DIAMO

010

TOWNSHIP: DUNDONALD

REPORT NO: 25

WORK PERFORMED FOR: FALCONBRIDGE LTD.

RECORDED HOLDER: SAME AS ABOVE (X)

: OTHER ( )

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
71013	DUN-26-04	302 m	NOV/91	(1)
71193	DUN-25-27	200.25 m	JUNE/91	"

NOTES: (1) W9260.00145, FILED NOV/92.

ASSESSMENT REPORT FOR

DIAMOND DRILLING PROGRAM FOR

FALCONBRIDGE LIMITED MINING CLAIMS

P1128060,P1128061,P1128064,P1128065,P1113207
P1113215,P1113216,P1113229,L71013 and L71193

DUNDONALD TOWNSHIP

N.T.S. 42A/10

FALCONBRIDGE LIMITED - TIMMINS, ONTARIO

A.D. McLaughlin

October 19, 1992

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LIST OF FIGURES

LIST OF APPENDICES

1. INTRODUCTION

Falconbridge Limited completed a diamond drill program over two mining lease claims, L71013 and L71193, in Dundonald Township in the Porcupine Mining Division between June 15 and November 16, 1991. Two drill holes, totalling 502.25 metres were drilled. Total eligible assessment costs of the work was $47,448. This is to be credited to the specified contiguous mining claims, as indicated in the attached Report of Work Conducted After Recording Claim, with the remainder banked in reserve.

All drill data are compiled in Figures 3 and 4, and in Appendix B. The work was supervised by A.D. McLaughlin, also author of this report.

2. LOCATION AND ACCESS

The property is located 60 road kilometres northeast of Timmins and 25 road kilometres northeast of the Falconbridge Limited Metallurgical Site (Figure 1). The main block of claims, is located in the southeast corner of Dundonald Township. Access to the property is via a 2.6 kilometre all season gravel road which connects to Highway 67 approximately 5.0 kilometres northeast of MacIntosh Springs. Old logging and drilling roads provide easy access throughout the property.

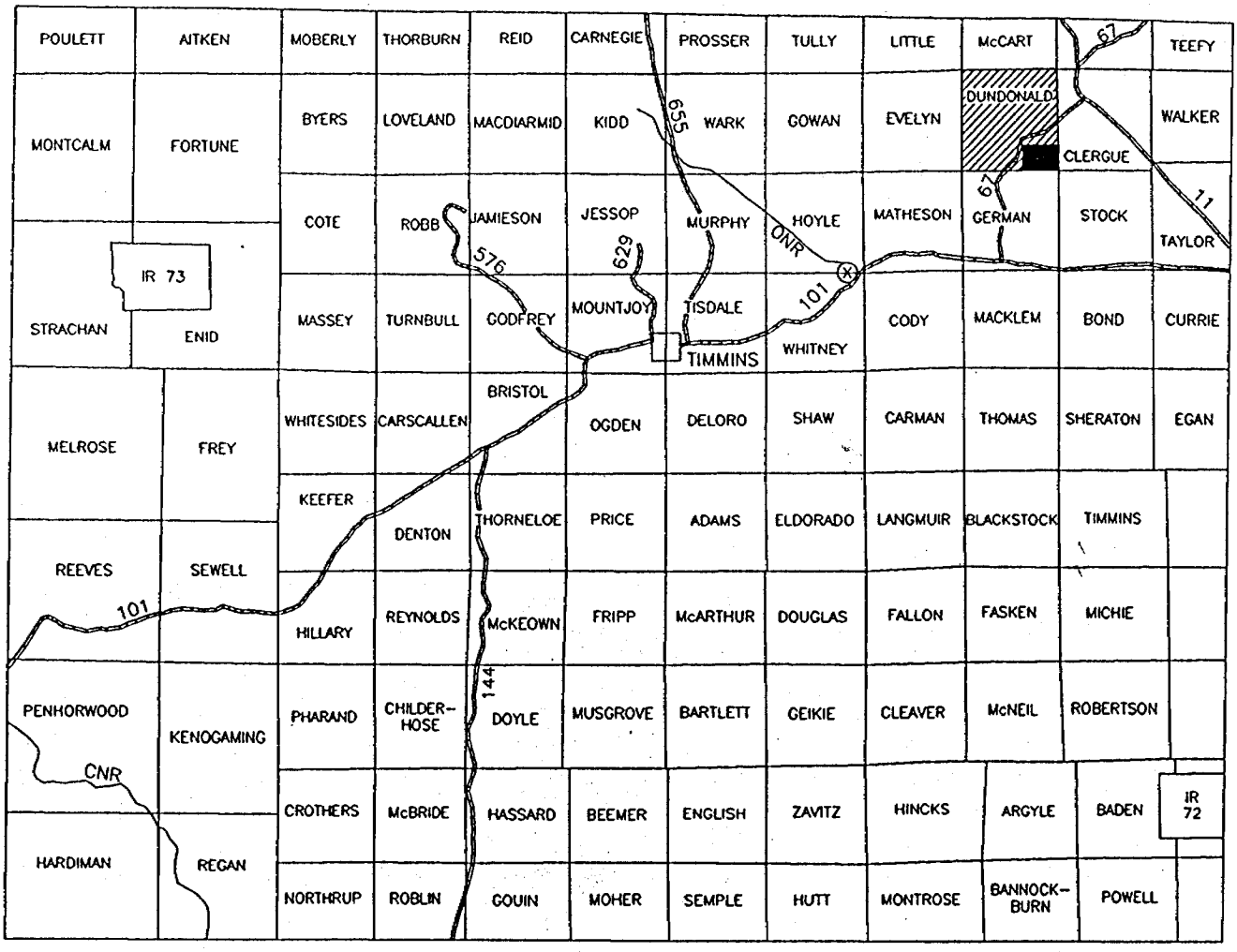
3. TOPOGRAPHY and VEGETATION

Mixed forests of deciduous and coniferous trees with alders and brush in low lying areas cover much of the area, with small lakes and beaver ponds found throughout. In the northeastern part of the property, logged in the last 40 years, alders and immature jack pine trees predominate.

4. PROPERTY and MINING CLAIMS

Falconbridge Limited holds a variety of leased claims, patent lots and staked claims in this township. All are 100 % owned by Falconbridge Limited. Covered in this report are eight mining claims and two leased mining claims as presented in Figure 2 and listed in Table I with the work performed on individual claims. The company address is:

Falconbridge Limited
P.O. Box 1140
571 Moneta Ave
Timmins, Ontario M5J 2V4



LEGEND

⊗ FALCONBRIDGE LTD (KIDD CREEK) METSITE

■ DUNDONALD PROJECT

N

FALCONBRIDGE LIMITED

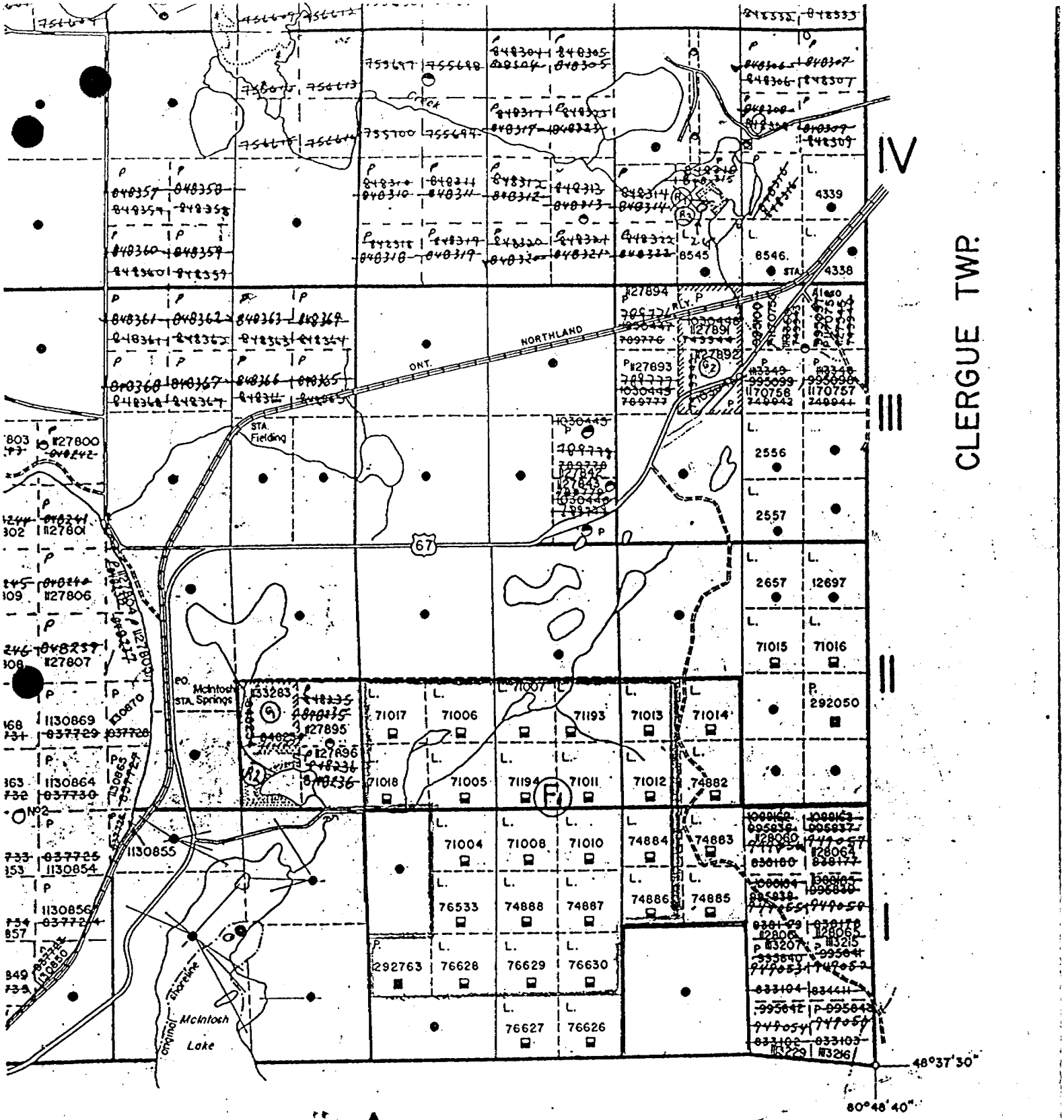
Exploration Division Timmins ONTARIO

DUNDONALD PROJECT

LOCATION MAP

TRACED: P.C.W.	DATE: 09/90	NTS: 42A/10	PROJECT: 8186
DRAWN: D.Mc./I.L.	DATE: 02/92	MAP No: DUNLOC-5	FILE:
SUPERVISED: S.C.	DATE: 02/92		
REVISED:	DATE:		

FIGURE 1



FALCONBRIDGE LIMITED

PROPERTY MAP - DUNDONALD TOWNSHIP

Figure 2 Claims covered in this report

1 inch = 40 chains

TABLE I

DIAMOND DRILL PROGRAM ON TEN CONTIGUOUS

FALCONBRIDGE LIMITED LEASE and MINING CLAIMS in DUNDONALD TOWNSHIP

CLAIM #	DRILL HOLE	METERS	ASSESS. CREDITS
L71013	DUN26-04	302.00	$19,482
L71193	DUN25-27	200.25	$27,966
P1128060	-	---	-------
P1128061	-	---	-------
P1128064	-	---	-------
P1128065	-	---	-------
P1113207	-	---	-------
P1113215	-	---	-------
P1113216	-	---	-------
P1113229	-	---	-------
TOTAL 10 Claims	2	502.25	$47,448

5. PREVIOUS WORK

Falconbridge Limited has held and explored the property since 1960. Work consisted of geological mapping, MAG and EM geophysical surveys, along with diamond drilling.

6. GEOLOGY

The property is underlain by intermediate feldspar crystal ash to lapilli tuff interlayered with massive to pillowed mafic volcanics. Overlying these are komatiite volcanics, possibly up to 700 metres thick. Above the komatiites are mafic volcanics.

Intruding the intermediate volcanics is the Dundonald tholeiitic mafic sill. It is differentiated and crudely layered with a dunite to peridotite core grading outward into a discontinuous pyroxene phase followed by an outer gabbro rim.

7. DIAMOND DRILL PROGRAM

With little volcanic rock exposure on the property a variety of geophysical surveys were completed over the property. From this work diamond drilling tested the komatiite stratigraphy and underlying mafic to intermediate volcanic footwall. Two drill holes are presented here (Figures 3, 4 and 5).

DUN25-27

This drill hole was drilled by Longyear Canada Inc. between June 15 and June 17, 1992 on mining lease claim L71193. Due to extensive serpentinization from fault zones HQ core drilling was attempted to permit deeper penetration of the komatiite section without losing the borehole. A drill cross section is presented on Figure 3.

After drilling through 36.27 metres of overburden, the drill hole intersected a series of pyroxenite to peridotite komatiite flows up to twenty metres thick. Typically the flows exhibit the classic komatiite texture variations; a spinifex upper portion grading down into a olivine cumulate layer. The larger flows have a thicker cumulate zone present. Interflow graphitic argillite up to 0.90 metres thick occur locally.

Weak to moderate serpentinization occur throughout the drilled section with minor calcite and rarely, quartz microveins. Finely disseminated pyrrhotite with lesser pyrite are ubiquitous in the flows, but comprise less than one per cent of the units. Up to five per cent disseminated to colloform pyrrhotite can occur in the argillites.

The drill hole was stopped at 200.25 metres depth.

DUN26-04

This drill hole was drilled on the mining lease claim L71013 between November 12 and 16, 1991 by Norex Drilling Inc., using NQ core size. Total depth was 302 metres. Figure 4 presents a drill hole cross section.

After drilling through 36.00 metres of overburden, 220 metres of komatiite volcanic flows were intersected to a depth of 256.30 metres. The upper section is marked by komatiitic basalt and pyroxenite to peridotite spinifex bearing flows less than twenty metres thick. Argillite is common between the individual flows. Below 90.00 metres drill depth thicker peridotite to dunite flows occur. Underlying the komatiites are massive to pillow mafic volcanics, continuing to the end of the drill hole.

The komatiites show variable serpentinization with local weak chloritization. The mafic volcanics are bleached and silicified. Trace amounts of disseminated to fracture controlled pyrrhotite occurs in the komatiites with up to 2% in the lower 14.00 metres of the basal flow. In the mafic volcanics, up to 5% pyrrhotite is present.

420mE — DUN25-27 — 512420mE

DRILL PLAN

VERTICAL GRADIENT (MAG)

+8
+4
0
-4
-8

59200
59000
58800
TOTAL FIELD MAGNETICS

GEOPHYSICS

Drill Hole Located on Lease Claim L71193

5387200mN | 5387400mN | 5387600mN | 5387800mN | 5388000mN

Azimuth 160°
Dip -66°

DUN25-27

200m

200m

200.25m.
DUN25-27

0m

0m

LEGEND

Geology

MAJOR ROCK DIVISIONS

10 DIABASE
9 FELSIC INTRUSIVE ROCKS
8 INTERMEDIATE INTRUSIVE ROCKS
7 MAFIC INTRUSIVE ROCKS
6 ULTRAMAFIC INTRUSIVE ROCKS
5 SEDIMENTARY ROCKS
4 FELSIC VOLCANIC ROCKS
3 INTERMEDIATE VOLCANIC ROCKS
2 MAFIC VOLCANIC ROCKS
1 ULTRAMAFIC VOLCANIC ROCKS

TEXTURAL/GEOCHEMICAL MODIFIERS

Fine Grained
Medium Grained
Coarse Grained
Quartz-Feldspar Phyric
Amygdaloidal/Vesicular
Primary Fragmentals
Granitic/Argillaceous
Thoeiitic
Calc-alkalic
Komatiitic
Tholeiitic
Spherulitic/Spherolitic
Pillowed
Quartz Phyric
Oxide Iron Formation
Siliceous, Exhalites
Pyroclastic
High TiO2
High Fe
High Al
Anorthite
Komatiite

A Primitive (Y<20)
B Evolved (Y>20<60)
C Heterolithic
D Feldspar Phyric
E Chert
F Wacke
G Leucocene Bearing
H Basaltic Komatiite
J Pyroxenite
K Not Textured
L Peridotite
M Dunite
N Ophitic
P Porphyritic
Q
R Polyaxtured
S Fractured
T Gabbroic Textured
U Pyroxene Spinifex
V Olivine Spinifex
W Skeletal/Crescumulate
X Adcumulate
Y Mesocumulate
Z Orthocumulate

ALTERATION MODIFIERS

<Ab> Albitization
<Bl> Bleached
<C> Carbonaceous
<Cb> Carbonatization
<Ch> Chloritization
<Ep> Epidotization
<Hm> Hematization
<K> Potassic Alteration
<Ser> Sericitization
<Si> Silicification
<Sp> Serpentinization
<Tc> Talc-Carbonatized

FIGURE 3

FALCONBRIDGE LIMITED

Exploration Division — Timmins, ONTARIO

DUNDONALD PROPERTY (DUNDONALD NORTH)

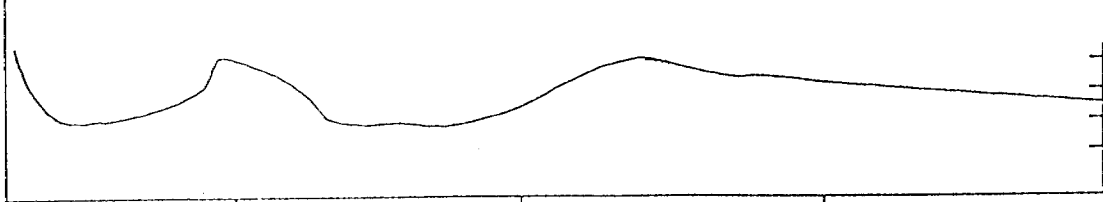
ROTATED DIAMOND DRILL SECTION 512420mE (+/-50m)

LOOKING SOUTHWEST (250°) — DUNDONALD Twp.

Traced	: AROZES	13/10/87	NTS : 42-A/10	PROJECT No: 8185H
Drawn	: d e l	13/10/87	MAP No:	FILE: 8185 EC
Supervised	: D McLaughlin	13/10/87	Scale :	1 : 5000 (metres)
Revised	:		0 50 100 150 200	

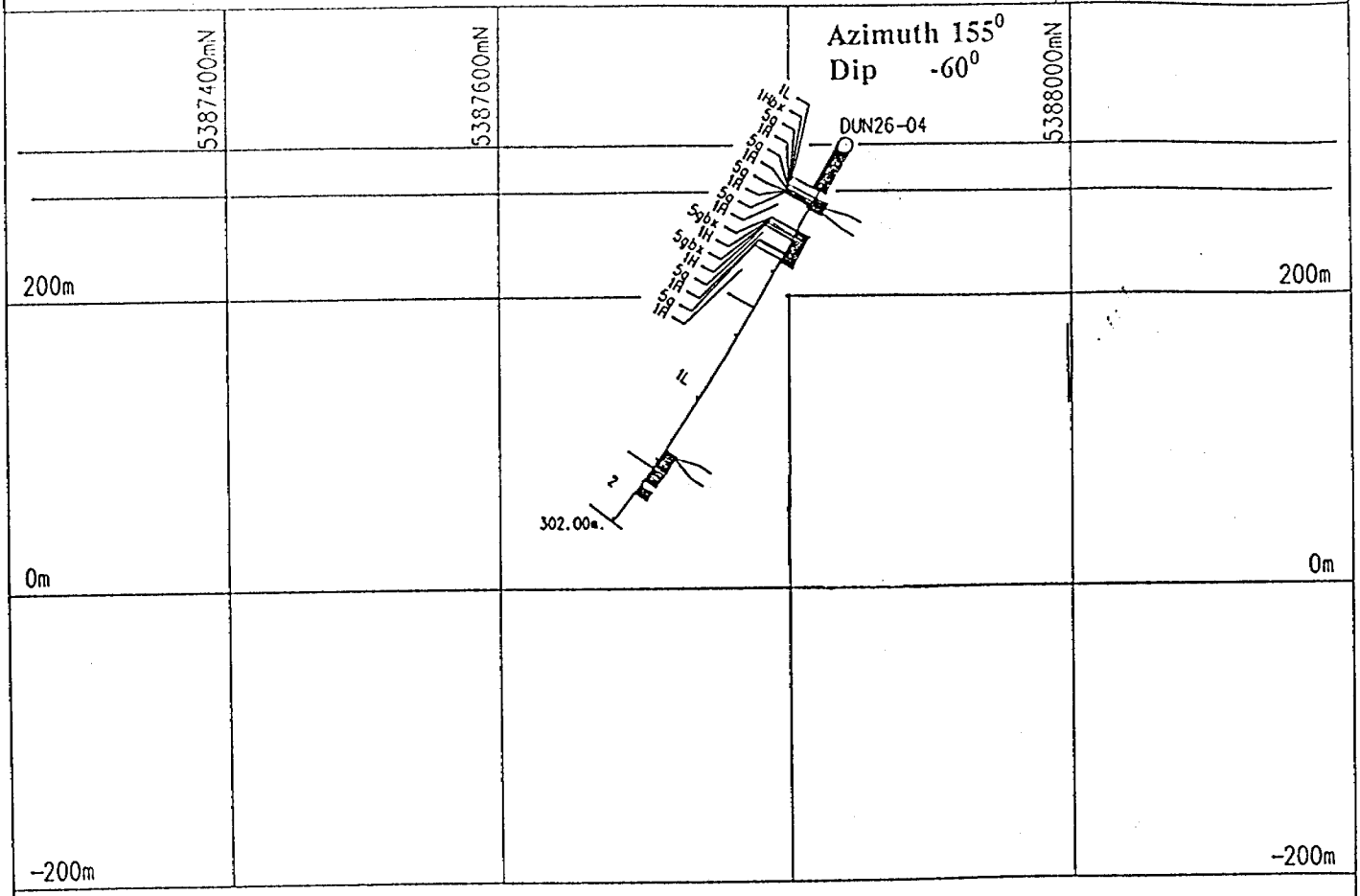
512700mE — DUN26-04 — 512700mE

DRILL PLAN



TOTAL FIELD MAGNETIC PROFILE (nanoteslas) (γ)

GEOPHYSICS



LEGEND

Geology

MAJOR ROCK DIVISIONS

10	DIABASE
9	FELSIC INTRUSIVE ROCKS
8	INTERMEDIATE INTRUSIVE ROCKS
7	MAFIC INTRUSIVE ROCKS
6	ULTRAMAFIC INTRUSIVE ROCKS
5	SEDIMENTARY ROCKS
4	FELSIC VOLCANIC ROCKS
3	INTERMEDIATE VOLCANIC ROCKS
2	MAFIC VOLCANIC ROCKS
1	ULTRAMAFIC VOLCANIC ROCKS

TEXTURAL/GEOCHEMICAL MODIFIERS

a	Fine Grained	A	Primitive (Y<20)
b	Medium Grained	B	Evolved (Y>20<60)
c	Breccia		
d	Coarse Grained	C	Heterolithic
e	Quartz-Feldspar Phyric	D	Feldspar Phyric
f	Amygdaloidal/Vesicular	E	Chert
g	Primary Fragmentals	F	Tuffs
h	Graphitic/Argillaceous	G	Leucoxene Bearing
i	Tholeiitic	H	Basaltic Komatiite
j	Andetic		
k	Calc-Alkalic	J	Pyroxenite
l	Komatiitic	K	Net Textured
m	Flows	L	Peridotite
n	Massive	M	Dunite
o	Variolitic/Spinifex	N	Ophitic
p	Pillowed	P	Porphyritic
q	Quartz Phyric	Q	
r	Oxide Iron Formation	R	Polyaxtured
s	Sulphides, Exhalites	S	Fractured
t	Pyroclastic	T	Gabbroic Textured
u	High Mg	U	Pyroxene Spinifex
v	High Fe	V	Olivine Spinifex
w	High Al	W	Skeletal/Crescumulate
x	Andesite	X	Adcumulate
y	Rhyolite	Y	Mesocumulate
z		Z	Orthocumulate

ALTERATION MODIFIERS

(a)	Abitization
(b)	Biotite
(c)	Carbonaceous
(cb)	Carbonatization
(ch)	Chloritization
(e)	Epidotization
(h)	Hematization
(k)	Potassic alteration
(s)	Sericitization
(si)	Silicification
(sr)	Serpentinization
(tc)	Talc-Carbonatized

Drill Hole Located on Lease Claim L71013

FIGURE 4

FALCONBRIDGE LIMITED

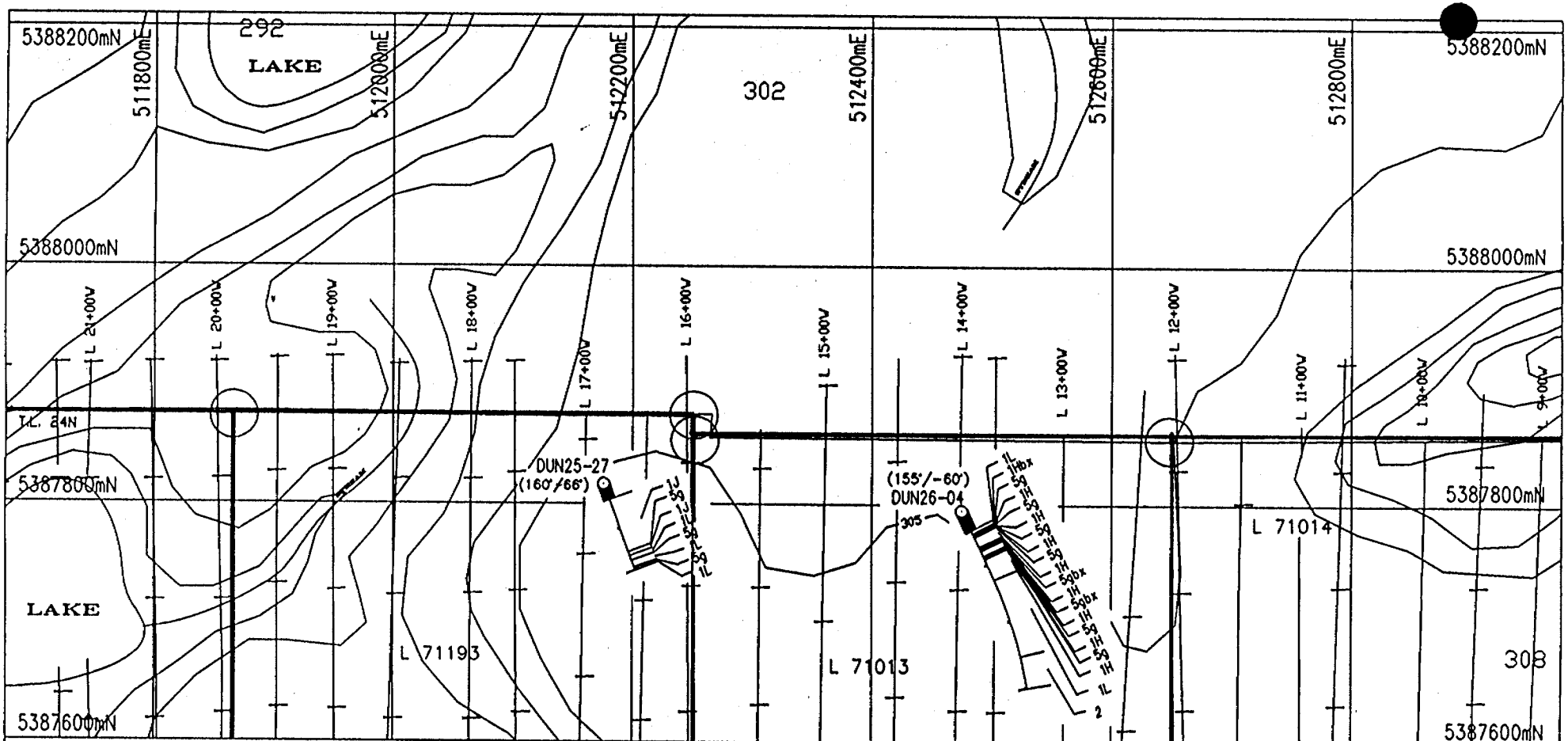
Exploration Division — Timmins, ONTARIO

DUNDONALD PROPERTY (DUNDONALD NORTH)

ROTATED DIAMOND DRILL SECTION "AB" 512700mE (+/-50m)

LOOKING SOUTHWEST (250°) — DUNDONALD Twp.

Traced	: PROCES	01/01/82	NTS : 42-A/10	PROJECT No: 81-85-M
Drawn	: d e l	01/01/82	MAP No:	FILE: 8185 DY
Supervised	: D McLoughlin	01/01/82	Scale :	1 : 5000 (metres)
Revised	:		0 50 100 150 200	



LEGEND

Geology

MAJOR ROCK DIVISIONS

10	DIABASE
9	FELSIC INTRUSIVE ROCKS
8	INTERMEDIATE INTRUSIVE ROCKS
7	MAFIC INTRUSIVE ROCKS
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5	SEDIMENTARY ROCKS
4	FELSIC VOLCANIC ROCKS
3	INTERMEDIATE VOLCANIC ROCKS
2	MAFIC VOLCANIC ROCKS
1	ULTRAMAFIC VOLCANIC ROCKS

TEXTURAL/GEOCHEMICAL MODIFIERS

a	Fine Grained	A	Primitive (Y<20)
b	Medium Grained	B	Evolved (Y>30<60)
bx	Breccia		
c	Coarse Grained	C	Heterolithic
d	Quartz-Feldspar Phyric	D	Feldspar Phyric
e	Amygdaloidal/Vesicular	E	Chert
f	Primary Fragmentals	F	Wacke
g	Graphitic/Argillaceous	G	Leucocene Bearing
h	Tholeiitic	H	Basaltic Komatiite
i	Alkalic		
j	Calc-Alkalic	J	Pyroxenite
k	Komatiitic	K	Net Textured
l	Flows	L	Peridotite
m	Massive	M	Dunite
n	Variolitic/Spherulitic	N	Ophitic
o	Pillowed	O	Porphyritic
p	Quartz Phyric		
q	Oxide Iron Formation	P	Polyautured
r	Sulphides, Exhalites	Q	Fractured
s	Pyroclastic	R	Gabbroic Textured
t	High Mg	S	Pyroxene Spinifex
u	High Fe	T	Olivine Spinifex
v	High Al	U	Skeletal/Crescumulate
w	Andesite	V	Adcumulate
x	Icelandite	W	Mesocumulate
y		X	Orthocumulate
z		Z	

ALTERATION MODIFIERS

<Ab>	Albitization
<Bl>	Bleached
<C>	Carbonaceous
<Ca>	Carbonatization
<Ch>	Chloritization
<Ep>	Epidotization
<He>	Hematization
<K>	Potassic Alteration
<Se>	Sericitization
<Si>	Silicification
<Sr>	Serpentinization
<Tc>	Talc-Carbonatized

SHEET ORIENTED GRID NORTH ADMUTH 000° 11'

FALCONBRIDGE LIMITED

Exploration Division — Timmins, ONTARIO

DUNDONALD PROJECT (DUNDEAL ZONE)

DIAMOND DRILL PLAN (GEOLOGY)

DUNDONALD Twp.

Traced	: PROCES	15/10/92	NTS : 42-A/10 — PROJECT No: 8186W
Drawn	: d e l	15/10/92	MAP No: — FILE: 8186 DF
Supervised	: D McLaughlin	14/10/92	Scale : 1 : 5000 (metres)
Revised	: FIGURE 5		0 50 100 150 200

8. SUMMARY AND CONCLUSIONS

No significant mineralization was detected in the two drill holes.

9. REFERENCES

Code, P.R., (1979), Nickel Sulphide Deposits Associated with Ultramafic Rocks of the Abitibi Belt and Economic Potential of Mafic - Ultramafic Intrusions, Ontario Geological Survey, Study 20.

Lesher, C.M. and Groves, D.I. (1984), Geochemical and Mineralogical Criteria for the Identification of Mineralized Komatiites in Archean Greenstone Belts in Australia. Proceedings of the 27th International Geological Congress, Vol. 9, pp. 283-302.

APPENDIX A

CERTIFIED ABSTRACTS OF MINING LEASES

pp[illegible]o Amend 347292
eg'd 15/09/86.
M.J. Goodwin
D.L.R.

Under Mining Lease 100802, dated 29th September, 1965, filed in the Office of Land Titles at Cochrane, as Lease 223 Cochrane, on the 15th November, 1965, being an Indenture of Lease made between Her Majesty the Queen, represented by the Deputy Minister of Mines, the Lessor of the First part and ~~Falconbridge Nickel Mines Limited~~ FALCONBRIDGE LIMITED, with its head office at Toronto, Ontario (7 King Street East), Lessee of the Second part.

The said Falconbridge Nickel Mines Limited, is entitled subject to the terms and conditions of said lease to an estate for the term of Twenty-One (21) years to be computed from the 1st October, 1965, with the right of renewal as therein set out of that certain parcel of land, situate in the Township Dundonald, in the District of Cochrane and Province of Ontario, namely:

The Mines, Ores, Minerals and Mining Rights in, upon and under the South Half of Lot Number Three (3), in the Second Concession, of the said Township of Dundonald, including any land covered by the waters of an unnamed lake, being Mining Claims L.71007, L.71011, L.71193 and L.71194, containing by admeasurement One Hundred and Sixty (160) Acres, more or less.

The Title to the said land is subject to the provisions of Section 106 of The Mining Act of Ontario, requiring that all ores or minerals raised or removed therefrom shall be treated and refined within Canada and that in default thereof the said land shall revert to Her Majesty.

The Title of the said owner is subject to the following:

(1) Any provincial and municipal taxes, charges, rates or assessments and school and water rates which may be owing on said land.

(2) No surface mining operations shall be carried on within 150 feet of the limits of any highway or road maintained by the Department of Highways except with the consent in writing of the Minister of Mines, as provided in the Mining Act.

(3) The terms, conditions and reservations of said lease.

(4) The exceptions and qualifications mentioned in The Land Titles Act.

In Witness whereof I have hereunto subscribed my name, this 15th day of November, 1965.

No Office Copy of Lease Issued
Issued Office Copy of Lease 17/1/66.

Deputy Local Master of Titles.

enewal of Lease

By Lease 1131 Cochrane, dated 24th November, 1986, registered 23rd January, 1987, being Mining Lease 100802 Cochrane, of the Ministry of Natural Resources, the above Mining Lease 223 Cochrane, of the said Ministry of Northern Development and Mines was renewed to a further term of 21 years from the 1st day of October, 1986.

M.J. Goodwin
D.L.R.

Certified to be a true copy of the 1 pages
of parcel 210 L.C.
Dated at Cochrane, Ontario, this Oct. 14, 1992
at 10:00 AM.
LAND REGISTRAR. P.J. [illegible]

App. to Amend 347292 Reg'd 15/09/86.
M.J. Goodwin D.L.R.

Under Mining Lease 100798, dated 29th September, 1965, filed in the Office of Land Titles at Cochrane, as Lease 224 Cochrane, on the 15th November, 1965, being an Indenture of Lease made between Her Majesty the Queen, represented by the Deputy Minister of Mines, the Lessor of the First part and ~~Falconbridge Nickel Mines Limited~~ FALCONBRIDGE LIMITED, with its head office at Toronto, Ontario, (7 King Street East), Lessee of the Second part.

The said Falconbridge Nickel Mines Limited, is entitled subject to the terms and conditions of said lease to an estate for the term of Twenty-One (21) years to be computed from the 1st October, 1965, with the right of renewal as therein set out of that certain parcel of land, situate in the Township of Dundonald, in the District of Cochrane and Province of Ontario, namely:

The Mines, Ores, Minerals and Mining Rights in, upon and under the South Part of Lot Number Two (2), in the Second Concession, of the said Township of Dundonald, being all that part of said lot lying south of a line drawn across said lot parallel to the north boundary thereof and distant 41 chains southerly therefrom, being Mining Claims L.71012, L.71013, L.71014 and L.74882 containing by admeasurement One Hundred and Fifty (150) Acres, more or less.

The Title to the said land is subject to the provisions of Section 106 of The Mining Act of Ontario, requiring that all ores or minerals raised or removed therefrom shall be treated and refined within Canada and that in default thereof the said land shall revert to Her Majesty.

The Title of the said owner is subject to the following:

(1) Any provincial and municipal taxes, charges, rates or assessments and school and water rates which may be owing on said land.

(2) No surface mining operations shall be carried on within 150 feet of the limits of any highway or road maintained by the Department of Highways except with the consent in writing of the Minister of Mines, as provided in the Mining Act.

(3) The terms, conditions and reservations of said lease.

(4) The exceptions and qualifications mentioned in The Land Titles Act.

In Witness whereof I have hereunto subscribed my name, this 15th day of November, 1965.

No Office Copy of Lease Issued.
Office Copy of Lease Issued 17/1/66.

Deputy Local Master of Titles.

ewal of Lease

By Lease 1131 Cochrane, dated 24th November, 1986, registered 23rd January, 1987, being Mining Lease 100798 Cochrane, of the Ministry of Natural Resources, the above Mining Lease 224 Cochrane, of the said Mininstry of Northern Development and Mines was renewed to a further term of 21 years from the 1st day of October, 1986.

M.J. Goodwin
D.L.R.

Certified to be a true copy of the 1 pages
of parcel 211 L.C.
Dated at Cochrane, Ontario, this 04-14-1992
at 10:00 A.M.
LAND REGISTRAR.

App. to Amend 347292, reg'd 15/09/86
M Goodwin D.L.R.

Under Mining Lease 100801, dated 29th September, 1965, filed in the Office of Land Titles at Cochrane, as Lease 227 Cochrane, on the 15th November, 1965, being an Indenture of Lease made between Her Majesty the Queen, represented by the Deputy Minister of Mines, the Lessor of the First part and ~~Falconbridge Nickel Mines Limited~~ FALCONBRIDGE LIMITED, with its head office at Toronto, Ontario, (7 King Street East), Lessee of the Second part.

The said Falconbridge Nickel Mines Limited, is entitled subject to the terms and conditions of said lease to an estate for the term of Twenty-One (21) years to be computed from the 1st October, 1965, with the right of renewal as therein set out of that certain parcel of land, situate in the Township of Dundonald, in the District of Cochrane and Province of Ontario, namely:

The Mines, Ores, Minerals and Mining Rights in, upon and under the North Part of Lot Number Two (2), in the First Concession, of the said Township of Dundonald, being all that part of said lot lying north of a line drawn across said lot east ast'y from a point in the west boundary of said lot distant 40.48 chains measured northerly thereon from the south west angle thereof, being Mining Claims L.74883, L.74884, L.74885 and L.74886 containing by admeasurement One Hundred and Thirty-Six (136) Acres, more or less.

The Title to the said land is subject to the provisions of Section 106 of The Mining Act of Ontario, requiring that all ores or minerals raised or removed therefrom shall be treated and refined within Canada, and that in default thereof the said land shall revert to Her Majesty.

The Title of the said owner is subject to the following:

(1) Any provincial and municipal taxes, charges, rates or assessments and school and water rates which may be owing on said land.

(2) No surface mining operations shall be carried on within 150 feet of the limits of any highway or road maintained by the Department of Highways except with the consent in writing of the Minister of Mines, as provided in the Mining Act.

(3) The terms, conditions and reservations of said lease.

(4) The exceptions and qualifications mentioned in The Land Titles Act.

In Witness whereof I have hereunto subscribed my name, this 15th day of November, 1965.
No Office Copy of Lease Issued.
Office Copy of Lease Issued 17/1/66.

Deputy Local Master of Titles.

Renewal of Lease

By Lease 1131 Cochrane, dated 24th November, 1986, registered 23rd January, 1987, being Mining Lease 100801 Cochrane, of the Ministry of Natural Resources, the above Mining Lease 227 Cochrane, of the said Ministry of Northern Development and Mines was renewed to a further term of 21 years from the 1st day of October, 1986.

M Goodwin D.L.R.

Certified to be a true copy of the 1 pages
Parcel 214 L.C.
Land Registry Office at Cochrane, Ontario, this 04 - 14, 1992
at 10:00 AM
LAND REGISTRAR

APPENDIX B

DIAMOND DRILL LOGS

HOLE NUMBER: DUN26-04

FALCONBRIDGE LIMITED
DRILL HOLE RECORD

DATE: 12/20/1991
IMPERIAL UNITS: METRIC UNI

PROJECT NAME: 8186
PROJECT NUMBER: 008186
CLAIM NUMBER: L 7103
LOCATION: DUNDONALD TWP

PLOTTING COORDS GRID: UTM
NORTH: 5387795.00N
EAST: 512475.00E
ELEV: 303.00

ALTERNATE COORDS GRID: LINE
NORTH: 21+20N
EAST: 14+ 0W
ELEV: 303.00

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 302.00M
START DEPTH: 0.00M
FINAL DEPTH: 302.00M

COLLAR ASTRONOMIC AZIMUTH: 155° 0' 0"

GRID ASTRONOMIC AZIMUTH: 155° 0' 0"

DATE STARTED: 11/12/1991
DATE COMPLETED: 11/16/1991
DATE LOGGED: 11/22/1991

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: YES

PULSE EM SURVEY: NO
PLUGGED: YES
HOLE SIZE: NQ

CONTRACTOR: NOREX
CASING: 36.0m LEFT IN GROUND
CORE STORAGE: METSITE
UTM COORD.:

COMMENTS :
WEDGES AT:

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
65.00	153° 0' 0"	-60° 0' 0"	S	OK	
119.00	155° 0' 0"	-60°30' 0"	S	OK	
179.00	159° 0' 0"	-59° 0' 0"	S	OK	
239.00	166° 0' 0"	-55° 0' 0"	S	OK	

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments

Doug McLaughlin

Doug McL

HOLE NUMBER: DUN26-04

DRILL HOLE RECORD

DATE: 12/20/1991

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 36.00	OVERBURDEN «|ob|»					
36.00 TO 41.75	PERIDOTITIC KOMATIITE «1L»	|36.0-41.15|«1Y» -dark grey colour. -fine grained mesocumulate. -mesh textured. -crosscutting serpentine and calcite veins. -olivine content decreases downhole. -gradational lower contact. -weakly polysutured. -moderately magnetic. |41.15-41.75|«1JZ» -basal pyroxenitic zone. -light green colour. -fine grained orthocumulate. -decreasing olivine content to lower contact. -sharp lower contact marked by serpentine vein. -non magnetic.		-moderate to weak serpentine alteration. -weak serpentine alteration.		-37.0-40.0m -WR AN01905.
41.75 TO 44.05	KOMATIITIC BASALT «1Hbx»	|41.75-44.05|«1Hgbx» -eggshell breccia with graphitic clasts and replaced clasts. -medium grey and green colours with black and grey clasts. -aphanitic to fine grained. -<5% serpentinized olivine grains. -calcite associated with clasts. -20-30% clasts. -some clasts are entirely replaced including sulphide nodules. -sharp lower contact at 40° to the core axis. -crosscutting serpentine veins.		-weak chlorite and serpentine alteration.	-<1.0% Py and Po.	-42.0-43.5m -WR AN01906.
44.05 TO 44.40	GRAPHITIC SEDIMENT «5g»	-flat black colour. -aphanitic, massive textures. -contains clasts of komatiitic basalt. -weak bedding at 45° to the core axis. -sharp lower contact at 25° to the core axis. -lower contact brecciated by calcite veining.			|44.05-44.40|«15% Py, Po» -15% nodular and vein Py and Po.	
44.40 TO 44.85	KOMATIITIC BASALT «1H»	-medium light grey colour. -aphanitic massive textures. -crosscut by chlorite, serpentine and calcite veins.		-weak chlorite alteration.	|44.40-44.85|«3% Po» -3% vein associated Po.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-veins subparallel to 70° to the core axis. -lower contact is bulbous and undulatory. -minor graphite brecciation at lower contact.				
44.85 TO 44.95	GRAPHITIC SEDIMENT «Sg»	-black and dark grey colours. -aphanitic. -contains 50-60% clasts or shards. -insitu brecciation caused by calcite veining.			-<1.0% disseminated Po.	
44.95 TO 46.55	KOMATIITIC BASALT «1H»	-44.95-45.70m -medium grey-green colour. -aphanitic. -minor graphite breccia with <5% graphite clasts. -crosscutting chlorite and calcite veins. -minor development of randomly oriented acicular pyroxene grains. -lower contact sharp at 75° to the core axis. -veining subparallel to 60° to the core axis.		-weak chlorite alteration.	⌊44.95-45.70⌋«2% Po» -2% disseminated Po and Py.	
		⌊45.70-46.55⌋«1Z» -light grey-green colour. -fine grained orthocumulate. -10-15% serpentinized olivine grains. -crosscutting serpentine veins. -crackle breccia at lower contact. -lower contact sharp at 65° to the core axis.		-weak serpentine and chlorite alteration.	-<1.0% disseminated Po.	
46.55 TO 46.76	GRAPHITIC SEDIMENT «Sg»	-dull black colour. -contains 50% clasts of komatiite. -sharp lower contact at 85° to the core axis.			⌊46.55-46.76⌋«4% Py» -4% disseminated and vein Py.	
46.76 TO 47.35	KOMATIITIC BASALT «1H»	-46.76-46.85m -aphanitic flow top. -white and black colours. -30% interstitial graphite. -bleached appearance.		-moderate bleaching.	⌊46.76-76.85⌋«1% Po» -1% disseminated Po.	
		-46.85-47.35m -medium grey colour. -aphanitic to very fine grained. -crosscutting graphite and calcite veins. -sharp lower contact at 55° to the core axis. -contains 10% graphite.		-weak chlorite and serpentine alteration.	⌊46.85-47.35⌋«3% Po» -3% vein associated Po.	
47.35 TO 48.85	GRAPHITIC SEDIMENTS «Sg»	-flat black colour. -aphanitic, massive textures. -tensile fractures filled by calcite. -possible bedding at 40° to the core axis. -sharp lower contact at 60° to the core axis.			⌊47.35-48.85⌋«5% Py» -5% nodular Py.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
48.85 TO 67.50	KOMATIITIC BASALT «1H»	-light grey-green colour. -aphanitic to fine grained. -composed primarily of pyroxene with up to 5% serpentinized olivine grains. -olivine content increases downhole. -crosscutting chlorite, amorphous carbon and calcite veins. -sharp lower contact at 25° to the core axis.		-weak chlorite and serpentine alteration. -zones of moderate chlorite alteration.	⌈48.85-49.50⌋«<5% Po» -5% blebs of Po. -49.50-67.50m -<1.0% vein associated Po.	-63.0-66.0m -WR AN01907.
67.50 TO 68.30	GRAPHITIC HYALO-CLASTIC SEDIMENT «5gbx»	-flat black and dark grey colours. -aphanitic. -50% shards with onion skin textures. -shards are rounded to subrounded. -crosscut by calcite veins. -some veins are boudined and broken up. -sharp lower contact at 70° to the core axis.			⌈67.50-68.30⌋«10% Po» -10% nodular and vein associated Po.	
68.30 TO 70.85	KOMATIITIC BASALT «1H»	-dark grey colour. -aphanitic, massive textures. -weak variolitic texture. -crosscutting graphite and chlorite veins. -sharp lower contact at 70° to the core axis.		-weak chlorite alteration.	⌈68.30-70.85⌋«2% Po» -2% vein associated Po.	
70.85 TO 72.55	GRPAHITIC HYALO-CLASTIC SEDIMENT «5gbx»	-dark green-brown with a black matrix. -aphanitic hyaloclastite. -70-80% shards. -5% larger clasts replaced by sulphides. -10-20% large komatiitic clasts. -sulphides are interstitial and replacing shards and clasts. -lower contact difficult to identify.			⌈70.85-72.55⌋«15% Po» -10-20% Po replacing groundmass, shard and clasts. -possible minor Sph.	
72.55 TO 74.70	KOMATIITIC BASALT «1H»	-medium grey colour. -aphanitic groundmass with very fine grained randomly oriented acicular pyroxene grains. -crosscutting chlorite, calcite and graphite veins. -replacement alteration features with polygonal areas of different colour. -sharp lower contact at 60° to the core axis.		-weak chlorite alteration.	⌈72.55-74.70⌋«6% Po» -6% disseminated and vein associated Po.	
74.70 TO 84.50	GRAPHITIC SEDIMENT «5g»	-black with dark grey coloured komatiitic clasts. -aphanitic groundmass with aphanitic and fine grained clasts of komatiite and argillite. -crosscut by calcite veins. -clasts are angular to subrounded.		-weak silica alteration.	⌈74.70-76.92⌋«5% Py» -5% nodular and disseminated Py. ⌈76.92-77.27⌋«10% Py» -10% disseminated Py. ⌈77.27-78.0⌋«10% Py»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-sharp lower contact at 50° to the core axis. -76.92-77.27m -silicified clast. -78.0-78.36m -silicified clast. -79.93-80.25m -silicified clast.			-10% nodular and disseminated Py. |78.0-78.36|«7% Py» -7% disseminated Py. |78.36-79.93|«15% Py» -15% disseminanted and vein associated Py. |79.93-80.25|«10%» -10% disseminated and vein associated Py. |80.25-83.35|«5% Py» -5% nodular and disseminated Py. |83.35-84.50|«20% Py» -20% disseminated and vein associated Py.	
84.50 TO 86.04	KOMATIITIC BASALT «1H»	-dark grey colour. -aphanitic to very fine grained, massive textures. -crosscut by calcite and sulphide veins. -sharp lower contact at 65° to the core axis. -upper contact zone has 10% sulphide filled amygdules. -vein subparallel to 60° to the core axis.		-weak chlorite alteration.	|84.50-86.04|«3% Po» -3% vein associated Po.	
86.04 TO 90.00	GRAPHITIC ARGILLACEOUS SEDIMENT «5g»	-dull black and dark grey colours. -aphanitic groundmass with aphanitic clasts. -10-15% clasts of komatiitic basalt and argillite. -crosscutting calcite veins.			|86.04-90.0|«7% Py» -7% nodular and disseminated Py.	
90.00 TO 127.70	KOMATIITIC BASALT «1H»	-90.0-91.0m -light grey colour. -aphanitic flow top. -very fine grained minifex. -crosscutting calcite, chlorite and sulphide veins. -gradational lower contact. |91.0-96.93|«1?» -medium grey-green colour. -fine grained to medium grained. -gabbroic textured pyroxene with leafy and acicular grains. -minor string beef spinifex. -crosscutting chlorite, calcite and serpentine veins. -non magnetic. -gradational lower contact.		-weak chlorite alteration. -weak chlorite and serpentine alteration.	|90.0-91.0|«4% Po» -4% vein associated Po. -<1.0% disseminated Po.	-92.0-95.0m -WR AN01908.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		┤93.96-99.45├«1U» -aphanitic with fine grained to medium grained acicular pyroxene spinifex. -light green-grey colour. -crosscutting chlorite, serpentine and calcite veins. -gradational lower contact.		-weak chlorite alteration.	-<0.1% disseminated Po.	
		┤99.45-105.25├«1T» -medium grey-green. -fine grained to medium grained leafy and acicular pyroxene grains. -gabbroic texture. -crosscutting chlorite, calcite and serpentine veins.		-weak chlorite alteration.	-<0.1% vein associated Po.	
		┤105.25-117.50├«1U» -medium grey-green colour. -aphanitic with acicular pyroxene grains. -tensile fractures filled with chlorite. -crosscut by chlorite, calcite and serpentine veins. -gradational lower contact.		-weak chlorite alteration.		
		┤117.50-127.70├«1T» -light grey-green. -fine grained to medium grained leafy and acicular pyroxene grains. -crosscut by chlorite, serpentine and calcite veins. -sharp lower contact at 55° to the core axis.		-weak chlorite and serpentine alteration. -124.10-127.70m -moderate chlorite alteration.		
127.70 TO 256.30	PERIDOTITIC KOMATIITE «1L»	┤127.70-134.75├«1YX» -dark green colour. -very fine grained, massive mesocumulate to orthocumulate. -compact serpentinized olivine grains. -gradational lower contact marked by reduction in olivine content. -crosscut by serpentine and calcite veins. -moderately magnetic.		-moderate serpentine alteration.		-130.0-133.0m -WR AN01909.
		┤134.75-139.91├«1YZ» -medium grey-green and dark green colours. -fine grained to medium grained mesocumulate to orthocumulate. -60-80% serpentinized olivine grains. -weak mesh textures. -weakly polysutured. -crosscutting serpentine and calcite veins.		-weak to moderate serpentine alteration.		

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-very weakly magnetic. -gradational lower contact. -135.58-135.60m -pyroxenitic spinifex dyke. ┤139.91-140.05├«12» -light grey-green colour. -fine grained orthocumulate. -elongated and equant olivine grains. -decreasing olivine content downhole. -becomes more pyroxenitic. -crosscut by calcite and serpentine veins. -sharp lower contact at 50° to the core axis. ┤140.05-142.70├«1Y»		-weak serpentine alteration.		
		-dark green colour. -fine grained to medium grained mesocumulate. -70-85% serpentinized olivine grains. -crosscutting serpentine and calcite veins. -weakly magnetic. -sharp lower contact at 50° to the core axis. -142.70-142.88m -light grey coloured. -aphanitic to very fine grained flow contact. -randomly oriented pyroxene grains. -crosscuty by calcite and serpentine veins. -gradational lower contact. ┤142.88-143.50├«1U»		-weak to moderate serpentine alteration.		
		-light grey colour. -fine grained to medium grained, leafy and acicular pyroxene spinifex. -randomly oriented. -crosscut by serpentine and calcite veins. -gradational lower contact. ┤143.50-144.15├«1V»		-weak chlorite and serpentine alteration.		
		-medium grey and dark green colours. -aphanitic groundmass with medium grained dendritic olivine grains. -crosscut by calcite and serpentine veins. -gradational lower contact. -144.15-144.75m -medium grey-green colour. -fine grained pyroxene and olivine grains. -elongated and equant grains. -transition zone between spinifex and cumulate. -crosscut by serpentine and calcite veins. -gradational lower contact. ┤144.75-206.35├«1YX»		-weak serpentine alteration.		
		-dark green and green-brown colours. -fine grained mesocumulate and adcumulate. -on the verge of being a dunite.		-moderate to strong serpentine alteration.		-190.0-193.0m -WR AN01910.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-80-90% serpentinized olivine grains. -crosscutting serpentine veins with associated magnetite veins. -moderately to strongly magnetic. -serpentine veins have light green colour and a tubular habit. -weakly polysutured. -gradational lower contact. 190.50-190.95 «FAI» -fault gouge and shearing at 35° to the core axis. 206.35-207.3 «1YZ» -dark green with a grey-green interstitial material. -fine grained mesocumulate and orthocumulate. -50-70% serpentinized olivine grains. -olivine content decreases downhole. -sharp lower contact at 40° to the core axis. -weakly to moderately magnetic. -crosscut by serpentine veins. -207.3-207.43m -medium green-grey colour. -aphanitic. -appears to be brecciated by serpentine, calcite and chlorite veins. -sharp lower contact at 40° to the core axis. -possibly flow top contact zone. -non magnetic. 207.43-208.02 «1VZ» -dark green and light grey interstitial material. -fine grained to medium grained orthocumulate and olivine spinifex. -50-70% equant and elongated serpentinized olivine grains. -looks like transition zone from spinifex to cumulate. -minor crosscutting serpentine veins. -wavy nature to elongated grains. -weakly magnetic. 208.02-208.17 «rodingite dyke» -light grey and light green colour. -aphanitic with fine grained acicular pyroxene grains. -aphanitic upper and lower contacts. -upper contact at 70° to the core axis. -lower contact at 80° to the core axis.		-moderate serpentine alteration. -weak serpentine and chlorite alteration. -weak to moderate serpentine alteration. -strong rodingite alteration.		

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		⌈208.17-228.65⌋«1YX» -dark grey and medium green-grey colour. -fine grained to medium grained mesocumulate and adcumulate. -70-80% serpentinized olivine grains. -crosscutting serpentine and calcite veins. -very weakly magnetic. -lower contact is gradational.		-weak serpentine alteration.		
		⌈228.65-256.30⌋«1XY» -dark green and green-brown colour. -fine grained adcumulate and mesocumulate. -80-90% serpentinized olivine grains. -rarely small patch of rodingite alteration. -crosscut by serpentine and calcite veins. -weakly magnetic. -sharp lower contact at 60° to the core axis. -olivine content decreases towards lower contact. -textures mottled near lower contact. -239.10-239.11m -fault gouge at 50° to the core axis.		-weak to moderate serpentine alteration.	⌈242.50-256.30⌋«1% Po» -1-2% disseminated and blebby Po.	-240.0-243.0m -WR AN01911.
		⌈239.62-239.74⌋«rodingite dyke» -light green-grey. -aphanitic with fine grained acicular pyroxene grains. -sharp upper contact at 90° to the core axis. -sharp lower contact at 60° to the core axis.		-strong rodingite alteration.		
256.30 TO 302.00	MAFIC VOLCANIC «2»	⌈256.30-264.75⌋«2abx» -256.3-257.36m -upper contact zone. -medium grey colour. -aphanitic, massive texture. -5% remnant amygdules. -mottled texture near upper contact with epidote alteration. -crosscutting chlorite and epidote veins. -sharp lower contact with altered zone at 75° to the core axis.		-weak chlorite and epidote alteration.	-<1.0% disseminated Po.	
		-257.36-260.3m -altered zone. -light green with a background red-pink colour. -aphanitic, massive textured. -2-10% chlorite and sulphide filled amygdules. -lower contact gradational into brecciated zone. -crosscut by chlorite and calcite veins.		-weak chlorite and hematite alteration.	⌈257.36-260.3⌋«1% Po» -1% disseminated Po.	-258.0-260.0m -WR AN01912.
		-260.3-261.7m -brecciated zone.		-weak to moderate chlorite alteration	⌈260.3-261.7⌋«5% Po»	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
		-dark grey with ligh grey-green clasts. -variable clasts sizes. -smaller clasts near upper contact. -aphanitic. -clasts are rounded to subangular. -10-15% amygdules in clasts. -sulphides replacing amygdules and groundmass. -crosscut by chlorite and calcite veins. -sharp lower contact at 85° to the core axis.		with weak silica alteration.	-5-10% disseminated Po.	
		-261.7-262.7m -dark grey colour. -aphanitic to very fine grained, massive texture. -5% chlorite, calcite and sulphide filled amygdules. -crosscutting chlorite veins.		-weak chlorite alteration.	{261.7-262.7}«2% Po» -2% disseminated Po.	
		-262.7-264.75m -brecciated zone. -dark grey-black groundmass with light grey clasts. -aphanitic. -clasts contain 5-10% chlorite and sulphide filled amgydules. -angular subangular clasts. -clasts look bleached. -crosscut by chlorite and calcite veins. -gradational upper and lower contacts.		-weak to moderate chlorite and silica alteration.	{262.7-264.75}«2% Po» -2% disseminated Po.	
		{264.75-302.0}«2ap» -pillowed volcanics. -light grey to white-grey colour. -aphanitic. -5-10%, with up to 30%, chlorite and calcite filled amygdules. -zones of pillow breccia within selvages. -selvages marked by increased chlorite alteration. -crosscut by chlorite, calcite and quartz veins.		-weak chlorite alteration with very weak pink alteration. -weak silicification.	-264.75-271.42m -<1.0% disseminated Po. {271.42-271.91}«5% Po» -5% disseminated Po. -271.91-274.18m -<1.0% disseminated Po. {274.18-274.73}«3% Po» -3% disseminated and vein associated Po. {274.73-276.83}«4% Po» -4% replacement Po.	-277.0-280.0m -WR AN01913.
		-280.0-290.2m -lighter coloured portion.		-280.0-290.2m -bleached and silicified.		
302.00 TO 302.00	E.O.H.					

HOLE NUMBER: DUN25-27

FALCONBRIDGE LIMITED
DRILL HOLE RECORD

DATE: 02/17/1992
IMPERIAL UNITS: METRIC UNITS

PROJECT NAME: 8186
PROJECT NUMBER: 008186
CLAIM NUMBER: L 7193
LOCATION: DUNDONALD TWP

PLOTTING COORDS GRID: UTM
NORTH: 5387817.00N
EAST: 512176.00E
ELEV: 301.00

ALTERNATE COORDS GRID:
NORTH: +
EAST: +
ELEV: 301.00

COLLAR DIP: -66° ' "
LENGTH OF THE HOLE: 200.25M
START DEPTH: M
FINAL DEPTH: 200.25M

COLLAR ASTRONOMIC AZIMUTH: 160° ' "

GRID ASTRONOMIC AZIMUTH: 160° ' "

DATE STARTED: 06/15/1991
DATE COMPLETED: 06/17/1991
DATE LOGGED: 06/18/1991

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: LONGYEAR
CASING: LEFT IN HOLE
CORE STORAGE: METSITE
UTM COORD.:

COMMENTS : To test Dundeal Ni zone at 650m depth; 120m east and 70m below DUN25-12.
WEDGES AT:

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
38.70	° ' "	-66° ' "	A	OK	
96.00	° ' "	-68° ' "	A	OK	
144.90	170° ' "	-70° ' "	S		
166.72	160° ' "	-70°30' "	S		
194.15	166° ' "	-70° ' "	S		
197.00	° ' "	-69°30' "	A		test taken in rods

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
-	-	-	-	-	

Dave McLaughlin

HOLE NUMBER: DUN25-27

DRILL HOLE RECORD

DATE: 02/17/1992

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 36.27	CASING «|ob|»					
36.27 TO 157.10	PYROXENITIC KOMATIITE «1J»	|36.27-133.50|«1L» -36.27-133.5m -massive, fine grain. -dark grey. -weakly magnetic 36.27-41.0m. -up to 5% contorted light blue-green to dark green serpentine in fractures. -40.0-41.0m -orthocumulate up to 50% olivine grains pale grey colour - chilled adjacent to flow contact at 41.0m. -minor polysuturing. -intercalated pyroxenitic and peridotitic flows ie. pale grey-green colour often gradational with peridotites and less than 1mm wide ie 45.4-46.8m. -42.5-42.5m -Fault, 1cm wide gouge at 60° to core axis. |133.50-157.10|«1J» |133.50-157.10|«1L» |133.5-140.0|«|SPIN|» -133.5-133.7m -pyroxenite spinifex breccia. -up to 50% contorted spinifex clasts. -contact at 133.5m is sharp and irregular - adjacent to serpentine vein. -fine to medium grain olivine spinifex. -133.7-140.0m -gradual increase in size to coarse grain peridotite spinifex flow. -varies from long needles in bunches to dendritic. -pale grey colour. -140.0-157.1m -Massive Peridotitic Komatiite. -see descripstion as per 36.27-133.5m. -154.0-157.1m -becoming more grey-green colour.		«mod serp» -weak graphite in fractures. -moderate serpentinization. «mod serp» -moderate serpentine alteration.	«1 po» -<1.0% pyrite or pyrrhotite disseminated. -can see occasional bleb or grain with hand lense. -less than 1% disseminated sulphides pyrite and pyrrhotite. -140.2m -1 bleb of pyrrhotite 3mm x 1mm in serpentine veinlet. -154.6-154.63m -1% disseminated pyrrhotite.	-orthocumulate 50-70% olivine dark green in grey intercumulate. -grains not touching. -mesocumulate 70-90% olivine greater 95% olive adcumulate.
157.10 TO 157.20	GRAPHITIC ARGILLITE «5g»	-sharp contact at 157.1m is at 80° to core axis. -possible flame structures at contact but cannot discern tops. -black, massive. -cannot see individual beds.		-pervasive graphite.	«5 po» -5% colloform pyrite (up to 1cm x 2cm) size and in veinlets. -quite large. -3mm vein of pyrite at 70° to core axis 157.15-157.18m.	-broken core.

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
157.20 TO 166.50	PYROXENITE KOMATIITE «1J»	-sharp contact at 157.2m is at 60° to core axis. -157.2-157.6m -broken core. -157.2-161.4m -massive cumulate. -fine grain, pale grey-green colour. -up to 20% pale cream to grey needles 2mm long of pyroxene randomly oriented. -158.3-159.0m -micro spinifex? -fine grain dendritic pyroxenes. -not sure if true spinifex or part of cumulate zone. -161.4-166.5m -several massive and spinifex flows average length 30cm to 1m. -gradual colour change from pale grey to dark grey. -locally spinifex zone only 3cm wide.		«mod serp» -moderate pervasive and fracture controlled serpentine.	-overall <1% sulphides.	
166.50 TO 177.80	PERIDOTITIC KOMATIITE «1L»	-166.5-177.8m -massive peridotitic komatiite. -dark grey, fine grain. -see description as per 36.27-133.5m. -166.5-166.51m -Fault minor gouge, broken core. -cannot measure orientation on the fault. {173.5-173.7}«{FA1}» -Fault, minor gouge broken core. -cannot measure orientation on the fault.		«mod serp» -moderate pervasive and fracture controlled serpentine.	-overall <1% sulphides. -175.0-177.8m 1-3% pyrrhotite and pyrite in fractures and in serpentine veinlets.	
177.80 TO 177.90	GRAPHITIC ARGILLITE «5g»	-broken core. -black, fine grain. -no visible bedding. -sharp contact at 85° to core axis at 177.9m.		-graphite.	-minor white carbonate veinlets. -<1% sulphides. «1 po»	-177.8-177.9m -strongly conductive/10cm when measured with ohm metre.
177.90 TO 193.60	PERIDOTITIC KOMATIITE «1L»	{177.9-179.9}«{SPIN}» -Flow top breccia. -coarse grain to medium grain olivine ? spinifex dendritic, often in fragments insitu brecciated by serpentine veinlets. {179.9-190.4}«1L2» -massive orthocumulate to mesocumulate peridotite. -180.69-180.7m -Fault - broken core. -minor gouge, no orientation can be measured. -dark grey colour. -190.2-190.3m -2-3% spinifex clasts, minor hyaloclastite flow top breccia. {190.4-193.6}«{SPIN}» -spinifex zone only 3cm wide. -190.43-193.6m -massive peridotite. {190.40-193.60}«1L»		«mod serp» -moderate pervasive and fracture controlled serpentine.	-<1% sulphides.	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
193.60 TO 194.50	GRAPHITIC ARGILLITE «5g»	-193.6-193.7m -minor graphite clasts. -193.7-194.5m -black, massive. -no visible bedding. -sharp contacts at 193.6 and 194.5m at 85° to core axis.			-<1% sulphides. «1 po»	-only conductive along fracture planes and 5mm x 5mm size clasts.
194.50 TO 200.25	PERIDOTITIC KOMATIITE «1L»	-dark grey, massive.		«mod serp» -moderate pervasive serpentine and in fractures and veins.	-<1% sulphides. -200.0-200.05m -2 disseminated blebs pyrrhotite.	
200.25 TO 200.25	E.O.H.					-Hole steepened, abandoned.

APPENDIX C

AUTHOR'S STATEMENT OF QUALIFICATIONS

and FIELD PERSONNEL

STATEMENT OF QUALIFICATIONS

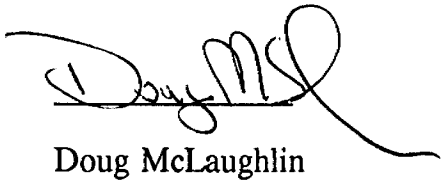
I, Arthur Douglas McLaughlin, of #9 - 820 Suzanne Street, Timmins, Ontario, do hereby declare:

I graduated from Acadia University in Wolfville, Nova Scotia with a Bachelor of Science degree in geology,

I have been employed as a mineral exploration geologist for the past twelve years,

I am currently employed as a geologist with Falconbridge Limited and that the work described in this report was conducted under my direct supervision,

I have no legal interest, nor expect any, in the mining claims described in this report, or in Falconbridge Limited.



Doug McLaughlin

Timmins, Ontario

FIELD PERSONNEL

Doug McLaughlin	Project Geologist, Falconbridge Limited #9 - 820 Suzanne Street, Timmins, Ontario P4N 8C4
Ian Liu	Technician, Falconbridge Limited 40 Shirley Street, Timmins, Ontario
Diamond Drillers	Norex Drilling Limited P.O. Box 88, South Porcupine, Ontario P0N 1C0
Diamond Drillers	Longyear Canada Inc., Contract Drilling Division P.O. Box 330, North Bay, Ontario P1B 8H6
Darral Chartrand	Surveyer, 421 Norman Street, Timmins, Ontario

Report #25

ASSM'T FILES

Ministry of Northern Development and Mines

Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9260.00145

Personal information collected on this form is obtained under the authority of the Mini
this collection should be directed to the Provincial Manager, Mining Lands, Ministi
Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

42A10NW0550 25 DUNDONALD

900

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s): FALCONBRIDGE LIMITED		Client No.: 130679.FL
Address: P.O. Box 1140. 571 MONETA AVE. TIMMINS ONT		Telephone No.: (705) 267-1183
Mining Division: PORCUPINE	Township/Area: DUNDONALD	M or G Plan No.:
Dates Work Performed: From: JUNE 15, 1991	To: OCTOBER 16, 1991	

ONTARIO GEOLOGICAL SURVEY
GIS - ASSESSMENT FILES
NOV 19 1992
RECEIVED

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	
✓	Physical Work, Including Drilling	DIAMOND DRILLING, SURFACE
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

RECORDED
OCT 23 1992
Receipt

Total Assessment Work Claimed on the Attached Statement of Costs $ 47,448

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
DOUG McLAUGHLIN	9-820 SUZANNE ST., TIMMINS, ONT
IAN LIU	40 SHIRLEY ST., TIMMINS, ONT.
DARRAL CHARTRAND	421 NORMAN ST., TIMMIN, ONT
NORET DRILLING	P.O. Box 89, SOUTH PORCUPINE, ONT

(attach a schedule if necessary)
LONGYEAR CANADA INC., P.O. Box 330, NORTH BAY, ONT

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: DOUG McLAUGHLIN, 9-820 SUZANNE ST. TIMMINS, ONT

Telephone No.	Date	Certified By (Signature)
(705) 267-3105	Oct-16.1992	

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
$ 47,448	OCT. 23/92		RECEIVED MINING DIVISION 23 OCT 28 1992 10:15
	Deemed Approval Date: JAN. 21/93	Date Approved	
	Date Notice for Amendments Sent		

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date

	A	B	C	D	E	F	G
1	Work report			Value of	Value applied	Value assigned	Reserve:
2	number for	Claim	Number of	assessment	to this claim	from this claim	work to be
3	applying	number	claim units	work done on			claimed at a
4	reserve			this claim			future date
5	not applic.	P1128060	1	$0	$2,210	$0	$0
6	"	P1128061	1	$0	~~$2,120~~ $1,880	$0	$0
7	"	P1128064	1	$0	$2,120 $1,880	$0	$0
8	"	P1128065	1	$0	$2,120 $1,880	$0	$0
9	"	P1113207	1	$0	$2,120 $1,880	$0	$0
10	"	P1113215	1	$0	$2,120 $1,880	$0	$0
11	"	P1113216	1	$0	$2,120 $1,880	$0	$0
12	"	P1113229	1	$0	$2,120 $1,880	$0	$0
13	"	L71013	1	$19,482	$0	$12,000	$7,482
14	"	L71193	1	$27,966	$0	~~$5,050~~ $3,370	~~$22,916~~ 24,596
15							
16			10	$47,448	~~$17,050~~	~~$17,050~~	~~$30,398~~ 32
17			Total number	Total value	Total value	Total assigned	Total reserve
18			of claims	work done	work applied	from	

Total Number of Claims	Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1. ☑ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature

Date Oct 16 1992

0241 (03/91)

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9260.00145

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre	1100	
	Field Supervision Supervision sur le terrain		1100
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type Drilling	46,232	
	Surveying	116	
			46,348
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		47,448

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Indirect Costs Total partiel des coûts indirects		
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		
	Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)		

RECORDED OCT 23 1992 Receipt

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as _____ I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	Date

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.