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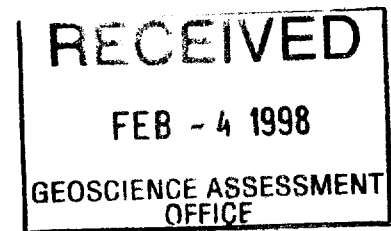
CAMECO CORPORATION

1997 ASSESSMENT REPORT "C" Block

MUSKRAT PROPERTY, ONTARIO
English, Zavitz and Semple townships

N.T.S. 42 A/3

2.18119



September 30, 1997

Peter Chubb

SUMMARY

The portion of the Muskrat Property covered by this report consists of 14 unpatented mining claims (1360Ha) referred to as the "C" Block. The property is located 50km south of Timmins, Ontario within the English, Zavitz and Semple townships.

The property lies within the Abitibi greenstone belt of the Superior Province, and is underlain by Archean mafic and felsic meta-volcanic and meta-sedimentary lithologies. The volcanic lithologies appear to be stratigraphically equivalent to the Tisdale and Deloro Groups, respectively of the Timmins-Porcupine Mining Camp. The property straddles the contact between the Deloro and Tisdale Groups, and includes dacitic quartz-feldspar porphyry flows intercalated with pyroclastic quartz feldspar porphyry fragmentals and a sulphide and oxide rich iron formation. The felsic lithologies are overlain by spinifex and cumulate textured ultramafic and pillowed and massive Fe- and Mg-rich tholeiites of the Tisdale Group.

The felsic volcanics are variably silicified, sericitized and sheared and display similarities to the geological settings of the Doyon-Bousquet-Dumagami gold deposits in northwestern Quebec. Chlorite, Cr-muscovite, and carbonate (ankerite, dolomite and calcite) alteration within the ultramafics and mafic flows is comparable to the gold deposits of the Timmins Mining Camp (Dome Deposit) or along the Larder-Cadillac Break (Kerr Addison Deposit), Ontario. Several gold and base metal occurrences are reported in the vicinity of the property including the Texmont nickel deposit 10 km north, and the TinTina Mines Limited gold showing adjacent to the English project.

The 1997 exploration program conducted on the property consisted of linecutting and mapping on three minor grid extensions cut on the "C" block. Mapping of the extensions of the "C" block was partially successful in delineating the Deloro-Tisdale contact and defining the areal extent of the ultramafic, mafic and felsic volcanic packages. Gold assays of samples obtained during the mapping phase did not provide any significant results.

The orientation of the stratigraphic units and foliations is locally highly variable with an overall trend towards the northeast and dipping to the southeast. The variable foliations are the result of polyphase folding.

Based upon the mapping completed on the "C" block it is recommended that no further work be conducted on the property.

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MUSKRAT PROJECT, ONTARIO

1997 ASSESSMENT REPORT "C" BLOCK

1.0 Introduction

This report documents the 1997 exploration program on the Muskrat Project situated in the English and Semple townships, N.T.S. 42 A/3, located 50 kilometres south of Timmins, Ontario (Figure 1). The work consisted of linecutting, mapping, and lithogeochemical sampling with fieldwork conducted by Peter Chubb, Dave Burga, Peter Leskiw and contractors. The contractor used to conduct linecutting was GEORGEX of Timmins.

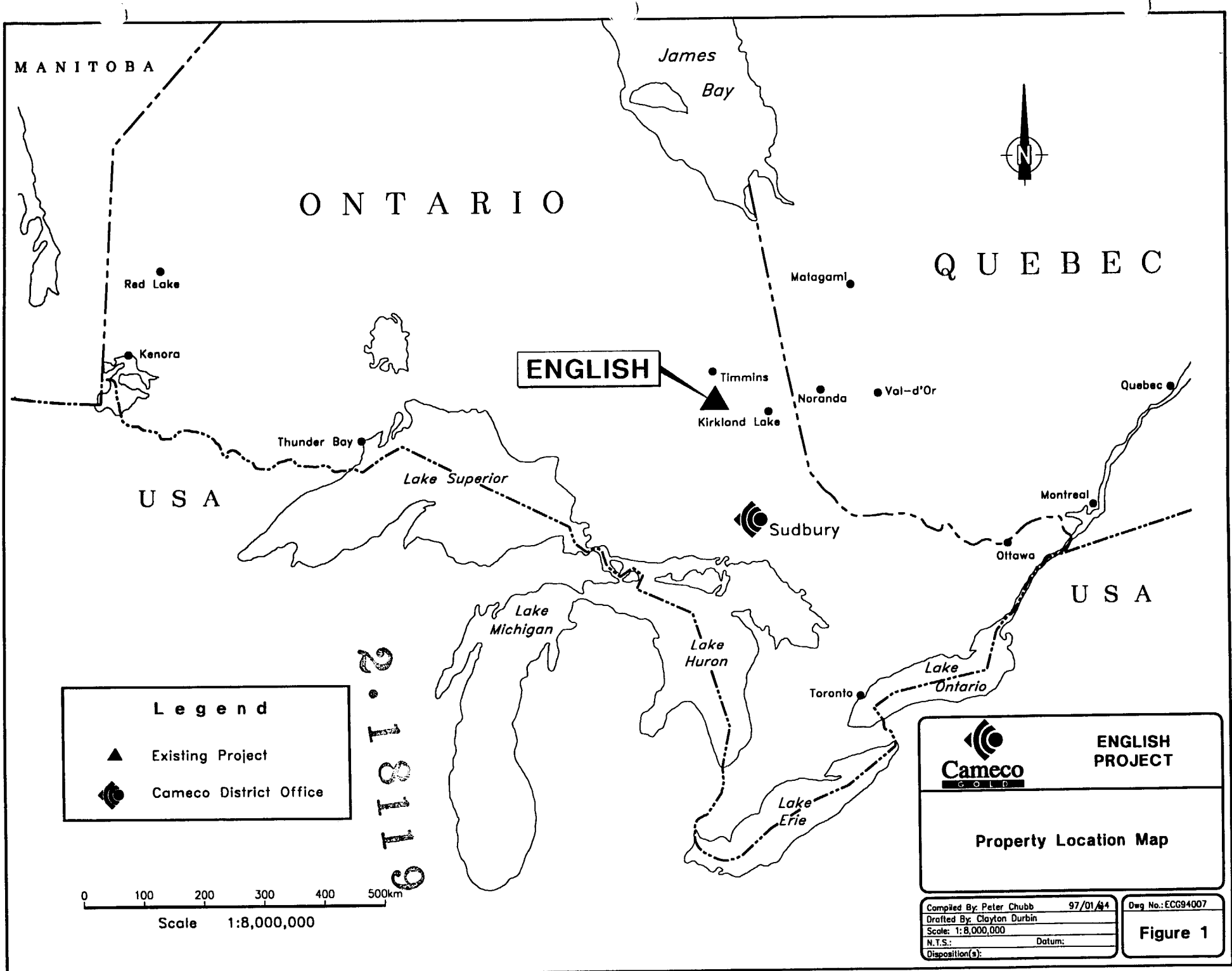
The property lies along the interpreted contact between the Deloro Group felsic volcanic sequence and the Tisdale Group mafic-ultramafic volcanic sequence (Pyke, 1982). This contact zone in the Porcupine - Timmins Mining Camp has been the stratigraphic location along which a number of gold mines, massive sulphide deposits and showings are located (e.g. Dome, Paymaster). The property area is also similar to the Porcupine - Timmins Mining Camp in that it is structurally complex with polyphase folding and some regional scale faults present.

There are no operating mines in the area, but the potential for further mineral discoveries is evident by the occurrence of several past-producing mines in the region (Ashley Gold Mine, NE Bannockburn Township; Young-Davidson and Matachewan Consolidated, Powell Township) and a host of gold showings.

2.0 Property Location and Access

The portion of the Muskrat property covered by this report consists of 14 unpatented claims (1360Ha) straddling the English-Semple-Zavitz townships boundary. The claim group layout is illustrated in figure 2 and the claims listing in table 1. The property lies within the M.N.R. administrative district of Sudbury and the Porcupine mining division.

Access is provided to the property by Pine street (south of Timmins) or the Forks River road (south of South Porcupine) that intersect the east-west Matachewan road. Numerous logging roads splay off from the main gravel roads providing good access to various parts of the property. The gravel roads are not maintained during the winter season therefore limiting access to the property during that time period.



Legend

- ▲ Existing Project
- ◈ Cameco District Office

ENGLISH PROJECT

Property Location Map

Compiled By: Peter Chubb	97/01/94
Drafted By: Clayton Durbin	
Scale: 1:8,000,000	
N.T.S.:	Datum:
Disposition(s):	

Figure 1

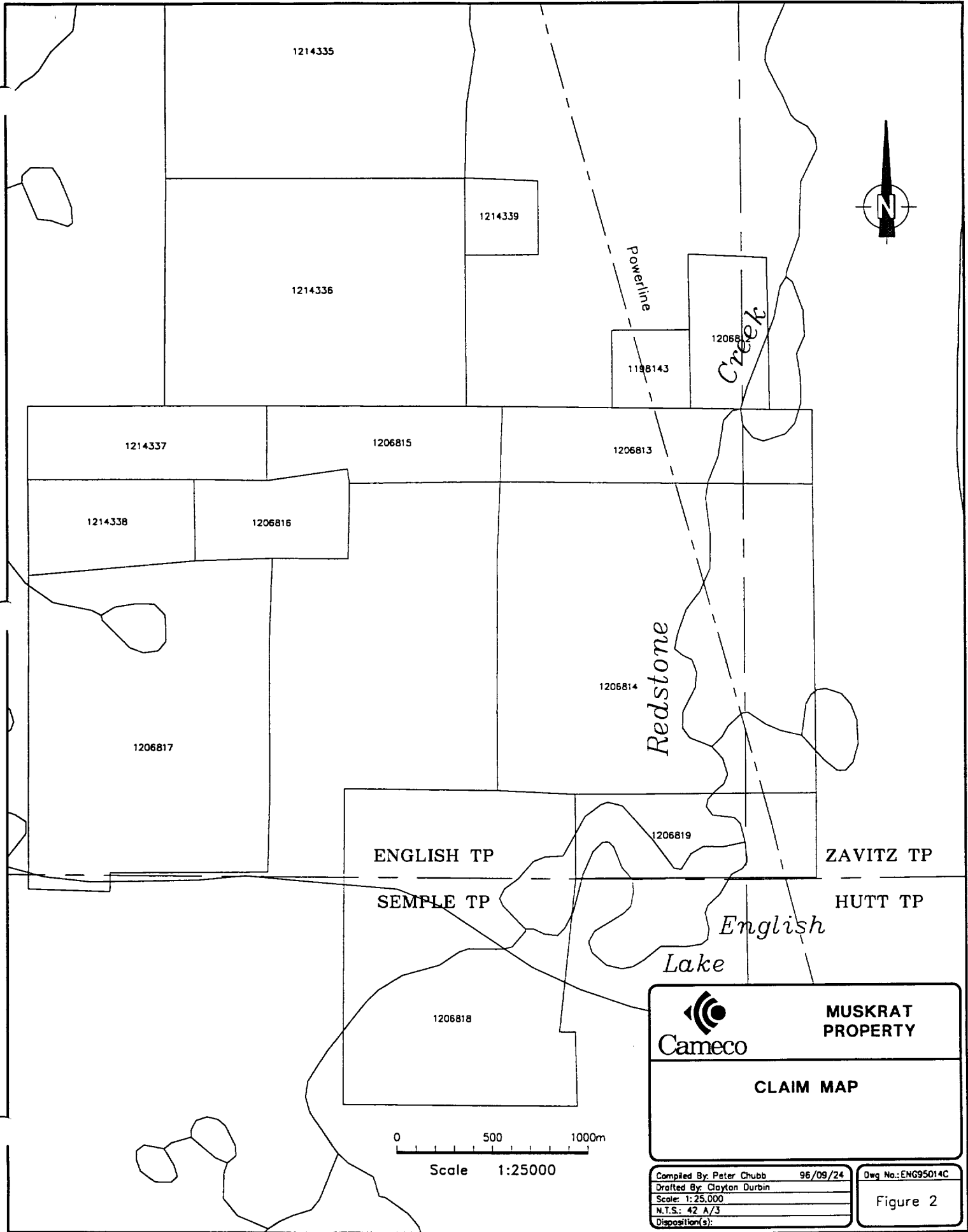
0 100 200 300 400 500km
 Scale 1:8,000,000


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Table 1. Claim Listing for the Muskrat Property

Claim #	Due date	# of Claim Units	Township	Work Req. (\$)
1206812	21/07/98	2	English/Zavitz	800
1206813	21/07/98	4	English	1600
1206814	21/07/98	16	English	6400
1206815	21/07/98	3	English	1200
1206816	21/07/98	2	English	800
1206817	21/07/98	12	English	4800
1206818	21/07/98	12	English	4800
1206819	21/07/98	3	English/Zavitz	1200
1214335	29/08/98	12	English	4800
1214336	29/08/98	12	English	4800
1214337	29/08/98	3	English	1200
1198143	29/08/98	1	English	400
1214338	29/08/98	2	English	800
1214339	29/08/98	1	English	400
total		85		\$34,000

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 Cameco	MUSKRAT PROPERTY
	CLAIM MAP

Compiled By: Peter Chubb	96/09/24
Drafted By: Clayton Durbin	
Scale: 1:25,000	
N.T.S.: 42 A/3	
Disposition(s):	

Dwg No.: ENG95014C
Figure 2

3.0 Infrastructure

Available infrastructure is fair with a high power transmission line bisecting the property, and numerous useable logging roads allowing access to the property (see Map 1). Skilled labour is available from Timmins and South Porcupine to the north. The property is cut by Redstone Creek that feeds numerous lakes in the area and represents an historic fur trading route.

4.0 Topography and Vegetation

The property lies within the Hudson Bay watershed, approximately 70km north of the divide between the Great Lakes and Hudson Bay watersheds, with the Redstone Creek draining north into James Bay. The property displays low relief with both lithologic and esker controlled topographic highs. The region is covered by a thin to moderately thick veneer of glaciofluvial and glaciolacustrine sediments topped by eolian sands and gravels. An esker-fan complex (topographic high) in the area trends north-south and runs through the central portion of the English Township. Rock exposure is limited to approximately 10% of the property with exposure decreasing towards the southeast.

Vegetation consists of moderately sized cedar swamps (2x1km size) in the topographic lows and jackpine, spruce, white and yellow birch, rock maple, poplar and balsam in the topographic highs.

Logging activity in the area has resulted in deforestation of approximately 30% of the property resulting in better access but also the destruction of pre-existing grids.

5.0 Exploration Model

Two gold models are being pursued on the English property; i) the gold associated ultramafic model; and, ii) the gold associated VMS sulphide model.

The **gold associated ultramafic model** is typified by the Kerr Addison (Virginiatown Twp.) and the Lightning Zone (Harker-Holloway Twp.) deposits. Both of these deposits are spatially associated with ultramafic, mafic and metasediment packages located along major structures (Kirkland Lake-Larder Lake Break, Destor-Porcupine Deformation Zone). The deposits display similar alteration assemblages and zonation with albite-quartz, sericite-ankerite, talc-carbonate-fuchsite zones. The talc-carbonate alteration of the ultramafics, though not necessarily coincident with the gold-sulphide mineralization, is usually present and may represent a possible source of the gold (Keays, 1975).

"limited analyses suggested that gold may be leached from komatiites during carbonatization. Keays (1975) determined the precious metal content of the ultramafic host rocks from 14 nickel sulphide deposits in Western Australia. The analyses indicated that significant quantities of gold (3-4ppb Keays, pers comm.) and sulphur were released during talc-carbonate alteration of the ultramafic rocks"

(Pyke, 1982)

Ultramafic rocks of the "Carbonate Ore" zone in the Kerr Addison display large additions of SiO₂, K₂O, Rb, Ba, CaO, MgO and MnO (Kerrich, 1983), with the mafic lithologies displaying similar chemical alteration except for the addition of Na₂O (albite veining). Outside the zone of mineralization anomalous B (880ppb), Hg, Au, As (940ppm), and Sb (18ppm) are heterogeneously distributed and indicative of a productive hydrothermal system. The gold associated ultramafic model also displays some geophysical characteristics including a strong magnetic response and a possible IP response (sulphide dependant).

The **gold associated VMS deposit model** is based on the Bousquet, Dumagami and Doyon deposits in northwestern Quebec which are situated along felsic volcanic - sedimentary/mafic volcanic contacts. The deposits are all associated with broad regional high strain zones (>500m in width) that are continuous on a regional scale. Mineralization is mainly restricted to the most deformed lithologies within the deformation zone. Mineralization consists of gold associated massive and semi-massive sulphide lenses (pyrite, pyrrhotite, chalcopyrite, bornite, chalcocite, sphalerite, galena, arsenopyrite, magnetite and a host of tellurides), pyrite-quartz veinlets and disseminated pyrite within foliation planes. The geochemistry of these deposits indicates that there is an enrichment in Al₂O₃, SiO₂, K₂O, Fe₂O₃, and S towards the mineralized zone. There is also a depletion of Na₂O, CaO, MnO and MgO towards the mineralized zone with a strong depletion of MgO at the core. Gold usually forms an erratic enrichment halo of 100-300ppb up to 300 metres around the ore body. This deposit model exhibits a strong IP & EM response and possible strong magnetic response.

6.0 Regional Geology

The Abitibi subprovince hosts one of the largest and best preserved Archean Greenstone belts, and is currently viewed as being analogous to a series of modern island arc, back arc, rifted arc (Ludden et al., 1986) and oceanic plateau (Kimura et al., 1993) environments. The property area lies south of the Destor-Porcupine Fault Zone and is associated with the Keewatin Super Group lithologies that are currently interpreted as the upper formation (III) of the Deloro Group (2727±1.5Ma) and the

lowest formation (IV) of the Tisdale Group (2705±10Ma). The greenstone belt including the property area has been regionally metamorphosed up to subgreenschist facies (Jolly, 1978). The Tisdale-Deloro group boundary is pervasively altered with the footwall felsic volcanics altered to chlorite, chlorite-sericite and minor chlorite-sericite-carbonate schists. Polysutured komatiitic flows and tholeiitic mafic volcanics at the base of the second super cycle (Tisdale Group) are pervasively altered to talc-carbonate and chlorite respectively.

The geology of the property area is covered by Ontario Geological Survey Report 231, "Geology of the Ferrier Lake - Canoeshed Lake Area" (Bright, 1984). The report and maps both indicate that the property is largely underlain by felsic-intermediate metavolcanics (Deloro Group), mafic-intermediate metavolcanics (Tisdale Group)(Figure 3.). Minor sulphide facies iron formation occurs near the contact between the felsic and overlying mafic units. Numerous mafic (Gabbro) intrusive plugs and lenses (2686±3Ma) occur in the area. The metavolcanic rocks are cut by two major quartz diabase-diorite dikes (2147 Ma; Gates and Hurley, 1973); one trending northeast and the other a narrower northwest oriented dike. The OGS maps indicate two northwest trending faults transecting the area. The most southerly fault has an apparent sinistral displacement of 400 metres while the northerly fault has a sinistral displacement of 1600 metres. Both of these faults post-date the quartz diabase-diorite dikes (Pyke, 1982).

Map units on the OGS maps accompanying Report 231 define large scale east- to east-northeast trending fold structures. To the east of the property area near West Nighthawk Lake and Kitchiming Lake, as well as south of the English Lake, map patterns define closed, doubly plunging structures suggesting the presence of polyphase folding. Structural symbols shown on the OGS map suggest the dominant foliation (S_1) is broadly conformable with the primary layering of the units (S_0), although around large fold closures, two sets of foliation orientations are common. One foliation is conformable to the gross lithologic layering and a second foliation is broadly coincident with the interpreted axial surface trace of the folds.

Recent structural studies in the Timmins region (Bleeker, 1995; Heather, 1995) have identified pre-Timiskaming polyphase folds indicating at least two early fold events (S_1 & S_2) prior to the deposition of the Timiskaming sediments. These predominantly "mushroom-type" fold interference patterns were faulted, unroofed and truncated by a pre-Timiskaming unconformity which was subsequently tightly folded around upright axial planes with shallow to moderately plunging axes (30°-40°). The youngest folding is related to strike-slip structures and is manifested by steeply-plunging asymmetric S- and Z-folds.

7.0 Previous Work

Work on the property has consisted of limited mapping, sampling and ground magnetics. Scattered gold anomalies occur within and near the property.

Government Mapping

Hawley et al. (1926) Ontario Department of Mines, V35, P6. Preliminary shoreline and trail mapping through the English and surrounding townships. p102.

Bright (1968) Ontario Geological Survey Preliminary Maps P.454, 455, and 490. These preliminary geology maps cover the English, Zavitz and Semple townships.

Pyke (1978) Ontario Geological Survey Report 171 describes the geology and mineralization in the Peterlong Lake area.

Bright (1984) Ontario Geological Survey Report 231 describes the geology, structure and mineral occurrences of Beemer, English, Zavitz, Moher, Semple, and Hutt townships (Ferrier Lake-Canoeshed Lake area).

Ontario Geological Survey (1990) Ontario Geological Survey Map 81397, 81400. Airborne electromagnetic and total intensity magnetic survey, Shining Tree area.

Rogers (1995) Ontario Geological Survey Preliminary Map P.3343. Geological and Exploration Data compilation of the Grassy River Area, covering Semple, Hutt, Nursey, Burrows, Kemp, Natal, Mond, Halliday, Sothman, Midlothian and Montrose townships.

Bajc (1996) Ontario Geological Survey Open File Report 5941. This report provides a framework of Quaternary geology using glacial drift analyses in the Peterlong Lake - Radisson Lake Area.

Industry Related Work

Hollinger Gold Mines Ltd. (1962; T-617) completed geological mapping, magnetometer and electromagnetic surveys over 42 claims overlapping the "C" Block area. Several iron formation units were tested with a pack sack drill, however no assays were reported. Sericite-chlorite schists and carbonate alteration zones were reported in close proximity to the iron formation.

Granges Inc. (1974; T-1643) conducted an airborne electromagnetic survey covering the English Township.

Esso Minerals Canada Ltd. (1988; T-3202) completed linecutting, geological mapping, soil geochemical surveys, induced polarization surveys and power stripping in east-central English Township adjacent to the "C" Block. Esso identified a 400 metre wide band of carbonatized polysutured and spinifex textured ultramafic to mafic flows which are deemed to be stratigraphically equivalent to the lower portion of the Tisdale Group rocks. Anomalous gold was detected in both iron formation (up to 565 ppb), and carbonatized basalt (1200 ppb) referred to as the 43N showing. A soil geochemical survey north of the "C" Block defined a zoned anomaly, with the outer zone spread over a 600 metre length with values of 20 to 50 ppb gold, and an inner zone 130 metres in length of 55 to 100 ppb Au. Eleven of 165 soil samples obtained returned values greater than 100 ppb Au, up to a maximum of 5000 ppb Au. An induced polarization survey completed on eight grid lines over a 900 metre strike length defined five anomalies that were recommended for drilling.

8.0 1997 Program

The objectives for the 1997 exploration program conducted on the Muskrat project were to:

- 1) Check along strike from previously mapped zones of alteration to see the continuation and direction of the stratigraphy and alteration within the "C" block.
- 3) locate new mineral showings on the property.

To facilitate the completion of these objectives; previous work was reviewed, and a field program including linecutting, and mapping was completed.

Activity	Timing	Description
Linecutting	Dec. 1996; May, 1997	40 km cut
Geological Mapping	Sept. 3 rd to 19 th , 1997	P. Chubb, P. Leskiw, D. Burga
Geological Sampling	Sept. 3 rd to 19 th , 1997	P. Chubb, P. Leskiw, D. Burga

Table 2. 1997 Exploration Program

8.1 Linecutting

In late December, 1996 and early March-May, 1997, the extensions to the "C" and "D" grid (38km) was cut by GEORGEX, Timmins, Ontario (Map 1). The "C" grid baseline extensions was oriented at 45° East of North with cut lines turned off every 100 metres with chained pickets placed every 25 metres. The "D" grid baseline extension was oriented at 90° East of North with cut lines turned off every 100m with 25m picket stations.

8.2 Property Geology

"C" Block

Mapping of the "C" grid (Map 2) revealed a stratigraphy characterized by tuffaceous to porphyritic felsic fragmental volcanics and tuff breccias capped by a sulphide- and/or oxide-rich iron formation all of which belongs to the Deloro Group (Map 1). In sharp contact with the underlying felsic volcanics is a sequence of ultramafic flows and pillowed amygdaloidal mafic volcanics. Intruding the entire stratigraphy is a series of feldspar and quartz pyritic felsic and syenitic dikes. Gabbroic plugs and sills are developed within the mafic volcanics. The stratigraphy of this block has undergone weak to strong deformation as characterized by minor shears and synform and syncline features, but has retained most relict igneous textures intact. A pervasive foliation (D_2) is present, but is variable in its orientation due to a later deformation event (D_3).

The felsic volcanic rocks are dacitic in composition and contain white plagioclase phenocrysts and quartz eyes usually less than 3mm in diameter. The felsic volcanics are relatively unaltered with minor saussuritization developed. The individual flows are less than 150m thick and are to be capped or underlain by a tuff breccia (flow top breccia ?) and/or tuff. The fragmental units are generally less than 5m in thickness and are poorly sorted, consisting of variably sized quartz feldspar porphyry fragments cemented by a dark green chloritic schist. The fragments are oriented parallel to the foliation and are stretched. The amount of chlorite within the matrix maybe spatially related to the iron formation. Those fragmental zones located further to the west (further away from the iron formation) contain less chlorite in the matrix, and as the iron formation is approached the intensity of the chlorite alteration increases rapidly. Sulphide mineralization consists of disseminated pyrite (1% volume) that is homogeneously distributed throughout the massive flows. Within the fragmentals, sulphides are developed as blebs and clasts (1-2cm length) of pyrite up to 2-3% rock volume. The porphyritic fragments within the fragmental unit are similarly mineralized with respect to the massive flows.

The iron formation sits at the top of the felsic volcanic package and is locally in contact with the ultramafics. On either side of the iron formation an alteration aureole persists for up to 20 metres down into the felsic unit and up to the ultramafic/felsic contact. Some of the lithologies next to the iron formation now consist of massive chlorite with only the primary quartz eyes remaining (possibly a quartz eye rhyolite or vestige of the porphyry). There is also an increase in the abundance of quartz veining as the iron formation is approached. The iron formation is zoned and is up to 3 metres in thickness. The basal zone of the iron formation consists of finely laminated quartz and chlorite that contains trace disseminated pyrite mineralization. The upper contact zone consists of massive

cryptocrystalline quartz that is sometimes heavily gossaned yet appears unmineralized. The sulphide rich portion of the iron formation comprises 25% volume of the total thickness of the iron formation and is characterized by strongly foliated chlorite, minor sericite alteration and massive to semi-massive pyrite.

The contact between the felsic lithologies and the overlying ultramafics is sharp. The ultramafic package consists of fine to medium grained cumulate, polysutured and spinifex textured flows. Spinifex textures typically display short (2-3 cm long) needles. The ultramafic volcanics are distinguishable by the thick gossan rind developed on the weathered interface. The ultramafics appear to be relatively undeformed with the delicate relict spinifex textures well preserved. They are pervasively altered with most of the original mineralogy degrading into carbonate (ankerite and calcite), talc assemblages and Cr-muscovite (fuchsite). Pervasive carbonitization is typical and the flows are intruded by numerous quartz carbonate veins and stockworks. The ultramafics are locally mineralized and dominated by disseminated pyrite and minor pyrrhotite and chalcopyrite. The contact with the overlying mafic volcanics is unexposed but is delineated to within 5 metres, with no apparent change in the mineralogy of the ultramafics as the contact is approached.

The mafic volcanics consist of thick packages of pillowed amygdaloidal (? variolitic) Fe-tholeiitic basalt and thin (<5 m thick) massive flows. Individual pillows are less than 1.0 metres in length and have been stretched to the degree that their tops direction can no longer be recognized with confidence. Sulphide mineralization is limited with local concentration of disseminated pyrite up to 1% volume associated with the pillow selvages and minor shear zones. The mafic volcanics display variable silicification. Chlorite and epidote are the principle alteration minerals observed with minor hematite and quartz also present. Sulphide mineralization is typical of the other lithologies and is characterized by finely disseminated pyrite.

Intruding the entire package is a thick (up to 100m) Abitibi dike oriented subparallel to the stratigraphy. Other smaller dikes and intrusions consisting of Nipissing diabase, syenite, felsite, aplite, diorite, gabbro, leucogabbro and olivine diabase are developed as thin (<2m wide dikes or small sills (<200m²).

8.5 Geochemistry

A total of 30 rock samples (Map 1) were obtained for gold analysis during the 1997 program from all sections of the stratigraphic profile. Gold Analyses from this mapping phase were discouraging

with weakly anomalous gold values obtained (<100ppb).

9.0 Conclusions

The "C" block displays relict primary textures and rock types that indicate a change from a felsic volcanic dominated environment with associated VMS type exhalative sulphide-oxide iron formations to a subaqueous mafic to ultramafic regime. The change from the felsic to mafic regime appears sharp with no visible unconformity observed. The Abitibi dike and smaller Nipissing diabase dikes intruding the property appears to have had little affect on the lithologies in the immediate vicinity of the dike.

The regional deformation has not disrupted the stratigraphy in the "C" block to any large degree, but has resulted in pervasive foliations, shears and faulting that has juxtapositioned various fault blocks. The variable foliation observed is indicative of polyphase folding and faulting.

Mineralization within the different lithologies is characterized by variable disseminated pyrite usually less than 1%. The pervasive pyrite mineralization appears to be recrystallized with the euhedral pyrite crystals apparently unaffected by the pervasive foliation and deformation.

Alteration of the lithologies is variable in the degree and mineral assemblages present. The felsics display variable albitization, silicification and saussurite and lesser chlorite. The ultramafics are moderately carbonatized and chloritized with variable talc, serpentine and fuchsite alteration present. The mafic volcanics are chlorite and calcite rich with minor dolomite and epidote present. Dikes intruding the host lithologies, depending upon their age and composition, also display variable mineral assemblages associated with alteration (epidote, saussurite, ilmenite). The intense albitization that characterizes some of the model mines being used was not present and no indication of an increase in alteration along strike was observed.

10.0 Recommendations

Based on the results obtained from the work completed to date, and a review of the previous work for the property it is recommended that no further work be conducted on this project.

11.0 References

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CERTIFICATE

I, Peter Chubb, of Apt# 201, 1490 Kelly Lake Rd., Sudbury, Ontario, P3E 4L9, do hereby certify that:

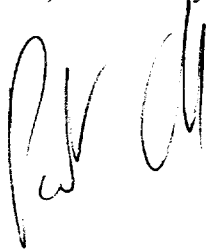
I am currently employed as a Geologist by Cameco Corporation,
1349 Kelly Lake Road, Unit #6, Sudbury, Ontario, P3E 5P5

I graduated from Carleton University in 1989 with a Bachelor of Science degree (honours) in Geology, and Laurentian University in 1994 with a Masters of Science degree (1st Class) in Geology. I have been practicing my profession continuously since graduation.

I am a member in good standing of the Geological Association of Canada, Canadian Institute of Mining, Metallurg and Petroleum and the Sudbury Geological Discussion Group.

I am directly responsible for the work outlined in this report and was present on the property when the work was being carried out.

Signed at Sudbury, Ontario, this 1st day of January, 1998.



Peter T.A. Chubb
Geologist, M.Sc.

Appendix A
Gold Assay Data Sheets



Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

Geochemical Analysis Certificate

7W-3622-RG1

Company: **CAMECO CORPORATION**

Date: SEP-12-97

Project:

Attn: P. Chubb

We hereby certify the following Geochemical Analysis of 17 Grab samples submitted SEP-10-97 by .

Sample Number	Au PPB	Au Check PPB
eng97x-001	Nil	-
eng97x-002	Nil	-
eng97x-003	33	-
eng97x-004	31	24
eng97x-005	2	-
eng97x-006	10	-
eng97x-007	12	-
eng97x-008	7	-
eng97x-009	5	-
eng97x-200	Nil	-
eng97x-201	Nil	-
eng97x-202	Nil	-
eng97x-203	Nil	-
eng97x-204	43	34
eng97x-205	39	-
eng97x-206	Nil	-
eng97x-207	Nil	-

One assay ton portion used.

Certified by



Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

Geochemical Analysis Certificate

7W-3726-RG1

Company: **CAMECO GOLD INC**

Date: SEP-19-97

Project:

Attn: P. Chubb

We hereby certify the following Geochemical Analysis of 19 Grab samples submitted SEP-17-97 by .

Sample Number	Au PPB	Au Check PPB
eng97x-208	7	-
eng97x-209	26	-
eng97x-210	2	2
eng97x-211	9	-
eng97x-212	7	-
eng97x-213	14	-
eng97x-214	2	-
eng97x-215	5	-
eng97x-216	10	-
eng97x-217	5	-
eng97x-218	7	5
eng97x-219	62	-
eng97x-220	7	-
eng97x-300	9	-
eng97x-301	7	-
eng97x-302	3	7
eng97x-303	2	-
eng97x-304	3	-
eng97x-305	5	-

One assay ton portion used.

Certified by



Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Established 1928

Geochemical Analysis Certificate

7W-3764-RG1

Company: CAMECO GOLD INC
Project: English
Attn: P. Chubb

Date: SEP-24-97

We hereby certify the following Geochemical Analysis of 9 Grab samples submitted SEP-19-97 by .

Sample Number	Au PPB	Au Check PPB
Eng 97x221	9	-
Eng 97x222	60	53
Eng 97x223	2	-
Eng 97x224	2	-
Eng 97x225	39	46
Eng 97x226	2	-
Eng 97x227	2	-
Eng 97x306	Nil	2
Eng 97x307	Nil	-

One assay ton portion used.

Certified by Denis Chubb

Appendix B
Map



42A03SE2002 2.18119 ZAVITZ

900

ity of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Act, the holder is required to review the assessment work and correspond with the mining land holder. The holder should contact the Mining Land Assessment Recorder, Ministry of Northern Development and Mines, 6th Floor,

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.
- Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary) 2

Name <i>Cameco Corporation</i>	Client Number <i>114820</i>
Address <i>Unit #6 - 1349 Kelly Ln. Rd.</i>	Telephone Number <i>705-523-4555</i>
<i>Sudbury, Ontario, P3E 5P5</i>	Fax Number <i>705-523-4571</i>
Name	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

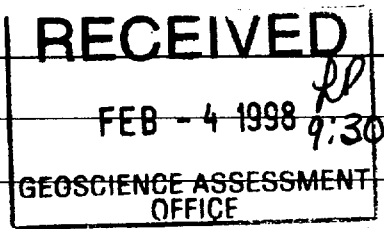
Geotechnical: prospecting, surveys, assays and work under section 18 (regs) Physical: drilling, stripping, trenching and associated assays Rehabilitation

Work Type <i>Geological Mapping and Sampling</i>	Office Use
	Commodity
	Total \$ Value of Work Claimed <i>9996</i>
Dates Work Performed From <i>3rd 09 1997</i> To <i>19 09 1997</i>	NTS Reference
Global Positioning System Data (if available)	Mining Division <i>Porcupine</i>
Township/Area <i>English / Semple</i>	Resident Geologist District <i>Timmins</i>
M or G-Plan Number	

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name <i>Peter Chubb</i>	Telephone Number <i>705-523-4555</i>
Address <i>Same as above</i>	Fax Number <i>705-523-4571</i>
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number



4. Certification by Recorded Holder or Agent

I, *Peter Chubb* (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent <i>[Signature]</i>	Date <i>06/01/1998</i>
Agent's Address <i>Same as Above</i>	Telephone Number <i>Same as above</i>
	Fax Number <i>Same as above</i>

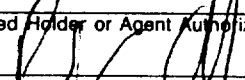
Declared May 5/98

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W980.00079.

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.		Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed in a future date.
eg	TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg	1234567	12	0	\$24,000	0	0
eg	1234568	2	\$8,892	\$4,000	0	\$4,892
1	1206818 ✓	12	2528	2528	0 ✓	0
2	1206817 ✓	12	1581	0	1581 ✓	0
3	1198143 ✓	1	454	400	54 ✓	0
4	1206812 ✓	2	556	556	0 ✓	0
5	1214339 ✓	1	407	400	7 ✓	0
6	1214336 ✓	12	2780	2780	0 ✓	0
7	1214335 ✓	12	410	0	410 ✓	0
8	1206813 ✓	4	836	836	0 ✓	0
9	1206814 ✓	16	444	2496	0 ✓	0
10						
11						
12						
13						
14						
15						
Column Totals			9996	9996	2052	0

I, Peter Chubb (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing:  Date: 06/01/98

6. Instructions for cutting back credits that are not approved.

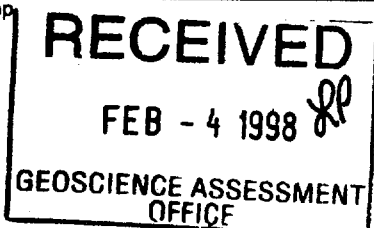
Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp



0241 (02/98)

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2.18119

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
Geological Mapping	39.56 km by 3 men		7930
Geochemical Analyses	30 Samples for gold Assay		345
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
	Gas for Truck		226
Food and Lodging Costs			
	Warm Lodging	\$55/person/day	1495
Total Value of Assessment Work			9996

RECEIVED
 FEB - 4 1998 J.P.
 GEOSCIENCE ASSESSMENT OFFICE

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

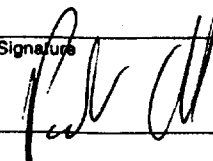
TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, Peter Chubb (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Peter Chubb, Geologist II (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature 	Date 06/01/98
---------------------------------------------------------------------------------------------------	------------------

April 29, 1998

Peter Chubb
CAMECO CORPORATION
Unit #6 1349 Kelly Lake Road
Sudbury, ON
P3E-5B5

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (705) 670-5881

Dear Sir or Madam:

Submission Number: 2.18119

Status

Subject: Transaction Number(s): W9860.00079 **Deemed Approval**

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,



ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.18119

Date Correspondence Sent: April 29, 1998

Assessor: Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00079	1206818	ENGLISH, SEMPLE	Deemed Approval	April 28, 1998

Section:
12 Geological GEOL

Correspondence to:
Resident Geologist
South Porcupine, ON

Recorded Holder(s) and/or Agent(s):
Peter Chubb
CAMECO CORPORATION
Sudbury, ON

Assessment Files Library
Sudbury, ON

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY
 S.R.O. - SURFACE RIGHTS ONLY
 M.+S. - MINING AND SURFACE RIGHTS

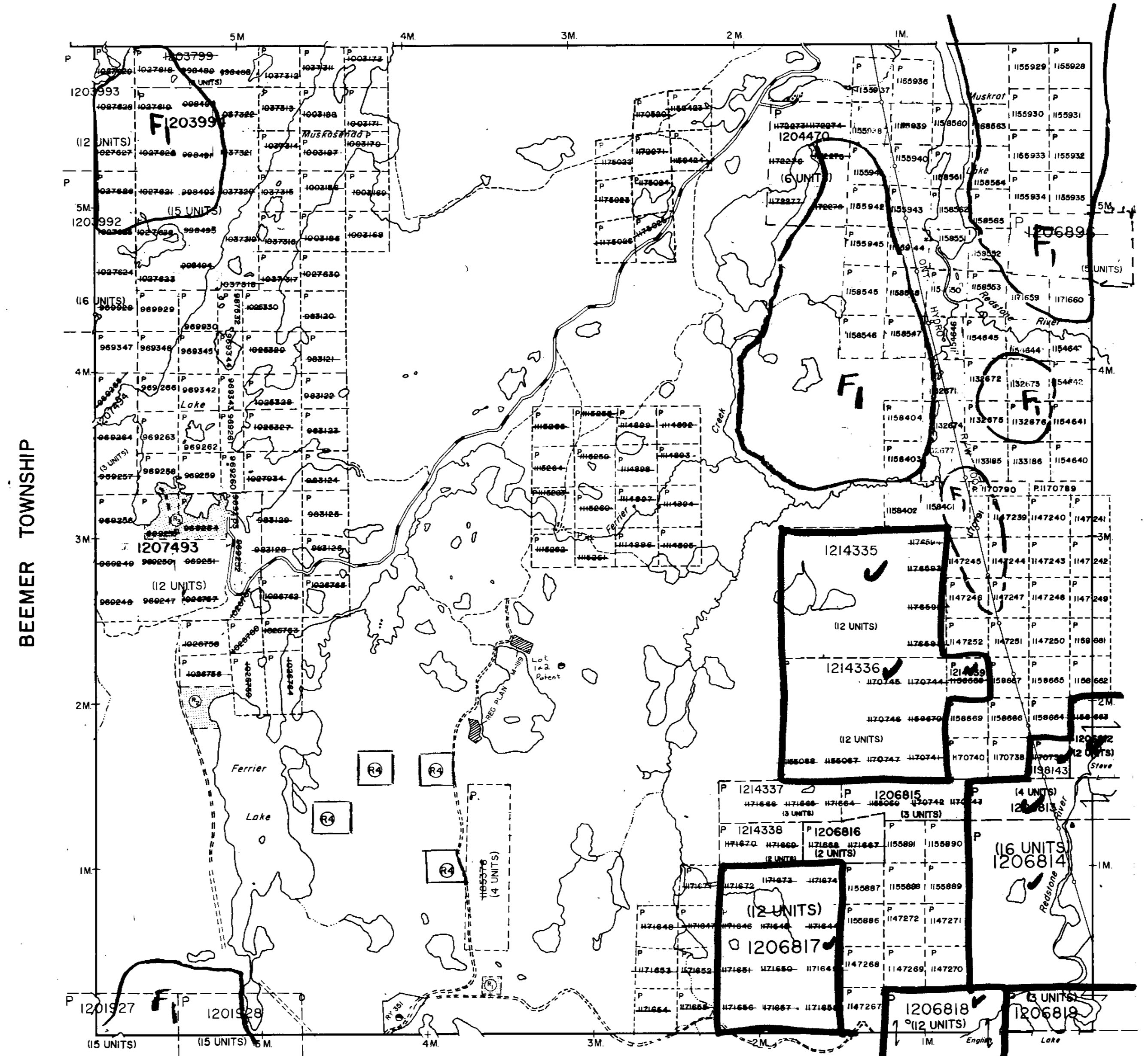
Description	Order No.	Date	Disposition	File
SEC 36/80	W 18 / 77	28/02/77	S.R.O.	85582
SEC 36/80	W 19 / 78	10/04/78	S.R.O.	188543
SEC 36/80	W 30 / 78	02/06/78	S.R.O.	192219

MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 43/94 NER DATED 94-MAY-02

MINING AND SURF

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.

BARTLETT TOWNSHIP



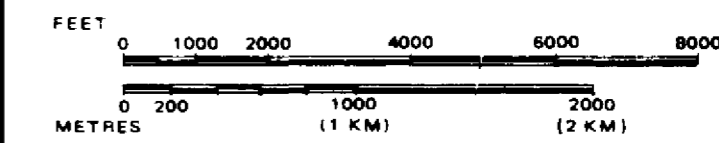
LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	◑
" SURFACE RIGHTS ONLY	◒
" MINING RIGHTS ONLY	◓
LICENCE OF OCCUPATION	◔
ORDER-IN-COUNCIL	◕
RESERVATION	◖
CANCELLED	◗
SAND & GRAVEL	◘

SCALE: 1 INCH = 40 CHAINS



THIS TWP IS SUBJECT TO FOREST ACTIVITY # 1994/95
 FURTHER INFORMATION ON FILE. 1-5-96

TOWNSHIP ENGLISH

M.N.R. ADMINISTRATIVE DISTRICT
 TIMMINS
 MINING DIVISION
 PORCUPINE
 LAND TITLES / REGISTRY DIVISION
 SUDBURY

DATE OF ISSUE
 MAR 31 1998
 PROVINCIAL RECORDING
 OFFICE - SUDBURY

Ministry of Natural Resources
 Ministry of Northern Development and Mines

Date SEPTEMBER 1990
 ACTIVATED SEPT. 25/90
 S.R.

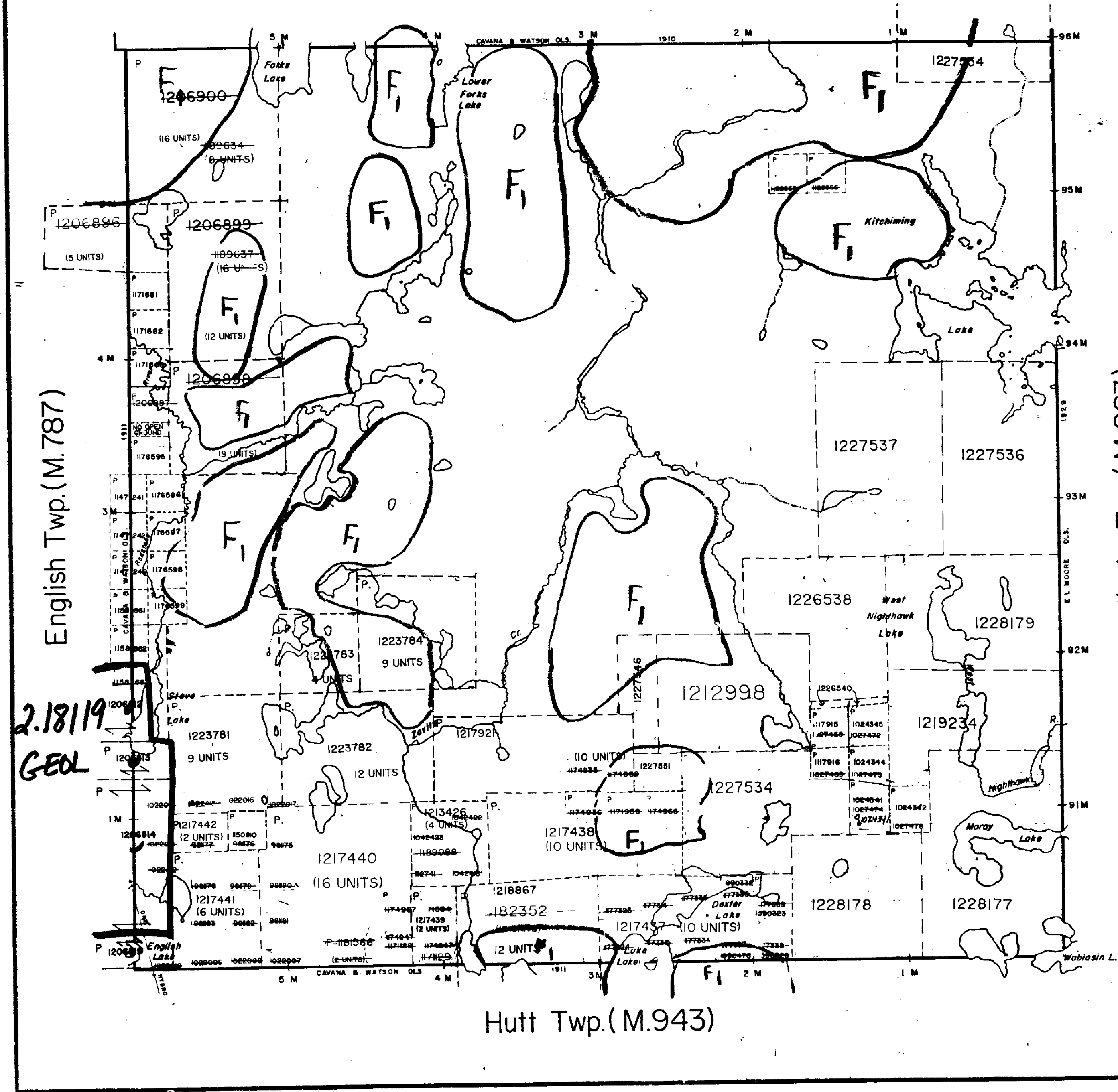
Number
G-3938



42A0382002 2.18119 ZAVITZ

218119 GEOL

Geikie Twp.(M.320)



2.18119
GEOLOGICAL

THE TOWNSHIP OF ZAVITZ

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.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	⊙
CANCELLED	C.

NOTES

400' SURFACE RIGHTS RESERVATION ALONG THE SHORES OF ALL LAKES AND RIVERS.

F1 - SUBJECT TO FORESTRY ACTIVITY IN 1994/95, 1995/96

DATE OF ISSUE

MAY 5 1998

PROVINCIAL RECORDING OFFICE - SUDBURY

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.

PLACE ON ACTIVE FILE. CHECKED 20103190. *Bl. mer.*

PLAN NO. M. 1189

DEPARTMENT OF MINES
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

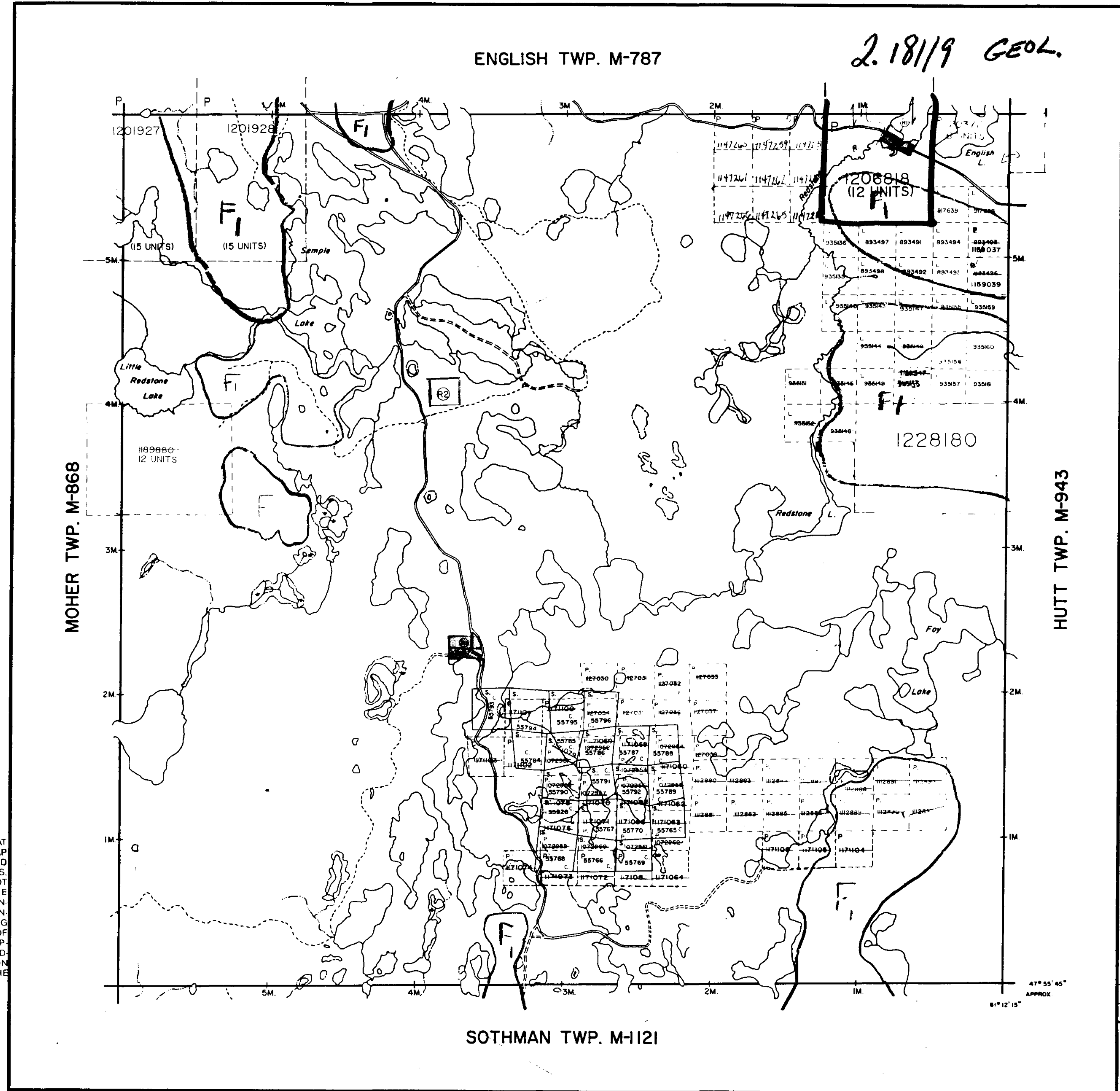


0011-M

SEMPLT LWB

W-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



NOTES

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

F1 - SUBJECT TO FORESTRY ACTIVITY IN 1994/95 1995/96

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970)

Order	File	Date	Disposition
(R1)	W-19-178	188543	10/4/78 S.R.O.

MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. W-P 44/94 NER DATED 94-MAY-02

ACTIVATED APRIL 24, 1990 D.C.

LEGEND

PATENTED LAND	Ⓟ or Ⓞ
PATENTED FOR SURFACE RIGHTS ONLY	Ⓟ
LEASE	Ⓞ
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	17
ROADS	—
TRAILS	- - -
RAILWAYS	—+—
POWER LINES	— —
MARSH OR MUSKEG	~
MINES	Ⓧ

*used only with summer resort locations or when space is limited

TOWNSHIP OF
SEMPLT
DISTRICT OF
SUDBURY

PORCUPINE
MINING DIVISION

SCALE : 1 INCH = 40 CHAINS (1/2 MILE)

DR. R.W. NOBLE
DATE APR. 22, 71

PLAN NO. **M-1100**

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS

DATE OF ISSUE
MAR 31 1998

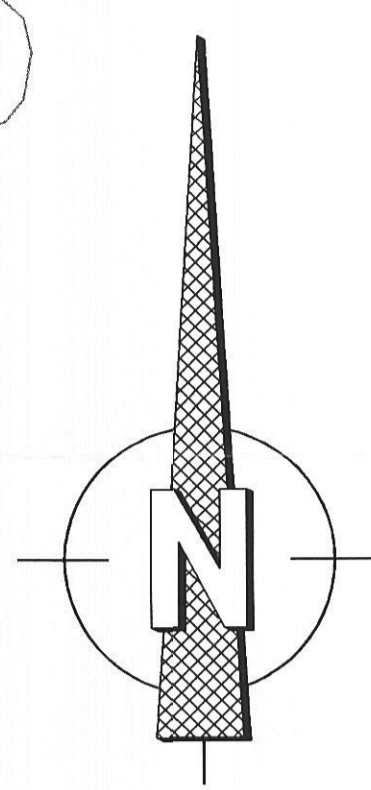
PROVINCIAL RECORDING
OFFICE - SUDBURY



0011-M

SEMPLT LWB

W-1100



1214335

1214336

1214337

1214338

1206815

1206816

1206817

1206818

1206819

1214339

1198143

1206812

1206813

1206814

1206819

1206818

1206819

1206818

1206818

1206818

1206818



Legend		Symbols		Abbreviations	
[11]	Diabase	○	Tilt Sample	AM	Amphibole
[8]	Gabbro	□	Rock Exposure	EP	Epidote
[10]	Hornblende Syenite	—	Contact	OZ	Quartz
[7]	Ultramafic Intrusive	—	Fault	HB	Hornblende
[2]	Intermediate Volcanics	—	Station Location	CL	Chlorite
[1]	Mafic Volcanics	—	Foliation	LX	Leucoxene
[4]	Ultramafic Flows	—	Swamp	MP	Magnetite
[3]	Felsic Volcanics	—	Beaver Dam	MT	Magnetite
		—	Trail	HM	Hematite
		—	Powerline	CB	Carbonate
		—	Road	CC	Calcite
		—	Drill Hole	SR	Sericite
		—	Trench & Name	FP	Feldspar

ENGLISH TP
SEMPLER TP English Lake

Camco
GOLD

MUSKRAT PROJECT

DETAILED GEOLOGY
"C" Block

Compiled By: Peter Chubb 98/01/05
Drafted By: Clayton Durbin
Scale: 1:5,000
N.T.S. Datum: NAD 27
Disposition(s):

2.18119

