

ASSESSMENT REPORT FOR
DIAMOND DRILLING ON
FALCONBRIDGE LIMITED MINING
CLAIMS IN SOTHMAN TWP.
42A-14 NTS

MAY 5 1994

480395mE

480395mE

DRILL PLAN

TOTAL FIELD MAGNETICS (nanoteslas)

62000

61000

60000

GEOPHYSICS

5305200mN

S054-02

S054-03

5305800mN

200m

218.00m

200m

0m

P1112935

0m

-200m

5305200mN

5305400mN

5305600mN

-200m

LEGEND

MAJOR ROCK DIVISIONS

- 10 BASALT
- 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
- B Medium Grained
- C Coarse Grained
- D Quartz-Feldspar Physic
- E Amphibole/Pyroxene
- F Primary Textures
- G Opaque/Argillaceous
- H Metakalic
- I Alkalic
- J Calc-Alkalic
- K Metakalic
- L Fluvial
- M Metakalic
- N Metakalic/Alkaline
- O Filled
- P Quartz Physic
- Q Gabbro-like Formation
- R Sphalerite, Galena
- S Pyroclastic
- T High Mg
- V High Fe
- W High Al
- X Anorthic
- Y Subvolcanic
- Z Highly Crystalline (>80)

ALTERATION MODIFIERS

- (A) Albitization
- (B) Sericitization
- (C) Carbonatization
- (D) Chloritization
- (E) Epidotization
- (F) Hematization
- (G) Pyroclastic Alteration
- (H) Sulfidation
- (I) Silicification
- (J) Saponification
- (K) Calc-sulfidation

Doug McLaughlin

FALCONBRIDGE LIMITED

Exploration Division Timmins, ONTARIO

SOTHMAN PROPERTY (SOTHMAN 54)

ROTATED DIAMOND SECTION 480395mE (+/-50m)

LOOKING SOUTHWEST 265° SOTHMAN Top.

Traced by : <i>ARDES</i>	<i>01/01/81</i>	MTS : <i>11-01/81</i>	PROJECT No: <i>800</i>
Drawn by : <i>d e l</i>	<i>01/11/81</i>	MNP No:	FILE: <i>800 A</i>
Supervised by : <i>D McLaughlin</i>	<i>25/01/81</i>	Scale :	1 : 5000 (metres)
Revised by : <i>d e l</i>	<i>01/01/81</i>		

5305750mN

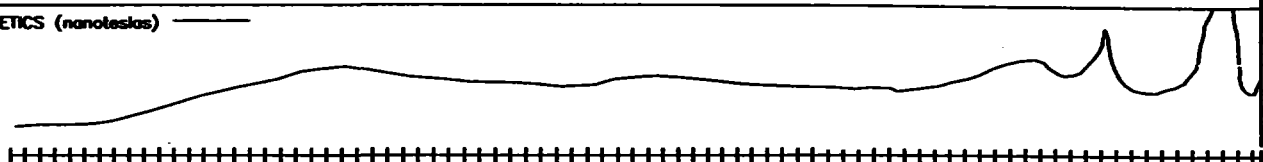
5305750mN

S051-01

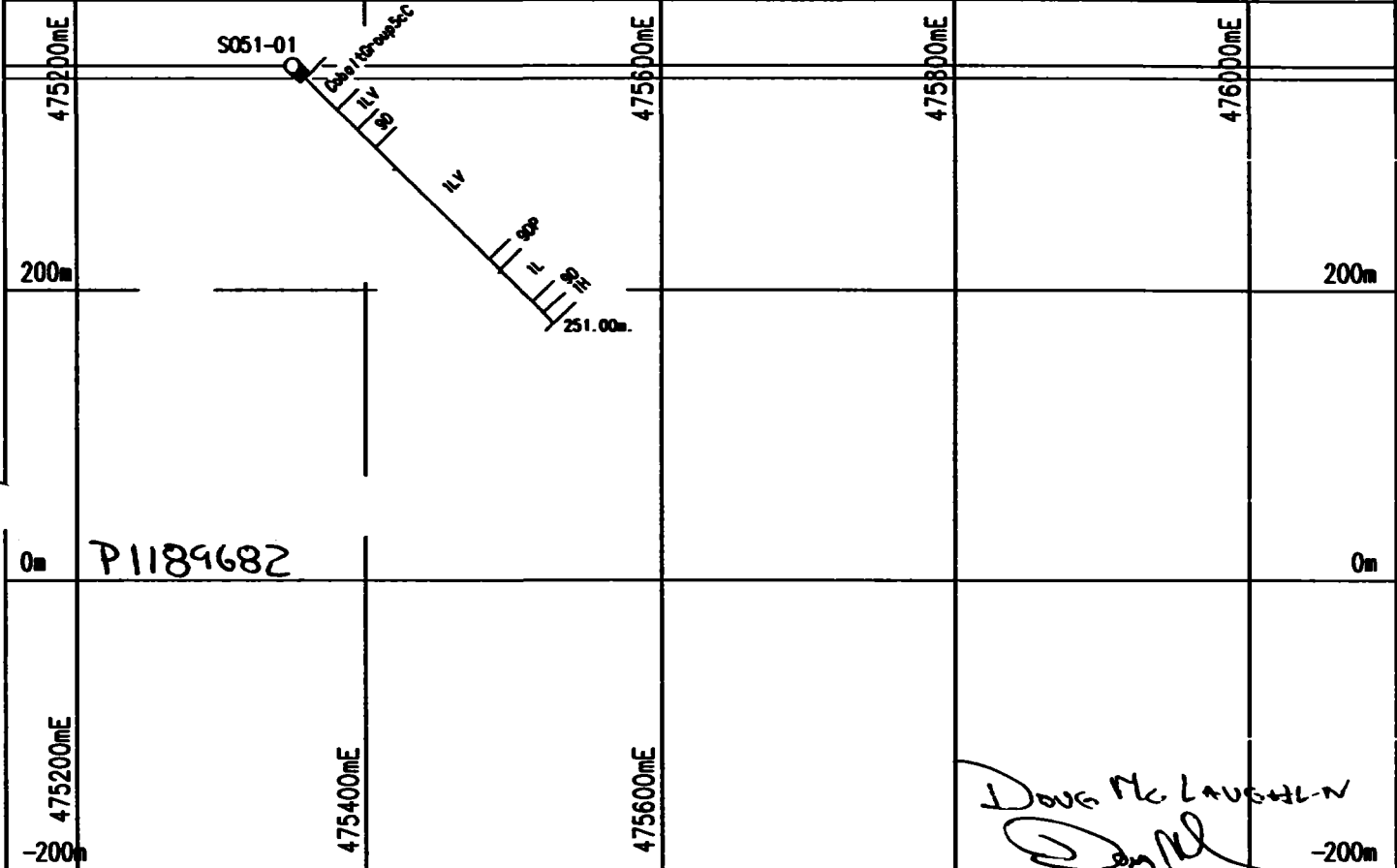
DRILL PLAN

TOTAL FIELD MAGNETICS (nanoteslas)

59000
58000
57000



GEOPHYSICS



LEGEND

- MAJOR ROCK DIVISIONS**
- 10 GNEISS
 - 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
 - Brookite
 - Coarse Grained
 - Quartz-Feldspar Physic
 - Amphibole/Plagioclase
 - Primary Fragments
 - Crystalline/Amorphous
 - Tabular
 - Blocky
 - Calc-Alcali
 - Magmatic
 - Fine
 - Medium
 - Variable/Schistose
 - Platy
 - Quartz Physic
 - Quartz Iron Formation
 - Subvolcanic, Exhalative
 - Pyroclastic
 - High Ig
 - High P
 - High A
 - Andesitic
 - Islandic
 - Highly Deformed (T>60)

- ALTERATION MODIFIERS**
- Albitization
 - Chloritization
 - Chlorite
 - Chloritization
 - Chloritization
 - Epithermal
 - Hydrothermal
 - Pyroclastic Alteration
 - Sericitization
 - Staurolite
 - Serpentinization
 - Silicification

FALCONBRIDGE LIMITED

Exploration Division Timmins, ONTARIO

BUDD LAKE (SOTHMAN 51)

DIAMOND DRILL SECTION 5305750mN (+/-50m)

LOOKING NORTH SOTHMAN Top.

Traced by : <i>ARDES</i> <i>01/01/91</i>	NTS : <i>1:1000</i> PROJECT No: <i>000</i>
Drawn by : <i>d o l</i> <i>21/11/91</i>	MAP No: FILE: <i>000 0</i>
Supervised by : <i>D McLaughlin</i> <i>25/01/91</i>	Scale : 1 : 5000 (metres)
Revised by : <i>d o l</i> <i>01/01/91</i>	0 50 100 150 200

HOLE NUMBER: 8081-01

PALCOMM LTD
DRILL HOLE RECORD

DATE: 08/12/1994
METRIC UNITS: X

PROJECT NAME: 8188 PLOTTING COORDS GRID: UTM
 PROJECT NUMBER: 008188 NORTH: 5308740.00M
 CLAIM NUMBER: P1889692 EAST: 478280.00M
 LOCATION: BUDD LAKE ELLEV: 355.00
 COLLAR ASTROMONIC AZIMUTH: 90° 0' 0"

DATE STARTED: 11/06/1993 COLLAR SURVEY: NO
 DATE COMPLETED: 11/10/1993 ROD LOG: NO
 DATE LOGGED: 11/20/1993 HOLE WALKS WATER: NO
 COLLAR SURVEY: NO
 PULS BY SURVEY: NO
 PULSED: NO
 HOLE SIZE: 80
 GRID ASTROMONIC AZIMUTH: 90° 0' 0"

CONTRACTOR: Horex
 CLAIM: Pulled out
 CORE STORAGE: METRITS
 UTM COORD: 1

COMMENTS :

RECORD A1:

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	PLAO	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	PLAO	Comments
60.00	75° 0' 0"	-44° 0' 0"	B								
120.00	83° 0' 0"	-45° 0' 0"	B								
180.00	88° 0' 0"	-45° 0' 0"	B		OK						
250.00	90° 0' 0"	-46° 0' 0"	B		OK						

HOLE NUMBER: 8081-01

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

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Dave McLaughlin
 Doug Myl

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 12.50	OVERBURNED -obp					
12.50 TO 43.40	«cobalt» «group» «BCC»	-pale red to green, coarse -massive, paracrystalline, with rare intervals «50cm of bedded sandstone, fragments subrounded to subangular. In order of decreasing abundance are granitic, mafic volcanic, ultramafic volcanic, max size 30cm diam. -40° CBM - bedding at 36.5m in sandy layer -lower contact sheared in lower 10cm at 30-40° CBM		-calcite microveins to 5mm, some hematite, increased calcite in lower 30cm, with weak pervasive chlorite -chlorite, clay along contact edge	-trace Py	
43.40 TO 62.67	KOMATIITE PERIDOTITE PLUMS «LIV»	-grey-green, fine grained -thin flows «10 metres thick with reasonably preserved spinifex -to cumulate textures, flow contacts more serpentinitised -flows appear to top downhole -43.4-46.0m: highly tectonised, strong calcite veins, foliation 10-20° CBM, cracked breccia 51.4-53.5m: lower contact sheared «FALP-«50.1-51.4» -sheared, fracture zone, below 53.0m increased alteration (serpentine, calcite and granitisation) with primary textures obscured «FALP-«53.5-54.3» -broken core, 1-5cm granitic dykes as below «dnd«53.5-56.1» -Dyenite Dyke, both contacts tectonised «FALP-«56.38-59.0» -broken core, gouge, foliation at 0-20° CBM -59.18-60.74m: Dyenite Dyke, lower contact tectonised		«Cb,Sp» -strong pervasive calcareous, calc-serpentine along fractures and olivine cumulus -pink to white calcite veins up to 3cm (51.5m)	-minor pyrite disseminated euhedral grains	
62.67 TO 80.25	MELTIC INTRUSIVE «D»	-orange red, medium grained, sheared -70V Feldspar crystals to 1mm generally with irregular aggregates to stringer like chloritised mafic minerals? -«1» quartz grains, but patchy silica aggregates (alteration likely)		«Cb,Sp» -calcite as aggregates, microveins, chlorite after mafics, patchy silica	-minor disseminated pyrite	

HOLE NUMBER: 8031-01

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CL	ALTERATION	MINERALIZATION	REMARKS
188-64 TO 188-64	KONARITITE PERIDOTITE #114*	<p>weak cataclastic fabric but variable orientation 30-40° CMB - lower 2.0m increased bands of wallrock with basal 90cm consisting of aggregates of pyroxite in wallrock (ultramafic) - granitification</p> <p>-dark grey-green, fine grained</p> <p>-upper contact sheared at 20° CMB, chlorite</p> <p>-textures obscured by alteration, local cumulate/spinelifer visible but no clear cut tops</p> <p>-more plagioclase with white to pale brown colour, or less iron staining</p> <p>-pyroxite Dyke, similar to above</p> <p>-#117, 0-118, 72#-9D</p> <p>-spinelite Dyke, similar to above, cut by pink apatite dyke, lower contact at 25° CMB</p> <p>-20.1m banding at 30° CMB</p> <p>-#113, 76-111, 85#-9D</p> <p>-only trace pyroxite, upper contact at 60° CMB, lower contact at 48° CMB</p> <p>-#113, 25-118, 22#-9D</p> <p>-minor pyroxite</p> <p>-#144, 0-145, 2#-9D</p> <p>-concorded foliation in hanging wall for 30cm 0-30° CMB</p> <p>-150.28m, possible flow breccia</p> <p>-#170, 0-188, 64#-Structure zones</p> <p>-broken core, minor gouge concorded foliation, slickensided foliation 10-20° CMB, fractures 0-30° CMB false intrusives to 10cm, lower contact sharp, but irregular</p>	<p>-red, medium grained</p>	<p>-massive, porphyritic with up to 20# light grey feldspar to 1mm in finer grained groundmass of feldspar, sillite, chlorite</p> <p>-similar groundmass to above pyroxite/granite dykes,</p>	<p>-red, medium grained</p>	<p>-massive, porphyritic with up to 20# light grey feldspar to 1mm in finer grained groundmass of feldspar, sillite, chlorite</p> <p>-similar groundmass to above pyroxite/granite dykes,</p>
188-64 TO 188-85	PLAGIOLITE INTRUSIVE #9D*	<p>-red, medium grained</p>	<p>-massive, porphyritic with up to 20# light grey feldspar to 1mm in finer grained groundmass of feldspar, sillite, chlorite</p> <p>-similar groundmass to above pyroxite/granite dykes,</p>	<p>-red, medium grained</p>	<p>-massive, porphyritic with up to 20# light grey feldspar to 1mm in finer grained groundmass of feldspar, sillite, chlorite</p> <p>-similar groundmass to above pyroxite/granite dykes,</p>	<p>-red, medium grained</p>

HOLE NUMBER: 9051-01

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CH	ALTERATION	MINERALIZATION	REMARKS
198.85 TO 230.30	KOMATIITE PERIDOTITE *1*	-dark green-grey, very fine grained -likely a series of flows, few textures visible however, local diving bladed spinifer, no tops possible, strongly foliated, but decreasing downhole, moderately magnetic, folio stringers, like above unit, common especially in upper 3.0m #202.8-205.8#*9D*		*Cb, Tca -strongly calcareous, pervasive and up to 10% veins to 1cm, decreasing downhole	-minor disseminated Po	
230.30 TO 241.02	PLAGIAC INTRUSIVE *9D*	-pale pink to brown, fine grained -massive to slightly porphyritic, with 8% pale coloured feldspar crystals to 4mm in finer grained feldspar-chlorite stringers (after melt minerals likely) and silica groundmass -238.02-241.02m: highly altered volcanic? rock with intrusive bands, contorted foliation		*Cb -calcareous with microveins, and pervasive	*1-3Py* -is disseminated pyrite, locally to 3% over intervals <30cm	
241.02 TO 281.00	KOMATIITE VOLCANIC *1*	-medium green-grey fine grained -no primary textures, other than possible narrow flow breccias locally		-1% quartz-calcite microveins, weak serpentine *Cb*	-trace pyrite	
281.00 TO 281.00	E.O.H.					

PROJECT NAME: 8188 PLACING COORDS GRID: UTM
 PROJECT NUMBER: 009188 NORTH: 5109500.00N
 CATH NUMBER: P1122915 EAST: 480390.00E
 LOCATION: SOTHEM TOWNSHIP ELEV: 370.00

DATE STARTED: 10/27/1993 COLLAR SURVEY: NO
 DATE COMPLETED: 11/02/1993 HOLE MAKER WATER: NO
 DATE LOGGED: 11/02/1993 GRID ASTROMONIC AZIMUTH: 355° 0' 0"

ALTERNATE COORDS GRID: LINE CONTRACTOR: NOKEX
 NORTH: 6+ 0W CHASING: NO
 EAST: 2+40W CORE STORAGE: METERS
 ELEV: 370.00 UTM COORD: 1

COMMENTS: 1
NONE AT 1

DIRECTIONAL DATA:

Depth (M)	Astronomic			Type of Test	FLAG	Comments	Depth (M)	Astronomic			Type of Test	FLAG	Comments
	Azimuth	Dip degrees						Azimuth	Dip degrees				
60.00	25° 0' 0"	-45° 0' 0"	S	OK									
120.00	15° 0' 0"	-45° 0' 0"	S	OK									
180.00	15° 0' 0"	-47° 0' 0"	S	OK									
240.00	5° 0' 0"	-48° 0' 0"	S	OK									
300.00	15° 0' 0"	-48° 0' 0"	S										

Doug McLaughlin
Doug McLaughlin

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLES TO CA	ALTERATION	MINERALIZATION	REMARKS	
0.00 TO 13.00	*|sl|* INTRUSIVE	-casing					
13.00 TO 61.80	PROCKENITE INTRUSIVE *s|* *s|*	-medium grey to dark green, fine grained -massive, variably altered, equigranular to local orthocumulate layers, less than 1.0m thick, weakly magnetic textures obscured by alteration, pyroxene up to 80%, equigranular, with olivine, and serpentinized groundmass -increased olivine grains to 50% in orthocumulate, increased cumulate sections below 47.0m -narrow gouge/diarr zones <5cm, sickenoides common along fractures -47.0-61.8m: increased dark green colour with more olivine cumulate intervals to 50cm, -dark green, medium grained		-moderately serpentinized, calcite-serpentine with some quartz -veins at 10-10' CAB commonly	-0		
61.80 TO 126.38	PROCKENITE INTRUSIVE *s|* *s|*	-up to 90% olivine grains typically 1-2mm, with serpentinized ground mass, cumulate, strongly magnetic, -lower contact sheared with gouge over 10m at 50' CAB -increased olivine downhole with local intervals of adcumulate dark green, fine grained		-80% -strongly serpentinized -after olivine grains and as antigorite veins to 1cm, rarely as massive bands to 5cm, occur with blue alteration, some calcite, veins at 20-40' CAB, 70-80' CAB -109.3-126.45m: increased veins to bands of pale grey bleaching with calcite veins, calc *80% -moderate to strong serpentine as antigorite veins <1cm, locally with magnetic minor calcite	-0	-very fine grained amphibole, disseminated, below 100.0m disseminated pyrite along fractures at 101.7-103.3m, Fe sickenoides at 102.2m	
126.38 TO 212.20	DUNITE INTRUSIVE *s * *s *	dark green, fine grained -massive, equigranular, up to 95% serpentinized olivine grains within serpentine groundmass 0-5ft disseminated to anhedral blobs of magnetite, sickenoides or thin gouge common along serpentine veins -fracture zones with some shearing usually less than 5cm					

HOLE NUMBER: 804-02

DRILL HOLE RECORD

LOGGED BY: D. MCARDONNELL

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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CL	ALTERATION	MINERALIZATION	REMARKS
		-dunite only moderately fractured -more emerald green colour below 175.0m #126.85-128.4#<P&I># 45-55° foliation -188.8-189.0m: shear #P&I>#203.6-214.0# shear zone local gouge some, poorly lithified rock in zones over 30cm, foliation at 10°, 60° CAS				
212.20 TO 231.90	DUNITE INTRUSIVE #6MYC#	-212.2-230.7m: typically equant olivine to 1mm, with local elongate grains 230.7-251.9m: <1mm irregular patches of grey serpentine, dark black-green colour	#8°	-pale green bands to 30cm, or as veins of serpentine-calcite		
251.90 TO 294.70	DUNITE INTRUSIVE #6MYC#	-251.9-271.35m: coarse grained section, -271.35-294.7m: fine grained <0.5mm typically, dark green-grey	#8°	-weak calcite with pervasive calcite -278.5-279.5m: pale green to grey, hard, quartz veins	-trace Pb, along fractures	
294.70 TO 328.65	PERIDOTITE INTRUSIVE #6L2M#	-dark grey, fine grained -massive, equigranular up to 90# serpentinized olivine grains to 1mm, in serpentinized, calcareous ground mass, disseminated magnetite, -306.3-306.43m: possible marginal breccia or cataclastic from serpentine vein, very fine grained with acicular grains -308.0-327.0m: dark green colour -lower contact irregular with orthocumulate sharp to partially inside lower unit, serpentine vein	#8°	-serpentine, minor antigorite veins -some olivine grained pale grey to white -306.0-327.0m: increased serpentine with antigorite veins		

HOLE NUMBER: 8054-02

DRILL HOLE RECORD

LOGGED BY: D. MCLAUGHLIN

PAGE: 3

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CL	ALTERATION	MINERALIZATION	REMARKS
328.45 TO 351.00	PERIDOTITE eLs	<ul style="list-style-type: none"> -grey, fine grained -upper 20cm pale brown-red with embayed olivine grains to 5mm, grades into orthoamphibole with polyhedral to breccia texture, -grey, 345.42-351.0 -grey to green -fine grained, local orthoamphibole section -local 8-10cm wide breccia fragments, angular within serpentine groundmass 		<ul style="list-style-type: none"> -St. Csa -serpentine - moderate, calcareous -serpentine, calcareous -serpentine, calcareous 		
351.00 TO 351.00	E.O.H.			<ul style="list-style-type: none"> -quartz-calcite veins, serpentine 		

HOLE NUMBER: 8094-02

DRILL HOLE RECORD

LOGGED BY: D. McLAUGHLIN

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HOLE NUMBER: 8034-03

FALCONRIDGE LIMITED
DRILL HOLE RECORD

DATE: 09/12/1994
IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: 0388
PROJECT NUMBER: 008188
CLAIM NUMBER: P1112935
LOCATION: SOTHRAN TOWNSHIP

DATE STARTED: 11/02/1993
DATE COMPLETED: 11/08/1993
DATE LOGGED: 11/08/1993

PLOTTING COORDS
GRID: UTM
NORTH: 5308530.00M
EAST: 480285.00M
ELEV: 370.00

ALTERNATE COORDS
GRID: LINE
NORTH: 6.0M
EAST: 3.60M
ELEV: 370.00

COLLAR DIP: -45° 0' 0"
LENGTH OF THE HOLE: 218.00M
START DEPTH: 0.00M
FINAL DEPTH: 218.00M

COLLAR AZIMUTH: 175° 0' 0"

GRID AZIMUTH: 175° 0' 0"

COLLAR SURVEY: NO
ROD LOG: NO
HOLE WALS VATER: NO

PULSE BH SURVEY: NO
PLUGGED: NO
HOLE SIZE: 89

CONTRACTOR: NOTEN
CASING:
CORE STORAGE: METSITS
UTM COORD.:

COMMENTS:
RECESS AT:

DIRECTIONAL DATA:

Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (M)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
59.00	164° 0' 0"	-45° 0' 0"	S	OK		.	.	.	.	.	.
120.00	182° 0' 0"	-45° 0' 0"	S	OK		.	.	.	.	.	.
180.00	181° 0' 0"	-45° 0' 0"	S	OK		.	.	.	.	.	.

HOLE NUMBER: 8034-03

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

PAGE: 1

Dave McLaughlin
Dave Miffl

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
0.00 TO 11.00	OVERBURDEN {obs}	-casing				
11.00 TO 61.40	PERIDOTITE INTRUSIVE {sls}	-grey to green, dark, fine grained -massive, cumulate, often groundmass altered obscuring textures, up to 70 μ olivine grains to 1mm, subrounded and equant generally in serpentinitized with dark brown alteration mineral (serpentine also?) groundmass, magnetic with disseminated magnetite -unit becoming more green coloured below 23.0m -fracture zones along serpentine veins, up to 10cm wide especially between 11.0-17.0m, 70-90°, 0-10° CB, common shear slips with alibemalides along serpentine veins -27.03-28.2m shear zone with serpentine veins, foliation at 0-10° CB -36.1-53.1m; darker green colour, with increased pervasive serpentine alteration, groundmass pale grey to green, less magnetic than upper interval. -53.11-60.5m calcite-quartz stockworks, veins to 1cm, bleached wallrock common, to pale green, veins at 0-10°, 70-60° CB typically -53.4m: weak grain size banding 1-5cm, 70° CB -lower contact transitional		-85° -serpentine after olivine, groundmass serpentinized with calcite microveins to 1cm thick 40-50° CB, common, 70-90° CB,	-0	
61.40 TO 72.00	PERIDOTITE INTRUSIVE {sls}	-dark green, medium grained -massive, cumulate, up to 85 μ dark green olivine grains to 2mm, equigranular in pale grey-green groundmass -local variations in grain size and percentage, magnetic		-85° -moderate serpentine -5 μ antigorite veins to 5mm, minor crystalite fibres perpendicular to antigorite veins, 20-30° CB -calcite-quartz veins to 5mm, locally boudinaged	-0	
72.00 TO 116.80	DUNITE INTRUSIVE {8NY}	-dark green, fine grained -mesocumulate, but textures obscured by serpentine alteration, 90 μ olivine magnetic with disseminated magnetite crystals to 8 μ , and with antigorite veins locally -76.9-82.6m fractured core with 'bleached' pale		-strong 85° -antigorite veins to 1cm, and after cumulate olivine grains, calcite with veins, 45° crystalite veins to	{80.0-118.8 μ minor Pb}	

HOLE NUMBER: 804-03

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

PAGE: 2

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLES TO CH	ALTERATION	MINERALIZATION	REMARKS
118.50 TO 125.00	FELSIC DYKE e8aa	green serpentine #94.7-95.4#-PVI1e -sheared rock, gouge, strong foliation at 70° -112.7-112.82m shear zone, gouge -lower contact fractured, bleached rock over 5cm		1mm -90.3-118.5m; green serpentine, pervasive		
125.00 TO 180.00	DUNITES INTRUSIVE e6HY	-pale green, aphanitic to very fine grained -massive, mottled, hard, c1t feldspar crystals to 1mm, minor quartz, in very fine grained granular groundmass, upper 20cm mainly red-brown rock - possible hornfels ultramafic? -120.85-121.7m; ultramafic as above, cut by 1cm felsic dykes, upper contact 68° CAB		-siliceous, weakly calcareous, quartz- calcite microveins patchy chlorite locally, giving mottled texture -strong gr -strong antigorite alteration, calcite with serpentine veins, crystalline veins 4mm	-trace pyrite	
180.00 TO 201.36	PERIDOTITE INTRUSIVE e6LS	-green, fine grained -same as above ultramafic, upper 10cm broken core #128.8-126.2#-PVI1e -broken core, gouge gradational change from emerald green colour to dark green-black over 20 meters between 140.0-160.0m		-gr -antigorite-calcite veins to 1cm, often pale green colour, not as common as above unit; increased calcite veins below 197.0m to 1cm, generally at 70-80° CAB up to 18% of unit in lower 80cm	-minor Po, Py along fractures	
201.36 TO 204.67	PROCHLORITE INTRUSIVE e6J	-grey, fine grained -massive, equigranular, pyroxene with olivine, lower contact fractured over 10cm		-weakly serpentinized 5% calcite- quartz veins to 1cm, 60°, 30° CAB	-minor pyrite with quartz-calcite veins c0.1% over entire unit	
204.67 TO 218.00	INTER- MEDIATE VOLCANIC e3aa	-pale blue-grey, -massive, very fine grained, amygdaloidal, few primary structures/textures, local zones of very indistinct breccia texture over 20cm, possible flow breccias? -208.8-208.9m; patchy zones of amygdalae with variable size		-strongly calcareous as microveins, filling amygdalae and pervasive, eCb		

HOLE NUMBER: 8094-03

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

PAGE: 3

HOLE NUMBER: 804-03

DRILL HOLE RECORD

DATE: 05/12/1994

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALIZATION	REMARKS
218.00 TO 219.00	E.O.H.					

HOLE NUMBER: 804-03

DRILL HOLE RECORD

LOGGED BY: D. McLaughlin

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THE TOWNSHIP
OF
2.15772
SOTHMAN²
DISTRICT OF
SUDBURY
PORCUPINE
MINING DIVISION
SCALE: 1-INCH=40 CHAINS

LEGEND

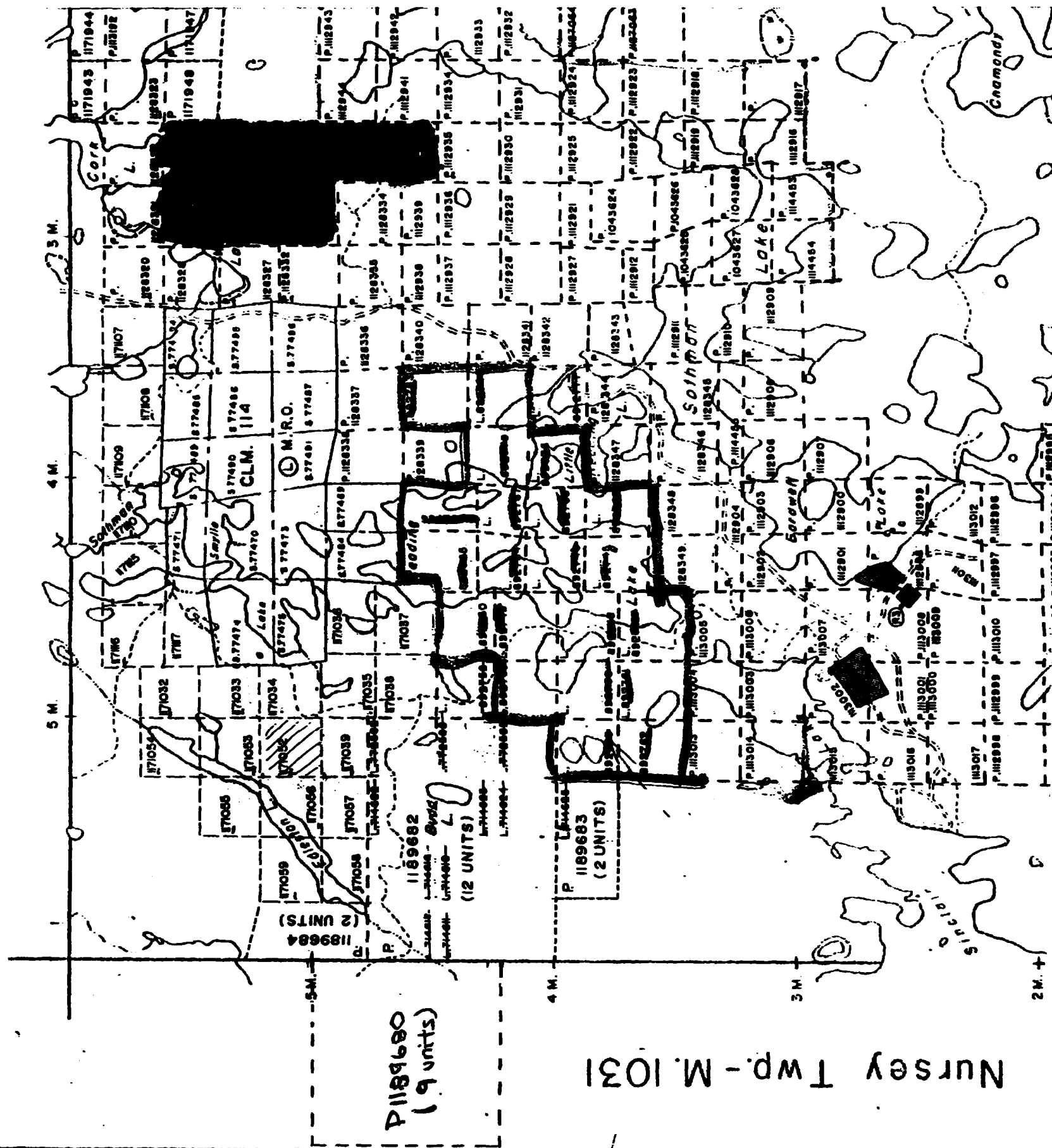
- Ⓟ PATENTED LAND
- Ⓢ CROWN LAND SALE
- Ⓛ LEASES
- Ⓛ LOCATED LAND
- Ⓛ LICENSE OF OCCUPATION
- Ⓛ MINING RIGHTS ONLY
- Ⓛ SURFACE RIGHTS ONLY
- Ⓛ ROADS
- Ⓛ IMPROVED ROADS
- Ⓛ KING'S HIGHWAYS
- Ⓛ RAILWAYS
- Ⓛ POWER LINES
- Ⓛ MARSH OR MUSKEG
- Ⓛ MINES
- Ⓛ CANCELLED

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Flooding Rights -- L.O. 7191 File No.162 vol. 4

Sample Twp. - M. 1100



P1189680 (9 units)

Nursey Twp. - M. 1031

Semple Twp. - M. 1100

THE TOWNSHIP OF 2.15772 SOTHMAN²

DISTRICT OF
SUDBURY

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

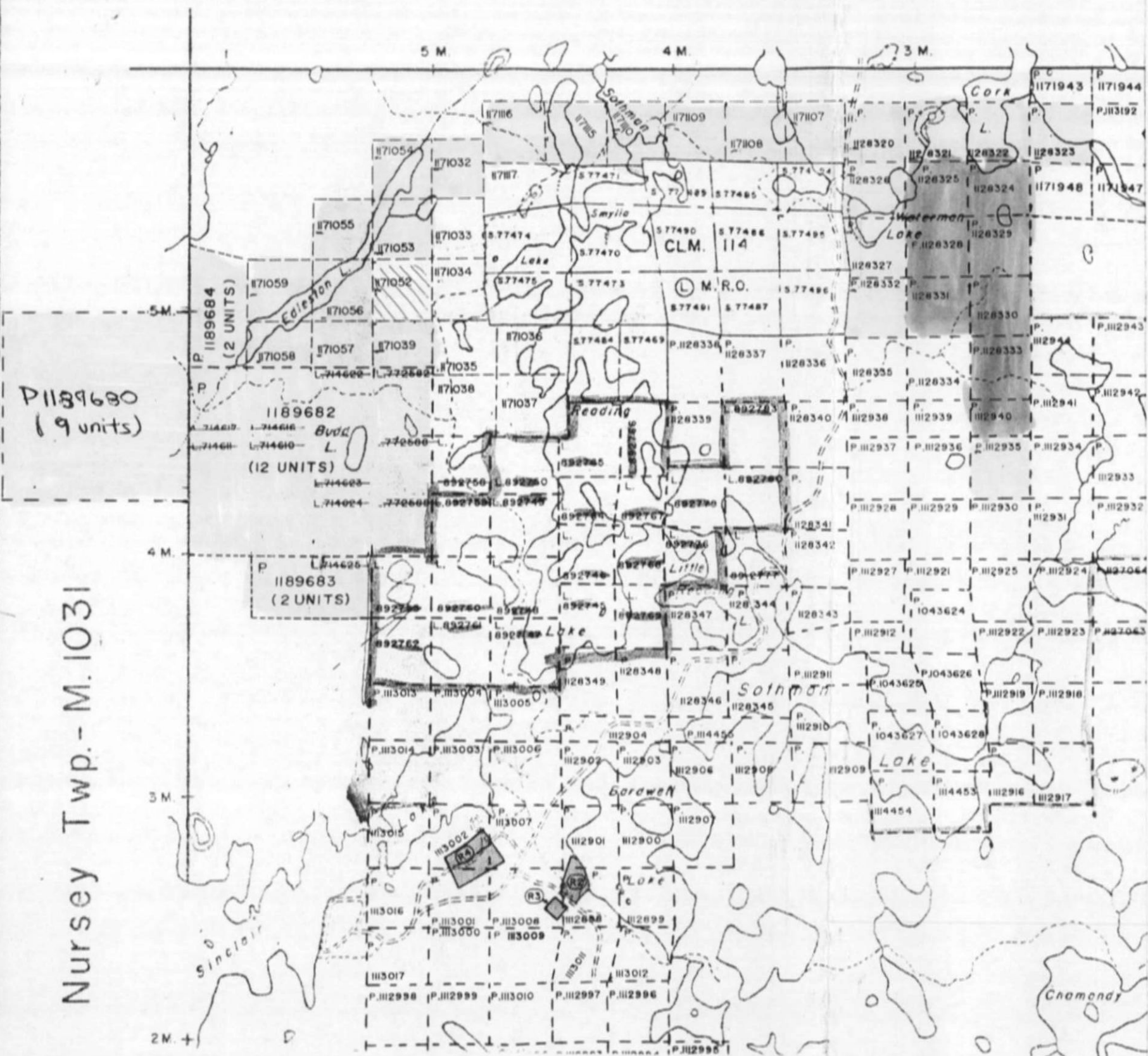
LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.P.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS —
- IMPROVED ROADS —
- KING'S HIGHWAYS —
- RAILWAYS —
- POWER LINES —
- MARSH OR MUSKEG —
- MINES X
- CANCELLED C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Flooding Rights -- L.O. 7191 File No. 1162 vol. 4



1189680
(9 units)

Nursey Twp. - M. 1031

2M. +



Personal information collected on this form is obtained under the authority of the
this collection should be directed to the Provincial Manager, Mining Lands,
Sudbury, Ontario, P3E 6A5, telephone (705) 670-7284.



41P140W0002 2 15772 SOTHMAN

900

- Instructions:
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of mining 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) FALCONRIDGE LIMITED		Client No. 130 679
Address PO Box 1140, 571 MONETA AVE, TIMMINS, ONT P4N 9H9		Telephone No. (705) 267-1133
Mining Division TIMMINS	Township/Area SOTHMAN, N. 1/2 Sec 3	M or G Plan No. C-3999
Date Work Performed From: OCT 26, 1993	To: NOV 11, 1993	

Work Performed (Check One Work Group Only)

Work Group	Type
<input type="checkbox"/> Geotechnical Survey	
<input checked="" type="checkbox"/> Physical Work, including Drilling	DIAMOND DRILLING
<input type="checkbox"/> Rehabilitation	
<input type="checkbox"/> Other Authorized Work	
<input type="checkbox"/> Assays	
<input type="checkbox"/> Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs \$ 38,445

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
NOBLE DRILLING LIMITED	PO. BOX 33, PORCUPINE, ONT. P0N 1C0
DOUG McLAUGHLIN	169 BASCOM ST N, TIMMINS, ONT P4N 6G8

(attach a schedule if necessary)

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 May 16/94	Recorded Holder or Agent (Signature) <i>[Signature]</i>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------	------------------------------------------------------------

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, 169 BASCOM ST N, TIMMINS, ONT P4N 6G8		
Telephone No. 267-3105	Date May 16/94	Certified By (Signature) <i>[Signature]</i>

For Office Use Only

Total Value Cr. Recorded \$38,445.	Date Recorded JAN. 25, 1995	Mining Recorder T. Dinkley Signed and dated Date Approved	Received Stamp (c) OCT 27 1994 1145
Deemed Approval Date		Date Notice for Amendments Sent	

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

A	B	C	D	E	F
Claim	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
313					
314	Claim				
316	number				
316				11,653.9	14,14
317	P112936	626,142	6347	120,000	644,142
318	P1128320	60	6400	60	60
319	P1128321	60	6400	60	60
320	P1128322	60	6400	60	60
321	P1128323	60	6400	60	60
322	P1128324	60	6400	60	60
323	P1128327	60	6400	60	60
324	P1128332	60	6400	60	60
328	P1171032	60	6400	60	60
328	P1171039	60	6400	60	60
327	P1171063	60	6400	60	60
328	P1171064	60	6400	60	60
329	P1171065	60	6400	60	60
330	P1171066	60	6400	60	60
331	P1171067	60	6400	60	60
332	P1171068	60	6400	60	60
333	P1171069	60	6400	60	60
334	P1171107	60	6400	60	60
336	P1171106	60	6400	60	60
336	P1171109	60	6400	60	60
337	P1171110	60	6400	60	60
338	P1171115	60	6400	60	60
339	P1171119	60	6400	60	60
340	P1188660	60	67,046	60	60
341	P1188682	12	612,303	66,348	60
342	P1188683	2	60	60	60
343	P1188684	2	60	60	60
344		48-74	638,448	60	60
346		Total number of units	Total value work done	Total value work applied	Total reserve
346			624,896	60	60
346			624,896	60	60

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:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized 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
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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

119460-00221

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, 4^e 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		3,700
	Field Supervision Supervision sur le terrain	3,700	3,700
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type SULLING	33,245	
			33,245
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			36,945

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 TRUCK LG94	1,500	
	gas, oil		
			1,500
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			1,500
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)		Value totale de crédit d'évaluation (Total des coûts directs et indirects admissibles)	38,445

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
	x 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.

Value totale du crédit d'évaluation	Évaluation totale demandée
	x 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 PAUL J. GEORGI I am authorized
(Recorded Holder, Agent, Person 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 PAUL J. GEORGI je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature [Signature] Date 11/16/1994

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Geoscience Approvals Section
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

January 11, 1995

Our File: 2.15772
Transaction #: W9460.00221

Mining Recorder
Ministry of Northern
Development & Mines
60 Wilson Avenue
1st Floor
Timmins, Ontario
P4N 2S7

Dear Sir/Madam:

**Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS
P1112935 & P1189682 IN SOTHMAN & NURSEY TOWNSHIPS**

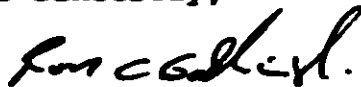
Assessment work credits have been approved as outlined on the report of work form for the submission. The credits have been approved under Section 16 (Drilling) of the Mining Act Regulations.

The approval date is January 09, 1995.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5855.

ORIGINAL SIGNED BY:

Yours sincerely,



Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

SBB/dl

cc: Resident Geologist
Timmins, Ontario

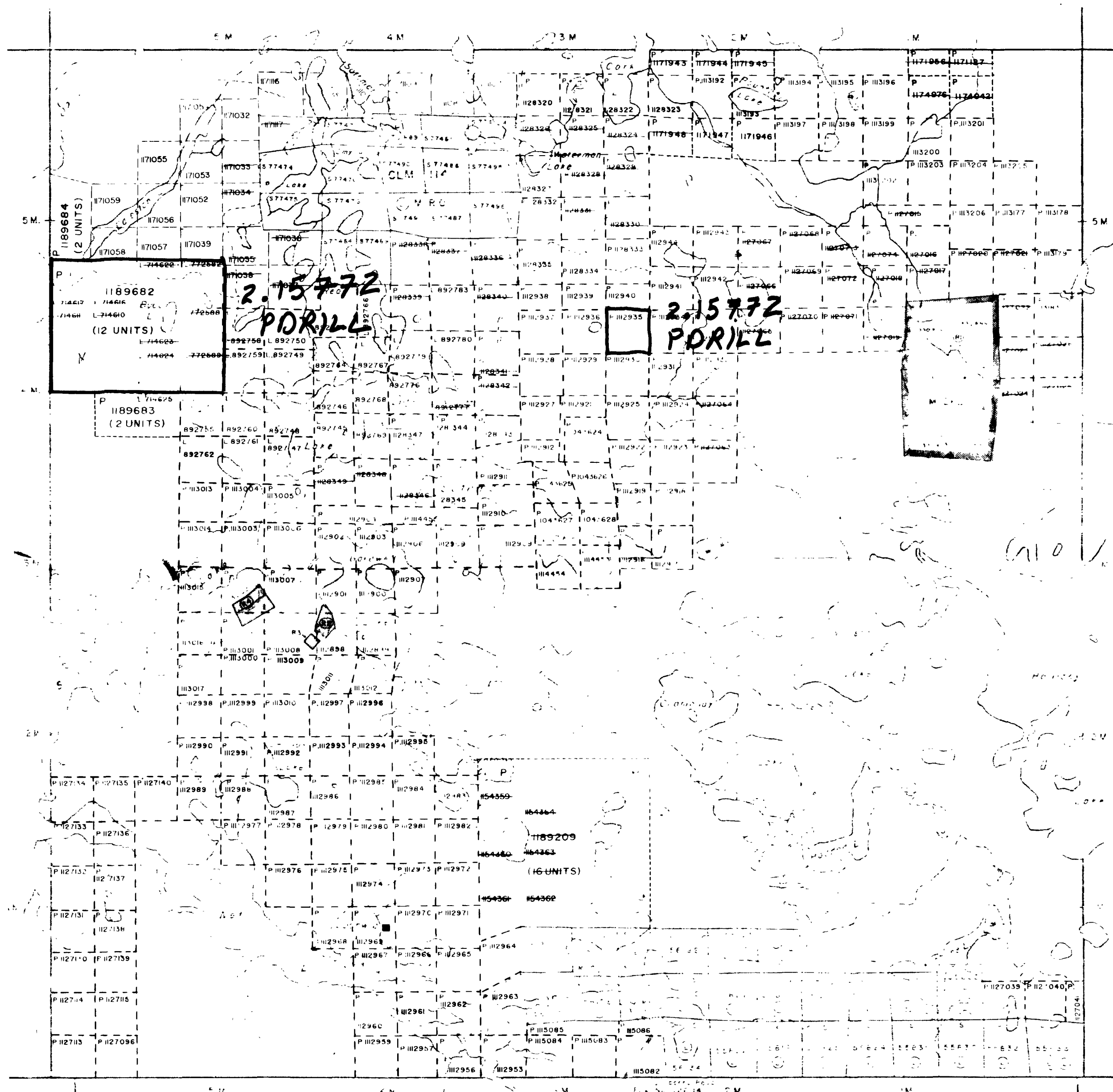
Assessment Files Library ✓
Sudbury, Ontario

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Semple Twp. - M. 1100



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

THE TOWNSHIP OF

OF

SOTHMAN

DISTRICT OF SUDBURY

PORCUPINE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND ⊗
- CROWN LAND SALE CS
- LEASES L
- LOCAL LAND LCL
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- RESERVED RIGHTS ONLY S.R.O.
- ROADS
- IMPROVED ROADS
- KINDS HIGHWAYS
- RAILWAYS
- POWER LINES
- MANUAL CONDUITS
- MINES
- CANCELLED C

NOTES

- 1. All rights reserved, and the same are subject to the provisions of the Mining Act, R.S.O. 1990, c. 120.
 - 2. Loading Rights, see Volume No. 2, vol. 4.
 - 3. Areas withdrawn from staking under Section 43 of the Mining Act, R.S.O. 1990, c. 120.
- | Order No. | File | Date | Disposition |
|-----------|---------------------------------|----------|-------------|
| (R1) | W 49184 C.M. 26 | 12/27/84 | M.R.O. |
| (R2) | Waste Disposal Site Buffer Zone | | M.R.O. |
| (R3) | W 89181 84517 24/8/91 | | S.R.O. |
| (R4) | MNR Grave Reserve 3-37 | | |

■ Trapline Cabin

ACTIVATED APRIL 27, 1990, D.C.

PLAN NO. 11-121

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

Hemp Twp. - M. 966



41P14NW002 2.15772 SOTHMAN

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