 85-90% combined fine to medium grained chlorite-biorite. Primary textures are completely destroyed. 319.2-337.2: Predominantly coarse-ash to lapilli sized siliceous fragments in a fine-grained pervasive chloritic matrix. 3-4% fine-grained garnets throughout gradually increasing in volume up to 20% at 337.0. 337.2-347.1: Intense Chlorite-Biotite-Tourmaline alteration. Primary features totally masked. 60-65% medium grained chlorite, 10-15% biotite, 15-20% euhedral tourmaline up to 2 cm long, randomly oriented, 5% euhedral, medium-grained whitish cordierite(?). Short less altered garnetiferous interval similar to 342.9-345.5.								Very good Core Recovery Very good R.Q.D. 1-3 fractures/foot commonly at high angles to core axis.	
350.4	360.2	MAFIC DYKE Both contacts relatively sharp at high angles to core axis. Fine-grained, massive, pervasively chloritized. Dark greenish black in colour. Center of dyke is medium grained indicating that the finer contact phases are chilled zones.									
360.2	406.8	ALTERED INTERMEDIATE TUFF TO BRECCIA Generally similar to interval from 317.0-350.4.									Very good Core Recovery Good to very good R.Q.D. 1-3 fractures/foot commonly at high angles to core axis.

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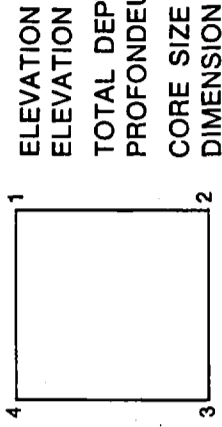
**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 17B-7  
NO. DU TROU  
SHEET NO. 5 of 5  
NO. DE FEUILLE  
LOCATION 1+00E  
ENDROIT 2+50S

PROPERTY DIXIE LAKE PROJECT 150-17  
PROPRIETE

BEARING DIRECTION  
DIP PENTE

STARTED COMMENCE LE  
COMPLETED TERMINE LE



ELEVATION ELEVATION  
TOTAL DEPTH PROFONDEUR TOTALE  
CORE SIZE DIMENSION DE CARROTE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES		REMARKS REMARQUES	
360.2	406.8	ALTERED INTERMEDIATE TUFF TO BRECCIA (Continued) 360.2-378.2: 5-15% coarse-ash to lapilli-sized siliceous fragments in a pervasively chloritized fine grained matrix. Fine to medium grained garnets vary from 2-10%. 278.2-390.1: Rhyolitic breccia similar to interval from 104.9-135.2: Alignment of bombs at 60-65° to core axis lends a banded appearance to the unit. 390.1-394.2: Heavily chloritized interval 394.2-401.0: Chloritized, garnetiferous lapilli-tuff such as at 360.2-378.2. 401.0-406.8: Fine, moderately chloritized tuffaceous interval. Weak foliation (bedding) at 60° to core axis.									
406.8	422.0	TONALITE Sharp upper contact at 75° to core axis. Similar to interval from 155.7-170.5. Well foliated at 50° to core axis.									Excellent Core Recovery Excellent R.Q.D. <1 fracture/foot commonly at high angles to core axis.
	422.0	END OF HOLE									

# DIAMOND DRILL RECORD

HOLE NO. 18-15 Extn.

SHEET NO. 1 of 2

LOCATION 22+50E  
16+00S

PROPERTY Dixie Prospect 150-18

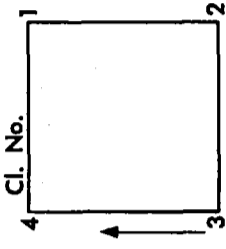
BEARING North

DIP COLLAR

ELEVATION

TOTAL DEPTH 577-858'

CORE SIZE BQ



STARTED Nov. 30, 1979 COMPLETED Dec. 4, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
0	577.0	See previous drill log.								
577.0	595.0	Mafic tuff (volcaniclastic) Black, fine grained, hornblende-garnet-feldspar bands alternating with more feldspathic layers. Bedded 60° to core axis. Minor beds pyrrhotite; occasional late vugs pyrite.								
595.0	673.0	DACITE Pale grey, fine grained, hard, well foliated at 60-70° to core axis. Predominantly biotitic, with minor green hornblende. Minor hornblende-garnet sections similar to above, particularly 618-641.0. Minor disseminated pyrite, pyrrhotite.								
673.0	702.0	ANDESITE Fine grained, dark green, well foliated but uniform in texture except for minor bedded section (i.e. predominant flows).								
702.0	707.0	DACITE TUFF Well bedded with 5-10% pyrrhotite.								
707.0	858.0	FELSIC TUFF TO LAPILLI TUFF 707-740: fine grained, moderately well bedded tuff with occasional isolated lapilli clasts to lapilli-rich beds. Predominant mafic is biotite. Unit is characterized by 3-5% disseminated magnetite.  740-858: Alteration Zone Characterized by anthophyllite-rich and biotite-chlorite rich zones.  740-787: Alteration is strong with coarse grained rosettes of anthophyllite set in a very siliceous matrix.								

TROPARI TESTS

Depth	Azimuth	Corr. Az.	Dip
210'	0.5°	354.0	-66°
410'	4.5°	358.0	-66°
620'	3.0°	356.5	-55°
800'	24.5°	018.0?	-51°

NOTE: Azimuth at -800' is likely untrue due to presence of pyrrhotite and magnetite in core.





# DIAMOND DRILL RECORD

HOLE NO. 18-21  
 SHEET NO 1 of 8  
 LOCATION 23+00E  
 15+00S

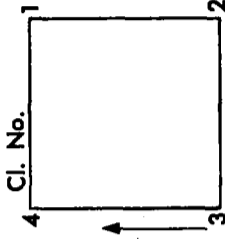
**PROPERTY**

DIXIE LAKE PROSPECT 150-18

ELEVATION

TOTAL DEPTH 682'

CORE SIZE BQ



BEARING 338°  
 DIP COLLAR -45°

STARTED July 9, 1979 COMPLETED July 14, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS																								
0	56.0	OVERBURDEN																																
56.0	131.8	<p>INTERMEDIATE VOLCANIC (DACITE)</p> <p>Very fine-grained, medium to dark grey colour, very hard. Faint foliation locally at 35° to core axis. 1-2% fine, rounded garnet throughout, locally concentrated in thin bands parallel to foliation. 3-4% pyrite in fine to medium grained disseminations throughout. Locally chloritized mafic fragments, ash to coarse-ash in size (ex. 66.6-67.7).</p> <p>69.2-69.9: Chloritized Dykelet                      Sharp but irregular contacts at 20° to core axis.</p> <p>80.4-83.1: Heavily quartz veined commonly at high angles to core axis. 4-5% coarse garnet, 3-4% pyrite disseminations accompany veins. Interval immediately below veining shows marked increase in garnet 12-15%, 2-3% fine magnetite cubes and 5-10% pyritic blebs (83.1-84.0).</p> <p>84.0-97.8: Unit appears fragmental. 50-55% coarse-ash to lapilli-sized greyish fragments in a chloritic fine-grained matrix. Moderate foliation at 35° to core axis. Matrix contains 10-15% medium-grained garnets. 1-2% pyrite locally. Fragments become less distinct and finer grained with depth. Some quartz-garnet pyrrhotite-epidote zones at high angles to core axis locally (ex. 89.6-90.4).</p> <p>97.8 unit grades into interval as originally described at 56.0 with more pronounced foliation at 35° to core axis. 109.7 garnet is no</p>																																
<p><b>TROPARI TESTS</b></p> <table border="1"> <thead> <tr> <th>Depth</th> <th>Azimuth</th> <th>Corr. Az.</th> <th>Dip</th> </tr> </thead> <tbody> <tr> <td>150'</td> <td>331.0°</td> <td>324.5°</td> <td>-42°</td> </tr> <tr> <td>300'</td> <td>328.0°</td> <td>321.5°</td> <td>-37°</td> </tr> <tr> <td>450'</td> <td>335.5°</td> <td>327.0°</td> <td>-33°</td> </tr> <tr> <td>600'</td> <td></td> <td></td> <td>-29°</td> </tr> <tr> <td>675'</td> <td>333.0°</td> <td>326.5°</td> <td>-27°</td> </tr> </tbody> </table> <p>Very good to excellent core recovery.                      Good to very good R.Q.D.                      1-2 fractures/foot at variable angles                      71.9-72.5: Highly fractured sub-parallel to core axis.</p>											Depth	Azimuth	Corr. Az.	Dip	150'	331.0°	324.5°	-42°	300'	328.0°	321.5°	-37°	450'	335.5°	327.0°	-33°	600'			-29°	675'	333.0°	326.5°	-27°
Depth	Azimuth	Corr. Az.	Dip																															
150'	331.0°	324.5°	-42°																															
300'	328.0°	321.5°	-37°																															
450'	335.5°	327.0°	-33°																															
600'			-29°																															
675'	333.0°	326.5°	-27°																															

# DIAMOND DRILL RECORD

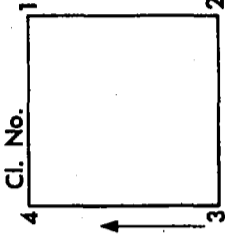
HOLE NO. 18-21  
 SHEET NO 2 of 8  
 LOCATION 23+00E  
 15+00S

**PROPERTY**

DIXIE LAKE PROSPECT

150-18

ELEVATION  
 TOTAL DEPTH  
 CORE SIZE



BEARING  
 DIP COLLAR

COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS
56.0	131.8	INTERMEDIATE VOLCANIC (DACITE) (Continued) 84.0-97.8: longer common. Slight increase in grain size. Possibly more dacitic in composition.									
31.8	141.6	INTERMEDIATE INTRUSIVE (?) Upper contact sharp at 45° to core axis, lower contact sharp at 50° to core axis. Moderately hard, fine-grained, massive, greyish green. 5% slightly coarser grained biotite phenocrysts throughout the matrix.									Similar to 18-15 from 202.0-222.4. Except that biotite phenocrysts are not well developed.
41.6	150.6	DACITE Similar to dacitic interval above with 10-12% fine-grained biotite in matrix. Greyish green, moderately hard. Weak to moderate foliation at 25-30° to core axis. Cut by numerous fine carbonate stringers at variable angles to core axis.									Excellent core recovery Excellent R.Q.D. 1 fracture/foot at variable angles to core axis.
50.6	259.9	ANDESITIC FLOW OR INTRUSION Gradational contact marked by increase in mafics in matrix (chlorite and biotite) as well as 1-2% very fine-grained garnets locally. Fine-grained, weak foliation at 25° to core axis. Dark green to greenish black, hard, locally magnetic. 150.6-157.2: Well foliated at 30° to core axis with 10-15% medium-coarse-grained feldspar phenocrysts. Abundant carbonate veining as in dacite above. 157.2: Relatively homogeneous, possibly recrystallized fine-grained subhedral texture, diabasic. Grain size gradually increases with depth such that at approximately 167' it is medium-grained. 169.3-170.1: Intermediate dyke similar to 131.8-141.6. Contacts sharp both cross-cutting foliation at 35° to core axis.									Excellent core recovery except for 162-172 where recovery is about 95%. Excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis.

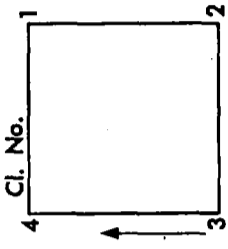
# DIAMOND DRILL RECORD

HOLE NO. 18-21  
 SHEET NO. 3 of 8  
 LOCATION 23+00E  
 15+00S

**PROPERTY**

DIXIE LAKE PROSPECT  
 BEARING  
 DIP COLLAR

150-18



ELEVATION

TOTAL DEPTH

CORE SIZE

COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
150.6	259.9	ANDESITIC FLOW OR INTRUSION (Continued) 172.5-175.5: Intermediate dyke with 15-20% fine-grained biotite clots as in 18-15 from 202.0-222.4. Also 5% fine-grained equant whitish phenocrysts similar to whitish cordierite(?) as in 150-3 footwall alteration zones. Slightly chilled contact margins. Upper contact sharp at 30° to core axis, lower contact sharp at 35° to core axis. 177.8-179.0: Intermediate dyke as above. Both contacts sharp; upper at 10° to core axis; lower at 30° to core axis. 186.4-188.8: Intermediate dyke as above except with very few biotite phenocrysts. Sharp contacts; upper at 30° to core axis, lower at 15° to core axis. 188.8: Andesite develops medium-coarse-grained feldspathic porphyroblasts (10-15%). 215.6-217.3: Finer grained interval, possibly mafic sill sharp contacts parallel to foliation. 221.5: Increase in fine to medium-grained biotite in matrix (up to 10%). Porphyroblasts decrease to ~5%. 230.1-232.3: Finer-grained interval, commonly very hard but locally chloritic and soft, cut by a number of coarse K-spar and carbonate veins at variable angles to core axis. Below this interval the porphyroblasts become fine to medium-grained, elongate and are preferentially aligned at 40° to core axis. 237.7-242.4: Fine grained mafic dyke similar to interval from 215.6-217.3. Sharp contacts at low angles to core axis.								May be caused by recrystallization of andesite or may represent original (crystal tuff-like) texture. NOTE: Referred to as Mafic Intrusion in 18-15 (ex. 150.9-197.1).

## DIAMOND DRILL RECORD

HOLE NO. 18-21  
 SHEET NO 4 of 8  
 LOCATION 23+00E  
 15+00S

## PROPERTY

DIXIE LAKE PROSPECT

150-18

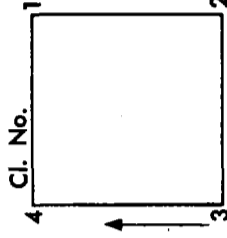
BEARING

DIP COLLAR

ELEVATION

TOTAL DEPTH

CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS
150.6	259.9	ANDESITIC FLOW OR INTRUSION (Continued) Below 242.4 unit is similar to description at 221.5 with both fine-grained, elongate and coarse-grained equant porphyroblasts. 247.6: Unit becomes fine-grained and almost free of porphyroblasts. May possibly represent chill margin at base of flow or intrusion.									
259.9	290.1	INTERMEDIATE VOLCANIC Sharp contact at high angle to core axis. Somewhat similar to description at 56.0. Very fine-grained, very hard, greyish in colour with 1-2% fine-grained garnets throughout. 2-3% fine stringers and disseminations of pyrrhotite and pyrite. Locally possibly some stretched lapilli-sized siliceous fragments (ex. 265.5-266.0). 269.6: Matrix becomes slightly more chloritic and a little softer. 271.0-280.4: Unit is cut by numerous 2-5cm wide quartz-garnet-pyrrhotite bands at variable but commonly high angles to core axis. Numerous stretched siliceous lapilli-sized fragments.									Very good to excellent core recovery Very good R.Q.D. 1-2 fractures/foot commonly at intermediate angles to core axis (45-60°).
290.1	319.3	ACID TO INTERMEDIATE VOLCANIC BRECCIA Contact marked by appearance of highly siliceous, extremely hard, bands which represent rhyolitic fragments up to 5cm in width. Locally smaller siliceous fragments are recognizable (ex. 287.3). Moderate banding at 50° to core axis caused by colour variation of siliceous fragments with respect to dark chloritized bands. Dark bands represent both mafic fragments and a very fine-grained matrix. 3-4% pyrite and pyrrhotite disseminations and fine-stringers parallel to foliation.									Fair to very good core recovery (some core lost from 282'-292'). Very good R.Q.D. 1-2 fractures/foot at commonly high angles to core axis. Pyrite smears along some slip faces (ex. 287.9).

## DIAMOND DRILL RECORD

HOLE NO. 18-21

PROPERTY DIXIE LAKE PROSPECT 150-18

SHEET NO 5 of 8

BEARING

LOCATION

DIP COLLAR

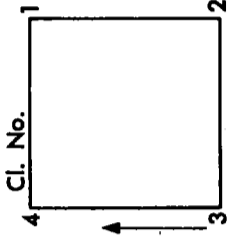
23+00E

15+00S

ELEVATION

TOTAL DEPTH

CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS	
290.1	319.3	ACID TO INTERMEDIATE VOLCANIC BRECCIA (Continued) 296.2-301.8: Massive, very siliceous interval, possible flow. 301.8-319.3: 2-3% fine-grained garnet throughout.										
319.3	381.0	ACID TO INTERMEDIATE FLOW Similar to massive section at 296.2-301.8. Grey, very fine-grained, extremely hard, massive. Commonly rhyodacitic with short slightly more biotitic (dacitic) intervals. Locally 2-4% fine-grained garnets associated with more biotitic segments. A few 2-5cm wide, irregularly spaced garnet-carbonate-quartz zones at variable angles to core axis.										Excellent core recovery Very good to excellent R.Q.D. 1-2 fractures/foot at variable angles to core axis.
381.0	430.9	INTERMEDIATE FLOW (DACITIC) Sharp upper contact at 30° to core axis. Grey to greenish grey, hard, very fine-grained. Commonly massive but locally moderate chloritic banding at 25-30° to core axis. 2-4% fine-grained garnet associated with chloritic zones. 1-2% pyrrhotite disseminations locally. 407.4-418.7: Rhyodacitic interval 430.0-430.9: Marked increase in fine-grained biotite (10-15%).										Very good core recovery Very good R.Q.D. 1 fracture/foot commonly at high angles to core axis.
430.9	453.0	INTERMEDIATE VOLCANIC (DACITE FLOW ?) Moderately sharp upper contact at 25° to core axis. 10-15% fine-grained biotite in a greyish, very hard, aphanitic matrix. Biotite locally increases up to 30%. Weak to moderate foliation defined by preferential alignment of biotite at 25-30° to core axis.										Very good core recovery Very good to excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis.

## DIAMOND DRILL RECORD

HOLE NO. 18-21

PROPERTY DIXIE LAKE PROSPECT 150-18

SHEET NO 6 of 8

BEARING

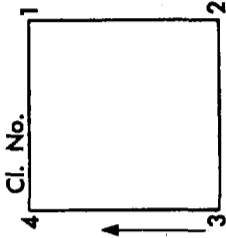
ELEVATION

TOTAL DEPTH

LOCATION 23+00E  
15+00S

DIP COLLAR

CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag oz/t	Pb %	
430.9	453.0	INTERMEDIATE VOLCANIC (DACITE FLOW ?) (Continued) 2-3% siliceous, coarse-ash sized fragments, locally 440.9-446.9. Aphanitic, massive interval similar to Intermediate Flow above (381.0-430.9).										
453.0	548.1	INTERMEDIATE METAVOLCANIC Commonly massive, flow-like in appearance. Upper portion very similar to dacitic flow from 381.0-430.9. Below 458.2 unit becomes gradually more chloritic and andesitic in nature. 3-4% fine-grained garnet throughout in the greyish-green andesitic section. Locally 2-3% siliceous, coarse-ash sized fragments. 480.5: Unit abruptly becomes dacitic in composition, greyish in colour. 10-15% biotitic commonly in metamorphic enhanced bands 2-4cm wide at 25-30° to core axis. Numerous quartz and carbonate veins at variable angles to core axis. Some isolated, possibly bleached (?) intervals. 527.4-534.1: Interval characterized by fine-grained biotite clots similar to flow (?) from 430.9-453.0. 534.9-543.5: Inhomogeneous zone. Chloritic alteration along healed fractures. Possible slumping. 546.2-548.1: Weak Mineralization. Fine stringers of sphalerite (5-6%) with blebs and disseminations of pyrite and pyrrhotite (15% combined). 4-5% chalcopyrite in fine stringers and rare bleb. Locally heavily chloritized along healed fractures.	0748 0749	545.0 546.2	546.2 548.1	1.2 1.9	1.2 1.9	.07 .03	.16 3.49	1.28 .58	NIL .08	Excellent core recovery Excellent R.Q.D. <1 fracture/foot at commonly high angles to core axis.
548.1	553.0	MASSIVE SULPHIDES Medium to coarse-grained euhedral recrystallized pyrite	0750	548.1	553.0	4.9	4.9	.64	15.09	.47	.06	Tr.

Au  
oz/t

## DIAMOND DRILL RECORD

HOLE NO. 18-21

PROPERTY DIXIE LAKE PROSPECT 150-18

ELEVATION

SHEET NO 7 of 8

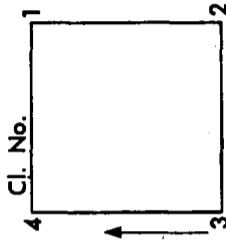
BEARING

TOTAL DEPTH

LOCATION 23+00E  
15+00S

DIP COLLAR

CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag oz/t	Pb %	
548.1	553.0	MASSIVE SULPHIDES (Continued) cubes (15-20%) in a fine-grained intergrowth of reddish-brown sphalerite (30-35%) and pyrrhotite (15-20%). Local magnetite cubes (45%), 1-2% fine chalcopyrite disseminations. Gangue consists of siliceous, medium to coarse-grained fragments (20-25%). Crude banding outlined by some fine sphalerite stringers at 45-50° to core axis.										Excellent core recovery Excellent R.Q.D. ∠1 fracture/foot at intermediate to high angles to core axis.
553.0	554.9	ACID VOLCANIC Similar to unit above sulphides but slightly more siliceous. Strongly foliated at 40° to core axis. 4-5% pyrite disseminations, 1-2% chalcopyrite, trace sphalerite and pyrrhotite.	0751	553.0	554.9	1.9	1.9	.19	.79	.82	.06	Au oz/t Tr.
554.9	571.1	MAFIC SEDIMENT Similar to interval from 569.6-578.0 in hole 18-15. Fine-grained heavily chloritized matrix with 15-20% fine-medium grained rounded garnets. Strongly magnetic (4-5% magnetite), 2-4% pyrite and pyrrhotite disseminations throughout with 1-2% chalcopyrite locally. Dark greenish black, relatively soft, strongly foliated at 25° to core axis.										Very good to excellent core recovery Excellent R.Q.D. ∠1 fracture/foot commonly at intermediate angles (45-60°) to core axis.
571.1	618.7	HEAVILY ALTERED ACID TO INTERMEDIATE TUFF 10-15% coarse ash-sized siliceous fragments in a heavily chloritized fine-grained matrix. Locally 5-10% siliceous lapilli fragments. Mottled light grey and dark greenish black, relatively soft. Strongly foliated at 25-30° to core axis. Commonly 5% (locally up to 15%) fine to medium grained pyrite and pyrrhotite along foliation plane. 571.1-583.1: 10-15% fine-medium grained garnet concentrated along heavily chloritized bands parallel										Very good to excellent core recovery. Commonly very good, locally (573.4-575.4), poor R.Q.D. ∠1 fracture/foot commonly at variable angles to core axis.





**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-22

NO. DU TROU

SHEET NO. 1 of 6

NO. DE FEUILLE

LOCATION 8+00W

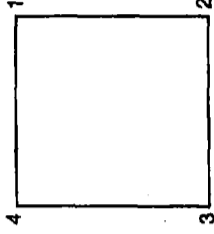
ENDROIT 15+00S

PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

BEARING Grid North  
DIRECTION

DIP -61°

PENTE



ELEVATION  
ELEVATION

TOTAL DEPTH 542'  
PROFONDEUR TOTALE

CORE SIZE 80  
DIMENSION DE CARROTE

STARTED Aug. 4, 1979  
COMMENCE LE

COMPLETED August 10, 1979  
TERMINE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES	REMARKS REMARQUES
0	23.0	OVERBURDEN							
23.0	128.7	INTERMEDIATE METAVOLCANIC Light greenish-grey in colour, very fine-grained, very hard. Weak to moderate foliation (bedding) at 40-45° to core axis. Tuffaceous texture. Predominantly quartz and feldspar with minor biotitic segregations along foliation planes. Occasional quartz-chlorite seams along fractures. Trace fine-grained pyrite disseminated throughout. Local segregations of biotite lend a faint banding parallel to foliation (ex. 67.3'). 72.6-92.1: Unit becomes slightly more dacitic and is relatively well layered. Numerous thin (1-2mm) chloritic seams parallel to foliation. Isolated quartz-Kspar-amphibole zones also parallel to foliation. 92.1: Clast size becomes slightly coarser. 120.5-218.7: Slight increase in biotite (10%) with faint banding parallel to foliation. 5% quartz-Kspar along fractures.							TROPARI TESTS Depth Azimuth Corr. Az. Dip 150' 359.0° 352.5° -60° 300' 001.5° 355.0° -57° 440' 016.5° 010.0° -59° Excellent Core Recovery Good to very good R.Q.D. 1-3 fractures/foot at variable but commonly intermediate angles to core axis (45-60°). In the upper portion of the unit a well developed fracture pattern subparallel to core axis also exists. Fractures in upper 20' of the unit are limonite-stained and commonly coated with carbonate. 92.1: May represent relict spherulitic or simply a coarsening of the ash. Quartz-Kspar zone at 92.1-92.5 appears brecciated and may represent brecciated top of spherulitic flow. Granite intrusion below may also be responsible for coarsening.
128.7	144.8	GRANITIC DYKE Both contacts sharp: upper at 70° to core axis, lower at 45° to core axis, minor chilling along contacts. Fine to medium-grained, pinkish near contacts, pinkish-grey towards center of dyke due to a higher concentration of Kspar along contacts. Moderately foliated at 30-35° to core axis. Composition: 10-15% quartz, 45-50% Kspar, 20-25% plagioclase, 5% biotite, 5% hornblende, 2-3% muscovite.							Excellent Core Recovery Very good R.Q.D. 1-2 fractures/foot commonly at high angles to core axis.

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-22

NO. DU TROU

SHEET NO. 2 of 6

NO. DE FEUILLE

LOCATION 8+00W

ENDROIT 15+00S

PROPERTY DIXIE LAKE PROSPECT 150-18

PROPRIETE

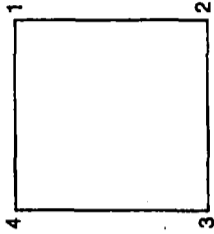
BEARING  
DIRECTION

DIP  
PENTE

ELEVATION  
ELEVATION

TOTAL DEPTH  
PROFONDEUR TOTALE

CORE SIZE  
DIMENSION DE CARROTE



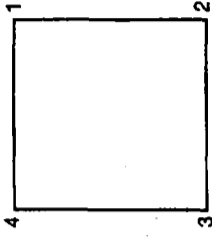
COMPLETED  
TERMINE LE

STARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES
44.8	159.5	INTERMEDIATE METAVOLCANIC (ANDESITIC) Similar to unit from 23.0-92.1 but slightly more biotitic. Well foliated at 40-45° to core axis. Section near upper contact is highly silicified and contains 5-10% fine pyrite disseminations and stringers parallel to foliation. Numerous fine (1-2mm wide) quartz stringers also parallel to foliation. Fine chloritic seams are absent.								
159.5	195.4	VOLCANICLASTIC SEDIMENT Well foliated at 45° to core axis. Unit consists of alternating chloritic and hard, greyish siliceous ones. Chloritic bands are commonly characterized by 4-5% fine pyrrhotite and lesser pyrite disseminations and stringers as well as 2-4% fine garnets. Numerous quarta veins at variable angles to core axis locally with medium-grained garnets. 170.5-170.8: 10-15% fine grained magnetite.								Very good to excellent Core Recovery Very good R.Q.D. 1-2 fractures/foot commonly at high angles to core axis.
195.4	324.0	INTERMEDIATE METAVOLCANIC TUFF OR VOLCANICLASTIC SEDIMENT Gradational upper contact. Grey, very hard, very fine-grained, weak to moderate foliation, variable from 40-45° to core axis (bedding). Predominantly quartz-feldspar with 10-15% biotite, locally some thin (1-3cm wide) chloritic bands. 1-2% fine-grained garnets commonly associated with more chloritic sections. 2-4% combined pyrite and pyrrhotite also with chlorite. Numerous quartz-garnet-pyrrhotite zones at variable angles to core axis throughout. 209.5-210.6: Felsic Dyke Light grey, fine-grained, weakly foliated at 40° to core axis. Sharp contacts; upper at 35° to core axis, lower at 45° to core axis.								Very good Core Recovery Good R.Q.D. 2-4 fractures/foot at variable angles to core axis.

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



HOLE NO. 18-22  
NO. DU TROU  
SHEET NO. 3 of 6  
NO. DE FEUILLE  
LOCATION 8+00W  
ENDROIT 15+00S

PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

BEARING  
DIRECTION

STARTED  
COMMENCE LE  
COMPLETED  
TERMINE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES
195.4	324.0	INTERMEDIATE METAVOLCANIC TUFF OR VOLCANICLASTIC SEDIMENT (Continued) 238.0-270.5: Unit becomes more mafic. Chlorite bands become more numerous. Represents inter-mixing of the unit immediately above with more mafic material. Increase in sulphides (6-8% combined pyrite-pyrrhotite) and very fine-grained garnets (4-5%). 262.9-263.3: Mafic Dyke Fine-grained, moderately hard, well chloritized. Both contacts sharp; upper at 45° to core axis, lower at 85° to core axis. Thin chill margins. 270.5-272.3: 15-20% pyrrhotite with lesser pyrite ( 5%) in fine-grained stringers parallel to foliation (35-40° to core axis). Host is much more siliceous than interval from 238.0-270.5. Fewer chloritic bands and marked decrease in garnets ( 1%). 282.1-283.9: Granitic Dyke Upper contact sharp at 45° to core axis marked by coarse quartz vein and 10-15% vuggy pyrite. Lower contact sharp at 40° to core axis. Foliation below dyke is disrupted and changes to 15° to core axis at 284.5-285.6. 285.6-324.0: Moderately siliceous (dacitic to rhyodacitic) well layered, 5-6% coarse-ash to lapillized siliceous fragments (ex. 294.0-295.0). Minor quartz grains concentrated along bedding planes locally (ex. 298.0). Unit gradually becomes more intermediate with depth.								Conductive and magnetic.  Unit characterized by two distinct fracture patterns. Prominent set of fractures at 45-50° to core axis with a weaker set subparallel to core axis.

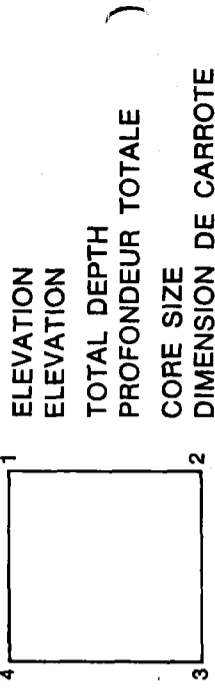
**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-22  
NO. DU TROU  
SHEET NO. 4 of 6  
NO. DE FEUILLE  
LOCATION 8+00W  
ENDROIT 15+00S

PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

BEARING  
DIRECTION

DIP  
PENTE



STARTED  
COMMENCE LE

COMPLETED  
TERMINE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES	
424.0	426.1	ANDESITE FLOW Unit becomes relatively massive with only faint foliation at 45° to core axis. Irregularly spaced chloritic bands (1-2cm wide) from 360.4-368.5 may represent pillow sel-vages. Locally grain size increases from aphanitic to Imm (ex. 339.0-340.5). Moderate foliation developed at 50-55° to core axis at 368.5. Flow undergoes recrysta-llization and at 385.2 it appears as a relatively massive, medium-grained gabbroic looking rock. 296.5-426.1: Flow becomes foliated as at 368.5 and is variable in grain size from medium-grained to aphanitic locally. 404.4-404.8: Tourmaline-bearing granitic dyke. Both contacts sharp at high angles to core axis. 5-10% fine-medium grained biotite below dyke along foliation planes. 422.0-426.1: Increase in biotite similar to area below granitic dyke from 404.4-404.8.								Biotite probably due to a reaction to the granitic intrusion.	
426.1	438.7	INTERMEDIATE DYKE Sharp but irregular contact at 20° to core axis. Pro-nounced aphanitic chill margin adjacent to both upper and lower contacts. Greenish-grey, relatively hard, massive. Aphanitic, feldspathic ground mass with 10-15% fine-medium grained subhedral chlorite phenocrysts or pseu-domorphs except in chill margins. 436.7-436.9: Xenolith of biotite-rich recrystallized andesite flow. Sharp lower contact at 20° to core axis.									Excellent Core Recovery Very good to excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis.
438.7	441.4	ANDESITE FLOW Similar to unit directly above dyke. Well foliated at 60° to core axis, fine to medium grained with 15-20%									Biotite once again due to reaction to intermediate dyke.

DRILLED BY

SIGNED

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-22

NO. DU TROU

SHEET NO. 5 of 6

NO. DE FEUILLE

LOCATION 8+00W

ENDROIT 15+00S

PROPERTY DIXIE LAKE PROSPECT

PROPRIETE

150-18

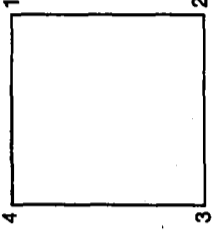
BEARING  
DIRECTION

DIP  
PENTE

ELEVATION  
ELEVATION

TOTAL DEPTH  
PROFONDEUR TOTALE

CORE SIZE  
DIMENSION DE CARROTE



COMPLETED  
TERMINE LE

STARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
438.7	441.4	ANDESITE FLOW (Continued) medium-grained biotite clots preferentially aligned parallel to foliation.							
441.4	456.6	PORPHYRITIC INTERMEDIATE FLOW Indistinct upper contact. Greenish-grey, weakly foliated at 60-65° to core axis. 10-15% fine to medium grained, subhedral, randomly oriented feldspar megacrysts in an aphanitic matrix. Locally 5-10% fine-grained biotite clots preferentially aligned parallel to foliation. Upper foot or so is characterized by finer phenocrysts strongly oriented parallel to foliation. Bottom few inches are phenocryst free and strongly foliated or sheared.							Very good Core Recovery Very Good R.Q.D. 1-2 fractures/foot at variable angles to core axis and are locally carbonate coated (ex.452.4). May be part of andesite flow above.
456.6	458.4	QUARTZ PORPHYRY Sharp upper and lower contacts at high angles to core axis (75-80°). Light grey, very siliceous, extremely hard, well foliated at 50° to core axis. 35-40% medium-grained subrounded quartz eyes. 1-2% fine-grained pyrite locally.							
458.4	542.0	DACITE FLOW Generally massive, aphanitic to very fine-grained, light greenish grey, moderately hard. Upper portion (458.4-468.6) is weakly foliated at 60° and is characterized by 5-10% fine-grained biotite clots aligned parallel to foliation as well as a fine-grained granular texture locally. Locally some short clastic or fragmental sections (ex. 505.5-506.0). 493.4-494.2: Greyish siliceous band followed by 5-10% combined pyrite-pyrrhotite stringers over a few inches.							Very good Core Recovery Commonly very good R.Q.D., locally fair, 1-3 fractures/foot at commonly intermediate angles to core axis (45-60°).  Recrystallization?

DRILLED BY

SIGNED

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-22  
NO. DU TROU  
SHEET NO. 6 of 6  
NO. DE FEUILLE  
LOCATION 8+00W  
ENDROIT 15+00S

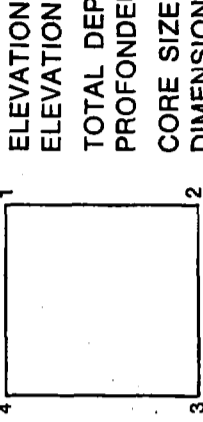
PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

BEARING  
DIRECTION

DIP  
PENITE

STARTED  
COMMENCE LE

COMPLETED  
TERMINE LE



ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE

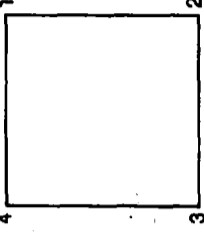
FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG. UEUR	CORE RECOV. ERED CARROTE RECOUVRE	ASSAYS ANALYSES	REMARKS REMARQUES
58.4	542.0	DACITE FLOW (Continued) 500.5-501.7: Garnet-quartz-epidote zone. 509.2-511.4: Biotite Porphyry Dyke Sharp upper contact at 45° to core axis marked by increase in fine-grained biotite. 25-30% fine-grained biotite phenocrysts in finer grained chloritized matrix. Well foliated at 35-40° to core axis. Sharp lower contact at 45° to core axis with thin chilled zone. 511.4-521.8: Possible interflow sediments or dacitic volcanoclastic. Alternating chloritic bands with biotite-rich bands. Moderately soft, well foliated at 45° to core axis. Chloritic bands commonly contain 5-10% combined pyrite-pyrrhotite.							
	542.0	END OF HOLE.							

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-23  
NO. DU TROU  
SHEET NO. 1 of 5  
NO. DE FEUILLE  
LOCATION 8+00B  
ENDROIT 14+00S

PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

BEARING Grid N  
DIRECTION  
DIP -60°  
PENTE



ELEVATION  
ELEVATION  
TOTAL DEPTH 492'  
PROFONDEUR TOTALE  
CORE SIZE BQ  
DIMENSION DE CARROTE

STARTED Aug. 10, 1979  
COMMENCE LE

COMPLETED Aug. 15, 1979  
TERMINE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES																
0	18.0	OVERBURDEN																								
18.0	25.2	ACID LAPILLI TUFF 55-60% highly stretched siliceous fragments in a highly chloritized matrix. Well foliated at 35° to core axis. 2-4% pyrite locally associated with chloritic matrix. Fragments variable in size from fine to coarse lapilli (2-25mm).																								
25.2	120.7	ACID TO INTERMEDIATE METAVOLCANIC Grey, relatively hard, weak foliation at 35-40° to core axis. Fine chloritic seams along foliation planes. Predominantly flows with some short fragmental segments. 34.6-42.6: Highly foliated interval. Numerous fine chloritic seams at 40° to core axis. May represent zone of highly stretched coarse-ash to lapilli-sized fragments. 94.4: Unit becomes more massive with very few chloritic seams. Flow-like in appearance. Weak foliation at 40-45° to core axis. 119.8-120: Thin feldspar porphyry dyke.																								
120.7	140.7	FELDSPAR PORPHYRY DYKE Sharp upper contact at 50° to core axis. No evidence of chilling. Grey, very hard, 20-25% subhedral to anhedral medium grained feldspar phenocrysts. Fine-grained matrix. Moderate foliation at 40° to core axis. Lower contact sharp at 30° to core axis. 132.5-135.7: Intermediate volcanic Very fine-grained, chlorite-biotite rich. Similar to unit below dyke. Both contacts with dyke are sharp; upper at 60° to core axis, lower at 50° to core axis.	79.5-81.9: Interval of well packed moderately stretched spherulites with wispy interstitial chlorite.																							
<p><b>TROPARI TESTS</b></p> <table border="1"> <thead> <tr> <th>Depth</th> <th>Azimuth</th> <th>Corr. Az.</th> <th>Dip</th> </tr> </thead> <tbody> <tr> <td>140'</td> <td>002.0°</td> <td>355.5°</td> <td>-50°</td> </tr> <tr> <td>320'</td> <td>005.5°</td> <td>359.0°</td> <td>-57°</td> </tr> <tr> <td>485'</td> <td>005.0°</td> <td>358.5°</td> <td>-50°</td> </tr> </tbody> </table> <p>Good Core Recovery Fair to good R.Q.D. 2-4 fractures/foot at variable angles to core axis. Fractures commonly have limonite stain on slip faces.</p> <p>Excellent Core Recovery Very good R.Q.D. 1 fracture/foot at variable but commonly intermediate (45-60°) angles to core axis.</p>											Depth	Azimuth	Corr. Az.	Dip	140'	002.0°	355.5°	-50°	320'	005.5°	359.0°	-57°	485'	005.0°	358.5°	-50°
Depth	Azimuth	Corr. Az.	Dip																							
140'	002.0°	355.5°	-50°																							
320'	005.5°	359.0°	-57°																							
485'	005.0°	358.5°	-50°																							



**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-23  
NO. DU TROU  
SHEET NO. 2 of 5  
NO. DE FEUILLE  
LOCATION 8+00E  
ENDROIT 14+00S

PROPERTY  
PROPRIETE

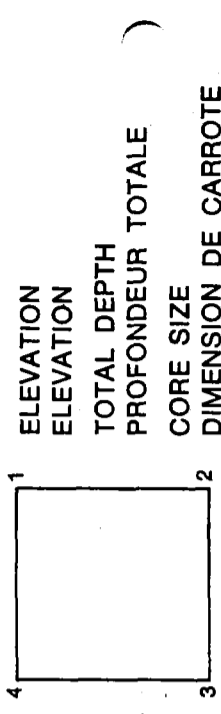
DIXIE LAKE PROSPECT 150-18

BEARING  
DIRECTION

DIP  
PENTE

STARTED  
COMMENCE LE

COMPLETED  
TERMINE LE



FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURS	ASSAYS ANALYSES				REMARKS REMARQUES
								AU oz/t	AG oz/t	CU %	Zn %	
140.7	289.6	INTERMEDIATE METAVOLCANIC (DACITE TO ANDESITE) Very fine-grained to aphanitic, upper portion possibly recrystallized by the intrusion of the dyke. Predominantly flows with minor tuffaceous intervals. Locally variable in colour from dark grey in dacitic intervals to dark green in andesitic portions. Faint foliation at 55° to core axis. From 4-8% combined fine-grained pyrite-pyrrhotite disseminations and stringers parallel to foliation. Locally 1-2% magnetite with sulphides. Upper part of unit is predominantly dacitic with minor andesitic sections however, at about 175.4 the unit becomes slightly more mafic and predominantly andesitic. 2-4% fine-grained garnet throughout. Some (2-4cm wide) indistinct chlorite bands usually with increased garnet and 5-10% combined pyrite-pyrrhotite parallel to foliation (50-55° to core axis). 220.2-260.9: Chloritic bands become wider and more numerous locally displaying fine (1-2mm) biotite clots. 260.9: Unit becomes greyish in colour and more felsic (dacitic) in composition. Isolated chloritic bands persist but account for <10% of unit. 264.5-266.1: Zone of carbonate-quartz veining at variable angles to core axis. 10-12% coarse pyrrhotite with minor pyrite associated with quartz veins as well as 2-3% garnet. 287.7-289.5: Coarse quartz vein subparallel to core axis with coarse pyrite and magnetite from 288.9-289.5.									Very good Core Recovery Good to very good R.Q.D. 1-3 fractures/foot at variable angles to core axis. Minor carbonate along slip faces.	
289.6	302.2	ACID FRAGMENTAL Indistinct upper contact 30-35% fine to coarse lapilli-sized fragments, commonly	0785	290.0	295.2	5.2	5.2	0.002 Tr.	0.01	0.01	0.01	Very good Core Recovery Very good R.Q.D. 1 fracture/foot at variable angles to core axis.

DRILLED BY

SIGNED

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-23

NO. DU TROU

SHEET NO. 3 of 5

NO. DE FEUILLE

LOCATION 8+00E

ENDROIT 14+00S

PROPERTY DIXIE LAKE PROSPECT 150-18

PROPRIETE

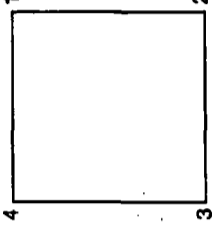
BEARING  
DIRECTION

DIP  
PENITE

ELEVATION  
ELEVATION

TOTAL DEPTH  
PROFONDEUR TOTALE

CORE SIZE  
DIMENSION DE CARROTE



COMPLETED  
TERMINE LE

STARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
289.6	302.2	ACID FRAGMENTAL (Continued) stretched in a fine chloritic matrix. Well foliated at 30° to core axis. 15-20% fine pyrrhotite disseminations and stringers parallel to foliation (40-45° to core axis).							May locally be autobrecciated (?).
302.2	363.1	MAFIC METAVOLCANIC (FLOW) Sharp upper contact at 30° to core axis. Similar to Andesitic Flow from 324.0-426.1 in 18-22. Relatively soft, green to greenish black, very fine grained to aphanitic. Well foliated at 45° to core axis in upper portion, more massive with depth. 2-3% pyrite-pyrrhotite disseminations throughout. Some siliceous ash to coarse-ash sized fragments locally. 320.7: Unit gradually begins to coarsen and is cut by numerous thin quartz veins at variable angles. 322.4-339.5: Unit achieves a gabbroic, medium grained texture well foliated at 45° to core axis. 339.5: Grain size gradually decreases. Matrix is relatively well chloritized, 10-12%. 12-15% fine to medium grained biotite clots are distributed throughout. Preferential alignment of biotite outlines foliation at 45-50° to core axis.							Excellent Core Recovery Excellent R.Q.D. 41 fracture/foot
363.1	382.9	INTERMEDIATE PORPHYRITIC FLOW Upper contact obscured by quartz-carbonate veining. Commonly 10-12% fine to medium grained subhedral to euhedral feldspar phenocrysts in a very fine-grained chlorite-biotite rich matrix. Weak foliation at 35-40° to core axis.							Unit may be a foliated equivalent of 18-22 at 385.2'.  Good Core Recovery Very good R.Q.D. 1 fracture/foot commonly parallel to foliation. May be porphyritic equivalent of Mafic Flow above.
382.9	487.7	INTERMEDIATE METAVOLCANIC (DACITE-ANDESITE) Gradational upper contact. Very fine-grained, locally well foliated at 55-60° to core axis, particularly in upper portion of the unit. Some biotite-chlorite							Very good Core Recovery Very good R.Q.D. 1-2 fractures/foot at variable angles to core axis.

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-23  
NO. DU TROU  
SHEET NO. 4 of 5  
NO. DE FEUILLE  
LOCATION 8+00E  
ENDROIT 14+00S

PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

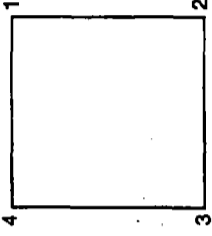
BEARING  
DIRECTION

DIP  
PENTE

STARTED  
COMMENCE LE

COMPLETED  
TERMINE LE

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES	
382.9	487.7	INTERMEDIATE METAVOLCANIC (DACITE-ANDESITE) (Continued) banding characterizes upper (dacitic) section with depth (approximately 396.5) unit becomes more andesitic and contains 4-5% fine to medium grained garnets through- out. 388.0-436.3: Porphyry dyke Similar to 509.2-511.4 in hole 18-22 except that phenocrysts are more chloritic. Both contacts sharp: upper at 35° to core axis, lower at 30° to core axis. 397.0-397.6: Bleached band, light grey in colour. 412.0: Possible fault at 30° to core axis. 2-3mm clayey gouge. 426.0-436.3: Well layered felsic tuff or volcanoclastic sediment. Well banded at 55-60° to core axis. Banding consists of felsic (grey) and biotite (brown) rich alternations. 436.3-443.7: Mafic sediment (Volcanoclastic?) Alternation of felsic and pyrrhotite-garnet- chlorite rich bands at 50° to core axis. Below sediments, volcanics are predominantly andesitic with some short, massive more felsic, garnet-free sections and are possibly less well layered volcani- clastic sediments themselves. 2-3% pyrrhotite along foliation (bedding?) planes locally.									
487.7	489.9	INTERMEDIATE DYKE Both contacts sharp at 40° to core axis, pronounced very fine-grained chill margin. 2-3% scattered feldspar phenocrysts (3-4mm diameter) in a fine-grained (1-2mm) chloritized matrix consisting predominantly of feldspar.									Excellent Core Recovery Excellent R.Q.D. ←1 fracture/foot.

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 18-23  
NO. DU TROU  
SHEET NO. 5 of 5  
NO. DE FEUILLE  
LOCATION 8+00E  
ENDROIT 14+00S

PROPERTY DIXIE LAKE PROSPECT 150-18  
PROPRIETE

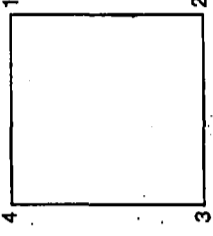
BEARING  
DIRECTION

DIP  
PENTE

STARTED  
COMMENCE LE

COMPLETED  
TERMINE LE

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES			REMARKS REMARQUES
489.9	492.0	INTERMEDIATE METAVOLCANIC Similar to more massive intervals of unit above dyke. END OF HOLE.									
492.0											

DRILLED BY

SIGNED





SELCO MINING CORPORATION LIMITED

# DIAMOND DRILL RECORD

PROPERTY DIXIE PROSPECT 150-18

HOLE NO. 18-24

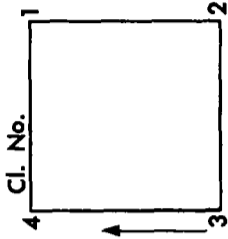
SHEET NO 1 of 2

LOCATION 22+50E  
16+00S

ELEVATION

TOTAL DEPTH 992'

CORE SIZE BQ



BEARING North

DIP COLLAR Collar: -72°

STARTED December 4, 1979 COMPLETED December 11, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS	REMARKS
0	47.0	CASING							
47.0	94.0	DACITE TUFF AND TUFF-BRECCIA Fine grained, grey-green, hard. Clasts generally more felsic than matrix.							
94.0	362.0	ANDESITE TUFFS Black to dark green, hornblende-rich with up to 5% garnet, minor magnetite+pyrrhotite. Well foliated at 35° to core axis.							
362.0	435.0	PORPHYRITIC FLOW Medium green, hornblende-rich with minor wisps of biotite. 3-5% irregular white phenocrysts to 5mm diameter. Lower contact sharp at 45° to core axis.							
435.0	470.0	ANDESITE TUFF Dark grey to black, garnet-hornblende tuffs. Moderately well bedded.							
470.0	481.0	METASEDIMENTS Very well bedded at 45-50° to core axis. Alternating pale grey and dark green beds with 5-10% pyrrhotite - conductive zone.							
481.0	540.0	DACITIC PYROCLASTICS Tuff and heterolithic breccias with minor more andesitic beds.							
540.0	702.0	DACITIC PYROCLASTICS Pale grey-green, hard, fine grained tuffs and minor breccia (heterolithic).							
702.0	706.0	METASEDIMENTS Calc-silicate with garnet-quartz-epidot+biotite assemblage. Coarse grained, massive.							

**TROPARI TESTS**

Depth	Azimuth	Corr. Az.	Dip
Collar		0°	-72°
-300'	352.5°	346.0*	-66°
-450'	003.5°	357.0	-64°
-685'	341.0°	348.0*	-61°
-850'	027°	020.0	-53°
-965'	352°	359.0	-48°

\* denotes unreliable azimuth readings due to presence of pyrrhotite.





**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO.  
NO. DU TROU 19-4

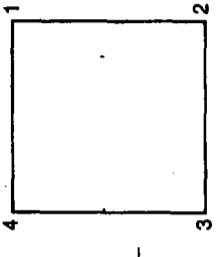
SHEET NO.  
NO. DE FEUILLE 1 of 6

LOCATION  
ENDROIT 18+00E 1+50N

PROPERTY  
PROPRIETE DIXIE LAKE PROSPECT (150-19) (KRL 448453)

BEARING  
DIRECTION 008°

DIP  
PENTE -56°



ELEVATION  
ELEVATION 452'

TOTAL DEPTH  
PROFONDEUR TOTALE BQ

CORE SIZE  
DIMENSION DE CARROTE

STARTED  
COMMENCE LE 28-6-79

COMPLETED  
TERMINE LE 2-7-79

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVRE	ASSAYS ANALYSES	REMARKS REMARQUES
0	75.0	OVERBURDEN							
75.0	110.1	Acid Tuff to Lapilli Tuff Light to medium grey in colour, moderately hard, coarse ash to locally lapilli sized fragments in a slightly chloritized and biotitic matrix (10-15% combined) 4-5 fibrous amphibole (tremolite?), massive 83.1-84.1 5-10% medium to coarse-grained garnet 83.1-83.2 slicken sided fracture with minor carbonate and py blebs along slip faces at 20° TCA With depth lapilli-sized fragments gradually decrease in abundance and matrix becomes more biotitic and locally more chloritic. 90.0-90.2 Fault at 15° TCA with 4-5mm gouge 95.2 Biotite content rapidly decreases to <5% Sericite content increases correspondingly to 10-15%. Sericite is concentrated mainly along healed fractures with ~5% sericite in matrix. Unit becomes light grey to creamy in colour. Weak foliation defined by matrix sericite at 25-30° TCA 106.2-108.7 Mafic Dyke? Sharp but irregular contact at low angles TCA. Medium-grained siliceous phenocrysts (fragments ?) in a heavily biotized, fine-grained matrix. Moderately foliated at 35-40° TCA. 108.7-110.1 Similar to tuff above dyke but with less sericite ~5%.						Tropari Tests Depth Az Corr Az Dip 150' 011° 004.5° -53 300' 014° 007.5° -49 440' 030.5° 024.0° -44 Excellent Core Recovery Very good RQD 1-2 fractures/foot commonly at intermediate to high angles  Texture appears tuffaceous	
10.1	124.5	Heavily Altered Acid Tuff Sharp upper contact at 30° TCA outlined by quartz vein.							

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-4

NO. DU TROU

SHEET NO. 2 of 6

NO. DE FEUILLE

LOCATION 18+00E 1+50N

ENDROIT

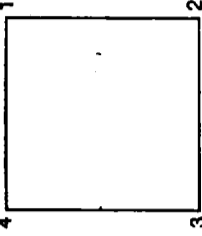
DIXIE LAKE PROSPECT (150-19)

PROPERTY

PROPRIETE

BEARING 008°  
DIRECTION

DIP -56°  
PENITE



ELEVATION  
ELEVATION

TOTAL DEPTH 452'

PROFONDEUR TOTALE

CORE SIZE

DIMENSION DE CARROTE

BQ

COMPLETED 2-7-79

STARTED 28-6-79

COMMENCE LE

TERMINE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES	REMARKS REMARQUES
		Dark grey in colour, relatively soft matrix, 15-20% coarse ash-sized siliceous fragments in a heavily altered fine-grained matrix. Alteration appears to have masked primary textures. Matrix consists of 60-65% biotite, 10-15% chlorite, 15-20% Tremolite and 1-2% garnet locally. 119.0-120.1 Fracture with minor gouge at 10° TCA in crumbly, biotite-rich zone							Excellent Core Recovery Good to Very Good RQD 1-2 fractures/foot commonly at intermediate angles (45-60°) TCA
14.5	137.9	Granodiorite Dyke Upper contact brecciated but sharp at 15° TCA, very hard, light grey to locally pinkish. Fine to medium-grained, 15-20% quartz, 65-75% feldspars, 4-5% biotite 2-3% sericite. Locally well foliated at 30° TCA. Crude and irregular banding locally due to the introduction of K-spar along fractures. Minor epidote along same fractures (ex.126.3-126.4)							Excellent Core Recovery Excellent RQD 1 fracture/foot commonly at high angles TCA (> 60°)
7.9	163.3	Heavily Altered Acid Tuff Sharp contact at 30° TCA Similar to interval between 110.1-124.5 140.1-144.4 20-25% equant lapilli-sized siliceous fragments in a heavily biotitized matrix. 145.8 Appearance of greenish, fine-medium-grained fibrous amphibole throughout matrix initially 4-5% but gradually increasing down hole. (Tremolite?) Locally forming coarse rosettes and aggregates (148.3-148.4) Moderate foliation at 25-30° TCA 158.0 Appearance of 1-2% fine-grained garnets							
3.3	214.7	Heavily Altered Dacite Lapilli Tuff As above but with 10-15% lapilli-sized siliceous							

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-4  
NO. DU TROU

SHEET NO. 3 of 6  
NO. DE FEUILLE

LOCATION 18+00E 1+50N  
ENDROIT

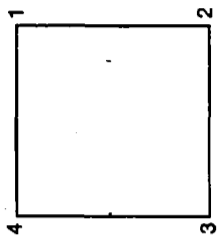
PROPERTY PROPRIETE  
DIXIE LAKE PROSPECT (150-19)

BEARING DIRECTION 008°  
DIP PENTE -56°

ELEVATION 452'  
TOTAL DEPTH PROFONDEUR TOTALE  
CORE SIZE DIMENSION DE CARROTE BQ

STARTED 28-6-79  
COMMENCE LE

COMPLETED 2-7-79  
TERMINE LE



FROM DE	TO A	DESCRIPTION	DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES	REMARKS REMARQUES
		fragments although indistinct due to alteration. Mottled white and dark grey in colour. At approx. 169.0 fibrous amphiboles locally comprise 20-25% of unit.								
		175.1 Matrix as outlined by fibrous amphibole appears highly contorted and at low angles TCA. Below this point amphiboles appear as randomly oriented acicular needles throughout matrix (5-6%) but seldom form rosettes or aggregates								
		188.0-189.1 Heavily biotitized matrix and highly foliated at 25-30° TCA with 15-20% medium-grained equant siliceous eyes								
		189.1 Alteration becomes less intense. Very little amphibole present, 2-3% chlorite and 5-10% biotite in matrix. Gradually with depth alteration intensifies again. Amphiboles re-appear at approx. 197.0 but do not exceed 5-6%. Biotite 10-12%								
14.7	308.0	Acid Tuff	Gradational upper contact. Very hard, ash-sized fragments with a slightly chloritized matrix. Moderate foliation at 30° TCA. Light to medium grey in colour. Commonly cut by 1-2cm wide, irregular quartzfeldspathic veins at variable angles. 221.5-223.3 20-25% lapilli-sized siliceous fragments 223.6-223.8 1-2% very fine-grained py disseminations 224.1 Matrix becomes more highly chloritized (10-12%) Chlorites is pervasive and fine-grained. Rock takes on dark green to greenish black colour.							Excellent Core Recovery Very good RQD 2-3 fractures/foot commonly at high angles TCA (760%) Relatively unaltered compared to DLT above

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-4  
NO. DU TROU

SHEET NO. 4 of 6  
NO. DE FEUILLE

LOCATION 18+00E 1+50N  
ENDROIT

PROPERTY DIXIE LAKE PROSPECT (150-19)  
PROPRIETE

BEARING 008°  
DIRECTION

DIP -56°  
PENTE

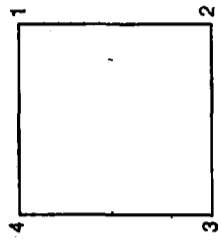
ELEVATION  
ELEVATION

TOTAL DEPTH 452'  
PROFONDEUR TOTALE

CORE SIZE  
DIMENSION DE CARROTE BQ

STARTED 28-6-79  
COMMENCE LE

COMPLETED 1-7-79  
TERMINE LE



FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ÉCHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVRE	ASSAYS ANALYSES	REMARKS REMARQUES
		235.3-244.4 Interval is cut by numerous coarse-grained quartz veins from 4-12cm wide at angles from 35-65° TCA							
		235.5-237.0 Fracture subparallel TCA with carbonate along slip faces							
		240.8 Alteration becomes much weaker and is limited to 5-10% very fine-grained chlorite in matrix							
		244.9-245.0 1-2% cpy in medium-coarse-grained blebs							
		248.1-251.7 Medium-grained gabbroic texture possibly due to recrystallization. Gradational upper and lower contacts							
		252.9 Unit is very weakly altered and regains a light greyish colour							
		255.8 Weak alteration in the form of 2-3% fibrous amphiboles and 3-4% combined biotite and chlorite							
		Slight increase in alteration with depth							
		Occasional tremolite rosette							
		269.3 Tuff coarsens slightly with ~5% lapilli-sized siliceous fragments. Alteration also shows a gradual but marked increase, particularly in tremolite content (5-10% locally)							
		270.0 Unit takes on a mottled appearance due to abundance of tremolite rosettes and aggregates (10-15%)							
		290.6-292.4 Intermediate to Mafic Dyke							
		Contacts sharp, upper at 10° TCA, lower at 45° TCA. Fine-grained, moderately hard, massive, greenish-grey in colour.							
		Below dyke unit is highly altered, predominantly to tremolite with abundant chlorite and lesser biotite							1-2 fractures/foot at predominantly high angles (>70%) TCA

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-4

NO. DU TROU

SHEET NO. 5 of 6

NO. DE FEUILLE

LOCATION 18+00E 1+50N

ENDROIT

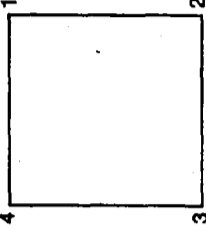
PROPERTY DIXIE LAKE PROSPECT (150-19)  
PROPRIETE

BEARING 008°  
DIRECTION

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STARTED 28-6-79  
COMMENCE LE

COMPLETED 2-7-79  
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ELEVATION  
ELEVATION

TOTAL DEPTH 452'  
PROFONDEUR TOTALE

CORE SIZE  
DIMENSION DE CARROTE BQ

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
308.0	329.9	Moderate foliation at 30-35° TCA. Original fabric of rock all but masked.  Recrystallized Mafic Tuff Gradational Contact over 3-4cm Fine to medium-grained, intrusive-like in appearance due to recrystallization. Mottled greenish-black and white. 25-30% quartz-feldspar, 65-70% mafics, predominantly chlorite-biotite with lesser hb. Commonly cut at variable angles by thin quartz veins. Moderately foliated at 30° TCA, relatively hard. 322.1-324.8 Band of intermediate tuffaceous material with ~5% lapilli-sized siliceous fragments Highly chloritized matrix, relatively soft Well foliated at 20-25° TCA							Similar to interval from 323.0-339.5 in Hole 19-1 Possible gabbroic intrusion?  Very good to excellent core recovery Excellent RQD ~1 fracture/ft predominantly at high angles TCA
329.9	340.5	Intermediate Porphyritic Dyke Sharp upper contact at 30° TCA outlined by quartz vein. Upper foot is chilled and none porphyritic 15-20% fine to coarse-grained equant feldspars in a moderately hard fine-grained feldspathic matrix with ~5% fine-grained chlorite clots. Well foliated at 25-30° TCA							Similar to interval from 463.0-480.2 in Hole 19-3
340.5		Acid Tuff Similar to unit at approx 269.0 Varying amounts of chlorite-biotite alteration up to 15-20% locally. Also 2-3% tremolite in more highly altered zones. Moderately foliated at 35° TCA. 340.5-344.4 Contaminated contact zone, locally highly biotitic with some quart-Kspar veining and a few feldspar phenocrysts.							Excellent Core Recovery Very good to Excellent RQD 1 fracture/ft predominantly at high angles TCA ( 70°)

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-4  
NO. DU TROU

SHEET NO. 6 of 6  
NO. DE FEUILLE

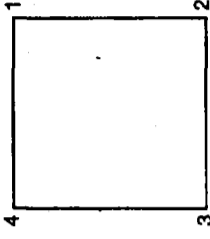
LOCATION 18+00E 1+50N  
ENDROIT

PROPERTY  
PROPRIETE

DIXIE LAKE PROSPECT (150-19)

BEARING 008°  
DIRECTION

DIP -56°  
PENTE



ELEVATION 452'  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE BQ  
DIMENSION DE CARROTE

STARTED 28-6-79  
COMMENCE LE

COMPLETED 2-7-79  
TERMINE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVE	ASSAYS ANALYSES	REMARKS REMARQUES
		371.3 Chlorite-Tremolite alteration becomes more pervasive throughout matrix							
		377.7-381.9 Intense silicification							
		381.9-406.3 Intense Tremolite-Biotite-Chlorite alteration Masks original texture. Locally strong foliation at 35-40° TCA. Tr cpy. Some short garnetiferous intervals (ex. 389.3-390.3 and 392.2-393.1) 10-15%, fine-grained. Alteration is present throughout but is concentrated in bands 10-20cm wide.							
		406.3-416.1 Intense silicification, extremely hard light green to locally brownish in colour							
		416.1-417.8 Heavily biotized felsic tuff							
		417.8-456.0 Highly variable in texture and composition from intensely altered (chl-biotite:ex. 441.1-442.2) to highly silicified. Locally garnetiferous (443.1-443.3). 5-10% fine to medium-grained orangy cordierite (?) from 448.0-450.2 Original texture masked by alteration							NOTE: 433.2-434.8 Ground core in heavy chlorite-biotite zone
56.0		E.O.H.							

# DIAMOND DRILL RECORD

HOLE NO. 19-4 Ext.

PROPERTY Dixie Prospect 150-19

(KRL 448453)

SHEET NO 1 of 2

BEARING

ELEVATION

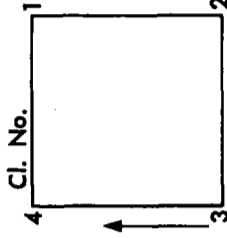
TOTAL DEPTH 452-662'

LOCATION

DIP COLLAR

CORE SIZE BQ

STARTED Nov. 22, 1979 COMPLETED Nov. 23, 1979



FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
452.0	517.3	<p>ALTERED ACID TUFF - LAPILLI TUFF</p> <p>As above.</p> <p>Generally moderate alteration consisting of 5-6% chlorite and 1-2% biotitic throughout matrix with short intervals of extreme alteration (ex: 466.0-467.3). More heavily altered intervals consist of 60-65% combined chlorite-biotite, 5% orangy cordierite(?) and locally up to 10% tremolite. Siliceous tuff to fine lapilli sized fragments occur throughout. Trace magnetite locally. Moderate foliation (bedding?) at 50' to core axis. Foliation completely masked in heavily altered intervals.</p> <p>472.0: With depth matrix alteration becomes more intense and heavily altered zones become more abundant. Trace 2% magnetite throughout, 5% locally (ex: ~493.0).</p> <p>495.0-497.5: Massive Biotite Alteration Strong foliation at 65° to core axis. Tremolite alteration becomes pronounced (10-15%) below this interval. Unit may be described as heavily altered below 495.0 (chlorite-biotite-tremolite).</p>							<p>TROPARI TEST</p> <p>Depth Azimuth Corr. Az. Dip 560' 356.0° 349.5° -40°</p> <p>Very good core recovery Good to very good R.Q.D. 1-2 fractures/foot commonly parallel to core axis.</p> <p>469.0: Possible fault at 60° to core axis Minor slickensiding, carbonate and limonitic stain on slip faces.</p> <p>472.0: Heavily chloritized zones typically exhibit fair to poor R.Q.D.</p>	
517.3	581.6	<p>ACID TUFF (Marked decrease in Alteration)</p> <p>Unit is generally unaltered to weakly altered with short moderately altered (chlorite-biotite+ tremolite) intervals. 10-12% fine sericite along foliation planes (60° to core axis) locally. Generally 2-4% sericite throughout. Isolated silicified zones at high angles to core axis. Fine, uniform, tuff. Trace chalcopyrite and pyrite associated with silicification locally. Moderate foliation (bedding?) at 55° to core axis.</p>								<p>Very good core recovery Very good R.Q.D. 1 fracture/foot commonly at high angles to core axis.</p>

# DIAMOND DRILL RECORD

HOLE NO. 19-4 Ext.

PROPERTY

Dixie Prospect 150-19 (KRL 448453)

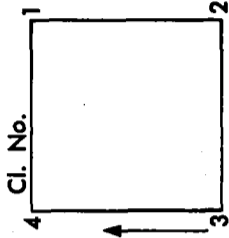
SHEET NO 2 of 2

BEARING

LOCATION

DIP COLLAR

ELEVATION  
TOTAL DEPTH  
CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
517.3	581.6	ACID TUFF (Continued) Altered zones become less abundant down hole. 552.0-558.5: Coarse ash to fine lapilli tuff with more highly altered matrix (biotite). Local chlorite-biotite alteration (557.1-558.5). 562.4-566.1: 12-15% fine to medium grained garnets in a siliceous coarse ash to lapilli-sized horizon. Well foliated at 60° to core axis. 576.1-581.6: More mafic, very fine grained, highly chloritized. Up to 15% medium grained garnets locally. Weak foliation at 60° to core axis. May represent chilled margin of metagabbro below.										May represent more permeable horizon which was more susceptible to alteration.
581.6	662.0	METAGABBRO Medium-grained, mottled white and dark green, moderate foliation at 60° to core axis. Chilled margin characterized by granodioritic dyke (582.1-583.1). Inhomogeneous texture marked by fine chloritized bands irregularly spaced parallel to foliation. 1-2% pyrite throughout. Very weakly magnetic locally. Unit becomes more massive and homogeneous with depth.										Very good core recovery Good to very good R.Q.D.  1-3 fractures/foot at variable angles to core axis. Slip faces locally exhibit carbonate coating.
662.0	662.0	END OF HOLE.										



**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-5

NO. DU TROU

SHEET NO. 1 of 6

NO. DE FEUILLE

LOCATION 10+00E 5+00N

ENDROIT

PROPERTY Dixie Lake Prospect 150-19

PROPRIETE

BEARING Grid N

DIRECTION

DIP -66°

PENTE

STARTED 2-7-79

COMMECE LE

COMPLETED 4-7-79

TERMINE LE

ELEVATION

ELEVATION

TOTAL DEPTH

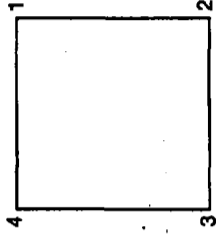
PROFONDEUR TOTALE

CORE SIZE

DIMENSION DE CARROTE

372'

BQ



FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVRE	ASSAYS ANALYSES	REMARKS REMARQUES	
0	33.0	OVERBURDEN								
33.0	223.5	Mafic Intrusive - Gabbro Medium grained, mottled dark green and white, moderately uniform. Composed of 30-35% feldspar, 50-55% amphiboles 10-15% chlorite, slightly magnetic, massive. Locally cut by thin quartz veins at variable angles TCA Local epidotization. 85.5-87.5 Granitic to granodioritic dyke, medium-grained. Sharp contacts, upper at 25° TCA, lower at 50° TCA 87.5-108.0 Much more mafic than above, only 10-15% feldspar in a more chloritic mass 108.0-111.3 Unit becomes fine-grained and appears more greyish in colour. Upper contact gradational, lower contact sharp at 25° TCA. 111.3-115.7 Unit develops strong foliation at 25° TCA 1% py in fine-grained disseminations along foliation planes. 115.7-120.0 Intense chlorite-biotite alteration accounting locally for 90-95% of the rock. Heavily fractured at from 30-45° TCA 122.9-126.5 Heavy chloritization with lesser biotite and sericite. Not accompanied by intense fracturing as above. 126.5 Unit regains texture and composition originally described 182.3-193.5 Similar to 108.0-111.3 with 20-30% medium-grained feldspathic phenocrysts locally 193.5-196.1 Heavy Chlorite-Biotite alteration as at 115.7-120.0 without intense fracturing								
<p><u>TROPARI TESTS</u></p> <p>Depth Az. Corr. Az. Dip                      160' 360.0° 353.5 -67°                      320' 351.0° 344.5 -63°</p> <p>Excellent Core Recovery                      Very good RQD                      1-2 fractures/ft commonly at high angles TCA.                      Fractures may have py along slip faces ex: 33.0-33.8, fracture at 10° TCA. or rusty, limonitic stain, ex: 37.7</p> <p>Possible fault zone?                      Very poor RQD</p>										

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO.  
NO. DU TROU 19-5

SHEET NO.  
NO. DE FEUILLE 2 of 6

LOCATION  
ENDROIT 10+00E 5+00N

PROPERTY  
PROPRIETE

Dixie Lake Prospect 150-19

BEARING  
DIRECTION Grid N.

DIP  
PENTE -66°

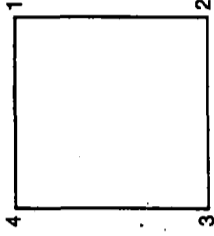
STARTED  
COMMENCE LE 2-7-79

COMPLETED  
TERMINE LE 4-7-79

ELEVATION  
ELEVATION

TOTAL DEPTH  
PROFONDEUR TOTALE 372'

CORE SIZE  
DIMENSION DE CARROTE BQ



FROM DE	TO A	DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURRE	ASSAYS ANALYSES		REMARKS REMARQUES
		196.1-209.4 Fine-grained with locally medium-grained feldspar phenocrysts similar to 182.3 - 193.5. Generally highly silicified and very hard, some soft chloritic seams. Dark green in colour with pinkish or whitish feldspar phenocrysts. Locally very highly fractured at variable angles TCA. Both contacts sharp, upper at 20° TCA, lower at 25° TCA 209.4-213.3 Granitic Dyke Medium to coarse-grained, very hard, inhomogeneous texture. Commonly greyish but locally pinkish in colour. 213.3-223.5 Similar to 196.1-209.4 but locally much more mafic. Chlorite up to 35-40% locally destroys or masks original texture. Foliation as described by chlorite is sub-parallel to TCA in the heavily altered zones to 20-25% TCA otherwise.								Porphyritic Dyke?  Very poor RQD
223.5	244.6	Acid to Intermediate Tuff Upper contact sharp at 20° TCA Unit consists of alternation of fine-grained, greyish very hard, rhyodacitic tuff with bands of coarse ash to locally lapilli-sized siliceous fragments in a heavily biotitized fine-grained matrix. Strong foliation varies from 40-45° TCA in the less altered bands down to 15-20° TCA in the biotitic bands Biotitic bands may be garnetiferous (ex. 229.1-229.4) while siliceous bands are locally sericitic.								Very good to excellent Core Recovery Variable RQD from very good in siliceous bands to fair in biotitic bands 1-2 fractures/foot in siliceous bands 3-4 fractures/foot in biotitic bands commonly parallel to foliation Alteration appears to have collapsed original fabric of the rock.

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO.  
NO. DU TROU 19-5

SHEET NO.  
NO. DE FEUILLE 3 of 6

LOCATION  
ENDROIT 10+00E 5+00N

PROPERTY  
PROPRIETE

Dixie Lake Prospect 150-19

BEARING  
DIRECTION Grid N.

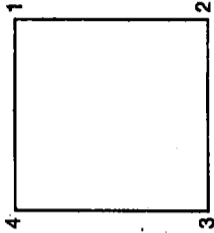
DIP -66°  
PENITE

STARTED 2-7-79 COMPLETED 4-7-79  
COMMENCE LE TERMINE LE

ELEVATION  
ELEVATION

TOTAL DEPTH 373'  
PROFONDEUR TOTALE

CORE SIZE  
DIMENSION DE CARROTE BQ



FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOUVRE	ASSAYS ANALYSES		REMARKS REMARQUES
		233.9-237.7 15-20% medium-grained equant, indistinct quartz eyes in siliceous, slightly sericitic band.								
		240.6-242.1 Highly biotitized lapilli tuff								
244.6	263.4	Granodiorite Dyke Sharp upper contact at 20° TCA Fine-medium-grained, very hard, salt and pepper in colour. Weak to locally moderate foliation at 25° TCA Local pinkish K-spar veining at high angles TCA.								Excellent Core Recovery Excellent RQD 1 fracture/foot predominantly at very high angles TCA (>70°)
263.4	290.9	Acid Tuff Upper contact sharp at 40° TCA and marked by quartz veining and short zone of intense biotization. Fine-grained, very hard, rhyodacitic to dacitic, moderately foliated at 30° TCA, greyish colour Becomes progressively more altered down hole from 4-5% biotite in matrix and 4-5 chlorite concentrated in fine seams at approx. 265.5 to 5-10% biotite and up to 15% chlorite at 276.8. Chloritic alteration is concentrated in short zones whereas biotite, although showing increases in chloritic zones, tends to be more pervasive. More heavily biotitic zones also have 5-10% fine-grained garnet. At approx. 283.5 tuff becomes coarser. Coarse-ash sized fragments predominate with 5-10% fine-lapilli fragments								Possibly highly recrystallized mafic tuff Excellent Core Recovery Excellent RQD 1 fracture/ft commonly at high angles TCA
290.9	310.8	Mafic Intrusive - Gabbro Relatively sharp contact at 50° TCA Medium to coarse-grained. Similar to unit described at 33.0, possibly slightly more chloritic. Moderate foliation at 35° TCA. Commonly quite uniform with some slightly more mafic zones.								

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-5

NO. DU TROU

SHEET NO.

NO. DE FEUILLE 4 of 6

LOCATION 10+00E 5+00N  
ENDROIT

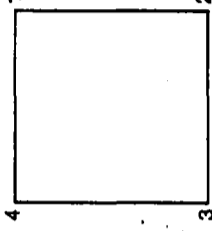
PROPERTY  
PROPRIETE

Dixie Lake Prospect 150-19

BEARING Grid N.  
DIRECTION

DIP -66°  
PENITE

STARTED 2-7-79 COMPLETED 4-7-79  
COMMENCE LE TERMINE LE



ELEVATION  
ELEVATION  
TOTAL DEPTH 372'  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVRE	ASSAYS ANALYSES	REMARKS REMARQUES
310.8	310.8	Contaminated lower contact zone							
310.8	361.7	Heavily Altered Acid to Intermediate Tuff Upper Contact sharp at 20°TCA marked by highly chloritized and biotized zone with lesser tremolite 310.8-312.7 Highly fractured sub parallel TCA Ash to coarse-ash sized siliceous fragments (15-20%) in a highly altered matrix (Biotite-chlorite-tremolite) Locally (ex314.6-315.3) alteration completely masks original texture. Moderate foliation at 30°TCA in less altered zones. 319.4 Bleached, siliceous zone grading into a porphyritic zone from 320.6-321.8 consisting of 55-60% medium-coarse grained rounded chloritic phenocrysts in a fine-grained feldspathic matrix Below porphyritic section, bleached zone gradually becomes altered such that at 325.6 the unit consists of 25-30% tremolite aggregates, 20-25% coarse biotite and 5-10% chlorite 326.3-328.2 40-45% fine-medium-grained chlorite 328.2-361.7 Coarse-ash to lapilli-sized siliceous fragments (25-40%);locally variable) in a heavily altered chlorite-biotite with lesser tremolite matrix. Moderate foliation at 30-35°TCA. Unit varies locally in intensity of alteration and in abundance of siliceous fragments.							
361.7	372.0	Granite to Quartz Monzonite Upper contact lost in ground core. greyish-pink, medium-grained, uniform, weak foliation at 35°TCA. Isolated mafic bands parallel to foliation, 2-4cm wide							

Note: Ground Core from  
361.5-362.0  
Very good core recovery  
Fair to good RQD  
1-3 fractures/ft at high angles TCA

# DIAMOND DRILL RECORD

HOLE NO. 19-5 **EXTN'**

**PROPERTY** DIXIE LAKE PROSPECT

150-19

SHEET NO. 5 of 6

ELEVATION

LOCATION 10+00E

BEARING

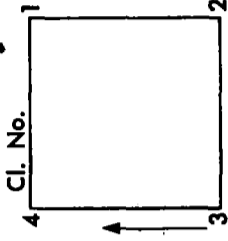
TOTAL DEPTH 499'

5+00N

DIP COLLAR

CORE SIZE BQ

STARTED July 15, 1979 COMPLETED July 16, 1979



FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag oz/t	Pb oz/t	
372.0	391.1	GRANITE TO QUARTZ MONZONITE As described from 361.7 to 372.0 in 19-5. Well chilled finer-grained margin from 390.2-391.1, moderately foliated at 35° to core axis.										
391.1	397.8	HEAVILY ALTERED TUFF Similar to interval from 310.8-361.7 in 19-5. Sharp upper contact at 40° to core axis. 5% siliceous coarse-ash sized fragments in a heavily chloritized matrix. Strong foliation at 30° to core axis.										
397.8	405.5	DISSEMINATED MINERALIZATION ZONE Very heavily altered, 20-25% fine tremolite, 5-10% biotite 20-25% chlorite. Mineralization consists of pyritic disseminations and stringers commonly at low angles to core axis (15-20%), thin bands of sphalerite (12-15%) 3-4% blebs of chalcopyrite and 2-4% pyrrhotite also in blebs. Foliation varies from 40° to core axis to sub-parallel to core axis and is commonly bent and contorted suggesting slumping.	0743	397.8	401.6	3.8	3.8	.13	2.20	.58	Nil	TROPARI TEST Depth Azimuth Corr. Az. Dip 480' 356.0° 349.5° -60°  391.5-392.0- Ground core  Very Good Core Recovery Good R.Q.D. 1-2 fractures/foot at intermediate angles to core axis (45-60°)
			0744	401.6	405.5	3.9	3.9	.49	.79	.82	Nil	
405.5	411.9	HEAVILY ALTERED TUFF Alteration consists of fine tremolite 5-10%, 10-15% biotite and 5-10% chlorite. Less altered segments consist of relatively siliceous tuffaceous fragments. Minor mineralization consists of 5% pyrite disseminations 1-2% chalcopyrite, 1-2% pyrrhotite and trace sphalerite.										
411.9	423.5	MINERALIZED ZONE Sulphides account for 75-80% of interval and consist of 35-40% sphalerite, up to 12% chalcopyrite locally, 15-20% pyrrhotite and 5-10% pyrite. Sulphides occur in contorted bands in a heavily chloritized and similarly contorted fine-grained matrix. Tremolite aggregates locally predominate alteration of ground mass.	0745	411.9	415.5	3.6	3.6	3.84	6.03	3.09	Nil	
			0746	415.5	419.1	3.6	3.6	.16	8.71	.41	Nil	
			0747	419.1	423.5	4.4	4.4	.68	4.64	.76	Nil	



# DIAMOND DRILL RECORD

**PROPERTY** DIXIE LAKE PROSPECT 150-19

**HOLE NO.** 19-6

**SHEET NO** 1 of 7

**LOCATION** 10+00E  
4+00N

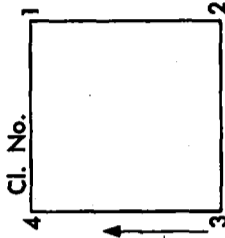
**BEARING** 008°

**DIP COLLAR** -66°

**ELEVATION**

**TOTAL DEPTH** 572'

**CORE SIZE** BQ



**STARTED** July 17, 1979 **COMPLETED** July 24, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS																			
0	33.0	OVERBURDEN																											
33.0	270.7	<p>MAFIC INTRUSIVE - META-GABBRO</p> <p>Medium to coarse-grained, mottled greenish-black and white. Moderately hard, massive, moderately magnetic. 35-40% feldspar, 45-50% hornblende, 5-10% chlorite. Locally finer-grained and more heavily chloritized (20-25%) and 5-10% biotite. 1-2% fine-grained pyrite dissemination. Weak foliation locally at 35-40° to core axis.</p> <p>53.2-71.5: fine-grained mafic dyke</p> <p>Both contacts sharp and at low angles to core axis (10-15°). Slight chilled margin along contacts. Similar in composition to surrounding gabbro. Weak to moderate foliation variable from 40° to subparallel to core axis.</p> <p>90.2-99.2: gabbro is much more mafic with up to 40% chlorite. Short intervals contain up to 20% biotite.</p> <p>102.8: Unit becomes very homogeneous, medium-grained subhedral texture. Composition remains constant (40% feldspar, 40-45% hornblende, 5% chlorite, 1-2% magnetite. Weak foliation at 35° to core axis.</p> <p>155.1-159.1: fracture parallel to core axis.</p> <p>184.0-186.4: slight coarsening and increase in feldspar content.</p> <p>195.4-200.2: magnetite increases up to 70% accompanied by increased chloritization and 3-4% pyrite stringers and disseminations along foliation at 20° to core axis.</p> <p>Short intervals below magnetite zone show marked increases in chloritization, up to 20% (ex. 202.5-208.8) generally very homogeneous both in texture and composition as described at 102.8.</p>							<p><b>TROPARI TESTS</b></p> <table border="1"> <thead> <tr> <th>Depth</th> <th>Azimuth</th> <th>Corr. Az.</th> <th>Dip</th> </tr> </thead> <tbody> <tr> <td>150'</td> <td>353.5°</td> <td>347.0°</td> <td>-62°</td> </tr> <tr> <td>300'</td> <td>359.5°</td> <td>353.0°</td> <td>-62°</td> </tr> <tr> <td>450'</td> <td>356.5°</td> <td>350.0°</td> <td>-61°</td> </tr> <tr> <td>567'</td> <td>353.0°</td> <td>346.5°</td> <td>-59°</td> </tr> </tbody> </table> <p>Excellent Core Recovery Very good to Excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis. Auto-intrusion (?). A few high angle fractures have small amounts of carbonate along slip faces. This foliation at a lower than usual angle to core axis is present only in this high magnetite content interval.</p>	Depth	Azimuth	Corr. Az.	Dip	150'	353.5°	347.0°	-62°	300'	359.5°	353.0°	-62°	450'	356.5°	350.0°	-61°	567'	353.0°	346.5°	-59°
Depth	Azimuth	Corr. Az.	Dip																										
150'	353.5°	347.0°	-62°																										
300'	359.5°	353.0°	-62°																										
450'	356.5°	350.0°	-61°																										
567'	353.0°	346.5°	-59°																										

# DIAMOND DRILL RECORD

HOLE NO. 19-6

PROPERTY DIXIE LAKE PROSPECT

150-19

SHEET NO 2 of 7

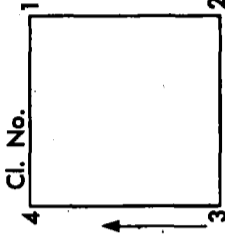
ELEVATION

TOTAL DEPTH

CORE SIZE

BEARING

DIP COLLAR



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS
33.0	270.7	<p>MAFIC INTRUSIVE - META-GABBRO (Continued)</p> <p>213.1: some feldspar take on a creamy to pinkish colour (10-15%).</p> <p>233.0-223.1: granitic dykelet at 30° to core axis.</p> <p>234.5-235.1: fine-grained mafic dyke at 25° to core axis.</p> <p>241.9-242.0: pinkish carbonate at 25° to core axis.</p> <p>249.7-250.9: possible fault at high angles to core axis (75-80°). Heavily fractured core, locally up to 3mm clayey gouge. Core ground from 250.4-250.9.</p> <p>265.0: locally some fine epidote veinlets at high angles to core axis.</p> <p>270.2-270.7: fine-grained contact phase strongly foliated at 30° to core axis.</p>									
270.7	509.4	<p>GRANITE TO GRANODIORITE</p> <p>Fine-grained, foliated K-spar-rich contact phase grading downwards into a fine to medium-grained granodiorite well foliated at 30-35° to core axis. Subhedral granular texture. Composition 5-15% quartz, 5-10% K-spar, 35-40% plagioclase, 35-40% mafics (biotite and hornblende), 2-3% sericite. Very hard. Slat and pepper coloured with local pinkish colour, K-spar content is variable and is locally concentrated in thin bands parallel to or at higher angles to core axis than the prevailing foliation.</p> <p>305.8-317.5: highly altered interval. Interval contains locally up to 90% combined biotite-chlorite. Strongly foliated at very low angles to core axis, locally subparallel to core axis in high biotite-chlorite zones. Generally 50-60% biotite-chlorite with isolated quartz-feldspar bands.</p>									<p>Very good to Excellent Core Recovery Excellent R.Q.D. &lt;1 fracture/foot at intermediate angles to core axis (35-45°).</p> <p>Very good Core Recovery Fair to good R.Q.D. 2-3 fractures/foot parallel to foliation.</p>



# DIAMOND DRILL RECORD

**PROPERTY** DIXIE LAKE PROSPECT 150-19

**HOLE NO.** 19-6

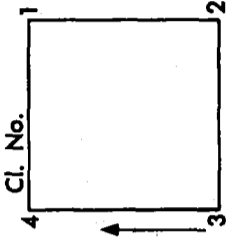
**SHEET NO** 3 of 7

**LOCATION** 10+00E  
4+00N

**ELEVATION**

**TOTAL DEPTH**

**CORE SIZE**



**BEARING**

**DIP COLLAR**

**COMPLETED**

**STARTED**

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
270.7	509.4	<p>GRANITE TO GRANODIORITE (Continued)</p> <p>317.5: granodiorite similar to unit above alteration zone with the following differences</p> <ul style="list-style-type: none"> <li>- fine-grained</li> <li>- fewer mafics (20-25%)</li> <li>- slightly more granitic in composition (K-spar: plagioclase ratio approaches 1).</li> </ul> <p>Foliated at 25-30° to core axis.</p> <p>K-spar content is locally variable as above.</p> <p>368.3-398.8: Alteration Zone</p> <p>Similar to interval from 305-8-317.5.</p> <p>Consists of unaltered zones interbanded with zones of high biotite-chlorite content.</p> <p>Foliation varies from 25° to core axis in unaltered granitic segments to 12-15% to core axis in high biotite-chlorite intervals. Contacts within the section are commonly not sharp resulting in a gradation from unaltered to highly altered host rock.</p> <p>398.8: granodiorite similar to interval from 270.7-305.8. Well foliated at 25° to core axis. Locally a very distinct pinkish banding occurs (402.7-415.7) a high angles to core axis caused by high K-spar concentrations.</p> <p>423.2-425.7: Mafic Dyke</p> <p>Sharp contacts, upper at 10° to core axis, lower at 25° to core axis. Porphyritic texture; medium-grained biotite phenocrysts in a fine-grained chloritized matrix. Well foliated parallel to contacts.</p> <p>428.8-433.2: Mafic Dyke</p> <p>Similar to above, sharp upper contact at</p>							<p>Unit appears more highly fractured than interval from 270.7-305.8</p> <p>2-3 fractures/foot commonly at high angles to core axis.</p> <p>Good to very good Core Recovery</p> <p>Very good R.Q.D. in less altered intervals ranging to fair R.Q.D. in highly altered sections.</p> <p>1-2 fractures/foot commonly at moderate to high angles to core axis in less altered sections.</p> <p>3-4 fractures/foot parallel to foliation in more highly altered zones.</p>	

# DIAMOND DRILL RECORD

**PROPERTY** DIXIE LAKE PROSPECT 150-19

**HOLE NO.** 19-6

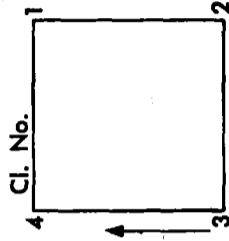
**SHEET NO** 4 of 7

**LOCATION** 10+00E  
4+00N

**ELEVATION**

**TOTAL DEPTH**

**CORE SIZE**



**BEARING**

**DIP COLLAR**

**COMPLETED**

**STARTED**

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
270.7	509.4	<p>GRANITE TO GRANODIORITE (Continued)</p> <p>428.8-433.2: Mafic Dyke (Continued) 20° to core axis with minor epidote, lower contact sharp at 25° to core axis. Well foliated subparallel to core axis. Less chloritic, more biotitic, than above.</p> <p>433.6-434.7: Mafic Dyke Similar to above, sharp irregular upper contact at 10° to core axis, lower contact sharp at 20° to core axis.</p> <p>434.7: granodiorite similar to interval from 317.5-368.3 except with only 5-10% K-spar. Weak foliation from 25-30° to core axis.</p> <p>462.6-474.5: tuffaceous band or intermediate dyke (?). Moderately hard, fine-grained, dark-green in colour. Strongly foliated from 30-35° to core axis. Sharp contacts; upper at 40° to core axis, lower at 35° to core axis.</p> <p>474.5: granodiorite similar to interval from 317.5-368.3. Upper portion is K-spar-rich (25-30%) but grades downwards into a granodiorite (5-10% K-spar). Moderately foliated from 30-35° to core axis. Towards bottom contact foliation becomes very strong at 40-45° to core axis.</p> <p>503.1-503.8: Altered Tuff Band Dark green, moderately soft, strongly foliated parallel to sharp upper and lower contacts at 45° to core axis. Heavily chloritized, intermediate in composition.</p> <p>503.8: Granodiorite Strongly foliated at 40-45° to core axis. Becomes fine grained and loses its granitic appearance.</p>									<p>Good Core Recovery Fair R.Q.D. 2-4 fractures/foot commonly parallel to foliation.</p>	

## DIAMOND DRILL RECORD

HOLE NO. 19-6

PROPERTY DIXIE LAKE PROSPECT

150-19

ELEVATION

SHEET NO 5 of 7

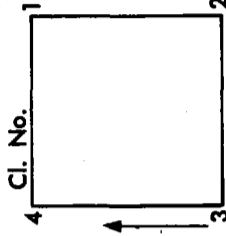
BEARING

TOTAL DEPTH

LOCATION 10+00E  
4+00N

DIP COLLAR

CORE SIZE



Cl. No.

COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag oz/t	Pb oz/t	
270.7	509.4	GRANITE TO GRANODIORITE (Continued) 503.8: Granodiorite (Continued) Looks gneissic or sheared. Local heavily chloritized pyrrhotite and pyrite zones (e.g. 505.7-505.8). Generally biotite-rich (up to 10-15%).										
509.4	568.2	ALTERED TUFF Light greenish, moderately soft. Indistinct upper contact, hidden by pyrite, pyrrhotite and chalcopyrite blebs and disseminations. Heavy chloritization has all but destroyed original texture. Strong foliation at 40° to core axis. 10-15% pyrite and pyrrhotite stringers and stretched blebs parallel to foliation, 5% chalcopyrite blebs near upper and lower contacts. 510.4-516.0: Mineralized Zone Consists of 70-75% sulphide minerals. Both contacts appear sharp, upper at 10° to core axis, lower at 25° to core axis. Sulphides are as follows: Pyrite 40-45% as short massive vuggy sections and recrystallized disseminations and blebs. Pyrrhotite 15-20% fine-grained, strongly associated with sphalerite. Sphalerite 30-35% as convoluted and slumped bands. Chalcopyrite 3-5% as medium-grained isolated blebs associated with sphalerite-pyrrhotite. Matrix is highly chloritized, soft and is locally slumped or convoluted as well.	0752	509.4	510.4	1.0	1.0	1.48	.80	1.34	Nil	Good to very good Core Recovery Fair to good R.Q.D. 2-3 fractures/foot at variable angles to core axis.
			0753	510.4	513.1	2.7	2.7	.17	4.95	.41	Nil	
			0754	513.1	516.1	3.0	3.0	.22	4.95	.41	Nil	





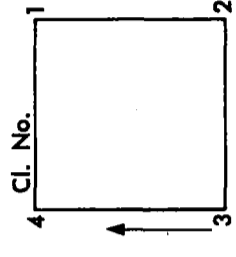
# DIAMOND DRILL RECORD

**PROPERTY** DIXIE LAKE PROSPECT (150-19)

**HOLE NO.** 19-7  
**SHEET NO** 1 of 5  
**LOCATION** 12+00E  
 4+50N

**BEARING** 010°  
**DIP COLLAR** -65°

**ELEVATION**  
**TOTAL DEPTH** 502'  
**CORE SIZE** BQ



**STARTED** July 24, 1979 **COMPLETED** August 3, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
0	40.0	OVERBURDEN								
40.0	185.0	<p>MAFIC INTRUSIVE-META-GABBRO</p> <p>Medium-grained mottled greenish-black and white in colour, moderately magnetic, commonly massive but locally foliated at 30° to core axis.</p> <p>35-40% feldspar, 5-10% biotite, 5% chlorite, 45-50% hornblende, 2-3% magnetite, 3-4% chlorite.</p> <p>61.1-69.0: Granodiorite Dyke</p> <p>Both contacts sharp at 20° to core axis and marked by both a well developed chilled margin in the dyke and a mafic reaction zone in the host gabbro.</p> <p>Well developed foliation at 20° to core axis.</p> <p>Medium grained commonly but displaying an inhomogeneous texture.</p> <p>Gabbro below dyke appears slightly finer-grained than above, is more strongly foliated and more biotitic locally.</p> <p>91.8-93.3: Magnetite content increases up to 75% with 3-4% pyrite disseminations and increased chlorite. Strong foliation from 25-30%. Numerous quartz veinlets and stringers cut gabbro at variable angles to core axis. Chlorite and biotite content of unit vary locally up to 20% combined. Gabbro is quite massive and only weakly foliated locally.</p>							<p><u>TROPARI TESTS</u></p> <p>Depth Azimuth Corr. Az. Dip</p> <p>417' 005° 358.5° -54</p> <p>502' 006° 359.5° -54</p> <p>Excellent Core Recovery</p> <p>Very good to excellent R.Q.D.</p> <p>1-2 fractures/foot commonly at high angles to core axis (&lt;60°)</p>	
185.0	208.4	<p>ALTERED TUFF</p> <p>Sharp upper contact at 30° to core axis. Unit consists of a series of interlayered heavily altered sections and lightly to moderately altered sections. Contacts are commonly gradational. Heavily altered sections</p>								Similar to interval in 19-6 from 195.4-200.2.

# DIAMOND DRILL RECORD

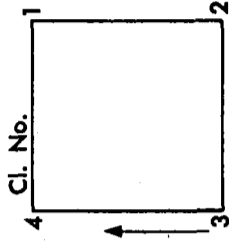
HOLE NO. 19-7  
 SHEET NO 2 of 5  
 LOCATION 12+00E  
 4+50N

PROPERTY DIXIE LAKE PROSPECT (150-19)

BEARING

DIP COLLAR

ELEVATION  
 TOTAL DEPTH  
 CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
185.0	208.4	ALTERED TUFF (Continued) consist of up to 70% combined biotite and (lesser) chlorite locally accompanied by 10-15% tremolite. Original texture is completely destroyed except for some quartz eyes or siliceous fine-lapilli sized fragments. Less altered sections are coarse-ash to locally fine-lapilli sized tuffs with a biotite and chlorite rich matrix. Faint foliation occurs locally at 30° to core axis. Interval from 185.9-187.7 strongly resembles Q.F.P. from 150-3 prospect. Strong foliation in this interval from 20-25° to core axis.								Very good to Excellent Core Recovery Very good R.Q.D. 1-2 fractures/foot commonly at high angles to core axis in the less altered sections and at intermediate angles to core axis in heavily altered sections.
208.4	346.9	GRANODIORITE Sharp upper contact at 30° to core axis, very lightly chilled. Fine to medium-grained, granitic in composition near upper contact grading downwards into a granodiorite. Well foliated at 20-25° to core axis. 5-10% K-spar, 15-20% quartz, 10-15% biotite, 55-60% plagioclase, 4-5% hornblende, 1-2% chlorite. K-spar in granodiorite sections is concentrated in thin bands commonly along fractures at variable angles to core axis. 217.4-220.7: moderately altered tuff band. Upper contact ground, lower contact sharp at 35° to core axis. Tuff locally affected by potassium metasomatism and locally "granitized". 227.7-228.6: Mafic Dyke Both contacts sharp; upper at 20° to core axis, lower at 25° to core axis. Granodiorite below dyke becomes strongly foliated at 20-25° to core axis with 45% K-spar present generally and is light greyish in colour rather than pinkish as above.								Excellent Core Recovery Fair to good R.Q.D. 2-4 fractures/foot at variable angles to core axis.







# DIAMOND DRILL RECORD

HOLE NO. 19-7

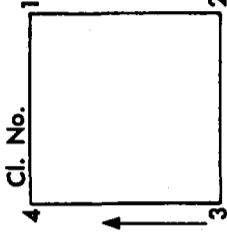
PROPERTY DIXIE LAKE PROSPECT (150-19)

SHEET NO 5 of 5

BEARING

LOCATION 12+00E  
4+50N

DIP COLLAR



ELEVATION  
TOTAL DEPTH  
CORE SIZE

COMPLETED

STARTED

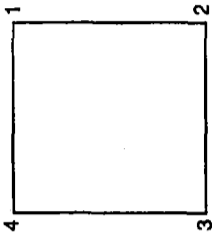
ROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
2.4	496.0	ALTERED TUFF (Continued) 463.3-464.7: mafic tuff well foliated at 25-30° to core axis. Gradational contacts. 475.5: tuff gradually gets more biotitic with depth, up to 20% near lower contact. Chlorite decreases to 2-4%.								
16.0	502.0	GRANITE TO QUARTZ MONZONITE Similar to interval from 346.9-372.4.								Very Good Core Recovery Very Good to Excellent R.Q.D. 1-2 fractures/foot at variable but commonly high angles to core axis.
12.0		END OF HOLE.								

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-8  
NO. DU TROU  
SHEET NO. 1 of 6  
NO. DE FEUILLE  
LOCATION 7+25E  
ENDROIT 5+50N

PROPERTY DIXIE PROSPECT 150-19  
PROPRIETE  
BEARING 002°  
DIRECTION  
DIP -72°  
PENITE

ELEVATION  
ELEVATION  
TOTAL DEPTH 512'  
PROFONDEUR TOTALE  
CORE SIZE BQ  
DIMENSION DE CARROTE

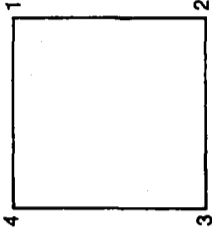


STARTED Nov. 18, 1979  
COMMENCE LE  
COMPLETED Nov. 22, 1979  
TERMINE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG-UEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES	REMARKS REMARQUES
0	50.5	OVERBURDEN							
50.5	89.0	GRANITE-GRANODIORITE Medium-grained, subhedral granular texture. Greyish with more pinkish, K-feldspar rich, areas typically along minor fractures. Some K-spar rich dykelets at variable angles to core axis. A few metagabbroic xenoliths. Slight chilling adjacent to lower contact.							TROPARI TESTS Depth Azimuth Corr. Az. Dip 290' 355° 348.5° -70° Very good core recovery Generally good RQD with some heavily broken zones (ex. 70.1-72.0). Two fracture sets 1 - Predominant at high angles to core axis (80-90°) 2 - Subordinate, from sub-parallel to low angles to core axis. Very good core recovery Very good RQD 1 fracture/foot commonly at high angles to core axis (60-80°)
89.0	147.3	MAFIC INTRUSIVE-META-GABBRO Sharp upper contact at 40° to core axis. Medium-grained massive, mottled greenish black in color, slightly magnetic. Predominantly chloritized amphiboles, pyroxenes and plagioclase with some minor K-spar near contact (1-2%). Fine-grained pyrite (1-2%) throughout. Towards lower contact, moderate foliation developed due to alignment of 5-10% biotite at 30° to core axis. Biotite tends to be concentrated adjacent to fractures, parallel to the foliation (ex. 142.6).							Good to very good core recovery Very good RQD 1 fracture/foot at variable but commonly intermediate angles to core axis (45-60°)
147.3	189.3	ACID TUFF TO LAPILLI TUFF Indistinct Upper Contact Siliceous coarse tuff to fine lapilli-sized fragments in a fine-grained chlorite-biotite-rich matrix. Well foliated at 40° to core axis (Bedding?). Unit is inhomogeneous both texturally and compositionally. Size and abundance of fragments varies from 20-75%. Chlorite-biotite varies from 10-15%, fine grained to 70% and medium-grained locally (ex. 165.0-166.0). 147.3-153.8: marked increase in fine-lapilli in a sericite-biotite matrix. Resembles quartz-porphry or crystal tuff. Lower contact is gradational.							

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE



HOLE NO. 19-8  
NO. DU TROU  
SHEET NO. 2 of 6  
NO. DE FEUILLE  
LOCATION 7+25E  
ENDROIT 5+50N

PROPERTY  
PROPRIETE

DIXIE PROSPECT 150-19

BEARING  
DIRECTION

DIP  
PENTE

STARTED  
COMMENCE LE

COMPLETED  
TERMINE LE

FROM DE	TO A	DESCRIPTION DESCRIPTION	SAMPLE NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG. UEUR	CORE RECOV. ERED CARROTE RECOUVRE	ASSAYS ANALYSES	REMARKS REMARQUES
47.3	189.3	ACID TUFF TO LAPILLI TUFF (Continued) 166.5-167.6: 10-15% fine garnets in an interval marked by numerous fragments and very little chlorite-biotite. 169.2-170.6: Possible fault zone Heavily fractured core, some limonitic staining and minor gouge.							
89.3	233.1	MAFIC INTRUSIVE-META GABBRO Sharp upper contact at 65° to core axis. Similar to interval from 89.0-147.3. Faint foliation at 35-40° to core axis locally. 206.2-206.5: Granodiorite dyke at 40° to core axis. Towards lower contact 2-3% K-spar phenocrysts are concentrated along minor slips and fractures. 226.5-233.1: Unit becomes highly chloritized and develops a strong foliation sub parallel to core axis. 232.0-233.1: Possible fault. Heavily fractures core, minor gouge.							Excellent core recovery Very good to excellent RQD 1 fracture/foot commonly at high angles to core axis (60-90°).
33.1	335.5	GRANITE TO GRANODIORITE Possible fault contact at 60° to core axis. Evidence of slickensliding along contact. Similar to unit from 50.5-89.0. Granitic (K-spar rich) near contact becoming granodioritic downhole. Weak to moderate foliation at 40° to core axis. 240.4-245.6: Meta-gabbroic interval similar to 226.5-233.1. Chlorite-rich with 10-15% biotite as medium-grained chlots throughout. Upper contact sharp at 20° to core axis, lower contact sharp at 30° to core axis. 246.8-250.3: Mixed zone, well foliated at 50° to core axis.							Poor RQD  Excellent core recovery Excellent RQD 1 fracture/foot at high angles to core axis.

DRILLED BY  
SONDAGE PAR

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JOURNAL PAR

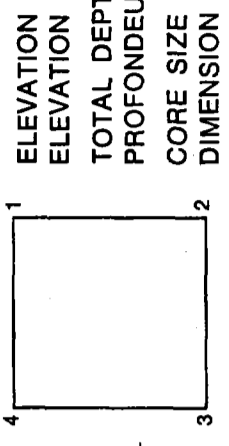
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**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-8  
NO. DU TROU  
SHEET NO. 3 of 6  
NO. DE FEUILLE  
LOCATION 7+25E  
ENDROIT 5+50N

PROPERTY DIXIE PROSPECT 150-19  
PROPRIETE

BEARING  
DIRECTION  
DIP  
PENTE



STARTED  
COMMENCE LE  
COMPLETED  
TERMINE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG- UEUR	CORE RECOV- ERED CARROTE RECOURVE	ASSAYS ANALYSES		REMARKS REMARQUES
335.1	335.5	GRANITE TO GRANODIORITE (Continued) 250.3: Below this point the K-spar content is variable such that the unit varies from locally granitic to quartz-monzonite to locally granodiorite. 5-6% fine biotite interstitial to quartz and feldspar. Massive, grey to pinkish grey in colour, fine-medium grained. 315.2-318.6: Fine-grained phase cut by 2cm wide quartz vein at high angles to core axis.								Excellent core recovery Very good RQD 1-2 fractures/foot commonly at high angles to core axis. Minor carbonate along some slip faces.
35.5	352.8	MAFIC TUFF (ALTERED ACID TUFF?) Sharp upper contact at 40° to core axis. 5-10% sub-angular, indistinct siliceous fragments (coarse tuff) in a pervasively chloritized matrix. Green to greenish black, moderately hard, massive. Chlorite is fine-grained, evenly distributed and may not be a result of alteration related to ore deposition.								Excellent core recovery Very good RQD 1-2 fractures/foot at variable but commonly high angles to core axis (>45°)
42.8	433.9	ALTERED ACID TUFF Upper contact marked by an increase in indistinct siliceous tuffaceous and fine lapilli fragments and a more siliceous matrix. Greenish grey commonly (darker green in more heavily altered zones). Unit varies from essentially unaltered in the upper few feet to heavily altered locally. Alteration minerals consist of predominantly felted clots and aggregates of chlorite with isolated biotitic clots and possibly minor whitish cordierite in the intensely altered intervals. Alteration marks original texture. 1-2% pyrite, pyrrhotite and chalcopyrite disseminations in less altered intervals.								Excellent core recovery Very good RQD 1-2 fractures/foot at variable but commonly high angles to core axis (>45°)

DRILLED BY  
SONDAGE PAR

SIGNED  
JOURNAL PAR

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

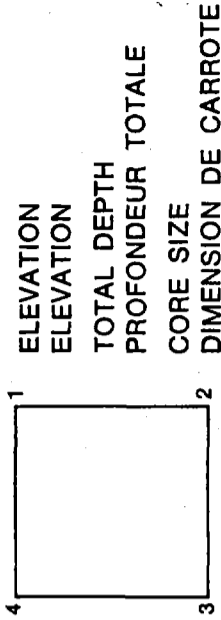
HOLE NO. 19-8  
NO. DU TROU 4 of 6  
SHEET NO. 7+25E  
NO. DE FEUILLE 5+50N  
LOCATION ENDROIT

PROPERTY DIXIE PROSPECT 150-19  
PROPRIETE

BEARING DIRECTION

DIP PENTE

STARTED COMMENCE LE  
COMPLETED TERMINE LE



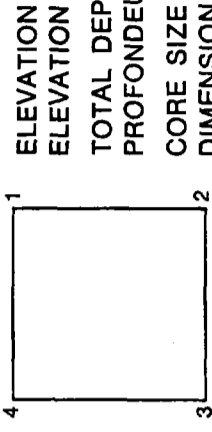
FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOURVE	ASSAYS ANALYSES				REMARKS REMARQUES
								Cu	Zn	Ag	Pb	
32.8	433.9	ALTERED ACID TUFF (Continued)										
		370.8-378.8: Heavily altered zone, chlorite-biotite ± cordierite, medium-grained.										
		378.8-380.6: Fine-grained, weakly altered, possible sericite 1-2% medium-grained magnetite throughout. Moderate foliation at 35° at core axis.										
		380.6-383.7: Moderate alteration, 15-20% pervasive chlorite, magnetite persists.										
		383.7-404.8: Weak to moderate alteration. Pervasive chlorite, 1-2% fine pyrite-pyrrhotite disseminations. Bedding at 50° to core axis at 391.7 outlined by lapilli fragments. Typically fine tuffaceous material. Magnetite persists.										
		404.8-433.9: Heavily Altered Interval Combined alteration minerals account for 80% of the unit locally. Alteration consists of medium grained chlorite and biotite blots and aggregates as well as lesser (5%) rounded whitish cordierite. Alteration completely masks original texture except for 10-20% siliceous fine-lapilli sized fragments throughout. 2-3% pyrite-pyrrhotite disseminations, 1-2% magnetite, 1-2% tremolite(?) locally.										
33.9	449.8	MINERALIZED ZONE										
		433.9-440.0: Magnetite Zone 75-80% fine to locally medium grained sub-hedral to euhedral magnetite. Moderate foliation at 30° to core axis. 6-8% pyrite-pyrrhotite disseminations, trace chalcopyrite. Matrix consists of very fine chlorite	0795 0796	433.9 437.0	437.0 440.0	3.1 3.0	3.1 3.0	1.03 .92	.06 .06	.01 .01	Excellent core recovery Good to very good RQD 1-3 fractures/foot commonly at high angles to core axis.	

**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-8  
NO. DU TROU  
SHEET NO. 5 of 6  
NO. DE FEUILLE  
LOCATION 7+25E  
ENDROIT 5+50N

PROPERTY DIXIE PROSPECT  
PROPRIETE 150-19

BEARING DIRECTION  
DIP PENTE



COMPLETED  
TERMINE LE

STARTED  
COMMENCE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONG-UEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES				REMARKS REMARQUES
								Cu	Zn	Ag	Pb	
33.9	449.8	MINERALIZED ZONE (Continued) 433.9-440.0: and accicular amphibole (anthophyllite). 440.0-449.8: Disseminated Sulphide Zone 12-15% coarse subhedral recrystallized pyrite cubes, 8-10% fine-medium grained blebs and disseminations of pyrrhotite, 1-2% chalcopyrite disseminations. 1-2% magnetite cubes. Heavily altered (chlorite-biotite) matrix with isolated siliceous coarse tuff to fine lapilli fragments (5-10%).	0797 0798 0799	440.0 443.0 446.0	443.0 446.0 449.8	3.0 3.0 3.8	3.0 3.0 3.8	.02 .13 .40	.22 .27 .41	.12 .01 .06	.01 .01 .01	
49.8	480.4	ALTERED TUFF Greyish in less intervals to greenish-grey in more altered zones. Fine, moderately hard. Moderate foliation (possible bedding) at 40° to core axis. Alteration varies from weak (5-15% pervasive chlorite) in upper half of interval to moderate (20-30% chlorite, 5% biotite) in lower half. 451.7: Possible fault at 30° to core axis. Heavily fractured core, minor gouge, heavily chloritized. 469.3-474.5: Lapilli Tuff Less altered intervals characterized by 35-40% coarse tuff to fine lapilli sized fragments in a fine, weakly chloritized matrix. Isolated coarse lapilli fragments. 471.4-472.6: Pervasively chloritized interval, 4-5% fine-medium-grained magnetite associated with chlorite. Cut at 20° to core axis by quartz vein. 474.5-480.4: Fine tuff, pervasively chloritized (15-25%).	0800	472.1	472.4	0.3	0.3	.04	.06	.06	.01	Excellent core recovery Excellent RQD <1 fracture/foot commonly parallel to foliation (bedding?)

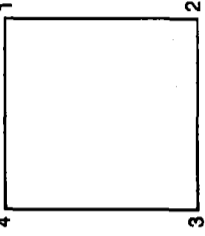
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**DIAMOND DRILL RECORD**  
**JOURNAL DE SONDAGE DE DIAMANT**

HOLE NO. 19-8  
NO. DU TROU  
SHEET NO. 6 of 6  
NO. DE FEUILLE  
LOCATION 7+25E  
ENDROIT 5+50N

PROPERTY DIXIE PROSPECT 150-9  
PROPRIETE  
BEARING DIRECTION  
DIP PENTE



ELEVATION  
ELEVATION  
TOTAL DEPTH  
PROFONDEUR TOTALE  
CORE SIZE  
DIMENSION DE CARROTE

STARTED COMMENCE LE  
COMPLETED TERMINE LE

FROM DE	TO A	DESCRIPTION	SAMPLE NO. NO. D'ECHANT.	FROM DE	TO A	LENGTH LONGUEUR	CORE RECOVERED CARROTE RECOUVRE	ASSAYS ANALYSES		REMARKS REMARQUES
1.4	512.0	GRANITE Sharp upper contact at 55° to core axis. Pinkish-grey, fine-medium grained, massive. END OF HOLE.								Excellent core recovery Excellent RQD 1 fracture/foot at variable but commonly high angles to core axis.
2.0										



# DIAMOND DRILL RECORD

**PROPERTY** DIXIE PROSPECT 150-19 (KRL 448453)

**HOLE NO.** 19-9

**SHEET NO** 1 of 9

**LOCATION** 18+00E  
0+50N

**BEARING** Grid North

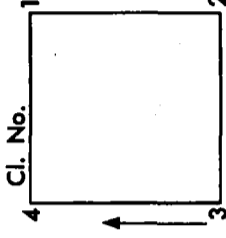
**DIP COLLAR** -61°

**ELEVATION** 626'

**TOTAL DEPTH** 626'

**CORE SIZE** BQ

**STARTED** Nov. 23, 1979 **COMPLETED** Nov. 26, 1979



FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
0	67.0	OVERBURDEN								
67.0	183.6	ACID TUFF ( RHYODACITE) Grey moderately hard, massive, fine-grained. A few indistinct tuffaceous fragments in a slightly (5%) biotized quartz-feldspar matrix. May be slightly recrystallized(?). Matrix appears to have a granular texture. With depth granular texture becomes slightly more pronounced and a weak foliation at 40-45° to core axis becomes evident. Slight increase in biotite (10-12%). 97.0-100.0 : 5-10% indistinct siliceous lapilli-sized fragments. 100.2 : 8-10% fine, clotted whitish microclites. 119.6-120.1: Moderately altered band parallel to foliation, 35-40% combined chlorite-biotite with 5% anthophyllite (tremolite?) locally. 125.0 : Local change in foliation to 30-35% to core axis. Texture appears less recrystallized similar to original description at 67.0. 135.0-319.8: Coarse lapilli-sized, indistinct, siliceous fragments, possibly stretched parallel to foliation. 139.8-142.9: Quartz porphyry dyke Indistinct contacts, well foliated at 50° to core axis. Highly siliceous, fine grained matrix. Local sericitic bands parallel to foliation. 1% fine pyrite disseminations along some slip faces. 142.9-143.6: Indistinct lapilli as above. 155.4-156.2: Alteration as at 119.6-120.1 in an interval characterized by 10-12% indistinct fine-lapilli-sized fragments. Biotite in matrix increases slightly (~15%)								
<p><b>TROPARI TESTS</b></p> <p>Depth Azimuth Corr. Az. Dip 300' 359.5° 353.0° -57° 620' -50°</p> <p>Very good Core Recovery Good to very good R.Q.D. 1-2 fractures/foot at high angles to core axis. 69.3: Possible fault at 50° to core axis, slickensided with 3-4mm clayey gouge. / 74.5-77.3: Highly fractured at high angles to core axis. Poor R.Q.D</p> <p>Unlike other porphyry dykes in this area in that it is feldspar free.</p> <p>Minor carbonate along many slip faces</p>										

SELCO MINING CORPORATION LIMITED

# DIAMOND DRILL RECORD

DIXIE PROSPECT 150-19 (KRL 448453)

## PROPERTY

HOLE NO. 19-9

SHEET NO. 2 of 9

LOCATION 18+00E  
0+50N

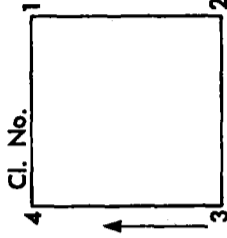
BEARING Grid North

DIP COLLAR -61°

ELEVATION

TOTAL DEPTH 626'

CORE SIZE BQ



STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
183.6	349.4	<p><b>ALTERED ACID TUFF</b> Alteration is patchy and discontinuous. Unit is characterized by irregularly spaced alternations of relatively unaltered tuff and heavily altered tuff. Altered intervals consist of up to 45-50% combined fine-medium-grained biotite-chlorite with locally 10-15% radiating aggregates of tremolite (anthophyllite?). Alteration completely masks original texture except for a few siliceous fine-lapilli sized fragments locally. Unaltered zones are very fine-grained, locally garnetiferous, massive and dacitic to rhyodacitic in composition. Biotite content ranges from 5-15%.</p> <p>223.3-235.4: Massive alteration zones are absent, 10-12% pervasive biotite-chlorite throughout matrix</p> <p>253.4-238.2: Aphanitic to very fine, light greyish interval. Gradational contacts, siliceous, very hard, possibly bleached.</p> <p>243.6-244.0: Coarse quartz-K-spar vein at high angles to core axis.</p> <p>248.1-255.8: Banded inhomogeneous interval. Moderately chloritized tuff cut by numerous quartz + K-spar dykelets at variable angles to core axis.</p> <p>256.6-257.1: Quartz vein with 1-2% pyrite at 30° to core axis. Heavily fractured core.</p> <p>263.5-284.5: Gradual but marked increase in silicification and sericitization. 10-12% fine biotite throughout matrix, 5-10% sericitic predominantly as fine, discontinuous stringers and wisps. Well foliated at 40° to core axis. Locally very well developed network of fine quartz ± sericite stringers at variable</p>								<p>Very good Core Recovery Very good R.Q.D. 1-2 fractures/foot commonly at high angles to core axis.</p> <p>Intensity of alteration appears to be a function of original permeability. Finer-grained more densely packed tuffs are much less altered than the coarser tuffs and lapilli tuffs.</p>

SELCO MINING CORPORATION LIMITED

# DIAMOND DRILL RECORD

DIXIE PROSPECT 150-19 (KRL 448453)

**PROPERTY**

HOLE NO. 19-9

SHEET NO 3 of 9

LOCATION 18+00E  
0+50N

BEARING Grid North

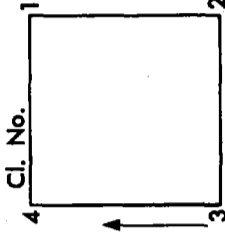
DIP COLLAR -61°

ELEVATION 626'

TOTAL DEPTH BQ

CORE SIZE BQ

STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979



FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS	
183.6	349.4	ALTERED ACID TUFF (Continued) angles to core axis. The discontinuous nature of many of the stringers suggests that they may represent stretched siliceous lapilli. 284.5 : Bleached interval. Numerous 1-2cm wide irregularly spaced bleached bands parallel to foliation at 50° to core axis. Unaltered bands are highly siliceous and display a fine saccharoidal texture with 5-10% very fine biotite throughout. 303.7-309.8: Tonalite dyke Sharp upper contact at 25° to core axis. Indistinct lower contact. Fine to medium grained, massive. 309.8-349.4: Patchy, discontinuous alteration, similar to original description at 183.6. Locally, 1-2% fine, honey-coloured sphalerite and trace chalcopyrite disseminations (ex: 332.8-334.1) commonly associated with less altered intervals. 10-30% indistinct siliceous coarse tuff to lapillitized fragments throughout less altered intervals. Strong foliation (bedding) at 40° to core axis. Less altered greatly predominate over heavily altered zones.									
349.4	473.9	RECRYSTALLIZED ACID TUFF Gradational upper contact Fine to medium grained, saccharoidal quartz-feldspar biotite. Very hard, weakly foliated at 30° to core axis. 1-2% fine garnets locally. Unit is quite variable in colour (light to dark grey), grain size and quartz:feldspar ratio.									Very good Core Recovery Generally very good R.Q.D., locally fair to poor, 1-4 fractures/foot commonly at high angles to core axis.

# DIAMOND DRILL RECORD

HOLE NO. 19-9

PROPERTY DIXIE PROSPECT 150-19

(KRL 448453)

SHEET NO 4 of 9

BEARING Grid North

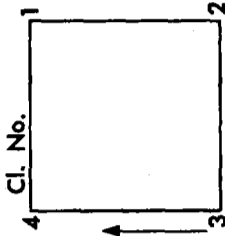
LOCATION 18+00E  
0+50N

DIP COLLAR -61°

ELEVATION

TOTAL DEPTH 626'

CORE SIZE BQ



STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS
349.4	473.9	<p>RECRYSTALLIZED ACID TUFF (Continued)</p> <p>372.2-379.2: Fine-grained, moderately biotized (10-15%) interval with locally coarse garnet megacrysts (5-6%). Moderate foliation at 50° to core axis. Faint banding locally due to biotitic concentrations parallel to foliation.</p> <p>383.4-417.5: Granitized Interval Relatively unaltered phase of saccharoidal recrystallized tuff cut by numerous K-spar veinlets at variable angles to core axis. K-spar concentrations extend a few millimeters on either side of healed fractures but locally (ex: 402.3-403.1) K-spar is quite pervasive. Upper few feet (383.4-387.2) are characterized by a faint greenish-pink colour possibly due to epidotization of feldspars(?). 4-5% sericite quite common with K-spar. Locally moderate foliation at 25-30° to core axis.</p> <p>417.5-419.6: Fine grained heavily chloritized, strongly schistose interval. Foliation at 20° to core axis. Both contacts sharp, upper parallel to foliation, lower at 30° to core axis, possibly fulated. 1-2mm clayey gouge and slickensiding along lower contact.</p> <p>419.6-434.6: As above schistose interval but with less granitization. K-spar commonly confined to immediate vicinity of healed fractures. Unit is fine-medium grained, uniform and intrusive in appearance. Weak foliation at 40° to core axis.</p>								<p>Good Core Recovery Poor to good R.Q.D. 1-5 fractures/foot commonly at high angles to core axis.</p> <p>407-412.0: Fault Zone Very heavily fractured core with areas of clayey gouge. Minor carbonate along some slip faces.</p> <p>May represent mafic dyke.</p>	

# DIAMOND DRILL RECORD

HOLE NO. 19-9

PROPERTY DIXIE PROSPECT 150-19

(KRL 448453)

SHEET NO 5 of 9

18+00E  
0+50N

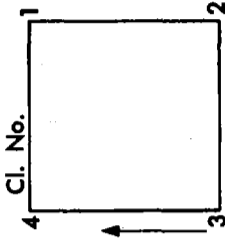
BEARING Grid North

DIP COLLAR -61°

ELEVATION

TOTAL DEPTH 626'

CORE SIZE BQ



STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag Oz/t	Au Oz/t	
349.4	473.9	RECRYSTALLIZED ACID TUFF (Continued) 434.6-472.6: Gradually recrystallization weakens and the unit takes on more of a tuffaceous texture. Foliation becomes stronger at 40° to core axis. 4-5% fine sericite commonly along foliation planes. Some indistinct weakly bleached bands. Minor granitization persists. Trace chalcopyrite disseminations. Minor granitization persists. Trace chalcopyrite disseminations locally. 472.6-473.9: Minor fine-grained garnet, slight increase in chloritization with a few isolated 1-2cm wide garnet-chlorite rich bands at 40° to core axis + magnetite.										
473.9	498.5	ALTERED ACID TUFF Marked increase in alteration minerals resulting in a fine to medium grained felted aggregate of anophyllite, chlorite and magnetite. 1-2% disseminated pyrite throughout. 475.8-476.7: Massive chlorite-biotite alteration. Medium grained biotite clots in a chloritic matrix. 1-2% pyrite, 4-5% magnetite. 476.7-481.2: Mineralized Interval 50-55% magnetite, 15-20% anophyllite and varying amounts of pyrite (5-20%) chlorite (10-20%) and sphalerite (0-20%). Sphalerite occurs as honey coloured distinct bands 3-5cm in width at 40° to core axis. 481.2-482.0: Massive chlorite-biotite similar to 475.8-476.7. 482.0-495.3: Relatively unaltered Acid Tuff similar to 471.0-472.6 except with local zone of garnet megacrysts (5-6%).	0901	477.6	479.4	1.8	1.8	.06	.06	9.30	Tr.	Good to very good Core Recovery Good to very good R.Q.D. 1-2 fractures/foot commonly parallel to foliation.

## DIAMOND DRILL RECORD

HOLE NO. 19-9

PROPERTY DIXIE PROSPECT 150-19

(KRL 448453)

SHEET NO 6 of 9

BEARING Grid North

18+00E

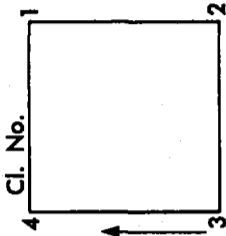
DIP COLLAR -61°

LOCATION 0+50N

ELEVATION

TOTAL DEPTH 626'

CORE SIZE BQ



STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag oz/t	Au oz/t	
73.9	498.5	ALTERED ACID TUFF (Continued) Fine chlorite-biotite matrix alteration. Locally trace of honey coloured sphalerite. Appears to become slightly more mafic (intermediate) down hole. 495.3-496.1: Increase in fine chlorite-biotite alteration (25-30%) and with garnet megacrysts (5-10%). 496.1-498.5: Intense sericite-chlorite alteration, moderately soft, light green, 2-3% euhedral magnetite cubes, 4-5% disseminated pyrite.										
98.5	554.2	MINERALIZED ZONE 498.5-501.9: Marked by increase in magnetite (35-50%) in an anthophyllite-chlorite matrix. 2-3% disseminated pyrite. 501.9-505.6: Increase in magnetite up to 80%. 505.6-508.8: Similar to interval from 498.5-501.9. 508.8-510.6: Massive magnetite with 5-10% reddish-brown sphalerite. 4-5% pyrite disseminations, trace chalcopyrite. 510.6-512.5: As above with 4-5% chalcopyrite disseminations. 512.5-514.0: Decrease in magnetite to 20-30%. Altered felsic matrix, 4-5% chalcopyrite, 12-15% sphalerite, 8-10% pyrite. Mineralization foliated at 45-50° to core axis. 514.0-527.8: Decrease in chalcopyrite to 1-2%. Chalcopyrite occurs as isolated stringers and disseminations, 10-15% magnetite. 527.8-528.9: Massive sphalerite-pyrite in slumped bands. 25-30% reddish-brown, fine grained sphalerite, 45-50% recrystallized medium grained pyrite cubes, 25-30% fine grained chloritized matrix.	0902	498.5	501.9	3.4	3.4	.01	.21	0.01	Tr.	
			0903	501.9	505.6	3.7	3.7	.01	.27	0.01	Tr.	
			0904	505.6	508.8	3.2	3.2	.01	.73	0.01	Tr.	
			0905	508.8	510.6	1.8	1.8	.07	5.30	0.06	Tr.	
			0906	510.6	512.5	1.9	1.9	.75	1.83	0.41	Tr.	
			0907	512.5	514.0	1.5	1.5	2.32	6.58	1.34	0.03	
			0908	514.0	519.0	5.0	5.0	.24	5.94	0.12	Tr.	
			0909	519.0	524.0	5.0	5.0	1.03	1.74	0.41	Tr.	
			0910	524.0	527.7	3.7	3.7	.04	1.00	0.06	Tr.	
			0911	527.7	528.9	1.2	1.2	.03	12.83	0.06	Tr.	

SELCO MINING CORPORATION LIMITED

## DIAMOND DRILL RECORD

PROPERTY DIXIE PROSPECT 150-19

(KRL 448453)

19-9

HOLE NO.

7 of 9

SHEET NO

18+00E

LOCATION

0+50N

BEARING Grid North

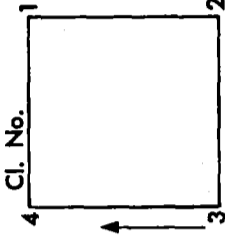
DIP COLLAR -61°

ELEVATION

TOTAL DEPTH 626'

CORE SIZE BQ

STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979



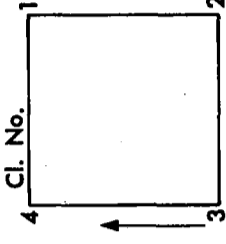
FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS				REMARKS
								Cu %	Zn %	Ag oz/t	Au oz/t	
98.5	554.2	MINERALIZED ZONE (Continued)										
		528.9-532.1: Heavily altered (65-70% combined chlorite-biotite) acid tuff. 4-5% disseminated pyrite-pyrrhotite.	0912	528.9	532.1	3.2	3.2	.05	0.19	0.01	Tr.	
		532.1-533.1: Massive pyrrhotite band with 20-25% fine-grained sphalerite throughout, 5-10% pyrite, 10-15% magnetite. Sharp contacts, both at high angles to core axis (80-90°).	0913	532.1	533.1	1.0	1.0	.06	12.09	0.06	Tr.	
		533.1-534.6: Similar to 528.9-532.1	0914	533.1	537.1	4.0	4.0	.04	0.45	0.06	Tr.	
		534.6-544.1: Similar to 498.5-501.9 with 50-55% magnetite well foliated at 40° to core axis. 5-6% pyrite disseminations, trace chalcopyrite, 1-2% sphalerite.	0915	537.1	542.0	4.9	4.9	.10	0.52	0.06	Tr.	
		544.1-544.8: Heavily altered interval, 5-6% pyrite-pyrrhotite disseminations.	0916	542.0	544.0	2.0	2.0	.13	0.69	0.06	Tr.	
		544.8-546.8: Stringer-zone type mineralization 5-10% chalcopyrite, 15-20% recrystallized, coarse pyrite cubes, 15-20% pyrrhotite, 2-3% sphalerite as stringers subparallel to core axis in a heavily chloritized matrix. Evidence of slumping and contortion of matrix.	0917	544.0	544.8	0.8	0.8	.13	0.69	0.06	Tr.	
		546.8-548.3: Massive chlorite-biotite + sericite alteration, 4-5% magnetite, 2-3% chalcopyrite, 4-5% vuggy pyrite.	0918	544.8	546.8	2.0	2.0	2.44	1.23	2.17	Tr.	
		548.3-552.1: Magnetite rich interval similar to 534.6-544.1. 10-15% reddish brown fine sphalerite in distinct 4-5cm bands locally. 1-2% chalcopyrite in stringers. Decrease in magnetite down hole with corresponding increase in fine chlorite alteration.	0919	546.8	548.3	1.5	1.5	1.26	0.79	0.41	Tr.	
			0920	548.3	552.1	3.8	3.8	0.13	2.25	0.01	Tr.	

## DIAMOND DRILL RECORD

HOLE NO. 19-9  
SHEET NO 8 of 9  
LOCATION 18+00E  
0+50N

PROPERTY DIXIE PROSPECT 150-19 (KRL 448453)

BEARING Grid North  
DIP COLLAR -61°



ELEVATION

TOTAL DEPTH 626'

CORE SIZE BQ

STARTED Nov. 23, 1979 COMPLETED Nov. 26, 1979

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS	
								Cu %	Zn %	Ag oz/t		Au oz/t
498.5	554.2	MINERALIZED ZONE (Continued) 552.1-554.2: Massive pyrrhotite band with 2-3% sphalerite, trace chalcopyrite, 10-15% recrystallized, coarse pyrite. Well foliated at 45° to core axis. Sharp lower contact at 40° to core axis.  ALTERED ACID TUFF Weak to moderate alteration. Pervasive chlorite-biotite (5-10%). Weak foliation at 35° to core axis. Some minor biotitic clotting and chlorite wisps along foliation planes. 1-2% fine garnets locally. 559.7-582.9: Highly silicified zone. Silicification is locally pervasive but predominantly takes the form of fine stringers from sub-parallel to 40° to core axis. Silicification masks original texture although locally (574.8) a few undistinct siliceous lapilli occur. 584.3-587.2: Massive alteration. 60-70% combined chlorite biotite. 587.2-589.8: 10-12% fine-grained garnet, 5-10% finely disseminated magnetite. 596.0-599.9: Moderate to locally heavy chlorite alteration. Trace pyrite-pyrrhotite disseminations. Moderate foliation at 30° to core axis. 599.9-626.0: Variable alteration. Commonly weak with short intervals of moderate (up to 30% alteration minerals) alteration. Predominant alteration mineral is chlorite with minor biotite in more heavily altered zones. Alteration gradually decreases with	0921	552.1	554.2	2.1	2.1	0.25	1.09	0.12	Tr.	Excellent Core Recovery Excellent R.Q.D. 1 fracture-foot at intermediate to high angles to core axis (45-80°).  Excellent R.Q.D. 1 fracture/foot at high angles to core axis.





# DIAMOND DRILL RECORD

**HOLE NO.** 19-10  
**SHEET NO** 1 of 7  
**LOCATION** 20+00E  
 0+05N

**PROPERTY** DIXIE PROSPECT 150-19 (KRL 448453)

**BEARING** North

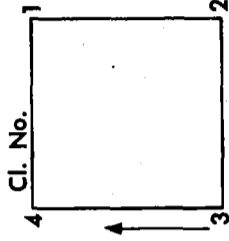
**DIP COLLAR** -60°

**ELEVATION**

**TOTAL DEPTH** 752'

**CORE SIZE** BQ

**STARTED** November 26, 1979 **COMPLETED** November 29, 1979



FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
0	95.5	OVERBURDEN								
95.5	141.1	ACID TUFF Fine, moderately hard, locally 10-15% indistinct siliceous lapilli-sized fragments in a weakly biotized matrix. Weak foliation at 30-35° to core axis. Matrix consists of fine, granular quartz + feldspar with 10-12% biotite throughout. Possibly recrystallized. Locally 5-8% very fine whitish microcrysts (Leucoxene?) (ex: 108.1-113.6). 113.6-116.3: Very fine-grained phase 122.1-141.1: Moderately altered Acid Tuff Alteration is patchy and discontinuous, unaltered intervals are similar to above but with fine pervasive chlorite-biotite (5-10%) throughout matrix. Altered intervals contain up to 30% combined chlorite-biotite with 5-6% anthophyllite locally.								ACID TESTS 200' 59° 400' 52.5° 572' 50° 670' 47°  Very good core recovery Poor to good R.Q.D. 1-4 fractures/foot commonly at high angles to core axis. R.Q.D. much improved below 102.5 114.8-115.2: Heavily chloritized fracture of low angle to core axis.
141.1	226.5	ACID TUFF (Weakly Altered) Moderately foliated at 50° to core axis. Very fine tuff, lacks granular texture (recrystallization?) of overlying tuff. Alteration consists of short, isolated chlorite-biotite-rich bands locally with some areas of very weak but pervasive chloritization (5-10%). Colour varies gradually with alteration from pale greyish in unaltered zones to greenish-grey in pervasively chloritized intervals. Trace chalcopyrite locally, spatially related to quartz veining (ex: 141.5-142.2). With depth (ex: 176.3-177.0) chlorite-biotite alteration bands become slightly more common. Pervasive alteration shows no significant increase with depth.								Excellent core recovery Very good R.Q.D. 1 fracture/foot commonly parallel to foliation

**DIAMOND DRILL RECORD**

HOLE NO. 19-10

PROPERTY DIXIE PROSPECT 150-19 (KRL 448453)

SHEET NO 2 of 7

(KRL 448453)

LOCATION 20+00E  
0+05N

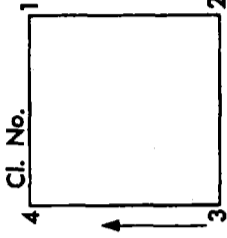
BEARING

DIP COLLAR

ELEVATION

TOTAL DEPTH

CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
226.5	237.3	<p>MODERATELY ALTERED ACID TUFF</p> <p>Contact is gradational over a few inches. Similar to very fine tuff above but with numerous quite heavily altered bands. Contacts of alteration bands are gradational. Foliation in the vicinity of these bands is quite often slumped and locally subparallel to core axis. Alteration consists of up to 60% chlorite-biotite locally with minor fibrous amphibole (anthophyllite?).</p>								
237.3	317.1	<p>ACID TUFF (Weakly Altered)</p> <p>Similar to interval from 141.1-226.5. Generally, this interval is slightly more pervasively altered. Mode-rate foliation at 45-50° to core axis. Locally matrix is dominated by a fine, accicular amphibole unlike that related to alteration.</p> <p>307.6-313.8: Very fine to aphanitic phase of metagabbro below.</p>								<p>241.2-241.7: Possible fault. Heavily fractured core, 3-4mm gouge, minor carbonate along slip faces</p>
317.1	371.1	<p>METAGABBROIC DYKE</p> <p>Contacts are indistinct but appear conformable to foliation. Very pronounced aphanitic chill margin. Generally fine-grained, massive, dark greenish-black in colour when aphanitic, mottled dark green and white otherwise. 5-6% fine biotitic locally. Cut by quartz rich vein-like structures at variable angles to core axis.</p> <p>343.2-344.2: Possible fault at 40° to core axis. Fractured and bleached interval. 3-4mm gouge, slickensiding.</p> <p>362.9-363.5: Fractured core at low angles to core axis. 2-3mm calcite along slip faces.</p>								<p>Excellent core recovery Excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis (&gt;60°)</p> <p>Quartz segregations may represent recrystallized siliceous host rock inclusions.</p>

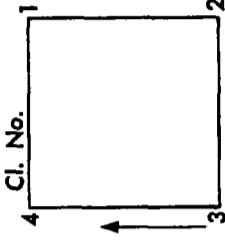
# DIAMOND DRILL RECORD

**PROPERTY** DIXIE PROSPECT 150-19

**HOLE NO.** 19-10

**SHEET NO** 3 of 7  
**LOCATION** 20+00E  
 0+05N

**ELEVATION**  
**TOTAL DEPTH**  
**CORE SIZE**



**BEARING**  
**DIP COLLAR**

**COMPLETED**

**STARTED**

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS		REMARKS
371.1	378.9	<p><b>CONTACT ZONE</b>                      Core is heavily fractured at variable but commonly low angles to core axis. Unit is a mixture of mafic material from the metagabbroic dyke and siliceous material from the tuff below. Foliation is slumped, contorted and commonly at low to subparallel angles to core axis. Quartz- carbonate veining locally.</p>								<p>Good core recovery                      Poor R.Q.D.                      2-5 fractures/foot at commonly low to subparallel angles to core axis.                      379.1-382.2: Ground core.</p>
378.9	467.5	<p><b>ACID TUFF</b>                      Indistinct upper contact.                      Upper few feet appear bleached, locally recrystallized due to gabbroic intrusion and heavily fractured. Wisps of chloritized material contributed by dyke occur in the upper portion.                      398.9-408.6: Very fine, moderately chloritized, possibly more intermediate in composition. Locally 5-10% indistinct coarse-ash to fine-lapilli sized siliceous fragments.                      408.6-437.5: Silicified Zone                      Similar to 263.5-284.5 and 559.7-582.7 in 19-9. Fine network of siliceous stringers predominantly at 30-40° to core axis.                      Larger, discontinuous siliceous zones may represent indistinct lapilli-sized fragments. Local sericitized intervals.                      Matrix is generally unaltered except for sericitization and silicification above 422.8. At this point, intervals with gradually increasing biotite-chlorite alteration are common and generally culminate in short zones with massive chlorite-biotite+anthophyllite (combined up to 65%) ex: 422.8-426.8. These alteration zones are separated by highly silicified + sericitized intervals with little or no chlorite-biotite alteration</p>								<p>Excellent core recovery                      Good to very good R.Q.D.                      1-3 fractures/foot at variable angles to core axis.</p>

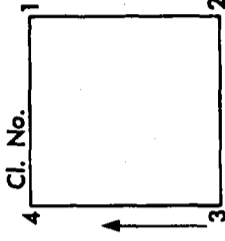
# DIAMOND DRILL RECORD

HOLE NO. 19-10  
 SHEET NO 4 of 7  
 LOCATION 20+00E  
 0+05N

PROPERTY DIXIE PROSPECT 150-19

BEARING  
 DIP COLLAR

ELEVATION  
 TOTAL DEPTH  
 CORE SIZE



COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS
378.9	467.5	<p>ACID TUFF (Continued)</p> <p>437.5-454.1: Very fine tuff, weakly to moderately chloritized. Chlorite is very fine and pervasively distributed throughout matrix. Similar to interval from 398.9-408.6. Moderate foliation at 40-45° to core axis. Trace pyrite locally along foliation planes.</p> <p>454.1-461.8: Bleached Zone                      Pale grey, sericitic bands alternating with darker grey, slightly chloritized bands. Strong foliation at 35-40° to core axis. Sericitic bands become more abundant and with depth and predominate below 457.0.</p> <p>461.8-472.5: Fine moderately chloritized, magnetite-bearing (5-6% fine euhedral cubes)tuff. Upper contact is gradational (interbanded) with bleached unit above.</p>									
467.5	563.0	<p>ALTERED ACID TUFF</p> <p>Alteration is patchy and discontinuous and is generally characterized by 10-20% chloritic wisps+biotite along foliation planes with short massive chlorite-biotite alteration zones, locally &gt;90% combined.</p> <p>468.3-471.2: Massive Chlorite Biotite Alteration                      Similar to 475.8-476.7 in 19-9. Medium-grained biotite clots in a chlorite matrix. Strongly schistosity at 30° to core axis.</p> <p>472.2-476.2: Fine, moderately chloritized matrix (15-20%) with 10-12% siliceous eyes up to 4mm in diameter. Well foliated at 45° to core axis. Eyes appear to be mainly</p>									<p>Excellent core recovery                      Very good to excellent R.Q.D.                      1-2 fractures/foot commonly at high angles to core axis.</p> <p>Numerous slip faces display varying amounts of limonitic staining.</p>

# DIAMOND DRILL RECORD

HOLE NO. 19-10

PROPERTY DIXIE PROSPECT 150-19

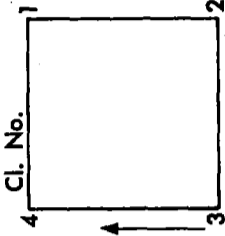
SHEET NO 5 of 7

LOCATION 20+00E  
0+50N

ELEVATION

TOTAL DEPTH

CORE SIZE



BEARING

DIP COLLAR

COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS	
467.5	563.0	ALTERED ACID TUFF (Continued) 472.2-476.2: feldspar (some pinkish K-spar) and lesser quartz. Foliation slightly crenulated locally. Minor sericite throughout. 476.2-499.7: Fine recrystallized (saccharoidal) weakly altered (~5%). Predominantly quartz with 15-20% fine biotite. Well foliated at 40-45° to core axis. 5-10% indistinct siliceous coarse-ash to fine lapilli-sized fragments, 5-10% fine orangey, vitreous microcrysts (garnet?) commonly along foliation planes. 2-3% fine magnetite locally as well as a few short, isolated moderately chloritized bands + minor euhedral magnetite cubes (ex: 486.0-486.2). 499.7-513.2: Coarser phase of unit above. May be a result of original fragment size or degree of recrystallization. Moderate foliation (bedding?) at 40° to core axis. Increase in alteration is gradually superimposed on the coarser unit described above, predominantly fine to medium grained chlorite (10-20%). 511.6-512.3: Massive biotite alteration with less chlorite and minor fibrous amphibole. 1-2% disseminations. 513.2-556.2: Similar to interval from 476.2-499.7 with slightly more matrix biotite and locally areas of fibrous amphibole (~5%). Locally strong bedding at 55-60° to core axis. Local quartz-hornblende-pyrite veins (ex: 529.7-530.0). 556.2-563.0: Moderate to heavy chlorite-biotite plus lesser fibrous amphibole alteration.										
												Numerous slip faces display minor carbonate coating.

## DIAMOND DRILL RECORD

HOLE NO. 19-10

PROPERTY DIXIE PROSPECT 150-19

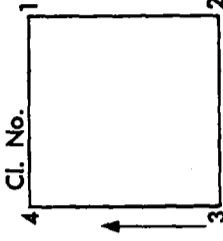
SHEET NO 6 of 7

BEARING

LOCATION 20+00E

DIP COLLAR

0+50N



ELEVATION

TOTAL DEPTH

CORE SIZE

COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS	REMARKS
467.5	563.0	ALTERED ACID TUFF (Continued) 556.2-563.0: Combined locally up to 65%. Isolated garnetiferous clots (5-6%).							
563.0	587.7	METAGABBRO Indistinct upper contact. Pronounced chill margin. Medium grained, weak foliation at 35° to core axis. Locally garnetiferous, particularly along chill margin (5% very fine).							Excellent core recovery Excellent R.Q.D. 1 fracture/foot commonly at high angles to core axis, locally carbonate coated.
587.7	752.0	ALTERED ACID TUFF Similar to interval from 476.2-499.7 but with generally less matrix biotite (~5%). Grain size (recrystallization) varies from very fine to medium locally. Generally more highly altered (10-20%) chlorite) with short zones of massive alteration (predominantly chlorite with lesser biotite). Locally up to 20% indistinct siliceous, coarse-ash sized fragments. Cut by a few 2-10cm wide quartz veins at variable angles to core axis. Weak-moderate foliation at 50° to core axis. 2-3% pyrite disseminations locally. 612.2-632.5: Weakly Altered Interval 5-10% sericite locally, 5-10% biotite throughout. Well foliated at 35-40° to core axis. 632.5-752.0: Moderately Altered Tuff Gradual increase in matrix biotite followed down hole with appearance and rapid increase in chlorite. Similar to 587.7-612.2. Increase in alteration with depth such that from 655.7-675.7 heavily altered (chlorite-biotite) intervals predominate. Locally strong foliation in heavily altered zones at 40° to core axis.							Good to very good core recovery Good to excellent R.Q.D. 1-2 fractures/foot commonly at variable but intermediate angles to core axis (45-60°). 621.8-627.9: Heavily fractured, poor R.Q.D.

# DIAMOND DRILL RECORD

HOLE NO. 19-10

PROPERTY DIXIE PROSPECT 150-19

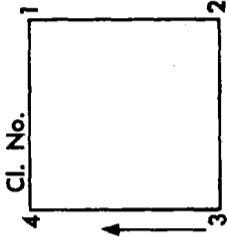
SHEET NO 7 of 7

20+00E

0+50N

BEARING

DIP COLLAR



ELEVATION

TOTAL DEPTH

CORE SIZE

COMPLETED

STARTED

FROM	TO	DESCRIPTION	SAMPLE NO.	FROM	TO	CORE LENGTH	CORE RECOVERED	ASSAYS			REMARKS	
587.7	752.0	ALTERED ACID TUFF (Continued) 32.5-752.0: Below 675.7 alteration is weak to moderate commonly wispy chlorite and minor biotite (5-20%) along foliation planes at 60-70° to core axis. Local heavily altered bands predominantly chlorite and accicular to fibrous amphibole, minor biotite and 2-3% euhedral magnetite (ex: 710.7-713.2) trace chalcopyrite associated with altered zones. Isolated 2-4cm wide sulphide stringers, comprising of medium grained euhedral, recrystallized pyrite cubes in fine grained pyrrhotite (ex: 719.9-720.1). Matrix alteration gradually decreases slightly with depth but isolated, more heavily altered bands persist, commonly associated with minor pyritic stringers.										
752.0		END OF HOLE										NOTE: Water return throughout hole was consistent and strong.







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