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PRELIMINARY MINERAL RESOURCE APPRAISAL OF PARTS OF YUKON AND NORTHWEST TERRITORIES INCLUDING PROPOSED NORTHERN PARKS AREAS

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CONTENTS

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Summary and Conclusions

1. This report presents appraisals of the potential of certain northern lands in Yukon and Northwest Territories, including those lands currently proposed as Northern Parks, to contain economically-significant deposits of a variety of metals, including copper, lead, zinc, nickel, uranium, gold, silver and iron. Hydrocarbon fuels are excluded. The appraisals are presented in qualitative (relative potential) terms and, with minor exceptions, no attempt is made to quantify information (number of deposits or tonnages and grades of ore in deposits).

2. Because of limitations in the information base (geological and mineral occurrence data) for many of the northern areas, and because of time constraints in conducting this study, it is emphasized that the results presented here should be considered as preliminary.

3. Table 1 summarizes relative potential ratings assigned to the various areas appraised for the main commodities considered. It shows that, in general terms, the proposed Northern Parks areas are considered to have relatively low mineral potential in comparison with the other areas investigated. An exception occurs in the case of the proposed Northern Ellesmere Island park which covers part of the Hazen Trough that is considered to have good potential for the occurrence of lead-zinc deposits. The relatively low potential assigned is a function of size since the proposed park areas are relatively small, but it is also a function of location with respect to geological features considered to be significant in terms of the localization of mineral deposits. Within the areas investigated outside the proposed parks, B-1 (North-central Yukon), B-2 (Eastern District of Mackenzie) and B-5 (Keewatin) are considered to have especially high potential for a variety of mineral commodities. It should be noted, however, that although the group of proposed park areas is generally rated as lower potential than adjacent and surrounding areas, there are, in addition to northern Ellesmere Island, several park areas (e.g. A-1-Northern Yukon, A-3-Bathurst Inlet) that contain sub-areas of higher potential. The general case of the Arctic Islands parks areas is more difficult to evaluate because of the paucity of information and because there has been (to date) so little exploration conducted.

4. A special note concerning uranium is warranted. Because uranium has a high value:weight ratio it may be one of the commodities for which commercial recovery from extreme northern regions may be most feasible. This, coupled with the facts that (1) systematic exploration for uranium is in its infancy in northern regions (in comparison with other commodities) and (2) there remain many large geological environments that have not yet been investigated beyond the bare reconnaissance level, suggests that caution should be exercised in eliminating such little-investigated areas prematurely.

5. In part because of the value:weight ratio factor noted in 4, above, transportation and access developments primarily unrelated to mineral requirements can have an important bearing on the "favourability" assignments of northern regions. In this context there are a number of developments that could affect areas considered in this study, including the original proposed arctic Polargas pipeline in District of Keewatin, N.W.T., and the recently-proposed alternative ("Y") route through parts of Eastern Mackenzie as well as the completion of the Dempster Highway in Yukon. In the latter case the proposed future construction of the "Dempster Lateral" gas pipeline connecting with the Alcan Alaska gas pipeline could also have a bearing on developments in area B-1.

6. A special point in connection with area B-2 (Eastern District of Mackenzie) is the presence not only of high potential, but also of significant reserves of some mineral commodities. These include Cu, Zn, Ag (Pb, Au) in massive sulphide deposits (e.g. Izok Lake, Hackett River, High Lake), copper in the Coppermine area, gold at Contwoyto Lake, and probably uranium in the Dismal Lakes area (see Table 2). Some reserves for nickel, and small tonnages of copper and zinc in sulphide pods are also known in area B-4 (Keewatin).

Introduction

This review was made in anticipation of the need for appraisals of mineral resource potential of certain areas in northern Yukon and Northwest Territories in connection with the proposed establishment of Northern National Parks[1] and the development of other northern policies, including guidelines for exploration, wilderness area assessment, pipeline and transportation development, and native peoples land allocations. It is a companion publication to an earlier report dealing with the mineral potential of the Western Arctic region[2] and forms a base for a planned series of more detailed northern mineral resource appraisals.

The areas involved in this study are outlined on Figures 1 and 2. Those identified with the prefix "A" are proposed park areas; those with "B" prefixes are much larger regions – generally adjacent to or surrounding mainland park areas, and considered to contain many of the favourable target areas for mineral exploration in the north, based on the present state of geological knowledge. For convenience of discussion the individual areas are treated in eight regional groups, as follows:

1. Northern Yukon, North-Central Yukon, and Tuktoyaktuk (A-1, B-1, A-2)
2. Eastern District of Mackenzie; West Part (B-2)
3. Eastern District of Mackenzie; East Part (A-3, B-3)
4. District of Keewatin (B-4, A-4)
5. Northern District of Keewatin (B-5)
6. Boothia Peninsula, Somerset and Prince of Wales islands (parts of) (B-6)
7. Banks Island (A-5, A-6)
8. Ellesmere and Axel Heiberg islands (A-7, A-8)

This appraisal is based mainly on two types of information: a) the computerized CANMINDEX and Uranium[3] Mineral Occurrence files of the Geological Survey supplemented by manual file data from the National Mineral Index (Mineral Policy Sector of the Department of Energy, Mines and Resources), notably for the Arctic Island areas; and b) general knowledge of the areas involved held by staff of the Economic Geology Subdivision supplemented by various published information (see Appendix 5) and unpublished information held in individual staff member files.

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[1] The proposed northern parks are briefly described in a series of pamphlets entitled e.g. "Banks Island – A Natural Area of Canadian Significance" available from the Parks Canada Directorate, Environment Canada, Ottawa. (See References)

[2] Economic Geology Subdivision, 1978. Evaluation of the Regional Mineral Potential (Non-hydrocarbon) of the Western Arctic Region; Geological Survey Open File Report 492, July 1978, 31 pp.

[3] Because of confidentiality requirements pertaining to uranium work, certain known uranium occurrences are omitted from the listings of occurrences in the Appendices (1A, 1B) of this report.

Table 1: Summary of mineral potential appraisal ratings of proposed northern parks and regional areas

Area and Designation	Approx. size (km^2)	U	Cu	Cu-Zn (± Ag)	Pb-Zn	Ni, Ni-Cu	Ag	Au	Fe	Other	General area rating and remarks
		Relative potential rating by commodity-type									
A. Proposed Park Areas											
A-1 Northern Yukon	20 500	M	L-M	L	M	L	L	L	L	W, Mo	General rating is low; includes unexplored environments potentially favourable for tungsten, uranium and zinc.
A-2 Tuktoyaktuk	1 813										Nil potential for mineral commodities considered here.
A-3 Bathurst Inlet	13 000	M?	L-M	L	L	L	L	M	L		General rating is low to moderate; moderate potential for Au and massive sulphide deposits in Archean portions. Possibly moderate but generally unevaluated potential for U and Cu in Proterozoic sediments.
A-4 Wager Bay	14 000	L	L	L	L	L		L	L		General rating is low; however immediately west of the area outlined, there is moderate potential for massive sulphide and gold deposits.
A-5 Southern Banks Island	8 250	L	L								Possibly some potential for uranium (probably low) and copper (very low). Other commodities almost nil.
A-6 Northern Banks Island		L									As A-5. Very little potential for commodities other than uranium.
A-7 Axel Heiberg Island	33 800	L-M			L						General rating is low. Some potential for uranium and zinc or lead-zinc.
A-8 Northern Ellesmere Island		L-M	L-M	L-M	M-H	L		L			General rating is low to moderate but based on present information favourable environments may be present for copper-zinc volcanogenic massive sulphides in NW Ellesmere and, in particular for lead-zinc deposits in Hazen Trough. Some potential for uranium; minor (low) potential for nickel.
B. Regional Areas											
B-1 Northern Yukon		M	M-H	M	M-H	L	M-H	M		W, Mo	General rating is moderate with local areas considered to have some potential notably for copper, tungsten, molybdenum zinc or leadzinc and silver (with lead). Large areas have had only reconnaissance exploration.

B-2 Eastern District of Mackenzie; West Part		M-H	L	H	L	L	L-M	H	L	Mo,Ti V,Pt group	General rating is high. Greenstone belts (and some metasedimentary areas) in Slave Province have excellent potential for massive sulphide and gold deposits. Good potential for uranium deposits in Great Bear-Dismal Lakes area, and moderate potential for silver in Bear Batholith area. Other commodities speculative, probably low, but in many cases have had little exploration attention.
B-3 Eastern District of Mackenzie, East part		M?	L-M	M	L	L	L-M	M	L	Mo	General rating is low to moderate; as for area A3. There is some additional potential for massive sulphide, gold and silver deposits in the Hope Bay and Elu Inlet volcanic belts.
B-4 District of Keewatin		M-H	L	H	L	M	L	H	L-M	Mo	General rating moderate to high. The Padlei-Tavani greenstone belt has excellent potential for massive sulphide and gold deposits. Uranium potential in Proterozoic sediments in Amer Lake and Schultz Lake areas is high. Moderate nickel potential. Possibilities for other deposit types. Exploration generally at an early stage.
B-5 Northern District of Keewatin		L-M		L-M	L-M		L-M		L		Generally low to moderate potential but some sub-areas little known. Potentially favourable environments for uranium and volcanogenic massive sulphide deposits (Cu-Zn ± Ag) may be present.
B-6 Boothia Peninsula, Somerset & Prince of Wales islands		L-M			M					Di	Generally low rating with local areas that may have potential for lead-zinc and uranium. Possible diamondiferous kimberlites?

Explanation for Table 1.

Favourability rating - N = nil; L = low; M = moderate; H = high.

Commodity Types-

U = uranium
Cu = copper
Cu-Zn ± Ag = volcanogenic massive sulphide deposits
Pb-Zn = lead-zinc
Ni, Ni-Cu = nickel and nickel-copper
Ag = silver
Au = gold
Fe = iron
W = tungsten
Cr = chromium
Mo = molybdenum
Ti = titanium
V = Vanadium
Pt = platinum group metals
Di = diamonds

Areas and area designations are shown on Figure 1.

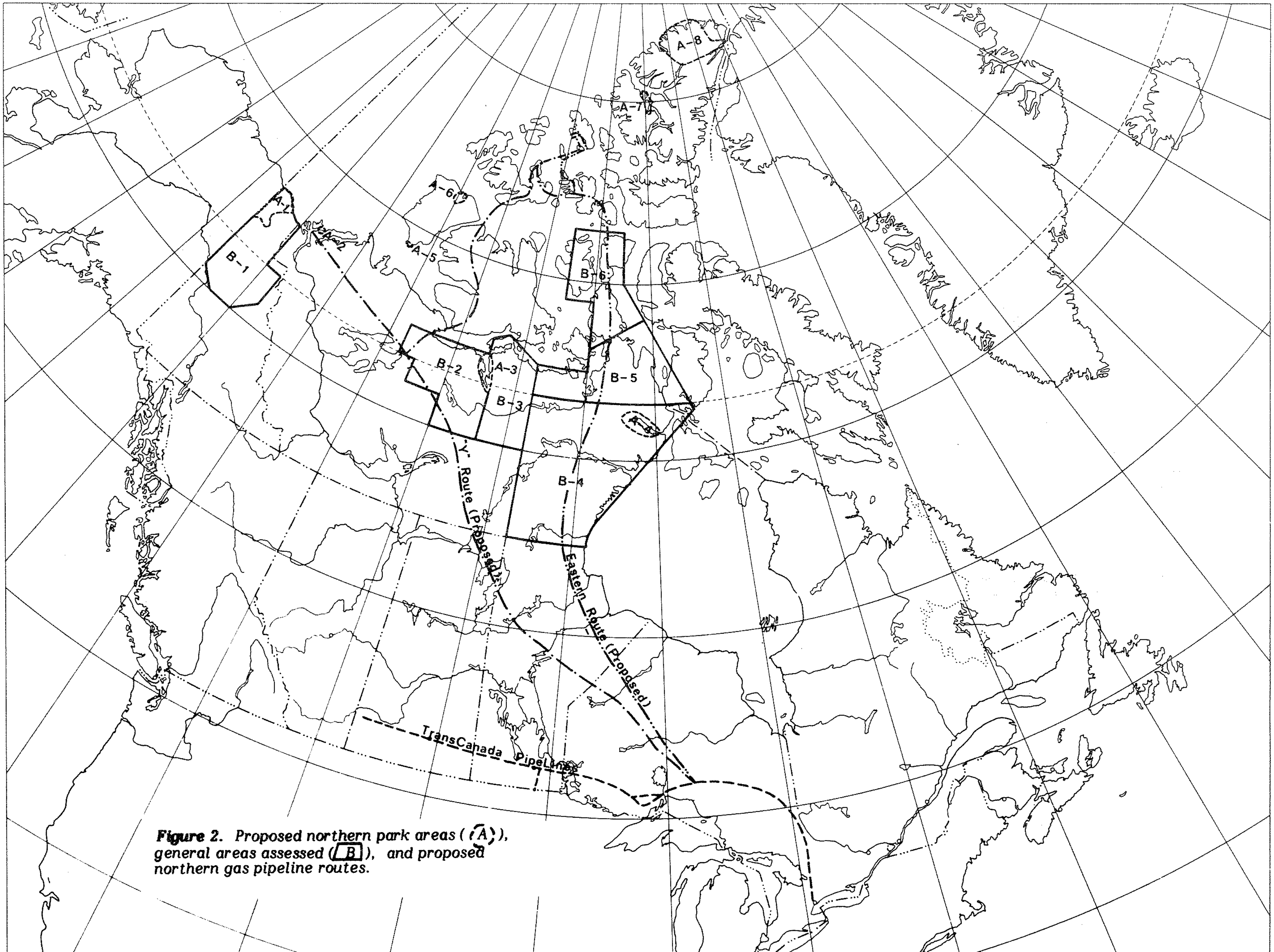

Figure 2. *Proposed northern park areas (A), general areas assessed (B), and proposed northern gas pipeline routes.*

The information on which this report is based is uneven in kind and depth for a number of reasons. The CANMINDEX and Uranium (URE-3) computerized file systems are still in the construction stage and for several areas here discussed do not yet contain all relevant information on known mineral occurrences. Also, because of the nature of the operational files at this stage, occurrences are weighted toward copper, lead-zinc, nickel and molybdenum. With certain exceptions precious metals (gold, silver, platinum-group) are not included in file listings[4]. In other cases the knowledge of geology and indicators of mineral potential are not yet at a level of detail that allows other than generalized conclusions and speculations.

For the reasons noted above, and because of the short time available in which to conduct this study it should be strongly emphasized that this is a limited and preliminary appraisal. It represents a compendium of a number of individuals' judgements based on geological rationale and backed by the available but incomplete "hard" information in the computerized files. Individual contributors to the report are listed in a later section.

The CANMINDEX and URE-3 files identified a total of 699 mineral occurrences in the areas involved in this study (Appendices 1A, 1B). Of this total 125 occurrences are considered to be "significant" or "proven" under the terms of reference used in this appraisal (see "Criteria", following section). In terms of density of occurrences, Northern Yukon (Regional Group 1) and Eastern District of Mackenzie (Regional Group 2) contain about 70% of these occurrences. Caution is needed in interpreting this apparent distribution because of incompleteness of the file base, lack of past exploration or simply, paucity of knowledge about the areas concerned. In filtering the 699 known occurrences to obtain only those considered "significant", occurrences may be eliminated that can have indicator implications disproportionate to their apparent "significance". In other cases, geological concepts may suggest that the areas could have significant potential, in spite of the apparent paucity of known occurrences. Boothia Peninsula (Regional Group 5) and Ellesmere and Axel Heiberg islands (Regional Group 7) are examples containing both the above elements; that is, none of the known occurrences report as "significant" in the screening process used here, but geological concepts suggest that these areas have significant potential for discovery of Zn or Zn-Pb deposits.

Criteria for Assessment of Mineral Potential

The criteria used in this appraisal are based mainly on the deposit model analogue approach. That is, the geological environments in the appraisal areas are examined to determine if geological features characteristically associated with various deposit types are present. This "conceptual" examination, coupled with knowledge of the distribution of known occurrences of the deposit type(s) being considered provides the base for a relative ranking of the areas in terms of their potential to contain deposits of possible economic significance. Details of appraisal criteria for various deposit types are given in Appendix 2.

For this preliminary appraisal, known occurrences have been grouped into thirteen commodity categories, and are coded on Figure 1 and on text figures as follows:

Code No. (Appendices 1A,1B)	Symbol (Fig. 1)	Commodity or Deposit Type
01	△	Uranium, uranium plus thorium
02	▲	Uranium plus copper (± other elements)
03	□	Gold
04	■	Gold-silver, silver
05	●	Copper (primarily)
06	○	Copper-nickel, nickel
07	◇	Base metals, general
08	◆	Volcanogenic massive sulphides (Cu-Zn-Ag)
09	◆	Lead-zinc, zinc
10	▼	Iron, mainly iron formation
11	◐	Molybdenum, copper-molybdenum
12	◒	Tungsten, copper-tungsten
M	x	Miscellaneous, unclassified

[4] However, a few significant iron and gold deposits have been added to the file for this study and are included on Fig. 1 and Appendices 1A and 1B.

In Appendices 1A and 1B, mineral occurrences are assigned a CANMINDEX commodity status code number ranging from 01 to 08. The code is as follows:

01 - commodity is being produced

02 - the deposit has calculated reserves of a commodity but has never produced

03 - the deposit has had past production; known reserves are present but the commodity is no longer being produced

04 - exhausted; the commodity is no longer produced and there are no known reserves or demonstrated resources

05 - two-dimensional data (e.g. length and width) and grade are available (public) but not enough to calculate reserves

06 - one-dimensional data and grade (e.g. a drillhole; one trench)

07 - present; commodity reported but insufficient data are available (public) to allow the occurrence to be classified

08 - the commodity occurs at a producing mine or in a significant deposit but it is not known whether it is being, or will be extracted for sale

For the purposes of this report and as shown on Figure 1, "proven" deposits (those with published grade and tonnage data) are those which have a CANMINDEX status for at least one commodity of 01 or 02. "Significant" deposits are those which have a status of 03 to 06 inclusive. The majority of occurrences shown on Figure 1 contain commodities given a status of 07. These "status" groupings are also indicated on Figure 1 by the size of the mineral occurrence symbol, as follows:

▲ - mineral occurrence (07)

▲ - "significant" deposit (06-03)

▲ - "proven" deposit (02-01)

This coding system attempts to screen large numbers of mineral occurrences to identify those which may be considered most important from:

a) an economic point of view;

b) the point of view of their significance in suggesting whether the geological environment in which they occur has potential to contain undiscovered deposits of a similar kind that may have potential economic importance (if discovered).

The relative potential terminology used in this report is qualitative. The mineral potential for areas or parts of areas investigated is designated as follows:

Mineral Potential Terminology	Interpretation
nil	for the deposit or commodity type considered, the potential for the occurrence of an economic deposit is considered, for practical purposes, as zero

low	under the same terms as above, occurrence is considered unlikely but, on the basis of geological rationale, the possibility of an economic deposit cannot be eliminated entirely
moderate	because of the favourable geological environment(s) or because of the presence of known "significant" or "proven" deposits or both, there is justification for predicting the presence of one or more economic deposits
high	because the geological environment(s) is known to contain many of the characteristics of environments elsewhere that have economic deposits, the probability of the presence of undiscovered economic deposits is high. This judgement may or may not be supported by the presence of known "significant" or "proven" deposits.

These qualitative rankings obviously have to be tempered by other factors. Included here are: quality and quantity of geological knowledge; amount and kind of past exploration efforts; remoteness and accessibility; and, type of commodity. The latter can be especially significant in the case of northern and Arctic mineral resources since, in many instances it seems likely that those commodities with high value:weight ratios will provide the best chances for exploitation under normal commercial conditions. Notable examples in this category are uranium and precious metals (gold, silver). Other factors, such as the proximity of transportation routes planned for other reasons will have a bearing on the assessment of an area in terms of its possible economic potential. In this connection the proposed alternative routes for the northern gas pipeline (Polargas), the routes of which are likely to cross either through areas B-4, B-5 and B-6 (eastern route) or through area B-2 ("Y" route) is a case in point (Fig. 2).

Sources of Information

Yukon Territory

Mineral information on Yukon was recorded in an annual series of publications of the Geological Survey from 1961 through 1968 (Skinner, 1961, 1962; Green and Godwin, 1963, 1964; Green, 1965, 1966; Findlay, 1967, 1969a, 1969b). Since 1969 similar review reports have been published by the Department of Indian Affairs and Northern Development (now Indian and Northern Affairs), such as Craig, 1972; Craig and Milner, 1975; Sinclair and Gilbert, 1975; Sinclair et al., 1975, 1976; and Morin et al., 1977. Earlier records are contained in Annual and Summary Reports of the Geological Survey from 1898 through 1933, now mainly out of print but many of which have been collected in a single volume (Bostock, 1957). Records for the period 1934 to 1940 are summarized in a series of Geological Survey reports by Bostock (1935, 1936, 1937, 1938, 1939 and 1941).

The principal geological compilation reference (Fig. 1 of this report) for much of the area in question is Norris et al., 1963 (Geological Survey of Canada, Map 10-1963) supplemented by various maps and reports issued by the Geological Survey in subsequent years. These sources are numerous and a complete listing is not provided here, although specific sources referred to in the report are given in the list of references.

District of Mackenzie, Northwest Territories

Mineral occurrences that were known in the Northwest Territories prior to about 1940 for District of Mackenzie and about 1964 for District of Keewatin were recorded in publications of various types, including reports dealing with specific map areas. Information on early work on these occurrences must thus be compiled from these dispersed source documents. Since 1940 the record of mineral exploration activities has been reasonably consistent for District of Mackenzie. Lord (1941, 1951) gives a systematic record (including quotes from many of the earlier sources) to about the end of 1950 for those properties on which exploration was done. This record was extended by McGlynn (1971) through 1959, and subsequently for some years by a series of annual reports (Baragar, 1961, 1962; Baragar and Hornbrook, 1963; Schiller and Hornbrook, 1964a; Schiller, 1965; Thorpe, 1966). The period 1966-1968 was covered in two reports by Thorpe (1970, 1972), one dealing exclusively with exploration programs for copper on properties in the Coppermine River area. Starting with the 1969 exploration season, this record has been continued with publications by the Department of Indian and Northern Affairs (Padgham et al., 1975; Padgham et al., 1976; Padgham et al., 1978; Laporte et al., 1978).

A few general accounts of the mineral deposits of the Northwest Territories have been published. One of these was by Thorpe (1969) and another by Padgham (1973).

District of Keewatin, Northwest Territories

Beginning with Schiller (1965), information on exploration programs in District of Keewatin is contained in the reports referred to above for District of Mackenzie. In general, however, exploration activities, and also the reporting of those activities, have been much less systematic in the case of District of Keewatin than for District of Mackenzie. Many of the early records of exploration activities are in copies of reports contained in the confidential Central Technical Files of the Geological Survey of Canada and in files of assessment reports maintained by the Department of Indian and Northern Affairs. Since the summer of 1969 a more complete record of exploration activities and mineral occurrences has been maintained by the latter agency. The pertinent publications are Laporte (1974a, 1974b), Padgham et al. (1976), and Laporte et al. (1978), covering the period 1969 to 1973 and the year 1975. Comments pertaining directly to the metallogeny of the eastern District of Keewatin are contained in publications by Ridler and Shilts (1974a, 1974b).

Arctic Islands

Sporadic references to occasional exploration efforts in the Arctic Islands are contained in some of the sources noted for Northwest Territories in the previous sections, but there is no systematic information base for this region. The little information concerning mineral potential of the Arctic Island areas contained in this report is derived mainly from subjective judgement on the part of the authors based on the assessment of known geological factors, and from information in some of the more recent reports of the Department of Indian and Northern Affairs noted above.

General Remarks Concerning the Main Regions of this Study

Evaluation of the mineral potential of northern Yukon and large parts of the districts of Mackenzie, Keewatin and Franklin must be undertaken with reference to a number of general factors, including:

i) the economic significance of mining and mineral exploration to the Yukon and Northwest Territories;

ii) the probable future impact of their mineral industries;

iii) the history and level of past mineral exploration; and,

iv) the present level of knowledge of both the general geology and of specific local features of the geology.

This report is concerned with aspects of all of these points in addition to a few other subsidiary factors that bear on qualitative estimates of mineral potential.

Yukon

Minerals have formed the mainstay of Yukon's economy since the Klondike Gold Rush of 1896-1901. However, only since about the mid-1960s have large-scale and systematic modern exploration programs been carried out in the Territory. This has resulted, over the past decade or so, in the development of a greatly expanded and diversified mineral production base for Yukon, beginnning with the initial discoveries of the large lead-zinc deposits in the Anvil Range area of central Yukon and progressing through to significant discoveries of copper, tungsten, lead, zinc, uranium and other metals in various parts of the Territory. This emphasis on mineral exploration and the resultant discoveries is reflected in Yukon mineral production statistics which show that the total value of mineral production increased dramatically from about $23.5 million in 1968 (pre-Anvil-Faro lead-zinc production) to about $228.2 million[5] in 1978.

Two major trends are evident in the record of past Yukon mineral activity as a basis for predicting future developments. The first and most significant has been the acquisition of high quality geological data in the Territory, particularly in the central and northern regions, coupled with the application of new metallogenic concepts to this information base to identify likely environments for the occurrence of economic mineral deposits. The recent emphasis on exploration of shale and carbonate packages in the Mackenzie Fold Belt and Selwyn Basin of east-central and central Yukon, and the recognition that certain geological environments of Wernecke and Ogilvie mountains of central Yukon could host potentially significant uranium deposits, are examples of new metallogenic applications that have already resulted in discoveries.

The second major factor is the gradual shift in exploration activities northwards as knowledge of the geological base has improved. Ten years ago there was little exploration effort north of about latitude 65° in Yukon (with the exception of some oil and gas exploration in the early 1960's in Eagle Plains area of northern Yukon); this picture has changed significantly in recent years as the exploration base gradually evolves northwards. This trend is aided by a number of factors, including improved access (e.g. Dempster Highway extension), transportation (helicopter availability) and communications facilities, and seems likely to continue. Northern data collection programs carried out by government agencies, such as for example, the recent reconnaissance geochemical surveys conducted by the Geological Survey under the former Uranium Reconnaissance Program (URP) in the northern Richardson Mountains and British Mountains (Blow River, Davidson Mountains, Demarcation Point and Herschel Islands)[6] may be considered as the vanguard of systematic exploration that seems likely to follow.

At this stage there is no indication that the trend toward increasing northward penetration of systematic exploration programs will change, although, as has happened frequently in the past, such trends are likely to be cyclic in nature.

Northwest Territories

In the Northwest Territories mineral exploration in 1977 was the second major non-government employer, with first position being occupied by mining itself (Padgham, 1978). Although exploration expenditures on minerals (about $35-40 million in 1978) were much lower than oil and gas exploration expenditures, the total effect of the former on the local economy was of equal or greater significance than the latter because more local residents are employed and a much greater proportion of expenditures is paid directly to local operators. Mining, with a value of mineral production of about $275 million in 1978, is the major economic activity in the Northwest Territories and provides nearly 2000 persons with full time employment.

In District of Mackenzie relatively intensive exploration for volcanogenic massive sulphide deposits within the northern part of the Slave geological province has been undertaken over the past ten years. Of 22 base metal exploration programs in the Slave Province in 1977 it appears that the majority were in the northern part within the B-2 (Mackenzie East) area of this report. The known metal reserves contained in the Hackett River and Izok Lake massive sulphide deposits (Area B-2 of Fig. 2; see also Table 2, next page) have an excellent chance of being doubled by more development work. If in future the Ingraham Trail were to be extended from 80 km north-east of Yellowknife to Contwoyto Lake, with branches to the Izok Lake and Hackett River deposits, it is possible that not only these deposits, but the Contwoyto Lake gold deposit and the small Takiyuak Lake massive sulphide bodies as well, would be mined. An alternative route for a gravel road might be that of the proposed "Y" gas pipeline route, since a gravel road would probably be built in conjunction with the pipeline if it were to be constructed. Either of these roads might only be important for transport of supplies and any operating and maintenance items required on a short term basis, with concentrates and heavy supplies that can be scheduled on a long term basis being transported by sea via ports on Coronation Gulf (50 km from the High Lake deposits and 250 km from Izok Lake) and Bathurst Inlet (80 km from the main Hackett River deposit). The development of a transportation corridor into the area could spur further intensive exploration, possibly leading to additional discoveries. It must be emphasized that although the Hackett River deposits lie outside the proposed A-3 (Bathurst Inlet), Park area, allowance may have to be made for future access across this area since at this time it is not known whether development of the deposits would require access only from the south or to a possible shipping site on Bathurst Inlet as well.

In northern District of Mackenzie, exploration for uranium has accelerated in recent years and properties that may contain significant deposits (YUK and PEC groups; see Table 2) are currently under exploration and development. Exploration in the Proterozoic sediments of Bathurst Inlet area has only gotten underway in the past few years, with a number of claim groups having been staked in 1977 and 1978.

It should be emphasized that, in the case of the northern District of Mackenzie, exploration for base metal deposits of the massive sulphide type and, in particular, for uranium, is at an early stage relative to similar exploration in other more accessible areas of Canada, and even relative to exploration of southern District of Mackenzie. More intensive exploration can therefore be expected to result in the discovery of additional deposits, some of which are likely to have economic significance.

In District of Keewatin mineral exploration prior to about 1968 consisted of programs by only a few companies and a few small independent prospecting parties. Exploration on a much broader scale, involving the participation of many oil companies and consortiums, started about 1968 with the assignment of a large number of exploration permits for uranium exploration. The first few years were mainly devoted to airborne surveys with relatively little detailed work on the ground. This initial exploration has gradually evolved to more detailed surveys that have resulted in the discovery of numerous showings. The main area of interest at

[5] Includes asbestos production valued at $32.4 million.

[6] Goodfellow, W.D., 1979, Geological Survey of Canada Open File 565.

Table 2: Deposits with proven and inferred reserves within Area B-2

Deposit No.	Commodity(ies)	Deposit	Tonnage	Grade* Cu	Pb	Zn	Ag	Au	NTS	Lat.	Long.
243	Zn, Ag, Cu, Pb, Au	Hackett River (Main Zone)	5 000 000	0.25	1.5	8.5	7.0	0.05	76F/16	65°55'05"	108°21'59"
239	Zn, Cu, Ag, Pb, Au	Hackett River (Boot Lake)	5 000 000		1.0	5.0	5.86		76F/16	65°54'46"	108°26'15"
238	Zn, Ag, Cu, Pb, Au	Hackett River (Cleaver Lake)	4 000 000	0.5	1.0	7.0	5.3	0.014	76F/16	65°55'00"	108°27'39"
254	Cu, Zn, Ag, Au	High Lake (AB Zone)	2 400 000	5.4		1.1		0.03	76M/07	67°22'50"	110°51'20"
255	Zn, Cu, Ag, Au, Pb	High Lake (D Zone)	2 800 000	2.0	0.2	3.6	1.1	0.02	76M/07	67°22'35"	110°51'18"
278	Zn, Cu, Ag, Pb, Au	Izok Lake	12 000 000	2.83	1.43	13.7	2.05		86H/10	65°38'00"	112°47'45"
620	Cu, Zn, Ag, Au	Takiyuak Lake (Hood River No. 10)	500 000 150 000	5 1		3.5 4	1.0	some	86I/02 "	66°04'40" "	112°45'00" "
621	Zn, Cu, Ag	Takiyuak Lake (Hood River No. 41)	320 000	1.57		4.12	0.52		86I/02	66°03'30"	112°42'00"
141	Cu	Coppermine R., No. 47 Zone (Dot 47)	4 106 000	3.07					86N/08	67°24'36"	116°24'43"
127	Cu, Ag	Dick No. 1	90 000	8.78					86N/08	67°19'50"	116°02'35"
64	Cu	Carl 7	125 000	2.0					86N/12	67°44'00"	117°35'35"
282	Cu	Jack, No. 13 Vein	Small tonnage inferred						86N/07	67°25'	116°45'
302	Cu	June	1 000 000	2.5					86O/11	67°34'25"	115°03'30"
694	U	YUK Gp. (Imperial Oil Ltd.)	**Significant tonnage inferred	.3-.5U_3O_8 (694 and 503)					86N/07	67°18'	116°51'
503	U	PEC Gp. (Aquitaine-Cominco)	Possibly a significant tonnage						86N/07	67°16'18"	116°56'
62	Au	Contwoyto Lake (Can. Nickel main showing)	Several million	0.3 oz/ton Au or better					76E/16	65°45'52"	111°13'35"

*Cu, Pb, Zn grades are given in percent; Ag & Au grades are in oz/ton.
**Mountain Lake

present is on properties in the Schultz Lake area, northwest of Baker Lake, and in the Yathkyed Lake area in the southwest part of Keewatin (B-4), which have recently been drilled, and in the Amer Lake area about 145 km northwest of Baker Lake (northwestern part of B-4). Base metal exploration in the Rankin Inlet-Ennadai belt has also been more active during the past 10 years. Exploration for uranium, base metals and other commodities in District of Keewatin must be considered to be at an early stage. One factor that could greatly influence mineral exploration and development would be construction of an arctic gas pipeline.

The originally proposed route of the Polargas gas pipeline passes south through District of Keewatin from the northern part of Melville Island, crossing much of the area considered here in Boothia Peninsula (B-6), Northern District of Keewatin (B-5) and Eastern District of Keewatin (B-4) (see Fig. 2). Recently, however, an alternative pipeline route ("Y" route) has been proposed through eastern District of Mackenzie (Fig. 2), crossing through much of the area designated B-2 in this study. In either case construction of such a pipeline would likely have a considerable impact on exploration and possible development along the corridor chosen. Exploration access would undoubtedly be greatly aided by a gravel road that would be built in conjunction with pipeline construction, and which should be passable for considerable distances for at least 3 years out of the total 5 year construction period planned. If such a road were to be maintained following pipeline construction, this coupled with the availability of an energy source from the pipeline could spur development of a number of small (to moderate?) deposits of Au, and base metals that are known near both routes. In the case of the eastern route, significant uranium deposits may be defined within a few years near the pipeline route, in Baker Lake and Schultz Lake areas.

Pipeline transport of iron ore in slurry form from deposits in Melville Peninsula to market areas in southern Canada has been suggested. These deposits contain over 4 billion tons of concentrating-grade iron ore. Such a pipeline would likely generally parallel the proposed eastern gas pipeline route discussed above. Such a slurry pipeline could generate exploration and development in parts of areas B-5 and B-6.

General Assessment of Regional Area Groups

North-central Yukon, Northern Yukon and Tuktoyaktuk (Areas A-1, B-1, A-2)

Figure 3 shows significant mineral occurrences in north-central and northern Yukon (A-1, B-1). There are no occurrences recorded in the Tuktoyaktuk area (A-2) which is underlain mainly by muds and silts of the Mackenzie Delta part of Arctic Coastal Plain. The non-hydrocarbon mineral resource potential of this area (A-2) appears nil, except for possible sand and gravel pockets that might be suitable for local construction needs.

With the exception of the tungsten (scheelite) placer occurrences of the Mt. Sedgwick area (locality 448 of Appendix 1A) along its northeast boundary, and chromite and tungsten reported in streams near the Alaska border, the proposed Northern Yukon park area (A-1) does not contain known mineral occurrences. There are, however, two geological features that warrant exploration. These are: the northwest extension of the Barn Uplift region through Mt. Sedgwick area and its mergence with the eastern extension of the Brooks Range geanticline in Alaska; and the extensive package of Carboniferous (Mississippian) and older sedimentary rocks trending easterly through Area A-1 in the vicinity of latitude 68°30'. The first region (Barn Uplift-Brooks Range) contains complex sequences of sedimentary and volcanic rocks ranging in age from Proterozoic to

Carboniferous and is, in part, cored by a chain of Devonian acidic intrusions, the northernmost (exposed) one being the Mt. Sedgwick pluton. It is a structurally complex region, generally little-explored, and as recent regional geochemical surveys indicate (see under area B-1) has potential for occurrences of tungsten, uranium and possibly base metals (copper, lead, zinc). The second area, underlain chiefly by Mississippian carbonates may have some potential for lead and lead-zinc deposits although there is little evidence of mineralization to date. The A-1 area is given an overall rating (Table 1) of low potential but it should again be emphasized strongly that virtually no systematic exploration has been done in this region on which to base a meaningful appraisal. A better appraisal requires, at a minimum, additional more detailed geochemical follow-up work, particularly in the two sub-areas noted above.

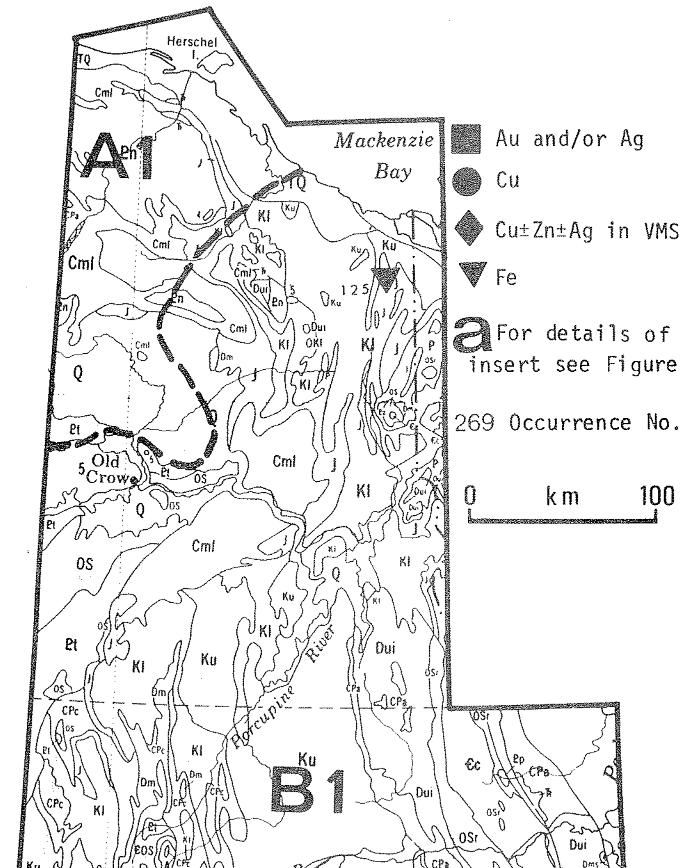

Figure 3. *Significant occurrences within and adjacent to areas A-1 and B-1.*

North-central Yukon (B-1) includes a number of known mineralized environments, but, to date, no major deposits are known. However, because of the known extension of mineralized environments into the area from the southeast and south (Mackenzie Fold Belt, Selwyn Basin) parts of this region have moderate (to high) potential to contain economic mineral deposits. In addition, the extreme southern part of area B-1 includes mainly well-prospected country west and northwest of the Keno Hill-Galena Hill silver-lead-zinc camp, in which numerous small silver-lead and locally gold occurrences are known.

The southern part of area B-1, extending north to approximately latitude 65°30' contains parts of two major geological elements of the northern Cordillera–Mackenzie Fold Belt and Selwyn Basin (Selwyn Fold Belt). The latter, a large Proterozoic and younger depositional basin, contains one of the major potential zinc and zinc-lead resource regions in Canada, mainly in the Anvil Range area in the south-central part of the basin and in eastern fringes of the basin near the Yukon-N.W.T. border (MacMillan Pass, Howards Pass). Total known economic-grade lead and zinc mineralization is now estimated at several hundred million tons in 6 or 7 deposits, with the potential for additional discoveries being high. In the northern fringes of the Basin, falling within the B-1 area, only minor occurrences are known to date but much of this region is only beginning to be subjected to systematic exploration. Exploration may be expected to intensify in this general area in the future however, because of the discoveries in 1976 by McIntyre Mines Ltd. and Prism Resources Ltd. of significant silver-lead (with minor zinc) mineralization in dolomites and shales of the "Grit" unit and other Late Proterozoic and early Paleozoic units in the Rackla River area immediately to the south.

Further to the east and northeast, upper Proterozoic and lower Paleozoic rocks of the Mackenzie Fold Belt have been the object of increasing attention in recent years due to the discovery of significant carbonate-hosted zinc-lead (with minor silver) deposits (Goz Creek; Corn Creek) and widespread copper, cobalt and uranium mineralization in the Bonnet Plume River area of Wernecke Mountains. Significant quantities of coal are also known to be present in Bonnet Plume Basin area. To the west, along the Mackenzie Mountain trend at least one small volcanogenic massive sulphide deposit is known (Mark-Hart River, Appendix 1A, No. 397) and other occurrences of copper, silver and lead are present. The central part of this westerly-trending belt between the Bonnet Plume River area and Hart River area probably has a moderate potential for additional discoveries, chiefly copper (with zinc) and uranium. Still farther west, near the boundary of Selwyn Basin and Mackenzie Fold Belt, scattered lead-zinc occurrences are known in carbonate strata of Ogilvie Mountains. South and west of the general Hart River area and in northwest Selwyn Basin, rocks of the Tombstone Ranges of Ogilvie Mountains contain numerous small uranium occurrences but, to date, no significant deposits have been found.

In extreme northeast Yukon, east of the proposed park (A-1) known occurrences of copper, zinc, lead, molybdenum, tungsten, phosphate, iron and uranium are present but except for the large, low-grade ironstone (with phosphate) occurrences in northern Richardson Mountains (Delta Iron, Listing No. 125, Appendix 1A) economically significant deposits have not yet been discovered. Little serious exploration has been done in this extreme northern region to date. However, because of various geological features and because of the occurrence of known mineralization (e.g. uranium in southern Richardson Mountains) and the possibility of lead-zinc deposits in favourable barite-bearing Road River shales in the same general area, the mineral potential of parts of this northern sector of B-1 is rated as moderate. In 1978 the

Geological Survey conducted regional geochemical reconnaissance surveys under the Uranium Reconnaissance Program over this northern region (including area A-1) and the results of this initial work[7] suggest potential for follow-up exploration in several localities, most notably in the vicinity of the Barn Uplift, immediately to the east of A-1 eastern boundary. Additional details bearing on the appraisal of areas A-1 and B-1 are given in Appendix 3.

Eastern District of Mackenzie; West Part (B-2) (Fig. 4)

Area B-2 contains reserves of Cu, Zn, Pb and Ag in polymetallic massive sulphide deposits which are still under exploration and development, of copper in other copper deposits (Coppermine area) and of gold (Contwoyto Lake and Tree River areas). In addition, probable reserves of uranium are present (Dismal Lakes-Great Bear Lake area). The potential is considered to be high for additional discoveries of these commodities. For sediment-hosted lead-zinc deposits the potential is uncertain, but is probably low to moderate. In rocks of the Bear Province there is a moderate potential for discovery of complex vein deposits of silver. The potential for iron, nickel, platinum group elements, molybdenum, and other metals is low. The appraisal of this area is presented in more detail in Appendix 3.

Eastern District of Mackenzie; East Part (A-3, B-3) (Fig. 4)

From areas A-3 and B-3, small tonnages of ore have been mined, consisting of silver ore from area B-3 (Hope Bay, east of Bathurst Inlet) and lead-rich ore from area A-3 (Galena Point within Bathurst Inlet). The large Hackett River massive sulphide deposits (area B-2) lie just west of B-3 and A-3 areas and may require access through the latter areas. In area B-3, the potential for gold is considered to be high, and for massive sulphide deposits moderate. There is less potential for massive sulphide deposits in area A-3. There is also potential (perhaps low to moderate) in area A-3 for sediment-hosted uranium, copper and lead-zinc deposits within Proterozoic sediments along Bathurst Inlet. This latter appraisal of potential is tentative because little general exploration has been done (and uranium exploration has only started recently) and details of the geological environments are not known. The potential is low for iron, nickel, molybdenum and other metals, although other small high-grade veins of silver could be found in area B-3 (Hope Bay belt), and possibly also in area A-3. Additional details of the appraisal of this area are given in Appendix 3.

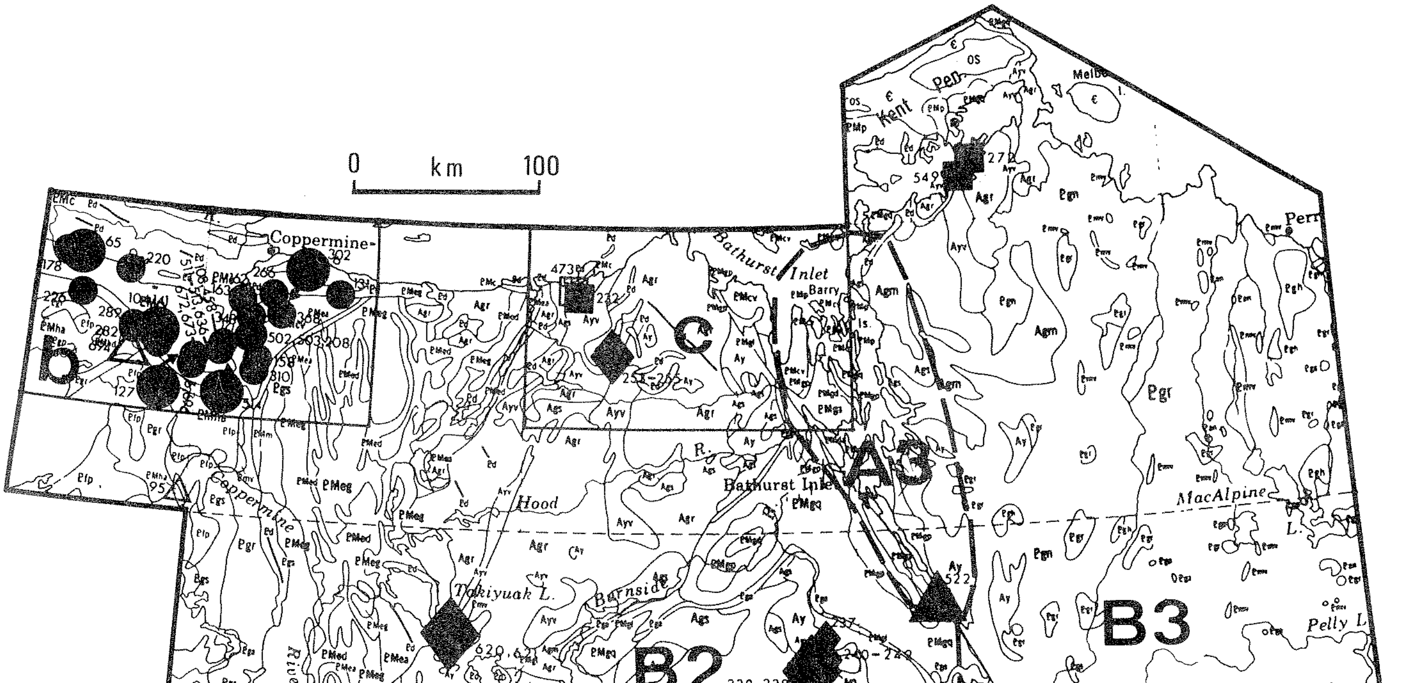

Figure 4. Significant occurrences within areas A-3, B-2 and B-3.

[7] Goodfellow, W.D., 1979, op. cit.

District of Keewatin (A-4, B-4) (Fig. 5)

The A-4 area (proposed Wager Bay Park) is considered to have a low mineral potential with the exception of a belt of metavolcanic rocks near its northern edge, which may have some potential for base metals (massive sulphide deposits) and gold. An area of similar rocks just west of A-4 is considered to have moderate to good potential for Cu-Zn (Pb, Ag, Au) massive sulphide deposits and gold deposits, and a low potential for nickel and iron deposits.

Area B-4 is considered to have high potential for polymetallic, Cu-Zn (Ag, Pb, Au), massive sulphide deposits, gold deposits and uranium deposits. Specifically, the potential is highest for massive sulphide and gold deposits in Archean terranes in the southern part of B-4 area in the Rankin Inlet-Ennadai "greenstone" belt. The main part of this belt extends from the coast of Hudson Bay east of Kaminak Lake, southwest to the vicinity of Selwyn Lake on the Saskatchewan-Northwest Territories border, about 150 km southwest of Ennadai Lake and 130 km west of the boundary of the B-4 area. Considerable exploration for base metal and gold deposits has been conducted in this belt in the last 15 years and some small deposits with reserves as well as numerous other occurrences are known. In view of the current high price of gold, a small gold mine may be developed at Cullaton Lake, about 130 km southwest of Padlei. Newer geological maps, coupled with recent metallogenic concepts, also suggest that much additional exploration is warranted in this region in the future.

The greatest potential for uranium deposits in the B-4 area is in belts of Proterozoic sedimentary rocks, and in this connection the base of the Thelon Formation may have many of the characteristics of the base of the Athabasca Formation in Saskatchewan and thus be particularly favourable. The potential for economic nickel-copper deposits in the area is considered to be moderate. Concentrating-grade iron deposits are known at Mistake Bay and near McConnell River, but the probability of their development in the foreseeable future or the discovery of better deposits is only low to moderate. For copper, lead-zinc and silver (other than in massive sulphide deposits) as well as for molybdenum the potential is low.

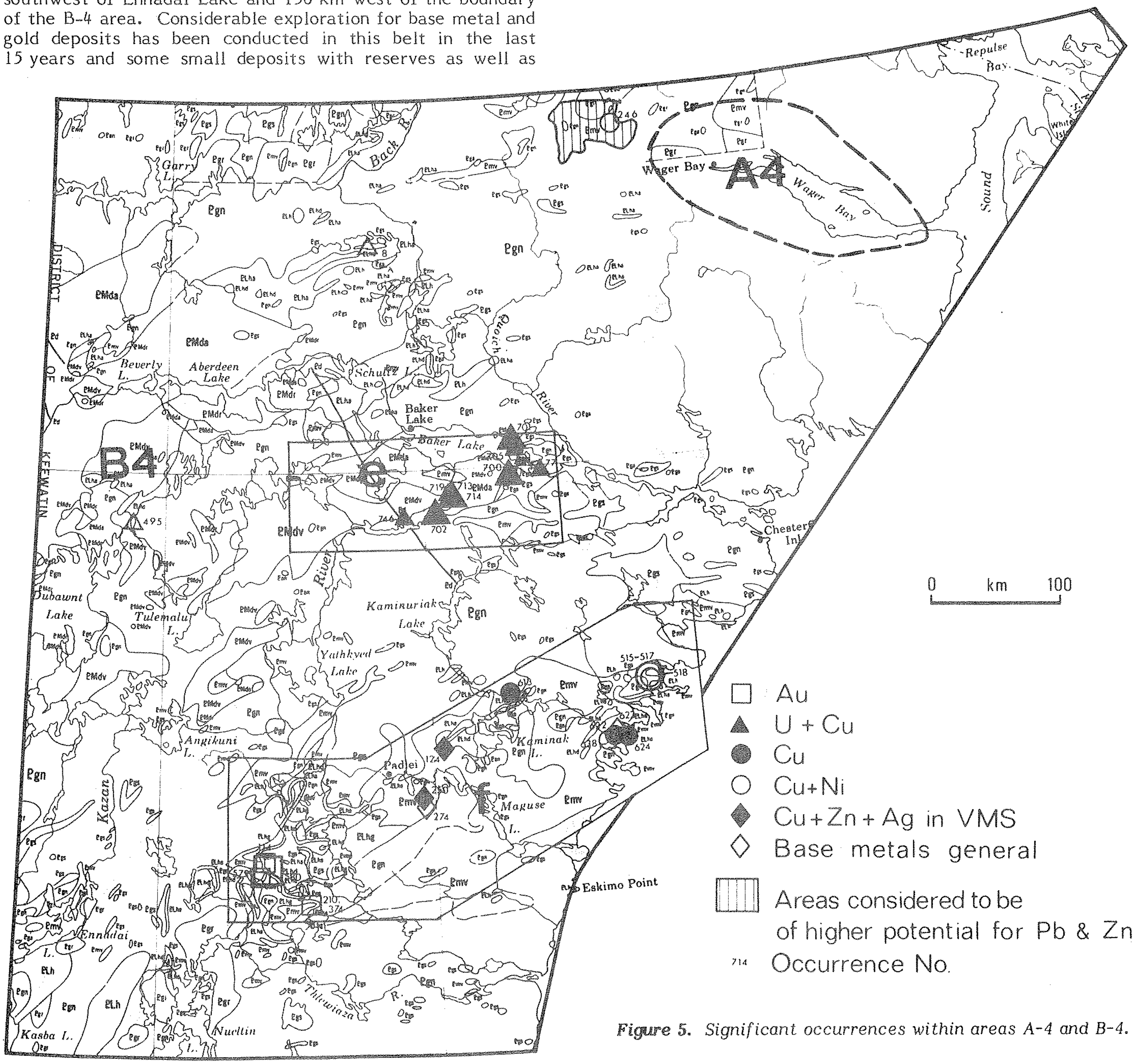

Figure 5. Significant occurrences within areas A-4 and B-4.

More details of the appraisal of these areas are presented in Appendix 3.

Northern District of Keewatin (B-5) (Fig. 6)

In area B-5 belts of Prince Albert Group volcanic and sedimentary rocks of Archean age, and their probable equivalents, are considered to have low to moderate potential for massive sulphide (base metal), gold and nickel deposits. There is some potential for uranium deposits in belts of Proterozoic sedimentary rocks. The potential in B-5 for deposits of other types is probably low. More details of the appraisal of this area are given in Appendix 3.

Boothia Peninsula, Somerset Island and Prince of Wales Island (parts of) (B-6) (Fig. 6)

Based on known geology and comparison with other mineralized northern areas, parts of this region have potential mainly for lead-zinc deposits. Most of the southern part of the region (mainly Boothia Peninsula) is underlain by gneisses, which give Aphebian radiometric ages and have been metamorphosed to granulite facies (Blackadar, 1967). These rocks are thus not considered to be favourable hosts for substantial Pb-Zn deposits. However, much of Prince of Wales Island, Somerset Island and the eastern part of northern Boothia Peninsula is underlain by rocks of Cambrian to Devonian age. These rocks (Lang River Formation) are in part the stratigraphic equivalents of the host rocks of the important Cornwallis lead-zinc district further to the north, or are contemporaneous (Read Bay Formation, Peel Sound Formation) with the tectonic activity postulated to have been an important controlling factor in the mineralization in the Cornwallis district (Kerr, 1977a, 1977b). On these grounds alone, the Paleozoic rocks must be considered to be of interest for exploration for Pb-Zn deposits, and are thus designated as areas of some economic potential on Figure 6. However, it should be pointed out that the Paleozoic sedimentologic and tectonic histories of the Cornwallis area and the Boothia Peninsula-Prince of Wales Island area are different, and thus the areas are not completely analogous.

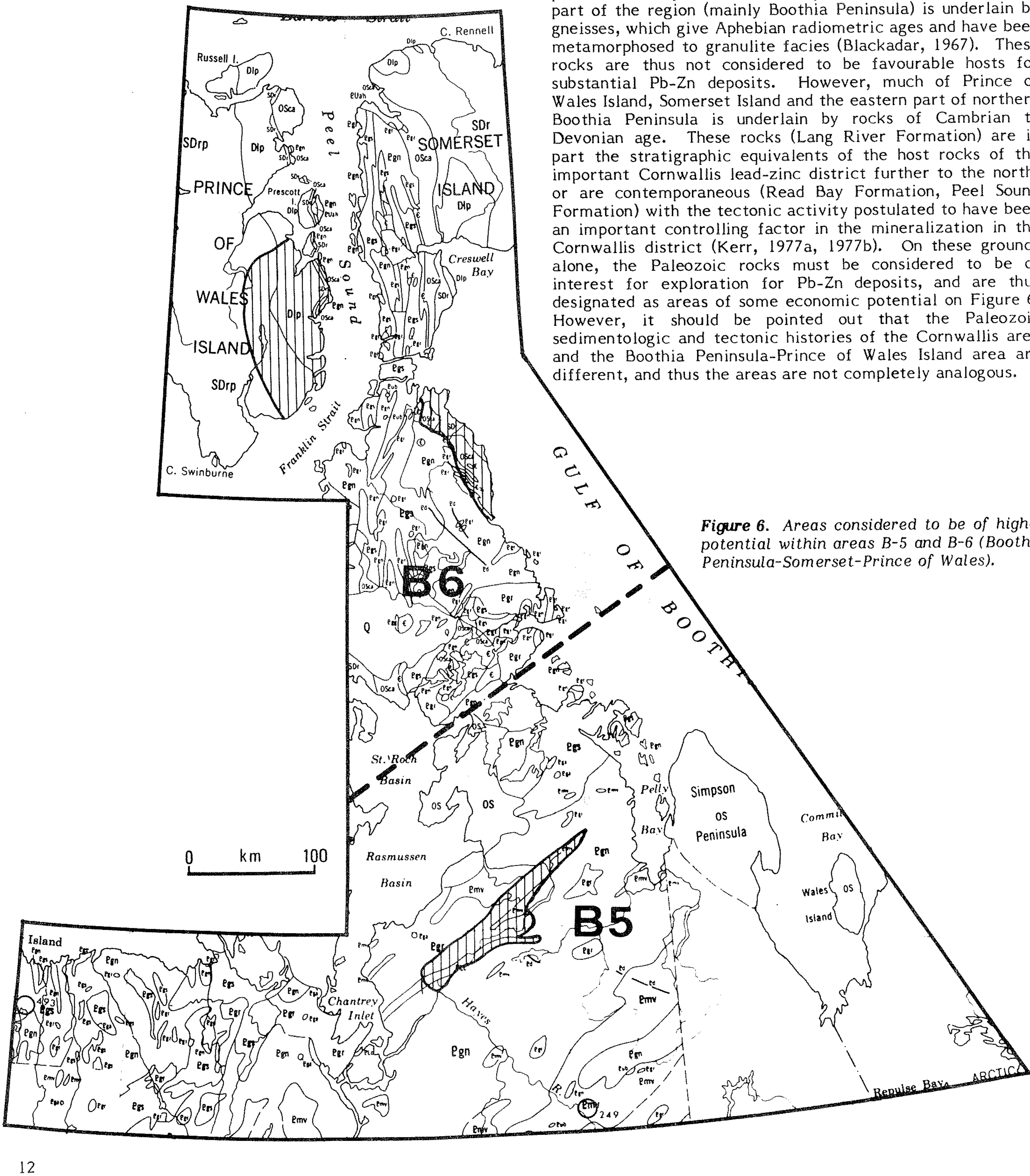

Figure 6. Areas considered to be of higher potential within areas B-5 and B-6 (Boothia Peninsula-Somerset-Prince of Wales).

For a note on the possible potential (low) for diamonds in kimberlites in this area see Appendix 3. Notes are also given on the potential for uranium and nickel in Appendix 3.

Banks Island (A-5, A-6)

Much of main Banks Island is blanketed by Tertiary or Early Quaternary silts, peat and wood-bearing sand and gravel of the Beaufort Formation. Little is known about the extent or distribution of peat deposits in this region; in any case they appear to have little economic significance.

Parts of A-5 (southern Banks Island) are underlain by Cretaceous sediments (shale, sandstone) and Proterozoic sediments of the Glenelg Formation. Area A-6 (northern Banks Island) is underlain in part by non-marine sediments of the Isachsen Formation, marine shales of the Christopher Formation, and Tertiary non-marine sediments. Parts of the pre-Tertiary environments of A-5 and A-6 may have some potential for uranium mineralization but, to date, no exploration has been conducted and no occurrences are known. On balance, the overall metallic mineral potential of the proposed Banks Island park areas and adjacent areas is considered low.

Ellesmere and Axel Heiberg Islands (A-7, A-8) (Fig.7)

The Schei Peninsula-Mokka Fiord region of Eastern Axel Heiberg Island (A-7) lies within Sverdrup Basin and is underlain by sediments of Triassic to Tertiary age. Because preliminary reconnaissance for uranium by the Geological Survey of Canada in 1977 revealed weak uranium anomalies spatially related to evaporites elsewhere in Sverdrup Basin (Ellesmere Island), the Axel Heiberg area cannot be ruled out for uranium[8]. However, based on the small size of the proposed park area and considering the remoteness of the area in terms of possible economic significance of deposits that might be found, the potential of A-7 is considered low.

North-central Ellesmere Island (A-8) is partly covered by a permanent ice field (Grant Land Ice Cap). The exposed bedrock is mainly Paleozoic strata. Several divisions and interrelationships of the exposed Silurian and older rocks have been proposed (Christie, 1957, 1964; Trettin, 1969, 1971; Kerr, 1976), but it would appear that further information is necessary to confirm some of the conclusions. Whatever the true interrelationships, there is no doubt that the area was one of anomalously high geothermal and tectonic activity during the Ordovician. On the northwest side of the ice field around M'Clintock Inlet, two thick volcanic sequences have been recognized that consist of intermediate to felsic volcanics with associated cherts, shales and impure limestone. These submarine lithologies must be considered possible hosts for volcanogenic massive sulphide deposits. On the southeastern side of the ice field, cherts, black shales, and slump breccias associated with Ordovician carbonates of the Hazen Plateau, indicate synsedimentary tectonic instability and possible hydrothermal activity within a trough-like structure flanked by a carbonate platform. These rocks are good candidates for sediment-hosted massive sulphide deposits as well as for Mississippi Valley type lead-zinc deposits. Carboniferous rocks exposed in the central area include carbonates, clastics and marine evaporites that underlie the northern extremities of the Sverdrup Basin Mesozoic succession. These rocks may also have potential for carbonate hosted lead-zinc deposits. There is little doubt that if this area was not so remote and inhospitable, it would already have been the scene of intense exploration for lead-zinc deposits. To date some malachite staining (Christie, 1957) and minor sphalerite, galena and pyrite mineralization in limestone of the Ordovician Copes Bay Formation on Judge Daly Promotory south of Lady Franklin Bay is the only reported evidence of the presence of base metal mineralization. Lignitic coal seams in Tertiary rocks (Eureka Sound Formation) have occasionally provided a local source of fuel.

This area has not yet been assessed for uranium potential. Based on the known geology the possibility of such deposits cannot be excluded.

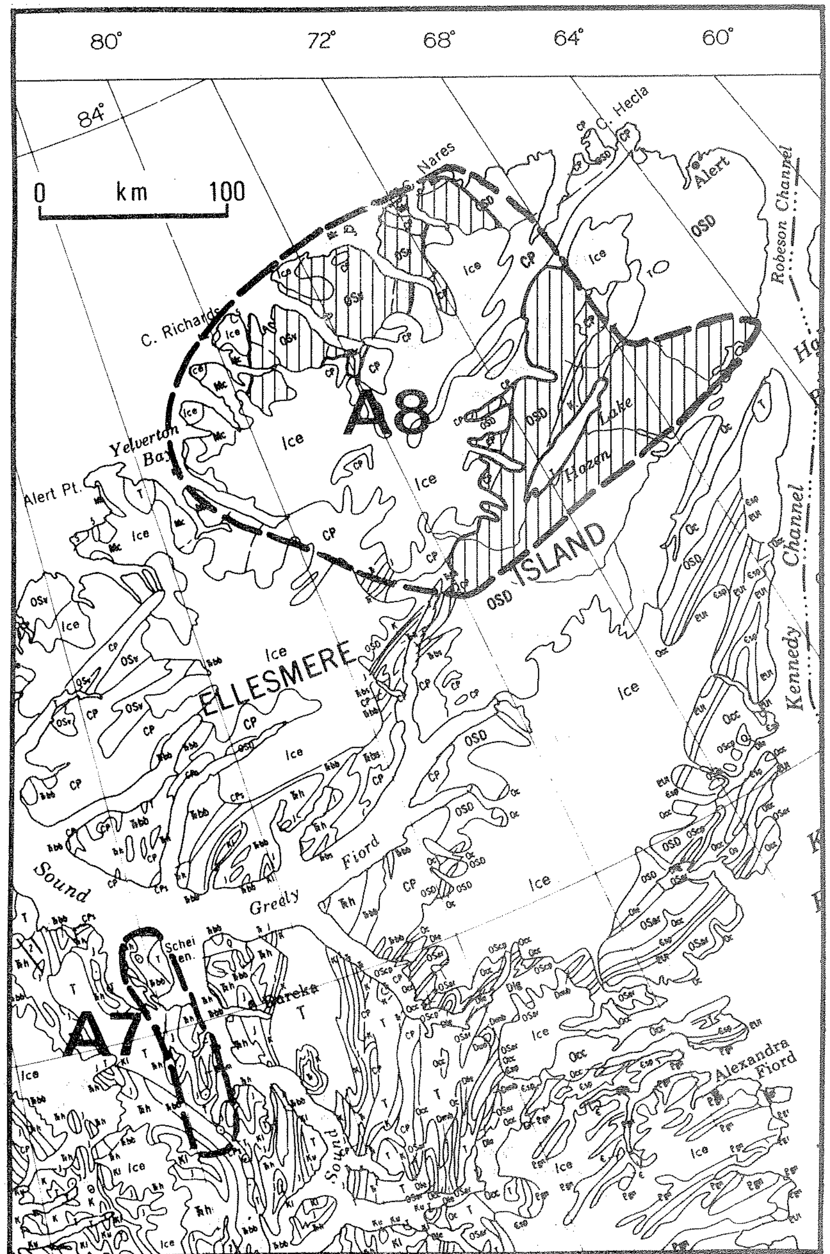

Figure 7. Areas considered to be of higher potential for Pb-Zn within area A-8 (Ellesmere Island).

[8] See, Jonasson, and Dunsmore, 1979.

Contributors and Acknowledgments

This report is the result of work by a number of individuals in the Economic Geology Subdivision (now Economic Geology Division) of the Geological Survey. It was prepared initially as an internal report in June, 1978 and revised for Open File release in late 1979. Following are the principal contributors with main areas of responsibility:

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APPENDIX 1A

ALPHABETICAL LISTING OF ALL FILE OCCURRENCES SEQUENTIALLY NUMBERED

+ # indicates "proven" deposit (status codes 1 and 2, below)
+ indicates "significant" occurrence (status codes 3 to 6, below)

NOTE: CANMINDEX commodity status code as follows:

1. Being produced. Commodity is being extracted for sale.
2. Reserves, never produced. Reserves, or demonstrated resources, of the commodity are reported or can be calculated but the commodity has not yet been produced. (i.e., three dimensional data plus grade.)
3. Reserves, was produced. The commodity is no longer produced although there are known reserves or demonstrated resources.
4. Exhausted. The commodity is no longer produced and there are no known reserves or demonstrated resources.
5. Grade, two dimensions. Two dimensional data (e.g. length and width) and grade of the commodity are available*, but not enough to calculate reserves.
6. Grade, one dimension. One dimensional data and grade. (e.g. 1 drill hole.)
7. Present. Commodity reported, but insufficient data are available* to allow the status to be classified.

*Available is used here to mean published or otherwise in the public domain.

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
1	B-2	A-14	076/M/02	67 08 41 110 52 56	07 VEINS IN SLATE & RHYOLITE AG 7 PB 7 ZN 7 SB 7 CU 7 AS 7
2	B-1	A/ B/ AB BRENNER STOCK	116/B/11	64 31 30 139 07 30	01 RADIOACTIVITY ASSOCIATED WITH GRANITIC INTRUSIVE U 7 TH 7
3	B-2	AC	086/O/06	67 20 50 115 22 35	05 IN FRACTURED BASALT AT MARGIN OF DIABASE DYKE CU 7
4	B-4	ACE	056/E/12	65 40 095 52	01 U IN A NARROW SKARN ZONE IN CRYSTALLINE LIMESTONE U 7
5	B-2	AL	086/O/10	67 36 00 114 43 25	05 SEAMS/PLATES/DISS/SHEARS/FRACS/VEINS/ IN BASALT CU 7
6+	B-2	ALF GROUP-SHOWING A	086/O/05	67 16 06 115 58 30	05 BRECCIA SHEAR ZONE IN BASALT CU 6 AG 7 AU 7
7	B-2	ALF GROUP-SHOWING B	086/O/04	67 14 31 115 57 52	05 VEIN ASSOCIATED WITH SHEAR ZONE IN BASALT CU 7
8+	B-4	AMER LAKE BRO/PRO/BRE/BRI/BRU/BRY	066/H/10	65 32 48 096 45 00	01 U IN QTZ-MICA SCHISTS OR MIXED SCHIST & QUARTZITE U 5
9	B-4	ANDREWS LAKE	055/M/15	63 56 094 52	02 U IN SANDSTONE NEAR CHRISTOPHER ISLAND TYPE ROCK U 7 CU 7 AG 7 PB 7
10	B-4	ANGIKUNI LAKE-1	065/J/05	62 15 30 099 52 42	09 SLFD BEARING CARBONATE IN QUARTZO-FELD GNEISS PB 7
11	B-4	ANGIKUNI LAKE-2	065/J/05	62 16 25 099 54 00	07 IN GNEISS CU 7 PB 7
12	B-1	ANY	116/B/08	64 18 138 18	05 QTZ VEINS CUTTING SEDS CU 7
13	B-1	APEX/ ELLIOT RIDGE	106/D/11	64 31 135 18	05 MISCELLANEOUS VEIN ? CU 7 PB 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
14	B-2	ARCH 186	086/N/12	67 43 00 117 56 25	05 QUARTZ VEIN IN BASALT CU 7
15	B-2	ARCH 28	086/N/13	67 46 00 117 46 50	05 SHEAR ZONE VEIN IN BASALT CU 7
16	B-1	AS/ GH FISH CREEK	116/A/05	64 15 137 55	05 VEINS IN PORPH/&DISS IN PORPH & ADJ SEDS NEAR CONT CU 7 AU 7 AS 7
17	B-2	AXE (1)	076/N/11	67 33 109 05	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
18	B-2	AXE (2)	076/N/11	67 36 18 109 24 16	05 EPIGENETIC FRAC FILLINGS IN BASALT FLOWS & DIABASE CU 7
19	B-2	AXE/ KIL	076/N/11	67 38 30 109 18 20	05 IN BASALT FLOWS CU 7
20	B-3	B AND C GROUPS	076/H/14	65 56 20 105 12	01 IN GRANITE GNEISS U 7
21	B-2	BAC	076/C/16	64 55 108 04	M IN VOLCANICS CU 7 ZN 7
22*	B-2	BAR-3 BAR LAKE	076/E/11	65 41 30 111 13 24	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 6 CU 7 AS 7
23	B-2	BAR-42 SEP LAKE	076/E/11	65 42 12 111 18 54	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 7 CU 7 AG 7 AS 7
24	B-1	BARN MOUNTAIN	117/A/11	68 35 138 10	12 IN CALCAREOUS SHALE CU 7 U 7 MO 7 W 7
25	OTHER	BARRY GROUP	048/C/02	73 02 22 085 04 15	05 DISSEM IN DOLOMITE ADJACENT TO GABBRO DYKE CU 7
26	B-1	BERN BERN & FOG	116/K/01	66 08 30 140 09 30	05 IN SILICIFIED LIMESTONE CUT BY QUARTZ VEINS CU 7 AG 7
27	B-2	BET	086/O/11	67 32 55 115 03 20	05 SULPHIDES IN BASALT ALONG FAULT CU 7
28	B-2	BETH GROUP-1	086/J/14	66 45 25 115 07 23	06 IN GNEISS EAST OF MUSKOX INTRUSION CU 7 NI 7
29	B-2	BETH GROUP-2	086/J/14	66 47 22 115 07 46	06 IN GNEISS EAST OF MUSKOX INTRUSION CU 7 NI 7
30	B-1	BLACKSTONE RIVER	116/G/14	65 45 139 15	M IN DOLOMITE AT CONTACT WITH MAFIC DYKES CU 7 ASB7
31	B-4	BLOCK G	055/L/06	62 19 095 23	07 QUARTZ VEIN IN VOLCANICS AU 7 CU 7 PB 7 ZN 7 AG 7
32	B-4	BLOCK I SOUTH OF ONEIL LAKE	055/L/06	62 24 52 095 16 52	07 QTZ VEINS/UNDERLAIN BY VOLCS-INTRUSIVES-GNEISS CU 7 AU 7 PB 7 ZN 7 AS 7
33	OTHER	BLUE LEAD DUBLIN GULCH	106/D/04	64 01 50 135 48 00	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
34	B-2	BO 57 & 120	086/O/05	67 17 00 115 46 00	05 ALONG FRACTURES AND DISSEMINATED IN BASALT CU 7
35	B-2	BOB 101-103	086/N/11	67 42 117 21	05 QUARTZ VEIN IN BASALT CU 7
36	B-2	BOB 125	086/N/06	67 15 35 117 23 50	05 VEIN IN BASALT CU 7
37	B-1	BON	117/A/07	68 16 30 137 47 00	01 RADIOACTIVE CHERT IN FRACTURES IN RUDACEOUS ROCKS U 7
38	B-2	BONANA LAKE CANINE CLAIMS	086/K/09	66 41 00 116 12 20	01 U IN INTRUSIVE PORPHYRY-STRONG RAD WITH FRACTURES U 7
39	B-1	BOND CREEK	106/D/11	64 39 30 135 00	02 HEMATITE-MAGNETITE IN SHEAR/ CU IN QTZ POD NEARBY CU 7 FE 7 U 7
40	B-2	BOX (MAIN SHOWING)	076/E/11	65 42 48 111 00 30	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7
41	OTHER	BOYLENS EASTERN CLAIM GROUP	087/H/10	71 31 113 14	05 IN BASALT CU 7
42	OTHER	BOYLENS WESTERN CLAIM GROUP	087/H/04	71 03 20 115 52 30	05 BASALT? CU 7 AG 7
43*	B-3	BRICK	076/O/16	67 50 50 106 24	03 QTZ IN MYLONITE BAND IN GREENSTONE BELT AU 6 CU 6 ZN 6 AG 6

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
44	B-4	BROOKS BLUFF	046/K/01	66 11 45 084 27 09	05 SLFOS IN GRANITIC GNEISS CU 7
45	B-4	BRY GROUP	066/H/10	65 32 30 096 50 50	01 YELLOW MINERAL STAIN ON FRACTURES IN RA LENSES U 7
46	B-2	BUD 157-204	086/O/05	67 23 00 115 44 00	05 QUARTZ VEIN CUTTING BASALT CU 7
47	B-2	BUD 37-72/DON 1-36/ORE 73-103	086/N/08	67 17 116 12	05 SHEARED & BRECCIATED ZONE IN BASALT CU 7
48	B-2	BUD 398-415	086/O/05	67 24 18 115 58	05 QTZ VEINS CUTTING SANDSTONE CU 7
49	B-2	BUD 589-590	086/O/05	67 27 25 115 59 00	05 FINE SPECKS IN GABBROIC DYKE INTRUDING BASALT CU 7
50	B-2	BUD 837-924	086/O/12	67 33 30 115 48 30	05 DISS & FRACS IN BASALT/ ALSO FRACS IN SANDSTONE CU 7
51	B-2	BUD 942-947	086/O/12	67 32 05 115 53 45	05 DISS/VEINLETS/& FRAC FILLS IN SHALES & SANDSTONES CU 7 FE 7
52	B-2	C GROUP	076/F/16	65 46 108 08	05 MINOR GOSSAN SLFD IN SILICEOUS ZONES IN METASEDS CU 7
53	B-2	C GROUP	076/M/03	67 10 40 111 02 25	07 SLFOS IN SHEARED BRECCIATED ZONES IN RHYOLITE CU 7 ZN 7 AG 7 PT 7 PB 7 NI 7 AU 7
54	B-2	C GROUP	086/N/03	67 14 22 117 13 48	05 ALONG FAULT SEPARATING GRANITE & SANDSTONE CU 7
55	B-4	CABIN LAKE	065/H/10	61 40 096 58	03 BASAL PEBBLE CONGLOMERATE AU 7
56	B-2	CAL 42	086/N/10	67 38 10 116 57 50	05 QTZ VEIN IN BASALT CU 7
57	B-2	CAL 43	086/N/10	67 38 20 116 58 40	05 QTZ VEIN IN BASALT CU 7
58	B-2	CAL 44 CAL-3	086/N/10	67 38 05 116 59 00	05 VEIN IN SS DYKE IN BASALT/ ALSO VEIN IN BASALT CU 7
59	B-2	CAL 45-46 CAL-2	086/N/10	67 38 20 116 59 40	05 LENSES & VEINS IN SHEAR CUTTING BASALT CU 7
60	B-2	CAM GROUP	086/N/09	67 33 45 116 15 05	05 REPLACEMENTS & AMYGDULE FILLING IN BASALT CU 7 AG 7
61	B-2	CAN/FOX/CLUB/CO/RED/WG	086/O/13	67 54 15 115 50 40	07 VEINS ASSOCIATED WITH DIABASE DYKE IN DOLOMITE CU 7 AU 7 AG 7 NI 7 CO 7 FE 7 TLC7
62**	B-2	CANADIAN NICKEL-MAIN SHOWING PAT/ CONGO/ MOP	076/E/14	65 45 52 111 13 35	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 2 AG 8 CU 8 AS 8 FE 8
63	B-5	CAPE REID	046/K/09	66 38 47 084 09 33	05 COUNTRY ROCK-DIORITE AND GABBRO CU 7 FE 7
64**	B-2	CARL 7	086/N/12	67 44 00 117 35 35	05 CHALCOCITE IN BASALT CU 2
65	B-2	CARL 94	086/N/11	67 43 30 117 28 55	05 SLFD LENSES IN VEIN CUTTING BASALT CU 7 PB 7 AG 7
66	B-4	CARNECKSLUCK LAKE	065/G/16	61 53 15 098 14 25	05 SULPHIDES IN VOLCANICS CU 7
67	B-4	CARR LAKE	055/E/13	61 58 55 095 38 30	08 QTZ VEIN IN GREENSTONE CU 7 PB 7 ZN 7
68	OTHER	CASSIAR CREEK CALEY	116/C/08	64 18 140 13	M STOCKWORK IN SERPENTINITE ASB7
69	B-4	CC SHOWING	055/K/16	62 51 00 092 11 24	04 DISSEM SLFOS IN ANDESITE AG 7 CU 7
70	B-2	CCI	076/N/02	67 12 25 108 54 00	05 ? CU 7
71	B-2	CED LAKE PROSPECTING PERMIT 315	076/M/02	67 07 110 45	07 UNDERLAIN BY VOLCS & METASEDS CU 7 ZN 7 PB 7
72	B-2	CHAPMAN ISLANDS-1 ISLAND NO 20	076/N/14	67 52 45 109 10 30	05 AMYGDULES VEINS & DISSEMINATIONS IN BASALTIC FLOWS CU 7
73	B-2	CHAPMAN ISLANDS-2	076/N/14	67 49 30 109 01 30	05 SEAMS & VEINS IN BASALTIC FLOWS CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
74	B-3	CHESTER BAY	066/M/16	67 46 07 102 18 48	10 ? FE 7 CU 7
75	B-2	CHILL GROUP-1	076/M/07	67 27 16 110 50 26	05 IN CHLORITE SCHIST CU 7
76	B-2	CHILL GROUP-2	076/M/07	67 28 00 110 59 35	05 DISS ALONG SHEAR PLANES IN CHLORITE SCHIST CU 7
77+	B-4	CHRISTOPHER ISLAND (MAIN ZONE) BL PROJECT	056/D/02	64 04 35 094 32 53	02 CALCITE VEINS W ASSOC SULPHIDES IN SANDSTONE U 5 MO 5 CU 7
78	B-4	CHRISTOPHER ISLAND (ZONE 2) BL PROJECT	056/D/02	64 06 21 094 36 57	02 MINERALIZED VEINLETS IN FRACTURES IN SANDSTONE CU 7 U 7
79	B-4	CHRISTOPHER ISLAND (ZONE 3) BL PROJECT	056/D/02	64 06 42 094 37 12	02 MINERALIZED FRACTURES IN FAULT ZONE IN TUFF CU 7 U 7 AG 7
80	B-2	CHUCK GROUP	076/L/15	66 48 40 110 59 00	05 DISSEM IN MAFIC VOLCANICS CU 7
81	B-3	CIC GROUP - EAST 2 SHOWING CIC CLAIM 14	077/A/03	68 03 52 106 38 30	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
82	B-3	CIC GROUP - EAST 5 SHOWING CIC CLAIM 21	077/A/03	68 02 35 106 38 30	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
83	B-3	CIC GROUP - EAST 8 SHOWING CIC CLAIM 32	077/A/03	68 02 29 106 38 27	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
84	B-3	CIC GROUP - NORTH 1 SHOWING CIC CLAIM 3	077/A/03	68 03 42 106 39 40	07 DISSEM/PATCHES/VEINS/FRAC FILLS IN PORPHYRY CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
85	B-3	CIC GROUP - SOUTH 3 SHOWING CIC CLAIM 36	077/A/03	68 02 25 106 36 55	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
86	B-3	CIC GROUP-NORTH 13 SHOWING CIC CLAIM 7	077/A/03	68 04 10 106 40 50	07 VEIN CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
87	B-3	CIC GROUP-NORTH 2 & 3 SHOWINGS CIC CLAIM 4	077/A/03	68 03 45 106 40 05	07 DISSEM/ PATCHES/ VEINS/ FRAC FILLS IN PORPHYRY CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
88	B-3	CIC GROUP-NORTH 5 SHOWING CIC CLAIM 5	077/A/03	68 04 06 106 40 30	07 DISSEM/ PATCHES/ VEINS/ FRAC FILLS IN PORPHYRY CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
89+#	OTHER	CLINTON CREEK CASSIAR	116/C/07	64 27 140 42	M STOCKWORK IN SERPENTINITE ASB1
90	B-4	COLLIN LAKE KASBA EXPL	065/H/04	61 02 48 097 51 54	03 ? AU 7
91	B-4	COLUMBIAN NORTHLAND LTD-1 PROSPECTING PERMIT 176	065/I/04	62 10 24 097 52 15	05 DISSEMINATED IN METAVOLCANICS CU 7
92	B-2	COM GROUP -COM 2	086/N/09	67 30 48 116 26 42	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
93	B-2	COM GROUP -COM 3	086/N/09	67 31 36 116 25 48	05 PODS IN CALCITE VEINS IN FRACTURES IN BASALT CU 7
94	B-2	COM-GROUP-COM 1	086/N/09	67 33 12 116 26 54	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
95+	B-2	COMUR	086/K/09	66 38 03 116 04 10	01 U IN VEINS & BRECCIA ZONE IN ECHO BAY GROUP ROCKS U 6
96	B-2	CONCESSION LAKE SW	076/E/12	65 40 23 111 46 00	05 IN HORNBLENDE DIORITE OR HB-BIOTITE GRANDIORITE CU 7
97	B-4	CONTOUR LAKE WEST	065/H/11	61 42 17 097 01 59	05 SULPHIDES IN MUDSTONE-SILTSTONE OF AMETO FORMATION CU 7
98	B-2	CONTWOYTO LAKE MCAVOY J SHOWING	076/E/16	65 55 110 20	M MINERALIZN PRESUMABLY ASSOC WITH SMALL STRINGERS U 7 NI 7 BI 7 AG 7
99	B-2	COP 14 18 & 30	086/N/10	67 30 40 116 47 10	05 MASSIVE QUARTZ VEINS IN BASALT CU 7
100	B-2	COP 361-538	086/O/11	67 40 45 115 28 30	05 IN CHERT BRECCIA ALONG SHEAR CUTTING SED ROCKS CU 7
101	B-2	COP 6 & 9 & 10	086/N/10	67 31 10 116 47 00	05 QTZ VEINS CUTTING BASALTS CU 7
102	B-4	COPPER COVE WHALE COVE/ MAR/ HI/ MINE/ CAT	055/K/02	62 13 092 36	06 MASSIVE SLFDS IN SHEAR ZONES CUTTING MAFIC VOLCS CU 7 NI 7 AU 7 AG 7 MO 7
103	B-2	COPPER LAMB	086/N/10	67 37 55 116 51 45	05 LENSES IN VEINS IN BASALT CU 7 BA 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
104+#	B-2	CORONATION NORTHWEST ZONE CORONATION WEST SHOWING/MGB 18	086/N/08	67 20 05 116 27 00	05 VEINS & BRECCIA ALONG FAULT IN BASALT CU 2 AG 7
105	B-2	CORONATION SOUTHEAST ZONE CORONATION EAST SHOWING/MGB 86	086/N/08	67 19 50 116 22 30	05 QTZ VEINS IN BRECCIATED BASALT ALONG FAULT CU 7 AG 7
106+	A-3	COT 15 OX (1964)	076/J/11	66 42 10 107 26 40	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 CU 7 AS 7
107	A-3	COT 4 OX (1964)	076/J/11	66 42 40 107 26	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS CU 7 AU 7 AS 7
108+	B-2	CU 1-36	086/O/05	67 21 20 115 47 30	05 VIENS IN BRECCIA SHEAR ZONES CUTTING BASALTS CU 6 AG 7
109	B-2	CU-HOC	086/O/05	67 19 55 115 47 25	05 VEINS IN FRACTURE ZONES IN BASALTIC FLOWS CU 7
110	B-2	CU-TAR GROUP - NO 4 LODE	086/O/05	67 18 21 115 47	05 BRECCIATED RED CHERT CEMENTED &PARTLY REPL BY SFLD CU 7
111+	B-2	CU-TAR GROUP-NO 1 LODE	086/O/05	67 18 43 115 47 01	05 STRINGERS IN FAULTED AND FRACTURED ZONE IN BASALT CU 6
112+	B-2	CU-TAR GROUP-NO 2 LODE	086/O/05	67 18 42 115 47	05 STRINGERS AND VEINLETS IN HEMATIZED BASALT CU 6
113+	B-2	CU-TAR GROUP-NO 3 LODE	086/O/05	67 18 41 115 47	05 VEIN/LENSES IN SHEAR/STRINGERS IN FRAC ZONE/BASALT CU 6
114+	B-4	CULLATON LAKE SOUTH (SHEAR LK) HBMS/ SELCO/ ROYEX/ O BRIEN	065/G/07	61 18 24 098 30 12	03 FRACTURES IN BASAL QUARTZITE AU 5
115	B-1	CUNG	116/H/07	65 21 30 136 45 30	07 SLFDS IN QTZ VEIN CUTTING CARBONATES CU 7 PB 7 ZN 7
116	B-2	D GROUP	086/J/14	66 57 38 115 20 41	05 AROUND STOCKS INTR SCHIST & MIGMATITE & IN FAULTS CU 7
117	B-5	D 1 SHOWING (CLAIM NI 86) GAVIN RIVER CLAIMS	066/N/05	67 16 20 101 36 20	06 RUSTY BAND OF QUARTZ-PYROXENE GRANULITE OR GNEISS CU 7 NI 7
118	B-5	D 10 SHOWING (NI 236/ 246/ 247 GAVIN RIVER CLAIMS	066/N/05	67 15 45 101 40 30	06 SULPHIDES IN GNEISS CU 7 NI 7 AU 7 FE 7
119	B-5	D 3 SHOWING (CLAIM NI 36) GAVIN RIVER CLAIMS	066/N/05	67 16 45 101 38 45	06 SULPHIDES DISSEMINATED IN QUARTZ-DIORITE CU 7 NI 7 FE 7
120	B-5	D 4 SHOWING (CLAIM NI 166) GAVIN RIVER CLAIMS	066/N/05	67 16 10 101 39	06 GOSSAN IN PYROXENITE CU 7 NI 7 AU 7
121	B-5	D 7 SHOWING (CLAIM NI 1) GAVIN RIVER CLAIMS	066/N/04	67 10 45 101 37 15	06 SULPHIDES IN GARNET GNEISS CU 7 NI 7 AU 7
122	B-5	D 8 SHOWING (CLAIM NI 118) GAVIN RIVER CLAIMS	066/N/05	67 17 50 101 40	06 SULPHIDES IN GRANULITE CU 7 NI 7
123	B-4	DAWSON INLET	055/F/13	61 56 15 093 38 40	05 MASS TO DISS SLFDS/& VEINS/IN VOLCS NEAR GRANODIOR CU 7 AU 7
124+	B-4	DEE GROUP SPI LAKE	055/L/04	62 04 11 095 52 50	08 SLFDS IN POD-SHAPED BODIES IN ACID FRAGMENTALS CU 6 ZN 6 AG 6 AU 6 PB 6
125+	B-1	DELTA IRON	117/A/09	68 35 136 45	10 BEDDED QUARTZ-SIDERITE IRON FORMATION FE 5 PHS5 MN 5
126	B-3	DENNIS LAKE	076/H/14	65 57 105 23	01 GRANITE GNEISS U 7
127+#	B-2	DICK NO 1 AMCO LAKE GROUP	086/N/08	67 19 50 116 02 35	05 VEINLETS PODS & IRREG MASSES IN BRECC VEIN IN BSLT CU 2 AG 7
128	B-4	DIKE LAKE HOOK CLAIMS 1-20 (?)	065/G/07	61 22 48 098 45 18	03 SLFDS IN GARNETIFEROUS PARA-AMPHIBOLITE AU 7 CU 7
129	B-2	DIZ/ JIM/ HERB	086/N/07	67 17 30 116 46 40	05 FRACTURE FILLINGS & VEINS IN BASALT CU 7
130	B-2	DOLL SHOWING A (DOLL 1)	086/O/10	67 36 36 114 31 30	05 VEINS FILLING FRACTURES IN BASALT CU 7
131+	B-2	DOLL SHOWING B (DOLL 8)	086/O/09	67 36 42 114 27 30	05 FAULT IN BASALTIC FLOWS CU 6 FE 7
132	B-2	DOLL SHOWING C	086/O/09	67 37 12 114 28 30	05 NEAR TOP OF BASALT FLOW CU 7
133	B-2	DOLL SHOWING D	086/O/09	67 37 12 114 27 30	05 VEINLETS IN QTZITE BED BTWN BASALT & DIABASE SILL CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
134	B-2	DOLL SHOWING E	086/0/09	67 37 114 26 15	05 VEINLETS ASSOC WITH HORNFELS AT BASALT-ARGILL CONT CU 7 FE 7
135	B-2	DON GROUP-1	086/N/07	67 29 47 116 42 45	05 VEINS IN BASALT CU 7
136	B-2	DON GROUP-2	086/N/07	67 29 43 116 40 31	05 IN BASALT CU 7
137	B-2	DOT 13 & 20 CIRCLE LAKE 2 & 3	086/N/08	67 25 20 116 27 00	05 VEINS IN SHEARED & BRECCIATED BASALT CU 7
138	B-2	DOT 1425	086/N/08	67 25 30 116 21 00	05 FRACTURE (SHEAR) ZONES IN BASALT CU 7
139	B-2	DOT 145-146	086/N/08	67 27 00 116 29 30	05 QTZ VEIN IN BASALT NEAR FAULTS CU 7
140	B-2	DOT 210	086/N/08	67 24 55 116 22 40	05 SHEARED FRACTURED ZONE IN BASALT CU 7
141+#	B-2	DOT 47 COPPERMINE R NO 47 ZONE	086/N/08	67 24 36 116 24 43	05 TABULAR BODY IN FRACTURED (FAULT ZONE) BASALTS CU 2
142	B-2	DOT 725	086/N/07	67 23 10 116 42 35	05 VEIN CUTTING BASALT CU 7
143	B-2	DOT 881 LAKE 450	086/N/07	67 25 05 116 46 15	05 VEIN CUTTING BASALT CU 7
144	B-2	DOT 900	086/N/10	67 30 48 116 45 35	05 QTZ VEINS IN BASALT CU 7
145	A-3	DOUG ALGAK ISLAND	076/N/09	67 34 20 108 27 56	05 ALONG JOINTS/IN AMYGDULES/IN BASALTS IN FAULT ZONE CU 7
146	OTHER	DUBLIN GULCH	106/D/04	64 02 30 135 49 55	03* BRECCIATED FAULT ZONES IN METASEDS CU 7 SN 7 AG 7 AU 7
147+	OTHER	DUBLIN GULCH	106/D/04	64 02 135 50	03 IN STREAM GRAVELS AU 3 W 3 SN 7 BI 7 PB 7 TI 7 FE 7 AS 7
148	A-3	DUNC ALGAK ISLAND	076/N/09	67 30 108 25	05 PROBABLE FRAC FILLS OR AMYGDULES IN BASALT CU 7
149	B-1	DYKE	116/G/01	65 01 138 05	M IN CONTACT ZONES OF BASIC IGNEOUS DYKES INTR SEDS CU 7 ASB7
150+	OTHER	EAGLE DUBLIN GULCH	106/D/04	64 01 38 135 48 35	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 6 AG 6 AS 7
151+#	OTHER	ECLIPSE EAST SHOWING	068/H/09	75 31 30 096 08	09 OPEN SPACE FILLING IN LIMESTONE & DOLOMITE BRECCIA ZN 2 PB 2
152	B-4	EDEHON LAKE DOWNER LAKE	065/A/10	60 34 45 096 52 30	05 SLFD SPECKS IN METAGREYWACKE CU 7
153	B-4	EDEHON LAKE NORTHWEST	065/A/12	60 30 42 097 39 18	05 DISS SLFDS IN SHEARED METAGREYWACKE (PARAGNEISS) CU 7
154	B-5	EIRA PERRY RIVER CLAIMS	066/N/05	67 22 45 101 44 45	06 IN GABBRO-NEAR PYROXENITE BAND IN GNEISS CU 7 NI 7
155	A-3	EKALULIA ISLAND-CHAR GROUP BARRY ISLANDS	076/N/09	67 33 108 03	05 VEINS DISS & AMYGDULES IN MASSIVE BASALT & FLOWS CU 7 AG 7
156	A-3	EKALULIA ISLAND-TINA GROUP BARRY ISLANDS	076/N/09	67 33 30 108 01 30	05 VEINLETS ASSOC W DIABASE DYKE IN FRAC ZONE IN BSLT CU 7 AG 7
157	B-3	ELLICE RIVER AREA	076/I/10	66 39 00 104 52 00	05 IN GNEISS CU 7
158+	B-2	EM 30	086/0/06	67 17 24 115 17 06	05 VEIN IN BASALT CU 6 AG 7
159	B-4	EM/ JB/ ST TARA	065/H/01	61 10 30 096 07 30	10 MAGNETITE & SPECULARITE FE FM FE 7
160	B-2	EMILE GROUP PASCAR	086/N/07	67 21 116 31	05 IN BASALT CU 7
161	B-4	ENNADAI LAKE LITTLE HUEY	065/C/13	60 56 56 101 31 12	03 QTZ LENSES & BODIES IN SERICITE-CHLORITE SCHIST AU 7 AG 7
162+	B-2	ESC 37-38	086/0/12	67 35 15 115 33 25	05 NODULES ADJ TO FAULTS/ ALSO DISSEM/ IN SANDSTONE CU 6
163+	B-2	ESC 63/69	086/0/12	67 35 25 115 35 25	05 NODULES & LAYERS IN SANDSTONE NEAR FAULT CU 6

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
164	B-2	ESC 68	086/O/12	67 36 10 115 30 00	05 NODULES & REPLACEMENTS IN SANDSTONES BESIDE FAULT CU 7
165	B-2	ESCAPE GROUP	086/N/11	67 33 55 117 28 30	05 VEINS & STRINGERS IN FRACTURE ZONE IN DOLOMITE CU 7
166*	B-2	ESKER LAKE BAY	076/E/11	65 41 36 111 09 12	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 AG 7 CU 7 NI 7 AS 7
167	B-2	EVE TREE RIVER	086/P/01	67 12 112 20	05 STOCKWORK IN FAULT CUTTING DOLOMITE & LIMY SHALE CU 7
168	B-2	F (1)	076/N/10	67 33 43 108 57 30	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
169	B-2	F (2)	076/N/10	67 35 16 108 57 00	05 SYNGENETIC-DISSEM/AMYGD/FRAC FILL IN BASALT FLOWS CU 7
170	B-2	FAR EXTENSION 1	086/N/12	67 44 50 117 35 35	05 QTZ-CARBONATE VEIN CUTTING BASALT CU 7
171	B-2	FAR EXTENSION 2	086/N/13	67 45 15 117 41 40	05 QTZ VEINS IN BASALT CU 7
172	B-2	FAR EXTENSION 3/4/5	086/N/13	67 45 20 117 43 00	05 VEINS IN BASALT CU 7
173	B-2	FAR 4 (H-10)	086/N/12	67 44 30 117 45 00	05 QTZ VEIN IN BASALT CU 7
174	B-2	FAR-1 (H-1)	086/N/12	67 43 36 117 51 00	05 STRINGERS IN QTZ VEIN CUTTING BASALT CU 7
175	B-2	FAR-10	086/N/12	67 43 42 117 51 54	05 QTZ VEIN IN BASALT CU 7
176	B-2	FAR-11	086/N/12	67 44 36 117 44 42	05 QTZ-CALCITE VEIN IN BASALT CU 7
177	B-2	FAR-2 (H-3)	086/N/12	67 43 48 117 45 36	05 QTZ VEIN IN BASALT CU 7
178*	B-2	FAR-3 (H-8)	086/N/12	67 44 18 117 40 36	05 VEINLET SWARM IN SHEAR-BRECCIA ZONE IN BASALT CU 6
179	B-2	FAR-6 (H-15)	086/N/12	67 44 24 117 42 36	05 CALCITE VEIN IN BASALT CU 7
180	B-2	FAR-7	086/N/12	67 44 24 117 43 48	05 CALCITE VEIN IN BASALT CU 7
181	B-2	FE GROUP	076/D/06	64 28 111 19	05 IN CHLORITIZED AMPHIBOLITE CU 7
182	B-4	FERGUSON LAKE-1 FERG	065/I/15	62 52 25 096 55 30	06 SULPHIDES IN ELONGATED BODIES OF HORNBLENDITE CU 7 NI 7
183	B-4	FERGUSON LAKE-2 FERG	065/I/15	62 52 30 096 49 40	06 SLFDS IN ELONGATED BODIES OF HORNBLENDITE NI 7 CU 7
184	B-4	FERGUSON LAKE-3 FERG	065/I/15	62 50 10 096 48 15	05 IN A MAFIC DYKE CU 7
185	B-2	FF/ OP	076/F/16	65 50 108 15	05 GOSSANS ON DISS SLFD IN SILICEOUS ZONES IN METASED CU 7
186	B-2	FGP	076/N/10	67 32 50 108 58 00	05 ? CU 7
187	B-2	FINGERS LAKE FOX-BOX	076/E/11	65 43 24 111 10 48	03 GNT-CMNG-SLFD GNEISS BAND(AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7
188*	A-1	FIRTH RIVER	117/C/01	69 09 23 140 09 23	03* GRAVEL BARS ON WEST SIDE OF FIRTH RIVER AU 3
189	B-1	FISHING BRANCH GIRLY & OTHER CLAIMS	116/J/05	66 23 139 41	09 BRECCIA/FRAC & VUG FILLS/REPLACEMENT-IN LST & DOLO CU 7 PB 7 ZN 7
190	B-3	FLAGSTAFF ISLAND	066/M/16	67 48 00 102 16 48	10 ? FE 7 CU 7
191	OTHER	FORT RELIANCE	116/B/03	64 09 139 29	05 SLFDS IMPREGNATE LAYERS OF SCHIST CU 7
193	B-2	FRED-1	086/N/10	67 34 12 116 57 06	05 QTZ CALCITE VEIN IN BASALT CU 7
194	B-2	FRED-2	086/N/10	67 31 42 116 53 30	05 IN BASALT CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
195	B-3	FREDDY LAKE	076/H/14	65 56 40 105 11	01 IN BANDS OF METAMORPH RX CONCORDANT W GRANITIC GNS U 7
196	B-2	GAIL	086/P/01	67 03 112 06	05 DISS & MASSIVE SLFDS IN SHEAR IN METASEDIMENTS CU 7
197	B-2	GAL	086/O/04	67 14 40 115 59 35	05 SHEAR ZONES IN BASALT CU 7
198	B-2	GALENA POINT-1 DON	076/N/13	67 53 10 109 53 15	07 VEINS CUTTING GRANITE PB 7 CU 7
199*	B-2	GALENA POINT-2 DON	076/N/13	67 53 50 109 54	07 VEINS CUTTING GRANITE PB 6 ZN 6 CU 6 AG 6
200	B-2	GDF - CHANCE SHOWING	086/O/06	67 24 00 115 27 20	05 IN FRACS IN HIGHLY FRACTURED OR SHATTERED BASALT CU 7
201	B-2	GDF 20 - HAUG 1 AREA	086/O/06	67 25 06 115 28 42	05 VEIN & SHATTERED ZONE IN FAULT OR SHEAR IN BASALT CU 7
202	B-2	GDF 77-78 HAUG 2 AREA/ FOKKER CREEK	086/O/06	67 23 54 115 27 12	05 FRACS ASSOC WITH QTZ-CALCITE VEIN MATRIX IN BASALT CU 7
203	B-4	GIANT YELLOWKNIFE MINES LTD-1 PROSPECTING PERMIT 10	065/I/01	62 00 41 096 22 06	05 MASSIVE SLFDS CU 7 ZN 7
204	B-4	GIANT YELLOWKNIFE MINES LTD-2 PROSPECTING PERMIT 10	065/I/01	62 12 50 096 05 34	06 DISSEMINATIONS CU 7 NI 7
205	B-4	GIANT YELLOWKNIFE MINES LTD-3 PROPSECTING PERMIT 10	065/I/01	62 13 00 096 03 45	05 DISSEMINATIONS CU 7
206	B-4	GIANT YELLOWKNIFE MINES LTD-4 PROSPECTING PERMIT 10	065/I/01	62 13 06 096 06 50	05 DISSEMINATIONS CU 7
207	B-4	GIANTS 3176 PROSPECT	055/L/05	62 19 30 095 30 30	07 GOSSAN ZONE IN VOLCANICS CU 7 AU 7
208*	B-2	GM/ DM/ FD/ SA	086/O/05	67 24 115 34 40	05 IN BRECCIATED ZONES IN BASALT CU 6
209	B-2	GO	086/O/11	67 32 25 115 21 00	05 FAULT BRECCIA ZONES IN BASALTIC FLOWS CU 7
210*	B-4	GOLD ISLAND	065/H/04	61 03 18 097 48 54	03 QTZ VEINS IN SHEAR IN ANDESITE NEAR GABBRO SILL AU 6 AS 7
211	B-2	GOOD/ BREN	086/N/10	67 43 00 116 53 50	05 IN SEDIMENTS & DIABASE & BASALT CU 7
212	OTHER	GOODENOUGH	106/M/13	67 56 30 135 31 00	05 SLFD IN DYKE/ COUNTRY RK-JURASSIC SEDIMENTS CU 7
213	B-2	GORD 153	086/N/12	67 41 10 117 44 20	05 NETWORK OF CALCITE VEINLETS IN BASALT CU 7
214	B-2	GORD 301-414	086/O/04	67 10 50 115 59 30	05 IN BASALT BRECCIA AND IN FLOW TOP BASALTS CU 7
215	B-1	GORDON	116/B/06	64 20 139 13	05 ? CU 7 PB 7
216	B-2	GOS GROUP	086/J/14	66 57 12 115 21 30	05 DISS IN SHEAR(IN MYLONITE?)& IN JOINT IN METASEDS CU 7
217	B-2	GOSSAN LAKE DUO	076/E/11	65 36 18 111 01 30	03 GNT-CHNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7 AS 7
218	B-2	GP BELLEAU LAKE	086/J/05	66 16 36 115 47	01 UNKNOWN U 7
219	B-4	GREG SELCO	065/G/08	61 27 12 098 25 42	03 ? AU 7
220*	B-2	GREG CLAIMS	086/N/10	67 41 00 116 55 00	05 VEINS IN BRECCIATED FISSURE ZONES IN BASALT CU 6
221	B-1	GREY COPPER HILL GREY COPPER KING	106/D/06	64 26 05 135 16 40	04 FAULT VEIN IN SEDS AG 7 CU 7 ZN 7 FE 7
222	B-4	GRIFFIN LAKE EAST SELCO	065/G/07	61 18 00 098 43 36	03 IN RUSTY FRACTURES AU 7
223	B-4	GRIFFIN LAKE NORTH	065/G/07	61 20 40 098 51 23	05 SULPHIDES IN VOLCANICS CU 7
224	B-4	GRIFFIN LAKE NORTHWEST	065/G/07	61 19 52 098 57 13	05 SULPHIDES IN VOLCANICS CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
225	B-4	GRIFFIN LAKE SOUTHWEST	065/G/02	61 13 12 098 49 00	03 IN QUARTZITE OR GREENSTONE AU 7 AG 7
226+	B-2	GRR 90	086/N/11	67 33 00 117 27 35	05 VEINS IN FRACTURE ZONE IN DOLOMITE CU 6
227	B-4	GUN GROUP	055/K/04	62 13 48 093 54 18	07 QTZ VEINS/COUNTRY ROCKS-VOLCS/SEDS/INTRUSIVES CU 7 PB 7 ZN 7 NI 7 AU 7 AG 7
228	B-2	GUN GROUP-2 GENERAL RESOURCES NO 2 SHOWING	086/N/10	67 34 54 116 32 54	05 NATIVE COPPER IN BASALT CU 7
229	B-2	GUN GROUP-3 GENERAL RESOURCES NO 3 SHOWING	086/N/10	67 34 42 116 34 12	05 MINOR CHALCOCITE & MALACHITE IN MASSIVE BASALT CU 7
230	B-2	GUN GROUP/ VANMETAL CLAIMS	086/N/10	67 34 42 116 37	05 DISSEM NATIVE COPPER IN BASALT CU 7
231+	B-3	GUNN BEC	076/O/16	67 58 35 106 28 20	03 QTZ VEIN IN BAND OF GREENSTONE-MYLONITE AU 6 CU 6 AG 6
232+	B-2	H GROUP-NO 1 VEIN	076/M/11	67 42 04 111 20 55	04 QTZ VEIN ZONE CUTTING GRANITIC ROCKS AU 5 CU 7 ZN 7 AG 7
233	B-2	H.P.LAKE CANINE 5-6	086/K/09	66 43 30 116 11 30	02 RAD ALONG SLATY ARGILLITE-RHYOLITE TUFF CONTACT U 7 CU 7 AG 7 AU 7
234	B-2	HA GROUP - SHOWING A TOWER	086/O/10	67 36 54 114 52 06	05 VEIN IN SHEAR (FAULT?) IN BASALTIC FLOWS CU 7
235	B-2	HA GROUP - SHOWING B TOWER	086/O/10	67 36 30 114 50 30	05 SRTINGERS IN JOINTS ASSOC WITH FAULT/ IN BASALT CU 7
236	B-2	HA GROUP - SHOWING D TOWER	086/O/10	67 36 30 114 46 48	05 DISSEMINATIONS ALONG FAULT IN BASALT CU 7
237+	B-2	HAC	076/K/01	66 03 11 108 25 00	08 IN GRANITIC & MAFIC GNEISS ZN 6 CU 7
238+@	B-2	HACKETT R-EAST CLEAVER LAKE CLEAVER LAKE	076/F/16	65 55 00 108 27 39	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCS ZN 2 AG 2 CU 2 PB 2 AU 2
239+@	B-2	HACKETT RIVER - BOOT LAKE ZONE	076/F/16	65 54 46 108 26 15	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCANICS ZN 2 CU 2 AG 2 PB 2 AU 2
240+	B-2	HACKETT RIVER - JO ZONE NORTH	076/F/16	65 54 41 108 21 19	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCANICS ZN 6 AG 6 CU 6 PB 6 AU 6
241+	B-2	HACKETT RIVER - JO ZONE SOUTH	076/F/16	65 54 34 108 20 36	08 STRATIFORM MASSIVE SFLDS IN FELSIC VOLCANICS ZN 6 AG 6 CU 6 PB 6 AU 6
242+	B-2	HACKETT RIVER-FINGER LAKE ZONE	076/F/16	65 54 36 108 25 51	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCANICS ZN 6 AG 6 CU 6 PB 6 AU 6
243+@	B-2	HACKETT RIVER-MAIN A ZONE BB	076/F/16	65 55 05 108 21 59	08 STRATIFORM MASSIVE SULPHIDES IN FELSIC VOLCS ZN 2 AG 2 CU 2 PB 2 AU 2
244+	OTHER	HAGGART CREEK	106/D/04	64 01 135 51	03* IN STREAM GRAVELS AU 3 W 3 SN 7 BI 7 PB 7 TI 7 FE 7 AS 7
245	B-4	HAIRPIN	065/P/10	63 35 56 096 58 58	01 U IN REGOLITH AT BASE OF SOUTH CHANNEL CONGLOM U 7
246+	B-4	HAR WAGER BAY-HAYES RIVER PROJECT	056/K/07	66 18 15 092 33	06 ALONG BEDS IN SEDS/ VEINLETS IN SEDS NEAR AMPHIBO CU 5 NI 5 FE 7
247	B-2	HARRY GROUP	086/N/10	67 38 05 116 53 50	05 QTZ VEIN CUTTING BASALT CU 7
248	B-2	HAY & VOIR	086/O/10	67 33 30 114 53 40	05 VEINLETS IN BASALT BRECCIA CU 7
249+	B-5	HEB WAGER BAY-HAYES RIVER PROJECT	056/J/12	66 42 40 091 42	06 MASSIVE SULPHIDE IN ULTRAMAFIC INTRUSION CU 6 NI 6
250+	B-4	HENINGA LAKE GEMEX / TOWER / SKIM	065/H/16	61 46 25 096 12 10	08 MASSIVE & DISSEM SULPHIDES IN PYROCLASTIC VOLCANI CU 5 ZN 5 AG 5 PB 5 AU 5
251	B-2	HEPBURN LAKE	086/J/05	66 22 115 30	01 U 7
252	B-2	HI	076/M/07	67 28 110 56	07 UNDERLAIN BY VOLCS/ GRANODIORITE/ DIORITE/ DIABAS CU 7 ZN 7
253+@	B-2	HIGH LAKE	076/M/07	67 22 50 110 51 20	08 MASSIVE-DISS-VEINLETS/STRATIFORM SLFDS IN METAVOL CU 2 ZN 2 AU 2 AG 2 PB 2

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
254+#	B-2	HIGH LAKE-AB ZONE	076/M/07	67 22 50 110 51 20	08 MASSIVE-DISS-VEINLETS/STRATIFORM SLFDS IN METAVOLC CU 2 ZN 2 AU 2 AG 8 PB 8
255+#	B-2	HIGH LAKE-D ZONE	076/M/07	67 22 35 110 51 18	08 MASSIVE-DISS-VEINLETS/STRATIFORM SLFDS IN METAVOLC ZN 2 CU 2 AG 2 AU 2 PB 2
256	B-2	HH	086/O/05	67 26 10 115 32 40	05 QTZ VEINS ASSOC WITH FAULT IN BASALT CU 7
257	B-2	HOOD RIVER (GOSSAN U-1) BOREALIS	076/L/15	66 53 45 110 54 00	08 GOSSAN ON MASSIVE PYRRHOTITE IN FELSIC VOLCS CU 7 ZN 7 AG 7
258	B-2	HOOD RIVER (GOSSAN U-2) BOREALIS	076/L/15	66 53 45 110 47 10	M GOSSAN CU 7 ZN 7 AG 7
259	B-2	HOOD RIVER (GOSSAN U-3) BOREALIS	076/L/15	66 47 50 110 45 00	M GOSSAN IN GREENSTONE CU 7 ZN 7 AG 7
260	B-2	HOOD RIVER (GOSSAN U-4) BOREALIS	076/L/15	66 46 30 110 53	M SLFD STRINGERS & MASSES IN VOLCS NEAR GRANITE CU 7 ZN 7 AG 7
261	B-2	HOOD RIVER (GOSSAN U-5) BOREALIS	076/L/15	66 56 110 54	M GOSSAN CU 7 ZN 7 AG 7
262	B-2	HOOD RIVER (GOSSAN U-6) BOREALIS	076/L/15	66 49 10 110 57 30	M GOSSAN CU 7 AG 7 AU 7
263	B-2	HOOD RIVER NORTH	076/K/14	66 58 42 109 21 48	05 IN METASEDS CU 7
264	B-4	HOOK LAKE - ZONE 4 SELCO	065/G/07	61 20 30 098 52 48	03 QTZ VEINS IN MAFIC VOLCS AU 7 CU 7 FE 7
265	B-4	HOOK LAKE-ZONE 3 SELCO	065/G/07	61 20 54 098 51 12	03 QTZ VEINS & STRINGERS IN HORNBLENDE GNEISS AU 7
266+	B-2	HR	086/O/11	67 36 10 115 07 35	05 VEINLETS AND STOCKWORK IN BASALT CU 6
267	B-4	HUD YANDLE-KAMINAK PROJECT	065/H/16	61 49 06 096 07 00	05 DISSEM IN CHLORITIZED TUFF CU 7 FE 7
268	B-4	HURRICANE SELCO	065/G/07	61 22 30 098 35 54	03 MAGNETITE FE FM WITHIN METASEDS AU 7 FE 7
269	B-4	HURWITZ LAKE WEST PROSPECTING PERMIT 126	065/B/16	60 57 30 098 02	03 QTZ VEIN STOCKWORK IN CHLORITIZED VOLCS AU 7 AS 7
270	B-2	HUSKY GROUP	086/N/08	67 20 50 116 07 05	05 IN FRACTURES IN FAN-SHAPED ZONE IN BASALT CU 7
271	B-1	IO/ OD/ OAS/ LALA	116/B/13	64 50 139 45	07 IN FAULT ZONE CUTTING SED ROCKS CU 7 ZN 7 PB 7
272+	B-3	IDA POINT SILVER SHOWING RUS/ NOEL	077/A/03	68 14 15 106 31 40	04 FRACTURES & BRECCIA/ GRANITIC DYKES CUT GREENSTONE AG 6 CU 7 PB 7 ZN 7 AU 7
273	B-2	IKE GROUP	086/N/08	67 15 116 10	05 IN BASALT CU 7
274+	B-4	INK YANDLE-KAMINAK PROJECT	065/H/09	61 42 30 096 08 15	07 SLFD LAYERS IN GABBRO & VOLC XENOLITHS CU 6 AG 6 ZN 6 FE 7
275	B-2	IS 148-149	086/N/08	67 18 00 116 00 55	05 VEINS IN FRACTURED/FISSURED ZONE IN BASALT CU 7 AG 7
276	B-2	IS 179-180	086/N/08	67 18 10 116 02 35	05 SEAMS & VEINLETS IN FRACTURE ZONE IN BASALT CU 7
277	B-4	ISLAND IN KAMINAK LAKE	055/L/02	62 13 39 094 53 14	05 IN GABBRO OR DIORITE CU 7
278+#	B-2	IZOK LAKE	086/H/10	65 38 00 112 47 45	08 METAMORPHOSED VOLCANOGENIC MASSIVE SULPHIDES ZN 2 CU 2 AG 2 PB 2 AU 7
279	OTHER	JAC 10 AND 11 CLAIMS MELVILLE PENINSULA	047/B/02	68 12 30 085 30 27	07 MINOR VEINS/ GOSSAN/ UNDERLAIN BY GREENST & SCHIST CU 7 AG 7 ZN 7 PB 7 FE 7
280	B-3	JACK LAKE (NORTH)	076/I/11	66 44 00 105 02 00	M GOSSAN ON DISSEM SLFD IN GREEN DIORITIC ROCK ZN 7 CU 7
281	B-3	JACK LAKE (SOUTH)	076/I/11	66 41 105 05	M GOSSAN IN GARNETIFEROUS MAFIC GNEISS CU 7 ZN 7 PB 7 AG 7 FE 7
282+	B-2	JACK-NO 13 VEIN	086/N/07	67 25 116 45	05 VEIN CUTTING BASALT CU 5 AG 5

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
283	OTHER	JAY G	106/0/04	64 00 30 135 38 30	04 VEINS/SHEET-LIKE BODIES PARALLEL TO BEDS/IN SCHIST AG 7 PB 7 ZN 7 AU 7 SB 7 FE 7 MN 7
284	B-2	JE SUN BAY (CONTWOYTO LAKE)	076/E/11	65 43 12 111 22 42	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 7 CU 7 AS 7
285	B-2	JH GROUP-JH 22-OCCURRENCE 1 SHOWING NO 8	086/0/06	67 25 20 115 18 55	05 IN BASALT CU 7
286	B-2	JH GROUP-JH 22-OCCURRENCE 2 SHOWING NO 8	086/0/06	67 25 17 115 18 35	05 IN BASALT CU 7
287	B-2	JH GROUP-JH 33 SHOWING NO 8	086/0/06	67 25 13 115 18 55	05 IN BASALT CU 7
288	B-2	JIM GROUP - JIM 1 SHOWING HEARNE COPPERMINE	086/N/08	67 22 36 116 15 00	05 IN BASALT CU 7
289	B-2	JIM GROUP - JIM 2 SHOWING HEARNE COPPERMINE	086/N/08	67 24 36 116 12 48	05 IN QTZ-CALCITE IN BASALT CU 7
290	B-2	JIM GROUP - JIM 3 SHOWING HEARNE COPPERMINE	086/N/08	67 22 54 116 11 00	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
291	B-2	JIM GROUP - JIM 4 SHOWING HEARNE COPPERMINE	086/N/08	67 23 18 116 11 24	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
292	B-2	JIM N92301-413	086/N/08	67 22 50 116 00 15	05 FAULT ZONE IN BASALT/ALSO CU-FE IN GABBROIC DYKE CU 7 FE 7
293	B-2	JIM N92502	086/0/05	67 20 48 115 55 00	05 CC-QTZ VEINS ASSOC W SHATTER ZONE IN BASALT FLOWS CU 7 AG 7
294	B-2	JIM 26-OCCURRENCE 1 NO 5 SHOWING	086/0/11	67 31 10 115 12 55	05 IN BASALT CU 7
295	B-2	JIM 26-OCCURRENCE 2 NO 5 SHOWING	086/0/11	67 31 00 115 13 15	05 IN BASALT CU 7
296	B-2	JIM 36 NO 5 SHOWING	086/0/11	67 31 15 115 14 15	05 IN BASALT CU 7
297	A-3	JOE GROUP-1 CLAIM T 8825	076/0/12	67 39 15 107 48 45	05 FRAC FILLINGS/VEINS/& DISSEM IN GRANITIC ROCKS CU 7 AG 7
298	A-3	JOE GROUP-2	076/0/12	67 40 00 107 49 55	05 FRAC FILLS & DISSEM IN GRANITIC ROCKS CU 7
299	B-2	JOK	086/0/05	67 21 115 33	05 BRECCIATED ZONE IN BASALT CU 7
300	B-2	JOS/ CIS/ PAL/ TON/ MIC/ ACK	086/0/06	67 26 15 115 03 00	05 STRINGERS OF QUARTZ IN BASALTS NEAR DIABASE DYKE CU 7
301	B-2	JS/ FM/ RIP	086/0/06	67 18 35 115 28 25	05 BRECCIA ZONES/ VEINLETS/JOINTS/FRACTURES-IN BASALT CU 7
302*@	B-2	JUNE	086/0/11	67 34 25 115 03 30	05 IN HIGHLY FRACTURED AND BRECCIATED BASALT CU 2
303	B-2	K	076/F/15	65 56 15 108 31 45	M ? CU 7
304	B-4	K (COLUMBIAN NORTHLAND LTD)-2 PROSPECTING PERMIT 176	065/I/04	62 11 00 097 49 50	05 ? CU 7
306	A-3	KANUYAK ISLAND BOB GROUP	076/0/05	67 24 06 107 54 00	05 IN DOLOMITE AT OR NEAR CONT WITH OVERLYING BASALT CU 7 AG 7
307	B-2	KARLA 1-13	086/N/11	67 41 30 117 05 30	05 QTZ VEINS IN BASALT CU 7 FE 7
308	B-2	KAT 28 KAT NO 1 SHOWING	086/0/05	67 15 29 115 52 56	05 DISSEMINATED NATIVE COPPER IN BASALT CU 7
309	B-2	KAT 31 KAT NO 2 SHOWING	086/0/04	67 14 43 115 52 04	05 DISSEMINATED NATIVE COPPER IN BASALT CU 7
310*	B-2	KAT 37 KAT NO 3 SHOWING	086/0/03	67 14 31 115 20 21	05 QUARTZ-CALCITE VEIN FILLING IN SHEARS IN BASALT CU 6
311	B-2	KAT 5 KAT SHOWING NO 4	086/0/05	67 16 07 115 51 02	05 IN HEMATIZED & BRECCIATED BASALT FLOW TOP CU 7
312	B-4	KAZ 1-12	065/P/10	63 41 30 096 53 05	05 QTZ VEINS IN DUBAWNT PORPHYRIES CU 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
313	8-2	KEIKO GROUP	086/H/11	65 38 113 13	05 QUARTZ STOCKWORK ALONG CONTACT OF SEDS AND GNEISS CU 7
314	8-2	KENNARCTIC EXP LTD	076/M/07	67 25 00 110 45 00	07 VEINS OR STOCKWORKS CU 7 ZN 7
315	8-2	KENNARCTIC-SHOWING NO 1 JAMES RIVER RESERVATION	076/M/11	67 38 30 111 04	03 DISSEMINATIONS IN QTZ IN SHEAR ZONE IN RHYOLITE CU 7 AU 7
316	8-2	KENNARCTIC-SHOWING NO 10 JAMES RIVER RESERVATION	076/M/03	67 10 30 111 03	07 SHEAR ZONE IN DACITE CU 7 ZN 7 AG 7
317	8-2	KENNARCTIC-SHOWING NO 12 JAMES RIVER RESERVATION	076/M/03	67 07 111 04	05 STRINGERS IN SHEAR OR BRECCIA ZONE IN ALTERED VOLC CU 7
318	8-2	KENNARCTIC-SHOWING NO 14 JAMES RIVER RESERVATION	076/M/02	67 05 30 110 46	05 DISSEMINATIONS IN SHEARED PYROCLASTICS & DACITE CU 7
319	8-2	KENNARCTIC-SHOWING NO 15 JAMES RIVER RESERVATION	076/M/02	67 04 56 110 45 05	05 DISS & STRINGERS IN SHEAR ZONE IN ALTERED DACITE CU 7
320	8-2	KENNARCTIC-SHOWING NO 2 JAMES RIVER RESERVATION	076/M/11	67 35 59 111 02	05 DISS & STRINGERS IN SHEARED CHERTY TUFF BED CU 7 AG 7
321	8-2	KENNARCTIC-SHOWING NO 3 JAMES RIVER RESERVATION	076/M/11	67 37 111 03	05 DISS & REPLACEMENT IN SHEAR ZONE IN VOLCANICS CU 7
322	8-2	KENNARCTIC-SHOWING NO 4 JAMES RIVER RESERVATION	076/M/10	67 31 30 110 58	05 QTZ VEIN IN VOLCS CU 7 AU 7
323	8-2	KENNARCTIC-SHOWING NO 5 JAMES RIVER RESERVATION	076/M/06	67 29 30 111 13	05 DISS ALONG SHEAR IN VOLCANICS CU 7
324	8-2	KENNARCTIC-SHOWING NO 6 JAMES RIVER RESERVATION	076/M/06	67 22 45 111 05	05 DISS IN SHEAR ZONE IN VOLCS ADJ TO DIORITE MASS CU 7
325	8-2	KENNARCTIC-SHOWING NO 7 JAMES RIVER RESERVATION	076/M/06	67 22 111 05	05 SILICIFIED SHEAR ZONE IN RHYOLITE NEAR DIOR STOCK CU 7
326	8-2	KENNARCTIC-SHOWING NO 8 JAMES RIVER RESERVATION	076/M/02	67 14 30 110 58 00	05 DISS & QTZ VEINS IN SHEAR ZONES IN RHYOLITE CU 7
327	8-2	KENNARCTIC-SHOWING NO 9 JAMES RIVER RESERVATION	076/M/02	67 14 110 57	05 QUARTZ VEINS IN SHEAR ZONES IN RHYOLITE CU 7
328	8-2	KENNEDY SHOWINGS	076/O/03	64 14 50 111 16 27	03 QTZ VEINS & STRINGERS IN SHEARED SLATE & GREYWACKE AU 7 CU 7 PB 7 AS 7
329	OTHER	KENT PENINSULA	077/B/01	68 12 108 11	05 DISS SLFDS IN MUDSTONE & SHALE/ STRATIFORM DEPOSIT CU 7
330	OTHER	KENT PENINSULA B	077/B/01	68 07 108 21	05 DISSEM(ASSOC W DIABASE DYKES & SILLS)IN DOLOMITE CU 7
331+	8-2	KIL	086/O/05	67 19 42 115 37	05 DISSEM IN SANDSTONE INTERCALATED WITH BASALT CU 6
332	8-2	KIL (1)	076/N/11	67 32 52 109 14 00	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
333	8-2	KIL (2)	076/N/11	67 32 00 109 07 45	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
334	8-2	KIL (3)	076/N/11	67 30 34 109 01 31	05 EPIGENETIC FRAC FILLINGS IN BASALT FLOWS & DIABASE CU 7
335	8-4	KIM & TEQUILA	065/H/15	61 52 30 096 40	01 2 RAD HORIZONS AT BASE OF CONGLOMERATE U 7 AG 7
336	8-4	KIRPATRICK LAKE KASBA EXPL	065/H/04	61 05 12 097 54 12	03 ? AU 7
337	8-1	KIWI	116/B/10	64 44 138 46	09 FAULT BRECCIA ZONE CUTTING DOLOMITE PB 7 ZN 7 AG 7 CU 7
338	8-3	L SHOWING (PERRY RIVER PROJECT	066/M/08	67 28 30 102 11 30	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
339+	8-3	LAHTI (NORTH VEIN) WAN	076/O/16	68 00 00 106 28 00	03 QTZ VEIN SYSTEM IN GREENSTONE AU 6 CU 6 AG 6
340+	8-3	LAHTI (SOUTH VEIN) WAN	076/O/16	67 59 45 106 27 45	03 QTZ VEIN SYSTEM IN GREENSTONE AU 6 CU 6 AG 6
341	8-4	LAKE 345-1	065/P/11	63 36 13 097 15 19	01 U IN FRACTURE IN CHRISTOPHER ISLAND VOLCANICS U 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
342	B-4	LAKE 345-2	065/P/11	63 36 16 097 16 23	01 U IN FRACTURE IN CHRISTOPHER ISLAND VOLCANICS U 7
343	B-4	LAKE 430-1	065/P/11	63 30 44 097 27 20	02 SULFIDES & URANIUM IN NE SHEAR ZONE U 7 CU 7
344	B-4	LAKE 430-2	065/P/11	63 30 50 097 27 19	01 U IN FRACTURE IN BASEMENT GNEISS U 7
345	B-4	LAKE 520-LONGSPUR GRANITE	065/P/12	63 37 40 097 45 42	01 GARNET-FLUORITE VEINLETS IN VOLCANICS NEAR GRANIT U 7 FSP7
346	B-2	LARRY GROUP	086/N/07	67 25 58 116 46 54	05 VEINLETS IN FRACTURE ZONE IN BASALT CU 7
347	B-2	LARS GROUP NO 22 LODE	086/N/07	67 27 55 116 36 56	05 SILICIFIED SHEAR ZONE IN BASALT CU 7
348*	B-2	LASH 210-300	086/O/11	67 32 15 115 24 30	05 CALCITE VEINS IN BASALT FLOWS CU 6
349	B-2	LASH 321 322 329 & 330	086/O/12	67 31 00 115 34 35	05 DISSEMINATIONS IN SANDSTONE NEAR DIABASE DYKE CU 7
350	B-2	LASH 523-524	086/O/05	67 29 25 115 40 55	05 NATIVE CU ALONG FRACS IN BASALT INTERCAL W SEDS CU 7
351	B-2	LEAH	086/N/10	67 37 20 116 36 25	05 NATIVE CU GRAINS &IN VEINS/SLFD IN FRACS/IN BASAL CU 7
352	B-2	LEL NO 1	086/O/10	67 30 24 114 54 36	05 NATIVE CU PLATES IN FRACTURE IN BASALT CU 7
353	B-2	LEL NO 10	086/O/10	67 31 18 114 50 24	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
354	B-2	LEL NO 11	086/O/10	67 31 48 114 49 00	05 IN BASALTIC FLOW TOP CU 7
355	B-2	LEL NO 12	086/O/10	67 32 42 114 49 06	05 IN BASALTIC FLOW TOP CU 7
356	B-2	LEL NO 13	086/O/10	67 32 54 114 49 48	05 IN FAULT BRECCIA IN BASALT CU 7
357	B-2	LEL NO 14	086/O/10	67 33 12 114 48 12	05 SHEAR IN BASALT CU 7
358	B-2	LEL NO 15	086/O/10	67 33 06 114 51 48	05 FAULT ZONE IN BASALT CU 7
359	B-2	LEL NO 2	086/O/10	67 30 48 114 52 12	05 AMYGDALOIDAL CU IN BASALT FLOW TOP CU 7
360	B-2	LEL NO 3	086/O/10	67 30 42 114 50 24	05 AMYGDALOIDAL CU IN BASALT FLOW TOP CU 7
361	B-2	LEL NO 4	086/O/10	67 30 48 114 50 18	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
362	B-2	LEL NO 5	086/O/10	67 30 46 114 48 36	05 SULPHIDES IN BASALT FLOW TOP CU 7
363	B-2	LEL NO 7	086/O/10	67 31 06 114 49 06	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
364	B-2	LEL NO 8	086/O/10	67 31 10 114 49 24	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
365	B-2	LEL NO 9	086/O/10	67 31 12 114 49 48	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
366	B-2	LEWES ISLAND CHAPMAN ISLANDS-3	076/N/15	67 53 15 108 54 40	05 IN BASALT FLOWS CU 7
367	B-1	LIN	117/A/02	68 09 40 137 39	01 RADIOACTIVE CHERT IN FRACTURES IN RUDACEOUS ROCKS U 7
368*	B-2	LIZ	086/O/11	67 31 15 115 03 25	05 FAULT ZONE IN BRECC BASALT/ALSO STRINGERS IN BASA CU 6
369	B-2	LKS	086/K/10	66 39 116 49	05 QTZ VEINS & STOCKWORKS CUT VOLCS & GRANODIORITE? CU 7 AG 7
370	B-2	LLOYD 5	086/N/07	67 28 116 43 40	05 QTZ VEIN CU 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
371	OTHER	LOCALITY-1	046/K/16	66 59 32 084 11 22	01 RADIOACTIVE FELSIC SILL IN CRYSTALLINE LIMESTONE U 7 TH 7
372+#	B-4	LONE GULL	066/A/05	64 27 097 36	01 FRAC AND DISSEM IN APHEBIAN GRAPHITIC METAQTZT U 2
373	B-2	LOW LAKE PROPERTY L/ J/ O/ H/ K/ M GROUPS	076/M/07	67 17 13 110 54 06	07 DISS-MASS IN SHEARS & FAULT BRECCIA/VEINS/IN VOLCS CU 7 PB 7 NI 7 GRP7
374+	B-4	LOWO LAKE SCOTT (SELCO)	065/H/04	61 03 06 097 51 24	03 / QTZ VEIN ALONG SHEAR IN ANDESITE AU 5 AS 7
375	B-2	LR 12 NO 9 SHOWING	086/O/06	67 26 15 115 20 50	05 IN BASALT CU 7
376	B-2	LR 27 NO 9 SHOWING	086/O/06	67 25 55 115 21 00	05 IN BASALT CU 7
377	B-2	M GROUP	076/M/03	67 08 00 111 07 30	05 IN METAVOLCS CU 7
378	B-3	M SHOWING (PERRY RIVER PROJECT	066/M/09	67 33 25 102 11	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
379	B-4	MAG	065/H/16	61 48 096 08	03 VEIN IN QTZ-PORPH SILL/ ALSO DISS IN SHEARED RHY AU 7 AG 7 CU 7 ZN 7 PB 7
380	B-2	MAG & MAT GROUPS	086/O/06	67 28 05 115 21 25	05 BASALT BRECCIA ZONES NEAR DIABASE CU 7
381+	B-2	MAG/ LOU/ NA MUSKOX LAKE	076/C/09	64 42 30 108 12 30	08 DISSEM SLFDS IN VOLCS CU 6 ZN 6 AG 6
382	B-4	MAGUSE LAKE (P GROUP) CARR LAKE PROJECT	055/E/14	61 52 30 095 28 26	11 VEINS IN GABBRO INTRUDING DACITE/ & DISS IN BASALT CU 7 MO 7 AU 7
383	B-1	MAM	117/A/06	68 27 30 138 04 30	01 MAY BE STRUCT CONTRLO SKARNS (FRACTS IN INTRUSV RX U 7 MO 7 W 7 FSP7
384	B-2	MAR 1-100 (MAR NO 1 SHOWING)	086/N/07	67 23 36 116 46 06	05 FAULT BRECCIA ZONE IN BASALT CU 7 AG 7
385	B-2	MAR 1-100 (MAR NO 2 SHOWING)	086/N/07	67 22 24 116 46 06	05 IN BASALT CU 7 AG 7
386	B-2	MAR 1-100 (MAR NO 3 SHOWING)	086/N/07	67 22 48 116 45 18	05 IN MATRIX OF BRECCIA IN BASALT CU 7 AG 7
387	B-2	MAR 117 RABBIT LAKE	086/N/07	67 24 45 116 48 00	05 QTZ VEIN IN BASALT CU 7
388	B-2	MAR 132-133 - MAR NO 7 SHOWING SOUTH GROUP	086/N/07	67 28 06 116 51	05 STRINGER/ IN BASALT? CU 7
389+	B-2	MAR 132-133 MAR NO 5 SHOWING SOUTH GROUP	086/N/07	67 26 116 47	05 QTZ VEIN IN BRECCIATED BASALT CU 5
390	B-2	MAR 132-133- MAR NO 6 SHOWING SOUTH GROUP	086/N/07	67 24 30 116 51	05 BRECCIA ZONE/ IN BASALT? CU 7
391	B-2	MAR 322-325	086/N/10	67 34 05 116 49 00	05 DISSEM AND FRAC FILLS AND VEINS IN BASALT CU 7
392	B-2	MAR 326-335 NORTH GROUP	086/N/10	67 35 30 116 52 40	05 VEINS IN BASALT CU 7
393	B-2	MAR 500 562 - NO 2 SHOWING	086/N/08	67 16 12 116 08	05 ZONE OF QTZ-CALCITE VEINS CUTTING BASALT CU 7
394	B-2	MAR 500 562 - NO 4 SHOWING	086/N/08	67 16 24 116 04 54	05 QTZ-CALCITE VEINS IN BASALT CU 7
395	B-2	MAR 500-562 - NO 1 SHOWING	086/N/08	67 16 42 116 07	05 CHALCOCITE STRINGERS IN SHEAR ZONE IN BASALT CU 7
396+	B-2	MAR 500-562 - NO 5 SHOWING	086/N/08	67 15 30 116 04 48	05 IN BASALT CU 6
397+#	B-1	MARK HART RIVER	116/A/10	64 38 10 136 49 00	08 MASSIVE SULPHIDE LENSES IN ARGILLITE CU 2 ZN 2 AG 2 AU 2 PB 2
398	B-2	MAS 7-8	086/O/05	67 27 115 30 35	05 STRINGERS & VEINS ASSOC W FAULT IN BASALT & SLATE CU 7 BA 7
399	B-2	MAS 9	086/O/06	67 26 50 115 29 40	05 QUARTZ-CALCITE VEIN IN BASALT AND SANDSTONE CU 7 BA 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
400	B-2	MATTHEWS LAKE (1)	076/D/03	64 01 54 111 14 34	05 GOSSAN ZONE/ BEDROCK IS MAFIC VOLCANICS CU 7 AU 7
401	B-2	MATTHEWS LAKE (2)	076/D/03	64 02 08 111 15 10	05 QTZ VEINLETS IN GOSSAN ZONE IN VOLCS CU 7
402	B-2	MATTHEWS LAKE (3)	076/D/03	64 02 24 111 15 16	05 SUGARY VUGGY QTZ IN GOSSAN WITHIN VOLCS CU 7 PB 7
403	B-2	MATTHEWS LAKE (4)	076/D/03	64 05 18 111 18 39	05 IN VOLCS CU 7
404	B-1	MCKAMEY COPPER NO 12/ZEBRA GP	116/A/10	64 40 45 136 55 30	05 IN FAULT ZONE BETWEEN ARGILL SEDS & GREENSTONE CU 7
405*	B-1	MCKAY HILL CRYSTAL/ FALLS CREEK	106/D/06	64 21 05 135 23 30	04 VEINS IN VOLCANICS AG 4 PB 4 CU 6 ZN 7
406	OTHER	MELVILLE PENINSULA-GOSSAN G-11	047/B/02	68 13 27 085 31 56	06 GOSSAN ZONE IN QUARTZ-CHLORITE GREENSTONES CU 7 AG 7 NI 7 FE 7
407	OTHER	MELVILLE PENINSULA-GOSSAN G-13	047/B/02	68 12 25 085 33	06 MASSIVE SLFDS IN QUARTZ-RICH ZONE IN GREENSTONE CU 7 NI 7 AG 7 AU 7
408	OTHER	MELVILLE PENINSULA-GOSSAN G-14	047/B/02	68 12 24 085 31 42	07 MASSIVE TO DISS SFLD IN QTZ PEBBLE CONGL & QTZITE CU 7 ZN 7 PB 7 NI 7 AG 7 FE 7
409	OTHER	MELVILLE PENINSULA-GOSSAN G-17	047/B/02	68 12 06 085 27 54	05 GOSSAN AT CONTACT OF MGNT-CHERT-FE FM & SCHIST CU 7 AG 7 AU 7 FE 7
410	OTHER	MELVILLE PENINSULA-GOSSAN G-18	047/B/02	68 12 24 085 16 24	05 GOSSAN ZONE IN GNEISS/ QUARTZITE/ & AMPHIBOLITE CU 7 AG 7 AU 7 FE 7
411	OTHER	MELVILLE PENINSULA-GOSSAN G-7	047/B/07	68 19 48 085 11 42	05 GOSSAN IN GREENST QTZITE & GNEISS NEAR GRN CONTACT CU 7 AG 7 FE 7
412	OTHER	MELVILLE PENINSULA-LOCATION 2	046/N/01	67 01 53 084 01 01	01 RADIOACTIVE FELSIC INTRUSIVE U 7
413	OTHER	MELVILLE PENINSULA-LOCATION 5	046/N/04	67 02 06 085 46 30	01 RADIOACTIVE SKARN IN CONTACT WITH GRANITIC INTRUSV U 7 TH 7
414	OTHER	MELVILLE PENINSULA-LOCATION 8	046/N/01	67 05 25 084 03 44	01 DISSEM RADIOACTIVE MINERAL IN FELSIC INTRUSIVE U 7
415	OTHER	MELVILLE PENINSULA-LOCATION 9	046/N/01	67 04 19 084 03 45	01 DISSEM RADIOCATIVE MINERAL IN FELSIC INTRUSIVE U 7
416	B-5	MELVILLE PENINSULA-1	046/N/04	67 06 04 085 57 04	01 RADIOACTIVITY ASSOC WITH GREY AUGEN GNEISS U 7 TH 7
417	B-5	MELVILLE PENINSULA-2	046/K/13	66 59 02 085 52 25	01 SLIGHTLY RADIOACTIVE BIOTITE/K-FELDSPAR GRANITE U 7
418*	B-2	METAL 13-26	086/N/08	67 20 15 116 30 00	05 FILLINGS AND REPLACEMENTS IN BASALT CU 6
419	B-2	METAL 5 & 7 & 12	086/N/08	67 23 15 116 28 10	05 IN BASALT (ASSOC WITH FAULT ?) CU 7 AG 7 PT 7
420	B-2	MGB 101-180/ 233-255	086/N/08	67 20 10 116 18 30	05 VEINS AND BRECCIAS IN BASALT CU 7
421	B-2	MGB 181-185	086/N/08	67 21 25 116 21 20	05 DISSEM IN MASSIVE BASALT AND IN AMYGDULES CU 7
422	B-2	MGB 277	086/N/08	67 20 05 116 14 05	05 IN QTZ-CARBONATE VEIN IN BASALT CU 7
423	B-2	MGB 325-396	086/N/08	67 19 20 116 11 00	05 VEINS IN BASALT CU 7
424	B-5	MIC	057/B/04	68 03 45 095 08	11 PYRITIC SCHIST BAND IN GRANITIC RX# & CU IN PEGMT CU 7 MO 7
425	B-2	MID 1-100	086/N/11	67 41 40 117 09 30	05 SHEAR ZONE VEINS IN BASALT/ ALSO CU ASSOC W DYKES CU 7
426	B-2	MID 101-200 - MID-2 CLAIM NO 115	086/N/11	67 39 36 117 09 42	05 QTZ-CALCITE VEIN ASSOC WITH DIABASE DYKE CU 7
427	B-2	MID 101-200-MID-4 CLAIM NO 104	086/N/11	67 40 18 117 09 48	05 QTZ-CALCITE VEIN IN BASALT CU 7
428	B-2	MID 101-200-MID-5	086/N/11	67 39 24 117 06 06	05 QTZ-CALCITE VEIN IN BASALT CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
429	B-2	MID 101-200-MIN-3 CLAIM NO 108	086/N/11	67 39 36 117 11 30	05 QTZ-CALCITE VEIN IN BASALT CU 7
430	B-2	MIKE 11 (SHOWING NO 6)	086/O/06	67 29 25 115 11 05	05 IN BASALT CU 7
431	B-2	MIKE 11 14 21 & 32	086/O/06	67 29 05 115 12 35	05 NATIVE COPPER IN BASALTS CU 7
432	B-2	MIKE 14 (SHOWING NO 6)	086/O/06	67 29 35 115 11 45	05 IN BASALTS CU 7
433	B-2	MIKE 32 (JUDY LAKE)	086/O/06	67 28 50 115 13 10	05 NATIVE COPPER IN BASALTS CU 7
434	OTHER	MILLER CREEK	116/C/02	64 01 140 55	05 REPLACEMENTS ALONG A SHEAR ZONE IN SEDS CU 7 PB 7
435	B-4	MILLER SHOWING	055/M/13	63 58 40 095 43 12	01 FRACTURES IN CHRISTOPHER ISLAND VOLCANICLASTIC SED U 7
436	B-2	MIN 181-280-MID 1 CLAIM NO 120	086/N/11	67 38 54 117 11 24	05 CHALCOCITE IN FINE FRACTURES & DISSEM IN BASALT CU 7
437	B-1	MINK	116/K/01	66 08 10 140 09 30	05 DISSEM SLFD IN SED ROCKS CU 7 PB 7 ZN 7
438	B-4	MISTAKE BAY IRON-AREA 1	055/K/03	62 12 093 04	10 FE FM (INTERBEDDED MAGNETITE & ARGILLITE) FE 7
439	B-4	MISTAKE BAY IRON-AREA 2 GIANT IRON MINE	055/K/03	62 13 093 10	10 FE FM (INTERBEDDED MAGNETITE & ARGILLITE) FE 7
440	B-2	MM 1-72	086/O/05	67 18 25 115 40 10	05 IN BASALTS CU 7
441	B-2	MOLLIE MAC MINES (AREA NO 2) WEST END OF CANOE LAKE	076/M/03	67 08 111 08 30	08 MASSIVE SULPHIDES IN SHEARED RHYOLITE CU 7 ZN 7 PB 7 AG 7
442	B-2	MONNIER 19-36 & ILROCK 1-36	086/N/07	67 21 15 116 37 40	05 VEIN IN FRACTURE IN AMYGDALOIDAL BASALT CU 7 AG 7
443	B-4	MONTGOMERY LAKE NORTHEAST	065/H/12	61 34 36 097 43 30	05 SULPHIDES IN SHEARED ANDESITES CU 7
444	B-4	MONTGOMERY PROJECT CLAIM BLOCK	065/H/15	61 45 096 50	01 U ASSOC WITH PYRITE IN CONGLOMERATE U 7
445	B-4	MORSO ISLAND-MAR 1-18 CLAIMS	055/K/02	62 02 092 40	07 QTZ& PEGMT VEINS CUT VOLCS & DERIVED SCHIST-GNEISS CU 7 AU 7 AG 7 NI 7
446	B-1	MOUNT FITTON AREA	117/A/06	68 30 138 00	12 SCHEELITE PLACERS WITH MINOR GOLD AND MOLYBDENUM W 7
447	B-1	MOUNT HARPER OZ (COAL CK DOME AREA)	116/B/12	64 44 139 44	09 VEINS & BRECCIA ZONES IN DOLOMITE & SHALE ZN 7 PB 7
448	A-1	MOUNT SEDGWICK AREA TRAIL RIVER	117/A/13	68 50 139 05	12 SCHEELITE PLACERS IN STREAM GRAVELS W 7
450	B-4	MOUNTAIN LAKE SOUTH AXE GROUP/ SELCO	065/G/02	61 09 098 37 00	03 PROBABLY ASSOC WITH FE FM AU 7
451	B-2	MOX	076/K/02	66 06 25 108 31 45	05 GOSSANS IN METASEDIMENTS CU 7 AS 7 AU 7
452	OTHER	MUSKOX SHOWING M-5	087/H/16	71 52 112 43	05 DISS VEINS & REPL IN FAULT BRECCIA/ IN BASALT CU 7 AG 7
453	OTHER	MUSKOX SHOWING-M-125	087/H/10	71 37 113 22	05 DISS IN AMYGDALOIDAL BASALT ALONG A FAULT CU 7 AG 7
454	OTHER	MUSKOX SHOWING-M-134	087/H/07	71 28 113 38	05 MALACHITE SURROUNDS RED AGGLOMERATE FRAGMENTS CU 7
455	OTHER	MUSKOX SHOWING-M-148	087/H/16	71 52 30 112 59	05 DISS IN FRACTURED BASALT & UNDERLYING SEDIMENTS CU 7
456	B-3	N SHOWING (PERRY RIVER PROJECT	066/M/09	67 31 20 102 12	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
457	B-2	NAN	086/O/06	67 29 24 115 26 50	05 VEINS IN BASALT CU 7
458*	B-2	NAN-GRA-PRO	086/O/05	67 21 30 115 44	05 VEIN SYSTEM IN FAULT ZONE IN BASALTIC FLOW CU 6

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
459**	OTHER	NANISIVIK STRATHCONA SOUND	048/C/01	73 03 40 084 30 30	09 MASSIVE SULPHIDES IN DOLOMITE PB 1 ZN 1 AG 1
460**	B-4	NATARAWIT LAKE	065/O/01	63 04 42 098 21 06	01 TH-U IN ALKALINE SYENITES U 2 TH 2
461	B-1	NEBULOUS	116/B/07	64 28 138 46	01 ON JOINTS & IN FRACTURES IN MONZONITE PORPHYRY U 7 TH 7
462*	B-2	NEW ATHONA-CONTWOYTO LAKE NAT	076/E/11	65 41 12 111 12 12	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 CU 7 AS 7 FE 7
463	B-2	NEWNORTH (SOUTH GROUP) CLAIM CG 25	076/D/06	64 15 57 111 22 30	05 SLFDS IN QUARTZ CU 7 AU 7
464	B-5	NIG	057/B/02	68 02 45 093 11	M IN META-VOLCANICS AT CONTACT WITH ULTRAMAFIC PLUG CU 7 ZN 7 NI 7 AG 7 CO 7
465	B-2	NOR 27-72/WIL 73-79/HOLE 1-8	086/N/09	67 32 00 116 05 25	05 BELBS/VEINLETS/DISSEM IN BASALT CU 7
466	B-2	NOR 47	086/O/06	67 26 35 115 13 00	05 NATIVE COPPER IN BASALTS CU 7
467	B-2	NOR 48 - OCCURRENCE 1	086/O/06	67 26 20 115 13 25	05 VEIN IN BASALT CU 7
468	B-2	NOR 48 - OCCURRENCE 2	086/O/06	67 26 25 115 13 45	05 VEIN IN BASALT CU 7
469	B-2	NOR 94 - OCCURRENCE 1 NO 7 SHOWING	086/O/06	67 26 55 115 12 55	05 IN FRACTURED BASALT ALONG FAULT CU 7
470	B-2	NOR 94 - OCCURRENCE 2 NO 7 SHOWING	086/O/06	67 26 45 115 12 45	05 IN FRACTURED BASALT ALONG FAULT CU 7
471	B-2	NORMA LAKE SE	076/E/11	65 42 19 111 15 45	05 IN SEDIMENTS NEAR FAULT CU 7
472	B-4	NORTH KAMINAK (ONEIL LAKE 5) PROSPECTING PERMIT 102	055/L/03	62 04 08 095 23 06	07 SHEAR ZONES & QUARTZ VEINS/ ASSOC SULPHIDES CU 7 AU 7
473*	B-2	NORTH VEIN P/ Q/ R/ X/ SIDEWALK GROUP	076/M/11	67 42 28 111 23 06	03 SHEAR VEIN CUTTING SYENO-DIORITE AU 5 CU 7 PB 7
474	OTHER	NORTHEAST CORNWALLIS ISLAND	058/G/06	75 21 15 094 09	09 FRACTURE FILLINGS IN DOLOMITE & LIMESTONE CU 7 PB 7 ZN 7 NI 7 AG 7
475	B-4	NOW 8	065/K/10	62 31 100 48 24	05 CHALCOCITE IN SHEARED RHYOLITE CU 7
476	B-4	NOWYAK LAKE WEST PP 175	065/G/15	61 47 42 098 32 21	05 IN VOLCANICS (?) CU 7
477	B-4	NUELTIN PROJECT-1 PROSPECTING PERMIT 132	065/C/02	60 11 08 100 31 25	07 SLFD ZONES IN SEDS CU 7 AU 7 AG 7
478	B-4	NUELTIN PROJECT-2 PROSPECTING PERMIT 136	065/C/11	60 36 50 101 12 00	05 MINOR DISSEM SLFD IN GREYWACKE CU 7
479	B-2	NWT-1 (CLAIM 81) H-7	086/N/12	67 44 48 117 45 18	05 BRECCIA & AMYGDULE FILLING IN BASALT CU 7
480	B-2	NWT-2 (CLAIM 78 OR 79)	086/N/12	67 44 54 117 46 30	05 BRECCIA ZONE IN BASALT CU 7
481	B-5	OAT-LIK	066/N/05	67 23 10 101 46 15	06 IN AMPHIBOLE-BIOTITE BANDS IN GNEISS CU 7 NI 7
482	B-5	OCCURRENCE (PERRY RIVER PROJ)	066/N/12	67 33 45 101 57 45	06 SULPHIDES DISSEMINATED IN DIABASE CU 7 NI 7
483	B-1	OG COAL CREEK DOME AREA	116/B/13	64 50 140 00	09 GALENA & SPHALERITE IN CARBONATE SEQUENCE PB 7 ZN 7
484	B-1	OLD CROW RANGE	116/N/10	67 35 140 45	12 SCHEELITE PLACERS W 7
485	OTHER	OLIVE DUBLIN GULCH	106/D/04	64 02 23 135 46 50	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
486	B-4	ONEIL LAKE 1 PROSPECTING PERMIT 102	055/L/06	62 24 47 095 06 53	08 DISS TO MASS AT CONTACT AGGLOM W METASED &ANDESITE CU 7 ZN 7
487	B-4	ONEIL LAKE 2	055/L/06	62 23 27 095 05 27	08 STRINGERS & DISSEMINATIONS CU 7 ZN 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
488	B-4	ONEIL LAKE 3 PROSPECTING PERMIT 102/BLOCK A	055/L/06	62 19 30 095 08 15	07 SULPHIDES IN QUARTZ VEINS IN TONALITE INTRUSIONS CU 7 AU 7 AG 7 PB 7 ZN 7 AS 7
489	B-4	ONEIL LAKE 4 PROSPECTING PERMIT 102/BLOCK A	055/L/06	62 18 45 095 05 45	05 STRINGERS &VEINS IN GREENST/ ASSOC W HORST STRUCT. CU 7 FE 7
490	B-2	OOK GROUP	086/N/09	67 32 116 21	05 NARROW VEINS & DISSEM IN BASALT CU 7
491	B-2	OP	086/O/04	67 14 10 115 48 50	05 SPECKS OF NATIVE COPPER IN BASALT CU 7
492	B-3	ORANGE DOGS LAKES EASTERN MACKENZIE SYNDICATE	076/I/06	66 22 105 09	03 GOSSAN IN QTZ-FELD-BIOTITE GNEISS CU 7 AU 7
493*	B-5	OTOK PERRY RIVER CLAIMS	066/N/05	67 24 18 101 46 36	06 IN PYROXENITE & GRANULITE BANDS & MAFIC INTRUSIONS CU 5 NI 5 FE 7
494	B-4	OTTER LAKE SOUTH	065/H/04	61 05 12 097 50 12	03 QTZ VEINS IN GREYWACKE AU 7 AS 7
496	B-2	OX	076/C/09	64 36 25 108 12 30	M SLFDS IN GRAPHITIC ARGILLITE CU 7 ZN 7
497	B-2	PAN/ DIB/ MAS	086/O/05	67 20 50 115 35 40	05 VEINSSHEARS/VEINLETS/AMYGDULES/BRECCIA/IN BASLATS CU 7
498	B-2	PAT 2 NO 9 SHOWING	086/O/06	67 26 35 115 21 40	05 IN BASALT CU 7
499	B-2	PAT 5	086/N/10	67 32 00 116 40 00	05 QTZ FISSURE VEIN IN BASALT CU 7
500	B-2	PAT 6 NO 9 SHOWING	086/O/06	67 26 30 115 22 15	05 IN BASALT CU 7
501*	OTHER	PATCH AID	086/K/11	66 31 30 117 22 30	07 QTZ VEIN SYSTEMS & STOCKWORKS CUTTING GRANITICS CU 6 BI 6 AG 6 AU 6
502*	OTHER	PAUL MOUNT CAMERON	106/D/03	64 05 20 135 00 30	04 FAULT VEIN IN LIMESTONE AG 5 PB 5 ZN 5 CU 7 FE 7
503	B-2	PEC GROUP	086/N/07	67 16 18 116 56	02 YELLOW U & GREEN CU STAINS IN MATRIX OF FELS SST U 7 CU 7
504	B-2	PENNY 1-36 GOLDEN WEST	086/N/09	67 35 116 15	05 IN BASALT CU 7
505	B-2	PER	076/C/09	64 41 108 10	05 GOSSAN ALONG CONTACT BETWEEN MAFIC VOLC & METASEDS CU 7
506	B-4	PERMIT 90	055/M/13	63 45 41 095 57 39	01 RAD CALCITE FRACTURES IN CHRISTOPHER ISL VOLCANICS U 7
507*#	OTHER	PESO & REX	106/D/04	64 00 45 135 57 20	04 FAULT VEIN SYSTEMS IN QUARTZITE/ PHYLLITE/ SCHIST AG 2 PB 2 ZN 6 SB 6 AS 6 CU 6
508*#	OTHER	PESO NO 1	106/D/04	64 00 45 135 58 00	04 FAULT VEIN IN QTZITE/ PHYLLITE/ SCHIST AG 2 PB 2 ZN 6 SB 6 CU 6 AS 6
509	OTHER	PESO NO 4 & NO 6	106/D/04	64 01 05 135 58	04 FAULT VEIN IN QTZITE/ PHYLLITE/ SCHIST AG 7 PB 7 ZN 7 SB 7 CU 7 AS 7
510	OTHER	PESO NO 5	106/D/04	64 01 30 135 58	04 FAULT VEIN IN QTZITE/ PHYLLITE/ SCHIST AG 7 PB 7 ZN 7 SB 7 CU 7 AS 7
511	A-3	PETE GROUP IGLORUA ISLAND	076/N/09	67 38 12 108 26 30	05 FRACTURED & BRECCIATED ZONES IN BASALT CU 7
512	B-2	PICKLE CROW 140 141 200 & 201 JENNY NO 3 VEIN	086/O/05	67 19 47 115 51 12	05 VEIN IN FRACTURE ZONES IN BASALTIC LAVAS CU 7
513	B-2	PICKLE CROW 140 141 200 & 201 HEARNE VEIN (JENNY NO 1)(MAIN)	086/O/05	67 20 15 115 50 10	05 VEIN IN FAULT-BRECCIA ZONE IN BASALT CU 7
514*#	B-2	PICKLE CROW 350 360 361 & 370 FRANKLIN NO 2 VEIN	086/O/05	67 17 55 115 48 55	05 VEINS ALONG FAULT IN BASALTIC FLOWS CU 2 AG 6
515*#	B-4	PISTOL BAY GROUP-1 MAR 95 & 96	055/K/07	62 29 48 092 48 36	06 IN BRECCIATED QUARTZITE/ALSO IN GABBRO-PERIDOTITE CU 2 NI 2 AG 7 AU 7 AS 7
516*#	B-4	PISTOL BAY GROUP-2 MAR 79	055/K/07	62 29 30 092 46 54	06 QTZ LENS AT CONTACT OF METAVOLCS & ULTRABASIC SILL CU 2 NI 2
517*#	B-4	PISTOL BAY GROUP-3 MAR 15/ 16/28	055/K/07	62 28 48 092 44	06 IN GABBRO & GNEISSIC GRANITE CU 2 NI 2 AG 2 AU 2

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
518+	B-4	PISTOL BAY GROUP-4 MAR 43	055/K/07	62 29 18 092 44 18	06 QUARTZ VEIN CU 5 NI 5 AU 5 AG 5
519	B-2	PIT	076/N/06	67 23 20 109 06 35	07 QTZ VEINS/ UNDERLAIN BY DIABASE & SEDS CU 7 ZN 7 AG 7 AU 7
520	B-3	PLUGGER LAKE EASTERN MACKENZIE SYNDICATE	076/I/10	66 34 00 104 51 30	05 GOSSAN IN BIOTITE GRANITE GNEISS CU 7 AG 7
521+#	OTHER	POLARIS BANKENO	068/H/08	75 23 10 096 56	09 MASSIVE & DISSEM SULPHIDES IN LMS & DOL BRECCIA ZN 2 PB 2 AG 2 CD 2
522+#	A-3	POMIE	076/J/03	66 13 107 01	02 PITCHBLENDE/HEMATITE/CALCITE VEINS IN BASALT FLOWS U 2 CU 7
523	B-2	PORT EPWORTH	076/M/12	67 39 50 111 31 00	05 IN METAVOLCS CU 7 PB 7
524	OTHER	POTATO HILLS AREA	106/D/04	64 02 135 47	04 VEIN CLUSTERS W-BEARING PEGMATITES AND SKARNS W 7 AU 7 AG 7 SN 7
525	B-2	PRO/ HOC/ KIL	086/O/05	67 20 55 115 39 55	05 FRACTURE FILLINGS & VEINS IN BASALTIC FLOWS CU 7
526	B-5	PROJECT WAGER-CURTIS LAKE	056/I/11	66 39 089 06	06 BANDS OF SLFDS IN METAGREYWACKE SCHIST & QUARTZITE CU 7 NI 7
527	B-5	PROJECT WAGER-KR HAYES RIVER	056/J/13	66 47 091 55	06 DISSEMINATIONS IN METAGREYWACKES AND METAQUARTZITE CU 7 NI 7
528	B-5	PROJECT WAGER-KRA	056/J/14	66 57 091 00	06 DISSEMINATIONS IN METASEDIMENTS CU 7 NI 7
529	B-4	PROJECT WAGER-KRF	056/K/06	66 21 093 15	06 DISSEMINATIONS IN QUARTZITE AND SCHIST CU 7 NI 7
530	B-5	PROJECT WAGER-PERMIT 225	056/P/04	67 12 089 47	06 ALONG NW MARGIN AND WITHIN ULTRAMAFIC BODY CU 7 NI 7
531	B-5	PROJECT WAGER-PERMIT 228	056/P/07	67 21 088 58	06 IN METASEDS ADJ TO & ENCLOSED BY ULTRAMAFIC BODY CU 7 NI 7
532	B-4	QUARTZITE LAKE	055/L/08	62 22 094 27	11 INTERMED TO MAFIC VOLCS/CONT W SEDS & PYROCLASTICS CU 7 MO 7
533	B-4	R E P GROUP	055/K/04	62 07 30 093 49 30	03 QTZ VEINS/REGIONAL GEOL-GREENST/GNEISS/SEDS/GRN AU 7 AG 7 CU 7
534+	B-1	RAE ZEBRA GROUP	116/A/10	64 40 45 136 57 45	05 VEIN IN FAULT/CUTS ARGILL SEDS & GREENSTONE SILL CU 6
535	B-1	RAE 8	116/A/10	64 39 136 58	05 SULFIDE LENS CU 7
536	B-2	RAM	086/K/14	66 50 117 00	01 U IN FRACTURES+RELATED VEINS#ALSO DISS IN GRANITE U 7 AU 7 AG 7 PT 7
537	OTHER	RAMBLER HILL	106/D/03	64 04 35 135 15 30	04 VEIN ALONG FAULT CUTTING SCHIST & GREENSTONE CU 7 AU 7 AG 7 PB 7 ZN 7 FE 7
538+	B-4	RANKIN INLET MINE	055/K/16	62 48 55 092 03 30	06 DISS & MASSIVE SLFDS AT BASE OF SERPENTINITE SILL CU 4 NI 4 PT 6 FE 7
539	B-2	RAY ADAM	086/P/08	67 17 112 16	05 IN CARBONATE (INCLUSIONS?) IN QTZ VEIN CUTTING GRNS CU 7
540	B-2	RAY GROUP	086/N/09	67 35 20 116 17 30	05 IN BASALT BORDERING FAULT ZONE CU 7 AG 7
541+	B-2	RED	076/D/03	64 06 24 111 17 48	03 DISSEM TO MASSIVE SLFDS IN RHYOLITES-ANDESITES AU 6 CU 7
542	OTHER	RED GROUP-SHOWING NO 5	086/K/06	66 27 54 117 26 54	02 SLFDS IN A GIANT QTZ VEIN (SLOAN DYKE) CU 7 U 7 V 7
543	OTHER	RED GROUP-SHOWING NO 6	086/K/06	66 28 18 117 26 54	05 IN A DIABASE DYKE CU 7 AG 7
544+#	OTHER	REX VEIN	106/D/04	64 08 10 135 54	04 VEIN IN SHEARED QUARTZITE & PHYLLITE AG 2 PB 2 ZN 7 SB 7 AU 7 AS 7 CU 7
545	B-2	RIT GROUP	086/N/11	67 35 20 117 25 18	05 STOCKWORK VEINS IN FRACTURED DOLOMITE CU 7
546	B-3	RIVER SHOWING CIC CLAIMS/ HOPE BAY	077/A/03	68 04 106 42	07 QUARTZ VEIN CUTS GREENSTONE & INTERBEDDED SEDS CU 7 AG 7 ZN 7 CO 7 PB 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
547	8-2	ROB AND SOP	086/N/08	67 21 116 25	05 DISSEM IN BASALT FLOW HORIZON CU 7
548	8-2	ROBB GROUP ROBB 1-18	086/N/08	67 20 25 116 08 15	05 VEINS ALONG SHEARS & FAULTS IN BASALT CU 7
549*	8-3	ROBERTS LAKE SILVER VAN GROUP	077/A/03	68 11 00 106 32 45	04 BRECCIATED FRACTURE OR FAULT ZONE IN METAVOLCS AG 3 CU 7 PB 7 ZN 7
550	8-4	ROBIN SHOWING	065/J/05	62 22 099 33	07 SLFDS IN ZONE CUTTING GRANITE W SED INCLUSIONS CU 7 AU 7 AG 7 PB 7
551	8-2	RON/ TER/ HED/ MAS-SHOWING 1	086/O/06	67 28 35 115 29 20	05 FRACS/REPL/ AMYGDULES/ DISS IN BRECCIAS/ IN BASALT CU 7
552*	8-2	RON/ TER/ HED/ MAS-SHOWING 2	086/O/06	67 26 06 115 26 54	05 SHEAR ZONE & FAULT BRECCIA ZONE IN BASALT CU 6
553*	8-2	RON/ TER/ HED/ MAS-SHOWING 3	086/O/06	67 25 48 115 29 12	05 VEIN/ STRINGERS/DISS IN FAULT BRECC ZONE/IN BASALT CU 6
554	8-2	ROX	076/E/14	65 48 40 111 03 17	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7 AS 7
555	8-4	ROY	055/E/11	61 38 095 05	10 FE FM ASSOC WITH ARCHEAN GREENSTONE FE 7 CU 7
556	8-2	ROY	076/B/13	64 55 108 00	M IN VOLCANICS CU 7 ZN 7
557	8-2	RT/ EM	086/O/06	67 21 115 27 20	05 VEINS/FRACS/BRECCIA/DISS/REPL/FISSURES/IN BASALT CU 7
558	8-2	RUN	076/M/11	67 36 111 11	05 SLFDS AS DISSEM/ STRINGERS/ PODS IN FELSIC TUFFS CU 7 AG 7
559	8-4	S W OF LAST LAKE	055/K/04	62 08 093 50	03 QTZ VEINS ALONG SHEARS IN PILLOWED ANDESITIC LAVAS AU 7 CU 7
560	8-2	SA	076/F/16	65 49 20 108 03 20	M ? CU 7 ZN 7
561*	8-2	SALMITA (SOUTHEAST VEIN) NEW DISCOVERY VEIN/ SALERNO	076/D/03	64 03 35 111 11 59	03 QTZ VEIN IN GREYWACKE/ SLATE/ MICA SCHIST AU 6 ZN 7
562*#	8-2	SALMITA (NORTH ZONE) SALERNO	076/D/03	64 04 30 111 14 28	03 QTZ VEINS/ IN VOLCS/ ALSO ALONG VOLCS-SEDS CONTACT AU 2 PB 7 ZN 7 AG 7 AS 7 CU 7 W 7
563	8-2	SALMITA (OLSEN SHOWING) SALERNO	076/D/03	64 04 22 111 13 04	03 QTZ VEINS & LENSES IN SHEARED & BRECCIATED SLATE AU 7
564	8-2	SALMITA (SOUTH ZONE) SALERNO	076/D/03	64 03 22 111 12 22	03 QTZ VEIN ALONG VOLCS-SEDS CONTACT AU 7 AS 7
565	8-2	SAM GROUP-SHOWING NO 1	086/O/05	67 20 04 115 49 02	05 BRECCIA-FRACTURE ZONE IN BASALT CU 7
566	8-2	SAM GROUP-SHOWING NO 2	086/O/05	67 21 55 115 52 00	05 IN MATRIX OF BRECCIA ZONE IN BASALT CU 7 AG 7 AU 7
567	8-2	SAND	076/F/16	65 50 25 108 06 18	M ? CU 7 ZN 7 PB 7
568	8-4	SCHULTZ LAKE	066/A/13	64 47 097 46	05 QTZ VEIN ASSOC WITH FAULT ZONE IN METASEDS CU 7
569	8-2	SD/ NWA/ MCK - SHOWING 1 NWA 97	086/O/10	67 40 18 114 54 24	05 QTZ-CALCITE VEIN IN BASALT CU 7
570	8-2	SD/ NWA/ MCK - SHOWING 16 SD 16	086/O/10	67 37 18 114 54 30	05 BLEBS OF SULPHIDES IN BASALT CU 7
571	8-2	SD/ NWA/ MCK - SHOWING 17 NWA 69	086/O/10	67 35 24 114 54 00	05 PLATES & STRINGERS IN BASALT CU 7
572	8-2	SD/ NWA/ MCK - SHOWING 18 SD 16	086/O/10	67 37 18 114 56 24	05 PLATES & STRINGERS IN BASALT CU 7
573	8-2	SD/ NWA/ MCK - SHOWING 4/5/6	086/O/10	67 39 12 114 55 12	05 FRACTURE ZONE IN BASALT CU 7
574	8-2	SD/ NWA/ MCK - SHOWINGS 12 &13 MCK 38	086/O/10	67 35 42 114 57 24	05 MASSIVE SULPHIDE VEINS IN BASALT CU 7
575	8-2	SD/ NWA/ MCK - SHOWINGS 14 &15 SD 17	086/O/10	67 37 24 114 57 24	05 SULPHIDE ASSOCIATED WITH CALCITE IN BASALT CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
576	B-2	SD/ NWA/ MCK - SHOWINGS 2 & 3 SD 10	086/O/10	67 39 24 114 53 48	05 QTZ-CALCITE VEIN IN BASALT CU 7
577	B-2	SD/ NWA/ MCK - SHOWINGS 7-11 NWA 79	086/O/10	67 34 54 114 58 18	05 DISSEMINATIONS IN CALCITE VEINS IN BASALT CU 7
578	B-4	SELCO A EXTENSION ZONE	065/G/07	61 18 42 098 32 48	03 AU ALONG SHEARS IN CHERT-MAGNETITE FE FM AU 7 FE 7
579*	B-4	SELCO A ZONE	065/G/07	61 16 12 098 30 33	03 AU IN QTZ STRINGERS & W SLFD IN CHERT-MGT FE FM AU 5 FE 7 AS 7
580*#	B-4	SELCO B ZONE	065/G/08	61 17 098 30	03 AU ASSOC W SLFD/ OXIDE/ CARBONATE PHASES OF FE FM AU 2 AS 7
581	B-4	SELCO C ZONE	065/G/01	61 13 00 098 28 12	03 CHERT-MAGNETITE FE FM AU 7 AS 7 FE 7
582	B-4	SELCO D ZONE	065/G/07	61 18 06 098 36 06	03 IN FE FM LENSES IN TUFFS NEAR QTZ-MONZ DYKES AU 7 FE 7
583	B-2	SELLWOOD RIVER	076/K/14	66 47 24 109 15 18	05 MINOR DISSEM IN GABBRO CU 7
584	B-2	SEPTEMBER MIN GROUP 3	086/N/08	67 19 30 116 02	05 DISSEM/AMYGDULE-FRAC FILLS/VEINS/BRECCIA IN BASALT CU 7
585	B-2	SEPTEMBER MT 1-SHOWING 1	086/O/05	67 28 54 115 56 30	05 IN STRINGERS/ FRACTURES/ JOINT PLANES IN BASALT CU 7
586	B-2	SEPTEMBER MT 1-SHOWING 2	086/N/09	67 30 54 116 01 48	05 IN BASALT CU 7
587	B-2	SEPTEMBER MT 2-RIVER OCCURRENC BUD	086/O/05	67 26 30 115 40 00	05 IN VEINLET & ALONG JOINT IN SANDSTONE CU 7
588	B-2	SEPTEMBER MT 2-WESTERN HILL BUD	086/O/05	67 27 18 115 52 30	05 MALACHITE & OCCASIONAL PLATES NATIVE CU IN BASALT CU 7
589	OTHER	SHAMROCK DUBLIN GULCH	106/D/04	64 02 35 135 46 25	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
590	B-2	SHARON 1-OCCURRENCE NORTH THOMPSON LAKE SHOWING	086/O/11	67 33 10 115 10 00	05 IN BASALT CU 7
591	B-2	SHARON 1-OCCURRENCE 2 NORTH THOMPSON LAKE SHOWING	086/O/11	67 33 05 115 10 05	05 IN BASALT CU 7
592	B-2	SHARON 23 THOMPSON LAKE SHOWING	086/O/11	67 32 10 115 09 30	05 IN BASALT CU 7
593	B-1	SHELL CREEK	116/C/09	64 34 140 20	10 SPECULARITE WITH CHALCOPYRITE IN PROTEROZOIC ROCKS FE 7
594	B-2	SIK-SIK (CU)	076/N/12	67 43 18 109 42 36	05 QTZ-CALCITE VEINS CUTTING METASEDS CU 7
595	B-2	SIL/ SP	086/O/05	67 17 30 115 46 35	05 FAULT BRECCIA ZONES IN BASALT CU 7
596	OTHER	SILVER CITY	116/B/05	64 18 20 139 52 00	04 IN QUARTZ-CARBONATE ROCK AG 7 PB 7 ZN 7 AU 7 CU 7
597	B-4	SINK (STEW/ BLACKJACK) YANDLE-KAMINAK PROJECT	065/H/09	61 40 22 096 11 30	07 PODS &LENSES IN ALTERED FELSIC TUFFS WITHIN GABBRO CU 7 ZN 7 AG 7
598	B-6	SOMERSET ISLAND	058/B/15	72 53 093 53	07 ALONG A FAULT IN LIMESTONE & SILTSTONE CU 7 PB 7 ZN 7
599	B-4	SON YANDLE-KAMINAK PROJECT	065/H/16	61 50 00 096 05 48	07 LAYERS OF DISSEM TO SEMI-MASSIVE SLFDS IN TUFFS CU 7 ZN 7
600	B-4	SOUTH OF KAMINAK LAKE	055/L/03	62 03 15 095 12 17	05 IN GABBRO OR DIORITE CU 7
601	B-4	SOUTHEAST OF LAKE 430	065/P/11	63 33 45 097 26 10	01 U IN FRACTURES IN BASEMENT GNEISS U 7
602	B-4	SOUTHEAST OF ONEIL LAKE	055/L/06	62 21 46 095 08 15	08 IN SCHIST & AMPHIBOLITE CU 7 ZN 7
603	B-4	SOUTHERN LAKE	055/L/01	62 08 39 094 17 34	06 SLFDS DISSEM IN GREENSTONES ADJACENT SHEAR ZONES CU 7 NI 7
604*	B-2	SP-11 SEP LAKE	076/E/11	65 42 24 111 19 42	03 GNT-CHNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 CU 7 AG 7 AS 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
605	B-2	ST GERMAIN FAULT ZONE	086/K/09	66 39 45 116 06 00	01 YELLOW STAIN ON RHYOLITE TUFF WHERE FRACTURES CUT U 7
606	B-2	STACK	076/N/11	67 42 07 109 20 30	05 IN BASALT FLOWS CU 7
607	B-2	STAN CLAIMS (NORTHLAKE)	086/N/07	67 28 116 53	05 QTZ VEINS IN BASALT CU 7
608	B-2	STAN GROUP (LYNCH)	086/N/07	67 29 35 116 54 55	05 QTZ VEIN & AMYGDULE FILLING IN BASALT CU 7
609*	OTHER	STAND-TO HILL	106/D/03	64 02 00 135 10 15	04 FAULT VEIN BETWEEN GREENSTONE & SEDS CU 6 AG 6 PB 6 AU 6 ZN 6 MN 7
610	OTHER	STEWART-CATTO DUBLIN GULCH/ CABIN VEIN	106/D/04	64 02 03 135 47 30	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
611	B-2	STOCKPORT ISLANDS-1 MARCET ISLAND	076/N/14	67 47 109 05	05 DISS/AMYGDULES/& VEINS IN BASALTIC FLOWS CU 7
612	B-2	STOCKPORT ISLANDS-2	076/N/15	67 47 00 108 59 00	05 VEINS IN BASALT CU 7
613*	B-4	STONECALF LAKE	055/L/07	62 26 53 094 50 27	05 IN PARAGNEISS & AMPHIBOLITE CU 6 AG 7 ZN 7
614	B-2	SUE	076/F/16	65 57 108 28	05 MINOR GOSSAN SLFD IN SILICEOUS ZONES IN METASEDS CU 7
615	B-2	SUE GROUP	086/J/14	66 57 34 115 10 21	06 ? CU 7 NI 7
616	B-4	SW RANKIN INLET WP 1-2/ BETH 1-6 CLAIM GROUPS	055/K/10	62 38 092 50	05 SLFD STRINGERS & QTZ VEINLETS IN METAVOLC & GNEISS CU 7
617	B-2	SWAK 11	086/N/08	67 26 30 116 04	05 IN FRACTURE ALONG BASALT-SANDSTONE CONTACT CU 7
618	B-5	SWAN SHOWING (PERRY RIVER PROJ	066/N/12	67 38 45 101 54	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
619	B-1	TAB	116/O/16	67 49 20 138 16 00	02 LR PALEOZOIC RADIOACT CHERTS & INTRAFM CHERT-BRECC U 7 BA 7 SR 7 PHS7 CU 7
620*#	B-2	TAKIYUAK LAKE-HOOD RIVER NO 10	086/I/02	66 04 40 112 45 00	08 MASSIVE SLFDS IN METAVOLCANICS CU 2 ZN 2 AG 2 AU 7 PB 7
621*#	B-2	TAKIYUAK LAKE-HOOD RIVER NO 41	086/I/02	66 03 30 112 42 00	08 MASSIVE SLFDS IN METAVOLCANICS ZN 2 CU 2 AG 2
622*	B-4	TAVANI ZONE - DDH S S	055/K/03	62 08 16 093 19 30	05 DISSEMINATED SLFDS IN ACID TO INTERMEDIATE LAVAS CU 6
623*	B-4	TAVANI ZONE - DDH S 6	055/K/03	62 08 18 093 19	07 DISSEMINATED SLFDS IN ACID TO INTERMEDIATE LAVAS CU 6 ZN 7 AG 7 AU 7
624*	B-4	TAVANI ZONE-DDH S 1& S 2 CRI	055/K/03	62 07 42 093 11 18	05 SLFDS IN RHYOLITE BRECCIA CU 6 ZN 7 AG 7
625	B-2	TEA CLAIMS	086/N/12	67 35 35 117 31 50	05 DISS IN FAULT BRECCIA/FRAC & AMYGDULE FILLS/BASALT CU 7
626	B-4	TEB 1-18 CLAIMS	065/O/09	63 34 45 098 28 15	05 VEINS ALONG FRACTURES IN SHEARED PORPHYRIES CU 7 PB 7
627	B-4	THI 1-4 CLAIMS THIRTY MILE LK/ PP 213/ THT	065/P/10	63 38 05 096 41 25	07 VEINS & BRECCIA IN GNEISS & DIABASE CU 7 PB 7 AG 7 ZN 7 SB 7 BA 7
629	B-4	THLEWIAZA RIVER	065/A/07	60 29 096 51	11 IN GRANITE MO 7
630	B-2	TIL	076/N/11	67 40 28 109 15 40	05 IN BASALT FLOWS CU 7
631	B-1	TING/ NOTING/ PROSPECTING TOMBSTONE BATHOLITH	116/B/07	64 23 20 138 38 30	01 DISSEM IN PSEUDOLEUCITE TINGUAITE/AND IN FRACTURES U 7 TI 7 FSP7
632	B-2	TIP	086/O/12	67 37 25 115 47 20	05 QTZ VEIN IN QTZITE/ DISS-BRECCIA-REPLAC IN BASALT CU 7
633	B-2	TL	076/N/06	67 29 55 109 02 00	05 EPIGENETIC FRAC FILLS & DISS IN DOLOMITE CU 7
634*	B-2	TMK FROBISHER	076/D/06	64 16 17 111 22 37	03 SHEAR ZONE IN MAFIC VOLCS AU 5 CU 7

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
635	B-2	TOIVO GROUP MGB 186-189	086/N/08	67 21 00 116 18 30	05 VEIN ASSOCIATED WITH FAULT CUTTING BASALT CU 7
636*	B-2	TOM	086/O/05	67 19 48 115 51 30	05 BRECCIA-VEIN ZONES IN BASALT CU 6 AG 6
637	B-1	TOMBSTONE RIVER AREA	116/B/07	64 25 45 138 45	05 DISSEM IN DIORITE & IN QTZITE ADJ TO SYENITE CU 7
638*	B-4	TORIN GROUP-1	055/K/03	62 07 07 093 21 46	06 DISS IN SCHIST (ALTERED UM LENS)/ & SHEAR IN VOLCS CU 6 NI 6 AU 6 AG 6 CO 7
639	OTHER	TRAIL RIVER	106/L/03	66 14 135 21	02 BRECCIA IN PROTEROZOIC SEDIMENTS U 7 FE 7 CU 7 CO 7 AS 7 AG 7 MN 7
640	B-2	TRI 1	086/N/11	67 35 00 117 04 00	05 FRACTURES AND VEINS IN BASALT CU 7 BA 7
641	B-2	TRI 4	086/N/11	67 37 00 117 08 55	05 VEINS IN FRACTURED BASALT CU 7 BA 7
642	B-1	TUKU/ ALI	106/E/14	65 59 135 24	09 FAULT ZONE CUTTING SED ROCKS CU 7 PB 7 ZN 7 BA 7
643	B-4	TUL 9-15 & 26-36 CLAIMS	065/O/03	63 10 45 099 22	05 STRINGERS BLEBS & FRACTURES IN SHEARED PORPHYRY CU 7
644*	B-2	TUNDRA (MATTHEWS VEIN) JEJA NO 2	076/D/03	64 02 11 111 18 36	03 QTZ VEIN ALONG VOLCS-SEDS CONTACT AU 3 W 7 PB 7 AS 7
645*	B-2	TUNDRA (NO 2 VEIN)	076/D/03	64 01 45 111 10 02	03 QTZ VEIN ALONG VOLCS-SEDS CONTACT AU 5
646	B-2	TUNDRA (SOUTH ZONE) JEJA 8 & ROMA 5/ REP 2	076/D/03	64 01 45 111 10 05	03 QTZ VEINS & LENSES IN MAFIC VOLCS AU 7 W 7 CU 7 AS 7
647*	B-2	TUNDRA MINE BULLDOG YELLOWKNIFE/ TAURCANIS	076/D/03	64 02 11 111 18 36	03 QTZ VEINS IN VOLCS & ALONG SEDS-VOLCS CONTACT AU 3 W 7 PB 7 AS 7 CU 7
648	B-2	TURNER LAKE GOLD (CCI 34 & 35)	076/N/02	67 13 05 108 56 29	03 IN BAND OF ARENACEOUS & AMPHIBOLITIC ROCKS AU 7 AS 7
649*	B-2	TURNER LAKE-1 COM	076/N/02	67 13 46 108 57 10	06 SHEAR ZONE IN METAMORPHOSED QTZ DIORITE CU 6 NI 6 AU 6 AG 6 CO 7 PB 7
650	B-2	TURNER LAKE-2	076/N/02	67 11 40 108 56 25	06 ? CU 7 NI 7
651	B-4	TURQUETIL LAKE	055/E/13	61 55 49 095 56 26	08 DISSEM IN GREENSTONE CU 7 ZN 7
668	B-2	UO TCO	086/J/05	66 17 115 50	01 A SHEAR ZONE IN ACIDIC INTRUSIVES IS MINERALIZED U 7 TH 7
670	B-2	VERA GROUP - NIC SHOWING	086/O/05	67 18 24 115 48 37	05 LENSES & VEINS IN FRACTURE ZONE IN BASALT CU 7
671	B-2	VERA GROUP-VERA SHOWING	086/O/05	67 18 07 115 48 20	05 QUARTZ VEIN IN FRACTURED BASALT CU 7
672*	B-2	VIC GEOUP-CLAIM NO T4580-1	086/N/08	67 18 35 116 04 40	05 CHALCOCITE IN DIABASE DYKE CU 6
673*	B-2	VIC GROUP-CLAIM NO T4577 MAIN SHOWING	086/N/08	67 18 40 116 07 30	05 REPLACEMENTS IN FRACTURED BASALT ASSOC WITH FAULTS CU 6
674	B-2	WATER 22	086/N/08	67 27 35 116 02 20	05 BLEBS IN FLAT-LYING ZONES IN BASALT & SANDSTONE CU 7
675	B-4	WEST RIDGE SELCO	065/G/07	61 18 00 098 30 36	03 FRACTURES IN QUARTZITE AU 7
676	B-3	WESTERN RIVER-1	076/G/16	65 48 36 106 27 10	05 CHALCO GRAINS OR MASSES IN GABBRO SILL CU 7 FE 7
677	B-3	WESTERN RIVER-2	076/G/16	65 46 55 106 25 15	N CHALCO GRAINS OR MASSES IN GABBRO SILL CU 7 FE 7
678	B-4	WHALE COVE GROUP MAR 1-72/CAT/JAN/MINE/HI	055/K/02	62 11 42 092 32 48	07 QTZ VEINS & SHEARS/VOLCS-SEDS-INTRUSIVES MO 7 CU 7 NI 7 AU 7
679	B-2	WIG	076/L/15	66 48 21 110 50 00	03 QTZ LENSES WITHIN ACID TO BASIC VOLCANIC ROCKS CU 7 AU 7
680	B-2	WIL GROUP	086/N/09	67 31 50 116 12 30	05 BLEDS & AMYGDULE FILLINGS IN BASALT CU 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
681	B-2	WIN 102 WIN GROUP-SHOWING NO 3	086/O/09	67 37 40 114 00 10	05 VEINLETS SPECKS & PLATES IN AMYGDALOIDAL BASALT CU 7
682	B-2	WIN 90 & 76 WIN GROUP-SHOWINGS 2 & 4	086/O/09	67 37 30 114 00 20	05 QTZ VEINS & CU PLATES IN BASALT CU 7
683	B-3	WOLF	077/A/03	68 02 106 37	05 QUARTZ-CARB ZONES IN METAVOLCS CU 7 AS 7
684	B-3	WOLF LAKE	076/I/03	66 14 105 00 30	01 IN NARROW BANDS OF CHLORITIC SCHIST & IN APLITE U 7 TH 7
685	B-3	WOLF LAKE	076/I/03	66 14 53 105 02	07 GOSSANS/ META-SED BANDS IN GRN-GNSS ROCKS & MIGMAT CU 7 AU 7 ZN 7 NI 7
686	A-3	WOLLASTON POINT (POLAR GROUP)	076/N/10	67 37 108 35	05 DISSEMINATIONS IN BASALT FLOWS CU 7
690	B-1	WORM LAKE LARSEN CREEK MAP AREA	116/A/09	64 30 30 136 15 30	05 ? CU 7
691	B-2	XYZ 1-180/ SON/ SHEL	086/N/11	67 43 20 117 03	05 QTZ VEINS IN BASALT CU 7
692+#	B-2	YAVA AGRICOLA LAKE	076/G/12	65 36 40 107 56 11	08 MASSIVE SULPHIDE IN FELSIC METAVOLCANIC FLOW ZN 2 PB 2 AG 2 CU 2 AU 2
693	B-4	YENS	065/H/15	61 55 096 45 30	01 RAD ASSOC WITH PYRITE MATRIX IN RUSTY CONGLOM U 7
694+#	B-2	YUK MOUNTAIN LAKE PROPERTY	086/N/07	67 18 116 51	01 PITCHBLENDE IN HORNBY BAY SANDSTONE U 2
695	B-2	ZED	076/F/16	65 54 48 108 21 00	05 GOSSANS UNDERLAIN BY QTZ-MICA SCHISTS & QUARTZITES CU 7 AS 7
696	B-2	ZO GROUP	086/J/14	66 56 32 115 04 39	06 GOSSANS OVER GRANITIC GNEISSES CU 7 NI 7
697	OTHER	18 MILES EAST OF CAPE SIBBALD	047/B/07	68 17 10 085 02 33	05 IN GRANITIC ROCKS CU 7
698	B-4	4 MI SE SOUTHERN LAKE	055/L/01	62 08 07 094 07 52	05 IN GREENSTONE CU 7
699	B-4	4 MI W OF KAMINAK LAKE	055/L/03	62 11 37 095 30 00	05 IN HORNBLENDE SCHIST & AMPHIBOLITE CU 7
700+#	B-4	68-1 CHRISTOPHER ISLAND	056/D/02	64 04 43 094 33 06	02 RAD-IMPREGNTN/FRACTURES IN KAZAN ARKOSE NEAR DIKES U 2 CU 2 MO 2
701+#	B-4	68-2	056/D/02	64 10 10 094 33 34	02 RAD IN XENOLITHIC PART-FELSITE DIKE/FRACT IN DIKE U 2 MO 2
702+#	B-4	68-4 69-4/PIC-14/PIC-15	055/M/12	63 41 25 095 46 27	02 FAULT-FRACTURE ZONES CUTTING GRANODIORITE GNEISS U 2 CU 2 AG 2
703	B-4	68-4 SHOWING PROSPECTING PERMIT 208	055/M/12	63 41 095 46	02 MINERALIZED FRACTURES IN PARAGNEISS & AMPHIBOLITE U 7 CU 7
704	B-4	68-4A 69-4A	055/M/12	63 40 58 095 43 55	02 FAULT ZONES CROSSCUTTING GRANODIORITE GNEISS U 7 CU 7
705+	B-4	69-9 CHRISTOPHER ISLAND	056/D/02	64 06 26 094 37 22	02 RAD FRACTURES IN CHRISTOPHER ISLAND TRACHYTE U 5 CU 5 MO 5
706	B-4	69-9A CHRISTOPHER ISLAND	056/D/02	64 06 46 094 37 14	02 RAD FRACT IN KAZAN & CHRISTOPHER ISL ARKOSE/VOLC U 7 CU 7 AG 7 MO 7
707	B-4	7 MI SE SOUTHERN LAKE	055/L/01	62 07 18 094 04 07	05 IN GREENSTONE CU 7
708	B-4	71-1 NORTH CHANNEL OCCURRENCES	056/D/02	64 09 15 094 30 45	01 RADIOACTIVE FELSITE DIKE IN GNEISS U 7
709	B-4	71-2 NORTH CHANNEL OCCURRENCES	056/D/02	64 08 53 094 32 48	02 U-BREXIATED GNEISS-PERIPHERAL TO ALKALINE INTRSN U 7 CU 7 TH 7
710	B-4	71-4	056/D/02	64 04 50 094 31 36	02 FRACTURES IN CHRISTOPHER ISLAND VOLCANIC PLUGS U 7 CU 7
711	B-4	71-4 ZONE CHRISTOPHER ISLAND/ BL PROJECT	056/D/02	64 04 30 094 31	02 SHEARED-FRACTURED CONTACT OF DIABASE DYKE-SANDSTON U 7 CU 7
712	B-4	71-5	055/M/12	63 42 56 095 40 27	01 FRACTURES IN CHRISTOPHER ISLAND VOLCANICLASTIC SED U 7

Appendix 1A (cont.)

ID NUM	AREA	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
713+#	B-4	74-1 WEST	055/M/13	63 49 02 095 35 07	02 U IMPREGNATION AND BANDS IN KAZAN ARKOSE NEAR DIKE U 2 CU 2 AG 5
714+#	B-4	74-1E	055/M/13	63 48 19 095 33 17	02 U IMPREGNATION IN KAZAN ARKOSE NEAR TRACHYTE DIKE U 2 CU 2 AG 2
715	B-4	75-1	065/P/09	63 39 25 096 25 31	02 RAD FRACT IN CHRISTOPHER ISL VOLCANIC FLOW U 7 CU 7
717	B-4	75-3	055/M/14	63 47 45 095 07 38	02 U IMPREGNATION IN KAZAN ARKOSE NEAR TRACHYTE DIKE U 7 CU 7
718	B-4	75-5 BISSETT LAKE	055/M/11	63 44 57 095 14 08	02 U-IMPREGNATION IN S-CHANEL CONGLOMERATE NEAR DIKES U 7 CU 7
719+	B-4	75-6	055/M/13	63 50 10 095 35 22	02 U IMPREGNATION IN KAZAN ARKOSE NEAR DIKE ROCK U 5 CU 5
724	B-4	76-10	055/M/14	63 49 32 095 25 13	02 U-CU IN ARKOSE ADJACENT TO ALKALINE DIKE U 7 CU 7
735	B-4	76-2	055/M/12	63 43 27 095 52 14	01 U IN BIOTITE K-FELDSPAR PEGMATITE U 7
739	B-4	76-4B	055/M/15	63 56 59 094 45 34	02 CU-U IN ARKOSE ADJACENT TO ALKALINE DIKE U 7 CU 7
746+	B-4	76-9W	065/P/09	63 40 04 096 17 52	02 FRACTURE IN PORPHYRITIC CHRISTOPHER ISL TRACHYTE U 6 CU 6 PB 6 ZN 6
747	B-4	8 MILES NW CARR LAKE	065/I/01	62 10 54 096 03 26	05 SULPHIDES IN VOLCANICS CU 7
748	B-4	9 MILES NNW OF CARR LAKE	065/I/01	62 12 34 096 01 00	05 SULPHIDES IN VOLCANICS CU 7

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*********** IGSONCH //// END OF LIST ////

APPENDIX 1B

ALL FILE OCCURRENCES LISTED BY AREA GROUPING (A-1, A-2, etc.)

++ indicates "proven" deposits (status code 1 and 2, below)
+ indicates "significant" occurrences (status code 3 to 6, below)

NOTE: CANMINDEX commodity status code as follows:

1. Being Produced. Commodity is being extracted for sale.
2. Reserves, never produced. Reserves, or demonstrated resources, of the commodity are reported or can be calculated but the commodity has not yet been produced. (I.e., three dimensional data plus grade.)
3. Reserves, was produced. The commodity is no longer produced although there are known reserves or demonstrated resources.
4. Exhausted. The commodity is no longer produced and there are no known reserves or demonstrated resources.
5. Grade, two dimensions. Two dimensional data (e.g. length and width) and grade of the commodity are available*, but not enough to calculate reserves.
6. Grade, one dimension. One dimensional data and grade. (e.g. 1 drill hole.)
7. Present. Commodity reported, but insufficient data are available* to allow the status to be classified.

*Available is used here to mean published or otherwise in the public domain.

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
A-1	188+	FIRTH RIVER	117/C/01	69 09 23 140 09 23	03* GRAVEL BARS ON WEST SIDE OF FIRTH RIVER AU 3
A-1	448	MOUNT SEDGWICK AREA TRAIL RIVER	117/A/13	68 50 139 05	12 SCHEELITE PLACERS IN STREAM GRAVELS W 7
A-3	106+	COT 15 OX (1964)	076/J/11	66 42 10 107 26 40	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 CU 7 AS 7
A-3	107	COT 4 OX (1964)	076/J/11	66 42 40 107 26	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS CU 7 AU 7 AS 7
A-3	145	DOUG ALGAK ISLAND	076/N/09	67 34 20 108 27 56	05 ALONG JOINTS/IN AMYGDULES/IN BASALTS IN FAULT ZONE CU 7
A-3	148	DUNC ALGAK ISLAND	076/N/09	67 30 108 25	05 PROBABLE FRAC FILLS OR AMYGDULES IN BASALT CU 7
A-3	155	EKALULIA ISLAND-CHAR GROUP BARRY ISLANDS	076/N/09	67 33 108 03	05 VEINS DISS & AMYGDULES IN MASSIVE BASALT & FLOWS CU 7 AG 7
A-3	156	EKALULIA ISLAND-TINA GROUP BARRY ISLANDS	076/N/09	67 33 30 108 01 30	05 VEINLETS ASSOC W DIABASE DYKE IN FRAC ZONE IN BSLT CU 7 AG 7
A-3	297	JOE GROUP-1 CLAIM T 8825	076/O/12	67 39 15 107 48 45	05 FRAC FILLINGS/VEINS/& DISSEM IN GRANITIC ROCKS CU 7 AG 7
A-3	298	JOE GROUP-2	076/O/12	67 40 00 107 49 55	05 FRAC FILLS & DISSEM IN GRANITIC ROCKS CU 7
A-3	306	KANUYAK ISLAND BOB GROUP	076/O/05	67 24 06 107 54 00	05 IN DOLOMITE AT OR NEAR CONT WITH OVERLYING BASALT CU 7 AG 7
A-3	511	PETE GROUP IGLORUA ISLAND	076/N/09	67 38 12 108 26 30	05 FRACTURED & BRECCIATED ZONES IN BASALT CU 7
A-3	522++	POMIE	076/J/03	66 13 107 01	02 PITCHBLENDE/HEMATITE/CALCITE VEINS IN BASALT FLOWS U 2 CU 7
A-3	686	WOLLASTON POINT (POLAR GROUP)	076/N/10	67 37 108 35	05 DISSEMINATIONS IN BASALT FLOWS CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-1	2	A/ B/ AB BRENNER STOCK	116/B/11	64 31 30 139 07 30	01 RADIOACTIVITY ASSOCIATED WITH GRANITIC INTRUSIVE U 7 TH 7
B-1	12	ANY	116/B/08	64 18 138 18	05 QTZ VEINS CUTTING SEDS CU 7
B-1	13	APEX/ ELLIOT RIDGE	106/D/11	64 31 135 18	05 MISCELLANEOUS VEIN ? CU 7 PB 7
B-1	16	AS/ GH FISH CREEK	116/A/05	64 15 137 55	05 VEINS IN PORPH/&DISS IN PORPH & ADJ SEDS NEAR CONT CU 7 AU 7 AS 7
B-1	24	BARN MOUNTAIN	117/A/11	68 35 138 10	12 IN CALCAREOUS SHALE CU 7 U 7 MO 7 W 7
B-1	26	BERN BERN & FOG	116/K/01	66 08 30 140 09 30	05 IN SILICIFIED LIMESTONE CUT BY QUARTZ VEINS CU 7 AG 7
B-1	30	BLACKSTONE RIVER	116/G/14	65 45 139 15	M IN DOLOMITE AT CONTACT WITH MAFIC DYKES CU 7 ASB7
B-1	37	BON	117/A/07	68 16 30 137 47 00	01 RADIOACTIVE CHERT IN FRACTURES IN RUDACEOUS ROCKS U 7
B-1	39	BOND CREEK	106/D/11	64 39 30 135 00	02 HEMATITE-MAGNETITE IN SHEAR/ CU IN QTZ POD NEARBY CU 7 FE 7 U 7
B-1	115	CUNG	116/H/07	65 21 30 136 45 30	07 SLFDS IN QTZ VEIN CUTTING CARBONATES CU 7 PB 7 ZN 7
B-1	125*	DELTA IRON	117/A/09	68 35 136 45	10 BEDDED QUARTZ-SIDERITE IRON FORMATION FE 5 PHS5 MN 5
B-1	149	DYKE	116/G/01	65 01 138 05	M IN CONTACT ZONES OF BASIC IGNEOUS DYKES INTR SEDS CU 7 ASB7
B-1	189	FISHING BRANCH GIRLY & OTHER CLAIMS	116/J/05	66 23 139 41	09 BRECCIA/FRAC & VUG FILLS/REPLACEMENT-IN LST & DOLO CU 7 PB 7 ZN 7
B-1	215	GORDON	116/B/06	64 20 139 13	05 ? CU 7 PB 7
B-1	221	GREY COPPER HILL GREY COPPER KING	106/D/06	64 26 05 135 16 40	04 FAULT VEIN IN SEDS AG 7 CU 7 ZN 7 FE 7
B-1	271	ID/ OD/ OAS/ LALA	116/B/13	64 50 139 45	07 IN FAULT ZONE CUTTING SED ROCKS CU 7 ZN 7 PB 7
B-1	337	KIWI	116/B/10	64 44 138 46	09 FAULT BRECCIA ZONE CUTTING DOLOMITE PB 7 ZN 7 AG 7 CU 7
B-1	367	LIN	117/A/02	68 09 40 137 39	01 RADIOACTIVE CHERT IN FRACTURES IN RUDACEOUS ROCKS U 7
B-1	383	MAM	117/A/06	68 27 30 138 04 30	01 MAY BE STRUCT CONTRLD SKARNS &FRACTS IN INTRUSV RX U 7 MO 7 W 7 FSP7
B-1	397**	MARK HART RIVER	116/A/10	64 38 10 136 49 00	08 MASSIVE SULPHIDE LENSES IN ARGILLITE CU 2 ZN 2 AG 2 AU 2 PB 2
B-1	404	MCKAMEY COPPER NO 12/ZEBRA GP	116/A/10	64 40 45 136 55 30	05 IN FAULT ZONE BETWEEN ARGILL SEDS & GREENSTONE CU 7
B-1	405*	MCKAY HILL CRYSTAL/ FALLS CREEK	106/D/06	64 21 05 135 23 30	04 VEINS IN VOLCANICS AG 4 PB 4 CU 6 ZN 7
B-1	437	MINK	116/K/01	66 08 10 140 09 30	05 DISSEM SLFD IN SED ROCKS CU 7 PB 7 ZN 7
B-1	446	MOUNT FITTON AREA	117/A/06	68 30 138 00	12 SCHEELITE PLACERS WITH MINOR GOLD AND MOLYBDENUM W 7
B-1	447	MOUNT HARPER OZ (COAL CK DOME AREA)	116/B/12	64 44 139 44	09 VEINS & BRECCIA ZONES IN DOLOMITE & SHALE ZN 7 PB 7
B-1	461	NEBULOUS	116/B/07	64 28 138 46	01 ON JOINTS & IN FRACTURES IN MONZONITE PORPHYRY U 7 TH 7
B-1	483	OG COAL CREEK DOME AREA	116/B/13	64 50 140 00	09 GALENA & SPHALERITE IN CARBONATE SEQUENCE PB 7 ZN 7
B-1	484	OLD CROW RANGE	116/N/10	67 35 140 45	12 SCHEELITE PLACERS W 7
B-1	534*	RAE ZEBRA GROUP	116/A/10	64 40 45 136 57 45	05 VEIN IN FAULT/CUTS ARGILL SEDS & GREENSTONE SILL CU 6
B-1	535	RAE 8	116/A/10	64 39 136 58	05 SULFIDE LENS CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-1	593	SHELL CREEK	116/C/09	64 34 140 20	10 SPECULARITE WITH CHALCOPYRITE IN PROTEROZOIC ROCKS FE 7
B-1	619	TAB	116/O/16	67 49 20 138 16 00	02 LR PALEOZOIC RADIOACT CHERTS & INTRAFM CHERT-BRECC U 7 BA 7 SR 7 PHS7 CU 7
B-1	631	TING/ NOTING/ PROSPECTING TOMBSTONE BATHOLITH	116/B/07	64 23 20 138 38 30	01 DISSEM IN PSEUDOLEUCITE TINGUAITE/AND IN FRACTURES U 7 TI 7 FSP7
B-1	637	TOMBSTONE RIVER AREA	116/B/07	64 25 45 138 45	05 DISSEM IN DIORITE & IN QTZITE ADJ TO SYENITE CU 7
B-1	642	TUKU/ ALI	106/E/14	65 59 135 24	09 FAULT ZONE CUTTING SED ROCKS CU 7 PB 7 ZN 7 BA 7
B-1	690	WORM LAKE LARSEN CREEK MAP AREA	116/A/09	64 30 30 136 15 30	05 ? CU 7
B-2	1	A-14	076/M/02	67 08 41 110 52 56	07 VEINS IN SLATE & RHYOLITE AG 7 PB 7 ZN 7 SB 7 CU 7 AS 7
B-2	3	AC	086/O/06	67 20 50 115 22 35	05 IN FRACTURED BASALT AT MARGIN OF DIABASE DYKE CU 7
B-2	5	AL	086/O/10	67 36 00 114 43 25	05 SEAMS/PLATES/DISS/SHEARS/FRACS/VEINS/ IN BASALT CU 7
B-2	6+	ALF GROUP-SHOWING A	086/O/05	67 16 06 115 58 30	05 BRECCIA SHEAR ZONE IN BASALT CU 6 AG 7 AU 7
B-2	7	ALF GROUP-SHOWING B	086/O/04	67 14 31 115 57 52	05 VEIN ASSOCIATED WITH SHEAR ZONE IN BASALT CU 7
B-2	14	ARCH 186	086/N/12	67 43 00 117 56 25	05 QUARTZ VEIN IN BASALT CU 7
B-2	15	ARCH 28	086/N/13	67 46 00 117 46 50	05 SHEAR ZONE VEIN IN BASALT CU 7
B-2	17	AXE (1)	076/N/11	67 33 109 05	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
B-2	18	AXE (2)	076/N/11	67 36 18 109 24 16	05 EPIGENETIC FRAC FILLINGS IN BASALT FLOWS & DIABASE CU 7
B-2	19	AXE/ KIL	076/N/11	67 38 30 109 18 20	05 IN BASALT FLOWS CU 7
B-2	21	BAC	076/C/16	64 55 108 04	M IN VOLCANICS CU 7 ZN 7
B-2	22+	BAR-3 BAR LAKE	076/E/11	65 41 30 111 13 24	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 6 CU 7 AS 7
B-2	23	BAR-42 SEP LAKE	076/E/11	65 42 12 111 18 54	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 7 CU 7 AG 7 AS 7
B-2	27	BET	086/O/11	67 32 55 115 03 20	05 SULPHIDES IN BASALT ALONG FAULT CU 7
B-2	28	BETH GROUP-1	086/J/14	66 45 25 115 07 23	06 IN GNEISS EAST OF MUSKOX INTRUSION CU 7 NI 7
B-2	29	BETH GROUP-2	086/J/14	66 47 22 115 07 46	06 IN GNEISS EAST OF MUSKOX INTRUSION CU 7 NI 7
B-2	34	BO 57 & 120	086/O/05	67 17 00 115 46 00	05 ALONG FRACTURES AND DISSEMINATED IN BASALT CU 7
B-2	35	BOB 101-103	086/N/11	67 42 117 21	05 QUARTZ VEIN IN BASALT CU 7
B-2	36	BOB 125	086/N/06	67 15 35 117 23 50	05 VEIN IN BASALT CU 7
B-2	38	BONANA LAKE CANINE CLAIMS	086/K/09	66 41 00 116 12 20	01 U IN INTRUSIVE PORPHYRY-STRONG RAD WITH FRACTURES U 7
B-2	40	BOX (MAIN SHOWING)	076/E/11	65 42 48 111 00 30	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7
B-2	46	BUD 157-204	086/O/05	67 23 00 115 44 00	05 QUARTZ VEIN CUTTING BASALT CU 7
B-2	47	BUD 37-72/DON 1-36/ORE 73-103	086/N/08	67 17 116 12	05 SHEARED & BRECCIATED ZONE IN BASALT CU 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	48	BUD 398-415	086/O/05	67 24 18 115 58	05 QTZ VEINS CUTTING SANDSTONE CU 7
B-2	49	BUD 589-590	086/O/05	67 27 25 115 59 00	05 FINE SPECKS IN GABBROIC DYKE INTRUDING BASALT CU 7
B-2	50	BUD 837-924	086/O/12	67 33 30 115 48 30	05 DISS & FRACS IN BASALT/ ALSO FRACS IN SANDSTONE CU 7
B-2	51	BUD 942-947	086/O/12	67 32 05 115 53 45	05 DISS/VEINLETS/& FRAC FILLS IN SHALES & SANDSTONES CU 7 FE 7
B-2	52	C GROUP	076/F/16	65 46 108 08	05 MINOR GOSSAN SLFD IN SILICEOUS ZONES IN METASEDS CU 7
B-2	53	C GROUP	076/M/03	67 10 40 111 02 25	07 SLFDS IN SHEARED BRECCIATED ZONES IN RHYOLITE CU 7 ZN 7 AG 7 PT 7 PB 7 NI 7 AU 7
B-2	54	C GROUP	086/N/03	67 14 22 117 13 48	05 ALONG FAULT SEPARATING GRANITE & SANDSTONE CU 7
B-2	56	CAL 42	086/N/10	67 38 10 116 57 50	05 QTZ VEIN IN BASALT CU 7
B-2	57	CAL 43	086/N/10	67 38 20 116 58 40	05 QTZ VEIN IN BASALT CU 7
B-2	58	CAL 44 CAL-3	086/N/10	67 38 05 116 59 00	05 VEIN IN SS DYKE IN BASALT/ ALSO VEIN IN BASALT CU 7
B-2	59	CAL 45-46 CAL-2	086/N/10	67 38 20 116 59 40	05 LENSES & VEINS IN SHEAR CUTTING BASALT CU 7
B-2	60	CAM GROUP	086/N/09	67 33 45 116 15 05	05 REPLACEMENTS & AMYGDULE FILLING IN BASALT CU 7 AG 7
B-2	61	CAN/FOX/CLUB/CO/RED/WG	086/O/13	67 54 15 115 50 40	07 VEINS ASSOCIATED WITH DIABASE DYKE IN DOLOMITE CU 7 AU 7 AG 7 NI 7 CO 7 FE 7 TLC7
B-2	62++	CANADIAN NICKEL-MAIN SHOWING PAT/ CONGO/ MOP	076/E/14	65 45 52 111 13 35	03 GNT-CMNG-SLFD GNEISS BAND (AMPHIBOLITE)IN METASEDS AU 2 AG 8 CU 8 AS 8 FE 8
B-2	64++	CARL 7	086/N/12	67 44 00 117 35 35	05 CHALCOCITE IN BASALT CU 2
B-2	65	CARL 94	086/N/11	67 43 30 117 28 55	05 SLFD LENSES IN VEIN CUTTING BASALT CU 7 PB 7 AG 7
B-2	70	CCI	076/N/02	67 12 25 108 54 00	05 ? CU 7
B-2	71	CED LAKE PROSPECTING PERMIT 315	076/M/02	67 07 110 45	07 UNDERLAIN BY VOLCS & METASEDS CU 7 ZN 7 PB 7
B-2	72	CHAPMAN ISLANDS-1 ISLAND NO 20	076/N/14	67 52 45 109 10 30	05 AMYGDULES VEINS & DISSEMINATIONS IN BASALTIC FLOWS CU 7
B-2	73	CHAPMAN ISLANDS-2	076/N/14	67 49 30 109 01 30	05 SEAMS & VEINS IN BASALTIC FLOWS CU 7
B-2	75	CHILL GROUP-1	076/M/07	67 27 16 110 50 26	05 IN CHLORITE SCHIST CU 7
B-2	76	CHILL GROUP-2	076/M/07	67 28 00 110 59 35	05 DISS ALONG SHEAR PLANES IN CHLORITE SCHIST CU 7
B-2	80	CHUCK GROUP	076/L/15	66 48 40 110 59 00	05 DISSEM IN MAFIC VOLCANICS CU 7
B-2	92	COM GROUP -COM 2	086/N/09	67 30 48 116 26 42	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
B-2	93	COM GROUP -COM 3	086/N/09	67 31 36 116 25 48	05 PODS IN CALCITE VEINS IN FRACTURES IN BASALT CU 7
B-2	94	COM-GROUP-COM 1	086/N/09	67 33 12 116 26 54	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
B-2	95+	COMUR	086/K/09	66 38 03 116 04 10	01 U IN VEINS & BRECCIA ZONE IN ECHO BAY GROUP ROCKS U 6
B-2	96	CONCESSION LAKE SW	076/E/12	65 40 23 111 46 00	05 IN HORNBLENDE DIORITE OR HB-BIOTITE GRANDIORITE CU 7
B-2	98	CONTWOYTO LAKE MCAVOY J SHOWING	076/E/16	65 55 110 20	M MINERALIZN PRESUMABLY ASSOC WITH SMALL STRINGERS U 7 NI 7 BI 7 AG 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	99	COP 14 18 & 30	086/N/10	67 30 40 116 47 10	05 MASSIVE QUARTZ VEINS IN BASALT CU 7
B-2	100	COP 361-538	086/O/11	67 40 45 115 28 30	05 IN CHERT BRECCIA ALONG SHEAR CUTTING SED ROCKS CU 7
B-2	101	COP 6 & 9 & 10	086/N/10	67 31 10 116 47 00	05 QTZ VEINS CUTTING BASALTS CU 7
B-2	103	COPPER LAMB	086/N/10	67 37 55 116 51 45	05 LENSES IN VEINS IN BASALT CU 7 BA 7
B-2	104**	CORONATION NORTHWEST ZONE CORONATION WEST SHOWING/MGB 18	086/N/08	67 20 05 116 27 00	05 VEINS & BRECCIA ALONG FAULT IN BASALT CU 2 AG 7
B-2	105	CORONATION SOUTHEAST ZONE CORONATION EAST SHOWING/MGB 86	086/N/08	67 19 50 116 22 30	05 QTZ VEINS IN BRECCIATED BASALT ALONG FAULT CU 7 AG 7
B-2	108*	CU 1-36	086/O/05	67 21 20 115 47 30	05 VIENS IN BRECCIA SHEAR ZONES CUTTING BASALTS CU 6 AG 7
B-2	109	CU-HOC	086/O/05	67 19 55 115 47 25	05 VEINS IN FRACTURE ZONES IN BASALTIC FLOWS CU 7
B-2	110	CU-TAR GROUP - NO 4 LODE	086/O/05	67 18 21 115 47	05 BRECCIATED RED CHERT CEMENTED &PARTLY REPL BY SFLD CU 7
B-2	111*	CU-TAR GROUP-NO 1 LODE	086/O/05	67 18 43 115 47 01	05 STRINGERS IN FAULTED AND FRACTURED ZONE IN BASALT CU 6
B-2	112*	CU-TAR GROUP-NO 2 LODE	086/O/05	67 18 42 115 47	05 STRINGERS AND VEINLETS IN HEMATIZED BASALT CU 6
B-2	113*	CU-TAR GROUP-NO 3 LODE	086/O/05	67 18 41 115 47	05 VEIN/LENSES IN SHEAR/STRINGERS IN FRAC ZONE/BASALT CU 6
B-2	116	D GROUP	086/J/14	66 57 38 115 20 41	05 AROUND STOCKS INTR SCHIST & MIGMATITE & IN FAULTS CU 7
B-2	127**	DICK NO 1 AMCO LAKE GROUP	086/N/08	67 19 50 116 02 35	05 VEINLETS PODS & IRREG MASSES IN BRECC VEIN IN BSLT CU 2 AG 7
B-2	129	DIZ/ JIM/ HERB	086/N/07	67 17 30 116 46 40	05 FRACTURE FILLINGS & VEINS IN BASALT CU 7
B-2	130	DOLL SHOWING A (DOLL 1)	086/O/10	67 36 36 114 31 30	05 VEINS FILLING FRACTURES IN BASALT CU 7
B-2	131*	DOLL SHOWING B (DOLL 8)	086/O/09	67 36 42 114 27 30	05 FAULT IN BASALTIC FLOWS CU 6 FE 7
B-2	132	DOLL SHOWING C	086/O/09	67 37 12 114 28 30	05 NEAR TOP OF BASALT FLOW CU 7
B-2	133	DOLL SHOWING D	086/O/09	67 37 12 114 27 30	05 VEINLETS IN QTZITE BED BTWN BASALT & DIABASE SILL CU 7
B-2	134	DOLL SHOWING E	086/O/09	67 37 114 26 15	05 VEINLETS ASSOC WITH HORNFELS AT BASALT-ARGILL CONT CU 7 FE 7
B-2	135	DON GROUP-1	086/N/07	67 29 47 116 42 45	05 VEINS IN BASALT CU 7
B-2	136	DON GROUP-2	086/N/07	67 29 43 116 40 31	05 IN BASALT CU 7
B-2	137	DOT 13 & 20 CIRCLE LAKE 2 & 3	086/N/08	67 25 20 116 27 00	05 VEINS IN SHEARED & BRECCIATED BASALT CU 7
B-2	138	DOT 1425	086/N/08	67 25 30 116 21 00	05 FRACTURE (SHEAR) ZONES IN BASALT CU 7
B-2	139	DOT 145-146	086/N/08	67 27 00 116 29 30	05 QTZ VEIN IN BASALT NEAR FAULTS CU 7
B-2	140	DOT 210	086/N/08	67 24 55 116 22 40	05 SHEARED FRACTURED ZONE IN BASALT CU 7
B-2	141**	DOT 47 COPPERMINE R NO 47 ZONE	086/N/08	67 24 36 116 24 43	05 TABULAR BODY IN FRACTURED (FAULT ZONE) BASALTS CU 2
B-2	142	DOT 725	086/N/07	67 23 10 116 42 35	05 VEIN CUTTING BASALT CU 7
B-2	143	DOT 881 LAKE 490	086/N/07	67 25 05 116 46 15	05 VEIN CUTTING BASALT CU 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	144	DOT 900	086/N/10	67 30 48 116 45 35	05 QTZ VEINS IN BASALT CU 7
B-2	158*	EM 30	086/0/06	67 17 24 115 17 06	05 VEIN IN BASALT CU 6 AG 7
B-2	160	EMILE GROUP PASCAR	086/N/07	67 21 116 31	05 IN BASALT CU 7
B-2	162*	ESC 37-38	086/0/12	67 35 15 115 33 25	05 NODULES ADJ TO FAULTS/ ALSO DISSEM/ IN SANDSTONE CU 6
B-2	163*	ESC 63/69	086/0/12	67 35 25 115 35 25	05 NODULES & LAYERS IN SANDSTONE NEAR FAULT CU 6
B-2	164	ESC 68	086/0/12	67 36 10 115 30 00	05 NODULES & REPLACEMENTS IN SANDSTONES BESIDE FAULT CU 7
B-2	165	ESCAPE GROUP	086/N/11	67 33 55 117 28 30	05 VEINS & STRINGERS IN FRACTURE ZONE IN DOLOMITE CU 7
B-2	166*	ESKER LAKE BAY	076/E/11	65 41 36 111 09 12	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 AG 7 CU 7 NI 7 AS 7
B-2	167	EVE TREE RIVER	086/P/01	67 12 112 20	05 STOCKWORK IN FAULT CUTTING DOLOMITE & LIMY SHALE CU 7
B-2	168	F (1)	076/N/10	67 33 43 108 57 30	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
B-2	169	F (2)	076/N/10	67 35 16 108 57 00	05 SYNGENETIC-DISSEM/AMYGD/FRAC FILL IN BASALT FLOWS CU 7
B-2	170	FAR EXTENSION 1	086/N/12	67 44 50 117 35 35	05 QTZ-CARBONATE VEIN CUTTING BASALT CU 7
B-2	171	FAR EXTENSION 2	086/N/13	67 45 15 117 41 40	05 QTZ VEINS IN BASALT CU 7
B-2	172	FAR EXTENSION 3/4/5	086/N/13	67 45 20 117 43 00	05 VEINS IN BASALT CU 7
B-2	173	FAR 4 (H-10)	086/N/12	67 44 30 117 45 00	05 QTZ VEIN IN BASALT CU 7
B-2	174	FAR-1 (H-1)	086/N/12	67 43 36 117 51 00	05 STRINGERS IN QTZ VEIN CUTTING BASALT CU 7
B-2	175	FAR-10	086/N/12	67 43 42 117 51 54	05 QTZ VEIN IN BASALT CU 7
B-2	176	FAR-11	086/N/12	67 44 36 117 44 42	05 QTZ-CALCITE VEIN IN BASALT CU 7
B-2	177	FAR-2 (H-3)	086/N/12	67 43 48 117 45 36	05 QTZ VEIN IN BASALT CU 7
B-2	178*	FAR-3 (H-8)	086/N/12	67 44 18 117 40 36	05 VEINLET SWARM IN SHEAR-BRECCIA ZONE IN BASALT CU 6
B-2	179	FAR-6 (H-15)	086/N/12	67 44 24 117 42 36	05 CALCITE VEIN IN BASALT CU 7
B-2	180	FAR-7	086/N/12	67 44 24 117 43 48	05 CALCITE VEIN IN BASALT CU 7
B-2	181	FE GROUP	076/D/06	64 28 111 19	05 IN CHLORITIZED AMPHIBOLITE CU 7
B-2	185	FF/ OP	076/F/16	65 50 108 15	05 GOSSANS ON DISS SLFD IN SILICEOUS ZONES IN METASED CU 7
B-2	186	FGP	076/N/10	67 32 50 108 58 00	05 ? CU 7
B-2	187	FINGERS LAKE FOX-BOX	076/E/11	65 43 24 111 10 48	03 GNT-CMNG-SLFD GNEISS BAND(AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7
B-2	193	FRED-1	086/N/10	67 34 12 116 57 06	05 QTZ CALCITE VEIN IN BASALT CU 7
B-2	194	FRED-2	086/N/10	67 31 42 116 53 30	05 IN BASALT CU 7
B-2	196	GAIL	086/P/01	67 03 112 06	05 DISS & MASSIVE SLFDS IN SHEAR IN METASEDIMENTS CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	197	GAL	086/O/04	67 14 40 115 59 35	05 SHEAR ZONES IN BASALT CU 7
B-2	198	GALENA POINT-1 DON	076/N/13	67 53 10 109 53 15	07 VEINS CUTTING GRANITE PB 7 CU 7
B-2	199+	GALENA POINT-2 DON	076/N/13	67 53 50 109 54	07 VEINS CUTTING GRANITE PB 6 ZN 6 CU 6 AG 6
B-2	200	GDF - CHANCE SHOWING	086/O/06	67 24 00 115 27 20	05 IN FRACS IN HIGHLY FRACTURED OR SHATTERED BASALT CU 7
B-2	201	GDF 28 - HAUG 1 AREA	086/O/06	67 25 06 115 28 42	05 VEIN & SHATTERED ZONE IN FAULT OR SHEAR IN BASALT CU 7
B-2	202	GDF 77-78 HAUG 2 AREA/ FOKKER CREEK	086/O/06	67 23 54 115 27 12	05 FRACS ASSOC WITH QTZ-CALCITE VEIN MATRIX IN BASALT CU 7
B-2	208+	GM/ DM/ FD/ SA	086/O/05	67 24 115 34 40	05 IN BRECCIATED ZONES IN BASALT CU 6
B-2	209	GO	086/O/11	67 32 25 115 21 00	05 FAULT BRECCIA ZONES IN BASALTIC FLOWS CU 7
B-2	211	GOOD/ BREN	086/N/10	67 43 00 116 53 50	05 IN SEDIMENTS & DIABASE & BASALT CU 7
B-2	213	GORD 153	086/N/12	67 41 10 117 44 20	05 NETWORK OF CALCITE VEINLETS IN BASALT CU 7
B-2	214	GORD 301-414	086/O/04	67 10 50 115 59 30	05 IN BASALT BRECCIA AND IN FLOW TOP BASALTS CU 7
B-2	216	GOS GROUP	086/J/14	66 57 12 115 21 30	05 DISS IN SHEAR(IN MYLONITE?)& IN JOINT IN METASEDS CU 7
B-2	217	GOSSAN LAKE DUO	076/E/11	65 36 18 111 01 30	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7 AS 7
B-2	218	GP BELLEAU LAKE	086/J/05	66 16 36 115 47	01 UNKNOWN U 7
B-2	220+	GREG CLAIMS	086/N/10	67 41 00 116 55 00	05 VEINS IN BRECCIATED FISSURE ZONES IN BASALT CU 6
B-2	226+	GRR 90	086/N/11	67 33 00 117 27 35	05 VEINS IN FRACTURE ZONE IN DOLOMITE CU 6
B-2	228	GUN GROUP-2 GENERAL RESOURCES NO 2 SHOWING	086/N/10	67 34 54 116 32 54	05 NATIVE COPPER IN BASALT CU 7
B-2	229	GUN GROUP-3 GENERAL RESOURCES NO 3 SHOWING	086/N/10	67 34 42 116 34 12	05 MINOR CHALCOCITE & MALACHITE IN MASSIVE BASALT CU 7
B-2	230	GUN GROUP/ VANMETAL CLAIMS	086/N/10	67 34 42 116 37	05 DISSEM NATIVE COPPER IN BASALT CU 7
B-2	232+	H GROUP-NO 1 VEIN	076/M/11	67 42 04 111 20 55	04 QTZ VEIN ZONE CUTTING GRANITIC ROCKS AU 5 CU 7 ZN 7 AG 7
B-2	233	H.P.LAKE CANINE 5-6	086/K/09	66 43 30 116 11 30	02 RAD ALONG SLATY ARGILLITE-RHYOLITE TUFF CONTACT U 7 CU 7 AG 7 AU 7
B-2	234	HA GROUP - SHOWING A TOWER	086/O/10	67 36 54 114 52 06	05 VEIN IN SHEAR (FAULT?) IN BASALTIC FLOWS CU 7
B-2	235	HA GROUP - SHOWING B TOWER	086/O/10	67 36 30 114 50 30	05 SRTINGERS IN JOINTS ASSOC WITH FAULT/ IN BASALT CU 7
B-2	236	HA GROUP - SHOWING D TOWER	086/O/10	67 36 30 114 46 48	05 DISSEMINATIONS ALONG FAULT IN BASALT CU 7
B-2	237+	HAC	076/K/01	66 03 11 108 25 00	08 IN GRANITIC & MAFIC GNEISS ZN 6 CU 7
B-2	238++	HACKETT R-EAST CLEAVER LAKE CLEAVER LAKE	076/F/16	65 55 00 108 27 39	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCS ZN 2 AG 2 CU 2 PB 2 AU 2
B-2	239++	HACKETT RIVER - BOOT LAKE ZONE	076/F/16	65 54 46 108 26 15	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCANICS ZN 2 CU 2 AG 2 PB 2 AU 2
B-2	240+	HACKETT RIVER - JO ZONE NORTH	076/F/16	65 54 41 108 21 19	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCANICS ZN 6 AG 6 CU 6 PB 6 AU 6
B-2	241+	HACKETT RIVER - JO ZONE SOUTH	076/F/16	65 54 34 108 20 36	08 STRATIFORM MASSIVE SFLDS IN FELSIC VOLCANICS ZN 6 AG 6 CU 6 PB 6 AU 6

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	242*	HACKETT RIVER-FINGER LAKE ZONE	076/F/16	65 54 36 108 25 51	08 STRATIFORM MASSIVE SLFDS IN FELSIC VOLCANICS ZN 6 AG 6 CU 6 PB 6 AU 6
B-2	243**	HACKETT RIVER-MAIN A ZONE BB	076/F/16	65 55 05 108 21 59	08 STRATIFORM MASSIVE SULPHIDES IN FELSIC VOLCS ZN 2 AG 2 CU 2 PB 2 AU 2
B-2	247	HARRY GROUP	086/N/10	67 38 05 116 53 50	05 QTZ VEIN CUTTING BASALT CU 7
B-2	248	HAY & VOIR	086/O/10	67 33 30 114 53 40	05 VEINLETS IN BASALT BRECCIA CU 7
B-2	251	HEPBURN LAKE	086/J/05	66 22 115 30	01 U 7
B-2	252	HI	076/M/07	67 28 110 56	07 UNDERLAIN BY VOLCS/ GRANODIORITE/ DIORITE/ DIABASE CU 7 ZN 7
B-2	253**	HIGH LAKE	076/M/07	67 22 50 110 51 20	08 MASSIVE-DISS-VEINLETS/STRATIFORM SLFDS IN METAVOLC CU 2 ZN 2 AU 2 AG 2 PB 2
B-2	254**	HIGH LAKE-AB ZONE	076/M/07	67 22 50 110 51 20	08 MASSIVE-DISS-VEINLETS/STRATIFORM SLFDS IN METAVOLC CU 2 ZN 2 AU 2 AG 8 PB 8
B-2	255**	HIGH LAKE-D ZONE	076/M/07	67 22 35 110 51 18	08 MASSIVE-DISS-VEINLETS/STRATIFORM SLFDS IN METAVOLC ZN 2 CU 2 AG 2 AU 2 PB 2
B-2	256	HM	086/O/05	67 26 10 115 32 40	05 QTZ VEINS ASSOC WITH FAULT IN BASALT CU 7
B-2	257	HOOD RIVER (GOSSAN U-1) BOREALIS	076/L/15	66 53 45 110 54 00	08 GOSSAN ON MASSIVE PYRRHOTITE IN FELSIC VOLCS CU 7 ZN 7 AG 7
B-2	258	HOOD RIVER (GOSSAN U-2) BOREALIS	076/L/15	66 53 45 110 47 10	M GOSSAN CU 7 ZN 7 AG 7
B-2	259	HOOD RIVER (GOSSAN U-3) BOREALIS	076/L/15	66 47 50 110 45 00	M GOSSAN IN GREENSTONE CU 7 ZN 7 AG 7
B-2	260	HOOD RIVER (GOSSAN U-4) BOREALIS	076/L/15	66 46 30 110 53	M SLFD STRINGERS & MASSES IN VOLCS NEAR GRANITE CU 7 ZN 7 AG 7
B-2	261	HOOD RIVER (GOSSAN U-5) BOREALIS	076/L/15	66 56 110 54	M GOSSAN CU 7 ZN 7 AG 7
B-2	262	HOOD RIVER (GOSSAN U-6) BOREALIS	076/L/15	66 49 10 110 57 30	M GOSSAN CU 7 AG 7 AU 7
B-2	263	HOOD RIVER NORTH	076/K/14	66 58 42 109 21 48	05 IN METASEDS CU 7
B-2	266*	HR	086/O/11	67 36 10 115 07 35	05 VEINLETS AND STOCKWORK IN BASALT CU 6
B-2	270	HUSKY GROUP	086/N/08	67 20 50 116 07 05	05 IN FRACTURES IN FAN-SHAPED ZONE IN BASALT CU 7
B-2	273	IKE GROUP	086/N/08	67 15 116 10	05 IN BASALT CU 7
B-2	275	IS 148-149	086/N/08	67 18 00 116 00 55	05 VEINS IN FRACTURED/FISSURED ZONE IN BASALT CU 7 AG 7
B-2	276	IS 179-180	086/N/08	67 18 10 116 02 35	05 SEAMS & VEINLETS IN FRACTURE ZONE IN BASALT CU 7
B-2	278**	IZOK LAKE	086/H/10	65 38 00 112 47 45	08 METAMORPHOSED VOLCANOGENIC MASSIVE SULPHIDES ZN 2 CU 2 AG 2 PB 2 AU 7
B-2	282*	JACK-NO 13 VEIN	086/N/07	67 25 116 45	05 VEIN CUTTING BASALT CU 5 AG 5
B-2	284	JE SUN BAY (CONTWOYTO LAKE)	076/E/11	65 43 12 111 22 42	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 7 CU 7 AS 7
B-2	285	JH GROUP-JH 22-OCCURRENCE 1 SHOWING NO 8	086/O/06	67 25 20 115 18 55	05 IN BASALT CU 7
B-2	286	JH GROUP-JH 22-OCCURRENCE 2 SHOWING NO 8	086/O/06	67 25 17 115 18 35	05 IN BASALT CU 7
B-2	287	JH GROUP-JH 33 SHOWING NO 8	086/O/06	67 25 13 115 18 55	05 IN BASALT CU 7
B-2	288	JIM GROUP - JIM 1 SHOWING HEARNE COPPERMINE	086/N/08	67 22 36 116 15 00	05 IN BASALT CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	289	JIM GROUP - JIM 2 SHOWING HEARNE COPPERMINE	086/N/08	67 24 36 116 12 48	05 IN QTZ-CALCITE IN BASALT CU 7
B-2	290	JIM GROUP - JIM 3 SHOWING HEARNE COPPERMINE	086/N/08	67 22 54 116 11 00	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
B-2	291	JIM GROUP - JIM 4 SHOWING HEARNE COPPERMINE	086/N/08	67 23 18 116 11 24	05 DISSEM NATIVE CU IN APHANITIC BASALT CU 7
B-2	292	JIM N92301-413	086/N/08	67 22 50 116 00 15	05 FAULT ZONE IN BASALT/ALSO CU-FE IN GABBROIC DYKE CU 7 FE 7
B-2	293	JIM N92502	086/O/05	67 20 48 115 55 00	05 CC-QTZ VEINS ASSOC W SHATTER ZONE IN BASALT FLOWS CU 7 AG 7
B-2	294	JIM 26-OCCURRENCE 1 NO 5 SHOWING	086/O/11	67 31 10 115 12 55	05 IN BASALT CU 7
B-2	295	JIM 26-OCCURRENCE 2 NO 5 SHOWING	086/O/11	67 31 00 115 13 15	05 IN BASALT CU 7
B-2	296	JIM 36 NO 5 SHOWING	086/O/11	67 31 15 115 14 15	05 IN BASALT CU 7
B-2	299	JOK	086/O/05	67 21 115 33	05 BRECCIATED ZONE IN BASALT CU 7
B-2	300	JOS/ CIS/ PAL/ TON/ MIC/ ACK	086/O/06	67 26 15 115 03 00	05 STRINGERS OF QUARTZ IN BASALTS NEAR DIABASE DYKE CU 7
B-2	301	JS/ FM/ RIP	086/O/06	67 18 35 115 28 25	05 BRECCIA ZONES/ VEINLETS/JOINTS/FRACTURES-IN BASALT CU 7
B-2	302**	JUNE	086/O/11	67 34 25 115 03 30	05 IN HIGHLY FRACTURED AND BRECCIATED BASALT CU 2
B-2	303	K	076/F/15	65 56 15 108 31 45	M ? CU 7
B-2	307	KARLA 1-13	086/N/11	67 41 30 117 05 30	05 QTZ VEINS IN BASALT CU 7 FE 7
B-2	308	KAT 20 KAT NO 1 SHOWING	086/O/05	67 15 29 115 52 56	05 DISSEMINATED NATIVE COPPER IN BASALT CU 7
B-2	309	KAT 31 KAT NO 2 SHOWING	086/O/04	67 14 43 115 52 04	05 DISSEMINATED NATIVE COPPER IN BASALT CU 7
B-2	310*	KAT 37 KAT NO 3 SHOWING	086/O/03	67 14 31 115 20 21	05 QUARTZ-CALCITE VEIN FILLING IN SHEARS IN BASALT CU 6
B-2	311	KAT 5 KAT SHOWING NO 4	086/O/05	67 16 07 115 51 02	05 IN HEMATIZED & BRECCIATED BASALT FLOW TOP CU 7
B-2	313	KEIKO GROUP	086/H/11	65 38 113 13	05 QUARTZ STOCKWORK ALONG CONTACT OF SEDS AND GNEISS CU 7
B-2	314	KENNARCTIC EXP LTD	076/M/07	67 25 00 110 45 00	07 VEINS OR STOCKWORKS CU 7 ZN 7
B-2	315	KENNARCTIC-SHOWING NO 1 JAMES RIVER RESERVATION	076/M/11	67 38 30 111 04	03 DISSEMINATIONS IN QTZ IN SHEAR ZONE IN RHYOLITE CU 7 AU 7
B-2	316	KENNARCTIC-SHOWING NO 10 JAMES RIVER RESERVATION	076/M/03	67 10 30 111 03	07 SHEAR ZONE IN DACITE CU 7 ZN 7 AG 7
B-2	317	KENNARCTIC-SHOWING NO 12 JAMES RIVER RESERVATION	076/M/03	67 07 111 04	05 STRINGERS IN SHEAR OR BRECCIA ZONE IN ALTERED VOLC CU 7
B-2	318	KENNARCTIC-SHOWING NO 14 JAMES RIVER RESERVATION	076/M/02	67 05 30 110 46	05 DISSEMINATIONS IN SHEARED PYROCLASTICS & DACITE CU 7
B-2	319	KENNARCTIC-SHOWING NO 15 JAMES RIVER RESERVATION	076/M/02	67 04 56 110 45 05	05 DISS & STRINGERS IN SHEAR ZONE IN ALTERED DACITE CU 7
B-2	320	KENNARCTIC-SHOWING NO 2 JAMES RIVER RESERVATION	076/M/11	67 35 59 111 02	05 DISS & STRINGERS IN SHEARED CHERTY TUFF BED CU 7 AG 7
B-2	321	KENNARCTIC-SHOWING NO 3 JAMES RIVER RESERVATION	076/M/11	67 37 111 03	05 DISS & REPLACEMENT IN SHEAR ZONE IN VOLCANICS CU 7
B-2	322	KENNARCTIC-SHOWING NO 4 JAMES RIVER RESERVATION	076/M/10	67 31 30 110 58	05 QTZ VEIN IN VCLCS CU 7 AU 7
B-2	323	KENNARCTIC-SHOWING NO 5 JAMES RIVER RESERVATION	076/M/06	67 29 30 111 13	05 DISS ALONG SHEAR IN VOLCANICS CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	324	KENNARCTIC-SHOWING NO 6 JAMES RIVER RESERVATION	076/M/06	67 22 45 111 05	05 DISS IN SHEAR ZONE IN VOLCS ADJ TO DIORITE MASS CU 7
B-2	325	KENNARCTIC-SHOWING NO 7 JAMES RIVER RESERVATION	076/M/06	67 22 111 05	05 SILICIFIED SHEAR ZONE IN RHYOLITE NEAR DIOR STOCK CU 7
B-2	326	KENNARCTIC-SHOWING NO 8 JAMES RIVER RESERVATION	076/M/02	67 14 30 110 58 00	05 DISS & QTZ VEINS IN SHEAR ZONES IN RHYOLITE CU 7
B-2	327	KENNARCTIC-SHOWING NO 9 JAMES RIVER RESERVATION	076/M/02	67 14 110 57	05 QUARTZ VEINS IN SHEAR ZONES IN RHYOLITE CU 7
B-2	328	KENNEDY SHOWINGS	076/O/03	64 14 50 111 16 27	03 QTZ VEINS & STRINGERS IN SHEARED SLATE & GREYWACKE AU 7 CU 7 PB 7 AS 7
B-2	331*	KIL	086/O/05	67 19 42 115 37	05 DISSEM IN SANDSTONE INTERCALATED WITH BASALT CU 6
B-2	332	KIL (1)	076/N/11	67 32 52 109 14 00	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
B-2	333	KIL (2)	076/N/11	67 32 00 109 07 45	05 EPIGENETIC FRAC FILLS & DISSEM IN DOLOMITE CU 7
B-2	334	KIL (3)	076/N/11	67 30 34 109 01 31	05 EPIGENETIC FRAC FILLINGS IN BASALT FLOWS & DIABASE CU 7
B-2	346	LARRY GROUP	086/N/07	67 25 58 116 46 54	05 VEINLETS IN FRACTURE ZONE IN BASALT CU 7
B-2	347	LARS GROUP NO 22 LODE	086/N/07	67 27 55 116 36 56	05 SILICIFIED SHEAR ZONE IN BASALT CU 7
B-2	348*	LASH 210-300	086/O/11	67 32 15 115 24 30	05 CALCITE VEINS IN BASALT FLOWS CU 6
B-2	349	LASH 321 322 329 & 330	086/O/12	67 31 00 115 34 35	05 DISSEMINATIONS IN SANDSTONE NEAR DIABASE DYKE CU 7
B-2	350	LASH 523-524	086/O/05	67 29 25 115 40 55	05 NATIVE CU ALONG FRACS IN BASALT INTERCAL W SEDS CU 7
B-2	351	LEAH	086/N/10	67 37 20 116 36 25	05 NATIVE CU GRAINS &IN VEINS/SLFD IN FRACS/IN BASALT CU 7
B-2	352	LEL NO 1	086/O/10	67 30 24 114 54 36	05 NATIVE CU PLATES IN FRACTURE IN BASALT CU 7
B-2	353	LEL NO 10	086/O/10	67 31 18 114 50 24	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
B-2	354	LEL NO 11	086/O/10	67 31 48 114 49 00	05 IN BASALTIC FLOW TOP CU 7
B-2	355	LEL NO 12	086/O/10	67 32 42 114 49 06	05 IN BASALTIC FLOW TOP CU 7
B-2	356	LEL NO 13	086/O/10	67 32 54 114 49 48	05 IN FAULT BRECCIA IN BASALT CU 7
B-2	357	LEL NO 14	086/O/10	67 33 12 114 48 12	05 SHEAR IN BASALT CU 7
B-2	358	LEL NO 15	086/O/10	67 33 06 114 51 48	05 FAULT ZONE IN BASALT CU 7
B-2	359	LEL NO 2	086/O/10	67 30 48 114 52 12	05 AMYGDALOIDAL CU IN BASALT FLOW TOP CU 7
B-2	360	LEL NO 3	086/O/10	67 30 42 114 50 24	05 AMYGDALOIDAL CU IN BASALT FLOW TOP CU 7
B-2	361	LEL NO 4	086/O/10	67 30 48 114 50 18	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
B-2	362	LEL NO 5	086/O/10	67 30 48 114 48 36	05 SULPHIDES IN BASALT FLOW TOP CU 7
B-2	363	LEL NO 7	086/O/10	67 31 06 114 49 06	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
B-2	364	LEL NO 8	086/O/10	67 31 18 114 49 24	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7
B-2	365	LEL NO 9	086/O/10	67 31 12 114 49 48	05 AMYGDULES & DISSEMINATIONS IN BASALT CU 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	366	LEWES ISLAND CHAPMAN ISLANDS-3	076/N/15	67 53 15 108 54 40	05 IN BASALT FLOWS CU 7
B-2	368+	LIZ	086/O/11	67 31 15 115 03 25	05 FAULT ZONE IN BRECC BASALT/ALSO STRINGERS IN BASAL CU 6
B-2	369	LKS	086/K/10	66 39 116 49	05 QTZ VEINS & STOCKWORKS CUT VOLCS & GRANODIORITE? CU 7 AG 7
B-2	370	LLOYD 5	086/N/07	67 28 116 43 40	05 QTZ VEIN CU 7
B-2	373	LOW LAKE PROPERTY L/ J/ D/ H/ K/ M GROUPS	076/M/07	67 17 13 110 54 06	07 DISS-MASS IN SHEARS & FAULT BRECCIA/VEINS/IN VOLCS CU 7 PB 7 NI 7 GRP7
B-2	375	LR 12 NO 9 SHOWING	086/O/06	67 26 15 115 20 50	05 IN BASALT CU 7
B-2	376	LR 27 NO 9 SHOWING	086/O/06	67 25 55 115 21 00	05 IN BASALT CU 7
B-2	377	M GROUP	076/M/03	67 08 00 111 07 30	05 IN METAVOLCS CU 7
B-2	380	MAG & MAT GROUPS	086/O/06	67 28 05 115 21 25	05 BASALT BRECCIA ZONES NEAR DIABASE CU 7
B-2	381+	MAG/ LOU/ NA MUSKOX LAKE	076/C/09	64 42 30 108 12 30	08 DISSEM SLFDS IN VOLCS CU 6 ZN 6 AG 6
B-2	384	MAR 1-100 (MAR NO 1 SHOWING)	086/N/07	67 23 36 116 46 06	05 FAULT BRECCIA ZONE IN BASALT CU 7 AG 7
B-2	385	MAR 1-100 (MAR NO 2 SHOWING)	086/N/07	67 22 24 116 46 06	05 IN BASALT CU 7 AG 7
B-2	386	MAR 1-100 (MAR NO 3 SHOWING)	086/N/07	67 22 48 116 45 18	05 IN MATRIX OF BRECCIA IN BASALT CU 7 AG 7
B-2	387	MAR 117 RABBIT LAKE	086/N/07	67 24 45 116 48 00	05 QTZ VEIN IN BASALT CU 7
B-2	388	MAR 132-133 - MAR NO 7 SHOWING SOUTH GROUP	086/N/07	67 28 06 116 51	05 STRINGER/ IN BASALT? CU 7
B-2	389+	MAR 132-133 MAR NO 5 SHOWING SOUTH GROUP	086/N/07	67 26 116 47	05 QTZ VEIN IN BRECCIATED BASALT CU 5
B-2	390	MAR 132-133- MAR NO 6 SHOWING SOUTH GROUP	086/N/07	67 24 30 116 51	05 BRECCIA ZONE/ IN BASALT? CU 7
B-2	391	MAR 322-325	086/N/10	67 34 05 116 49 00	05 DISSEM AND FRAC FILLS AND VEINS IN BASALT CU 7
B-2	392	MAR 326-335 NORTH GROUP	086/N/10	67 35 30 116 52 40	05 VEINS IN BASALT CU 7
B-2	393	MAR 500 562 - NO 2 SHOWING	086/N/08	67 16 12 116 08	05 ZONE OF QTZ-CALCITE VEINS CUTTING BASALT CU 7
B-2	394	MAR 500 562 - NO 4 SHOWING	086/N/08	67 16 24 116 04 54	05 QTZ-CALCITE VEINS IN BASALT CU 7
B-2	395	MAR 500-562 - NO 1 SHOWING	086/N/08	67 16 42 116 07	05 CHALCOCITE STRINGERS IN SHEAR ZONE IN BASALT CU 7
B-2	396+	MAR 500-562 - NO 5 SHOWING	086/N/08	67 15 30 116 04 48	05 IN BASALT CU 6
B-2	398	MAS 7-8	086/C/05	67 27 115 30 35	05 STRINGERS & VEINS ASSOC W FAULT IN BASALT & SLATE CU 7 BA 7
B-2	399	MAS 9	086/O/06	67 26 50 115 29 40	05 QUARTZ-CALCITE VEIN IN BASALT AND SANDSTONE CU 7 BA 7
B-2	400	MATTHEWS LAKE (1)	076/D/03	64 01 54 111 14 34	05 GOSSAN ZONE/ BEDROCK IS MAFIC VOLCANICS CU 7 AU 7
B-2	401	MATTHEWS LAKE (2)	076/D/03	64 02 08 111 15 10	05 QTZ VEINLETS IN GOSSAN ZONE IN VOLCS CU 7
B-2	402	MATTHEWS LAKE (3)	076/D/03	64 02 24 111 15 16	05 SUGARY VUGGY QTZ IN GOSSAN WITHIN VOLCS CU 7 PB 7
B-2	403	MATTHEWS LAKE (4)	076/D/03	64 05 18 111 18 39	05 IN VOLCS CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	418+	METAL 13-26	086/N/08	67 20 15 116 30 00	05 FILLINGS AND REPLACEMENTS IN BASALT CU 6
B-2	419	METAL 5 & 7 & 12	086/N/08	67 23 15 116 28 10	05 IN BASALT (ASSOC WITH FAULT ?) CU 7 AG 7 PT 7
B-2	420	MGB 101-180/ 233-255	086/N/08	67 20 10 116 18 30	05 VEINS AND BRECCIAS IN BASALT CU 7
B-2	421	MGB 181-185	086/N/08	67 21 25 116 21 20	05 DISSEM IN MASSIVE BASALT AND IN AMYGDULES CU 7
B-2	422	MGB 277	086/N/08	67 20 05 116 14 05	05 IN QTZ-CARBONATE VEIN IN BASALT CU 7
B-2	423	MGB 325-396	086/N/08	67 19 20 116 11 00	05 VEINS IN BASALT CU 7
B-2	425	MID 1-100	086/N/11	67 41 40 117 09 30	05 SHEAR ZONE VEINS IN BASALT/ ALSO CU ASSOC W DYKES CU 7
B-2	426	MID 101-200 - MID-2 CLAIM NO 115	086/N/11	67 39 36 117 09 42	05 QTZ-CALCITE VEIN ASSOC WITH DIABASE DYKE CU 7
B-2	427	MID 101-200-MID-4 CLAIM NO 104	086/N/11	67 40 18 117 09 48	05 QTZ-CALCITE VEIN IN BASALT CU 7
B-2	428	MID 181-200-MID-5	086/N/11	67 39 24 117 06 06	05 QTZ-CALCITE VEIN IN BASALT CU 7
B-2	429	MID 101-200-MIN-3 CLAIM NO 108	086/N/11	67 39 36 117 11 30	05 QTZ-CALCITE VEIN IN BASALT CU 7
B-2	430	MIKE 11 (SHOWING NO 6)	086/O/06	67 29 25 115 11 05	05 IN BASALT CU 7
B-2	431	MIKE 11 14 21 & 32	086/O/06	67 29 05 115 12 35	05 NATIVE COPPER IN BASALTS CU 7
B-2	432	MIKE 14 (SHOWING NO 6)	086/O/06	67 29 35 115 11 45	05 IN BASALTS CU 7
B-2	433	MIKE 32 (JUDY LAKE)	086/O/06	67 28 50 115 13 10	05 NATIVE COPPER IN BASALTS CU 7
B-2	436	MIN 101-200-MID 1 CLAIM NO 120	086/N/11	67 38 54 117 11 24	05 CHALCOCITE IN FINE FRACTURES & DISSEM IN BASALT CU 7
B-2	440	MM 1-72	086/O/05	67 18 25 115 40 10	05 IN BASALTS CU 7
B-2	441	MOLLIE MAC MINES (AREA NO 2) WEST END OF CANOE LAKE	076/M/03	67 08 111 08 30	08 MASSIVE SULPHIDES IN SHEARED RHYOLITE CU 7 ZN 7 PB 7 AG 7
B-2	442	MONNIER 19-36 & ILROCK 1-36	086/N/07	67 21 15 116 37 40	05 VEIN IN FRACTURE IN AMYGDALOIDAL BASALT CU 7 AG 7
B-2	451	MOX	076/K/02	66 06 25 108 31 45	05 GOSSANS IN METASEDIMENTS CU 7 AS 7 AU 7
B-2	457	NAN	086/O/06	67 29 24 115 26 50	05 VEINS IN BASALT CU 7
B-2	458+	NAN-GRA-PRO	086/O/05	67 21 30 115 44	05 VEIN SYSTEM IN FAULT ZONE IN BASALTIC FLOW CU 6
B-2	462+	NEW ATHONA-CONTWOYTO LAKE NAT	076/E/11	65 41 12 111 12 12	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 CU 7 AS 7 FE 7
B-2	463	NEWNORTH (SOUTH GROUP) CLAIM CG 25	076/O/06	64 15 57 111 22 38	05 SLFDS IN QUARTZ CU 7 AU 7
B-2	465	NOR 27-72/WIL 73-79/HOLE 1-8	086/N/09	67 32 00 116 05 25	05 BELBS/VEINLETS/DISSEM IN BASALT CU 7
B-2	466	NOR 47	086/O/06	67 26 35 115 13 00	05 NATIVE COPPER IN BASALTS CU 7
B-2	467	NOR 48 - OCCURRENCE 1	086/O/06	67 26 20 115 13 25	05 VEIN IN BASALT CU 7
B-2	468	NOR 48 - OCCURRENCE 2	086/O/06	67 26 25 115 13 45	05 VEIN IN BASALT CU 7
B-2	469	NOR 94 - OCCURRENCE 1 NO 7 SHOWING	086/O/06	67 26 55 115 12 55	05 IN FRACTURED BASALT ALONG FAULT CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	470	NOR 94 - OCCURRENCE 2 NO 7 SHOWING	086/O/06	67 26 45 115 12 45	05 IN FRACTURED BASALT ALONG FAULT CU 7
B-2	471	NORMA LAKE SE	076/E/11	65 42 19 111 15 45	05 IN SEDIMENTS NEAR FAULT CU 7
B-2	473*	NORTH VEIN P/ Q/ R/ X/ SIDEWALK GROUP	076/M/11	67 42 28 111 23 06	03 SHEAR VEIN CUTTING SYENO-DIORITE AU 5 CU 7 PB 7
B-2	479	NWT-1 (CLAIM 81) H-7	086/N/12	67 44 48 117 45 18	05 BRECCIA & AMYGDULE FILLING IN BASALT CU 7
B-2	480	NWT-2 (CLAIM 78 OR 79)	086/N/12	67 44 54 117 46 30	05 BRECCIA ZONE IN BASALT CU 7
B-2	490	OOK GROUP	086/N/09	67 32 116 21	05 NARROW VEINS & DISSEM IN BASALT CU 7
B-2	491	OP	086/O/04	67 14 10 115 48 50	05 SPECKS OF NATIVE COPPER IN BASALT CU 7
B-2	496	OX	076/C/09	64 36 25 108 12 30	M SLFDS IN GRAPHITIC ARGILLITE CU 7 ZN 7
B-2	497	PAN/ DIB/ MAS	086/O/05	67 20 50 115 35 40	05 VEINSSHEARS/VEINLETS/AMYGDULES/BRECCIA/IN BASLATS CU 7
B-2	498	PAT 2 NO 9 SHOWING	086/O/06	67 26 35 115 21 40	05 IN BASALT CU 7
B-2	499	PAT 5	086/N/10	67 32 00 116 40 00	05 QTZ FISSURE VEIN IN BASALT CU 7
B-2	500	PAT 6 NO 9 SHOWING	086/O/06	67 26 30 115 22 15	05 IN BASALT CU 7
B-2	503	PEC GROUP	086/N/07	67 16 18 116 56	02 YELLOW U & GREEN CU STAINS IN MATRIX OF FELS SST U 7 CU 7
B-2	504	PENNY 1-36 GOLDEN WEST	086/N/09	67 35 116 15	05 IN BASALT CU 7
B-2	505	PER	076/C/09	64 41 108 10	05 GOSSAN ALONG CONTACT BETWEEN MAFIC VOLC & METASEDS CU 7
B-2	512	PICKLE CROW 140 141 200 & 201 JENNY NO 3 VEIN	086/O/05	67 19 47 115 51 12	05 VEIN IN FRACTURE ZONES IN BASALTIC LAVAS CU 7
B-2	513	PICKLE CROW 140 141 200 & 201 HEARNE VEIN (JENNY NO 1)(MAIN)	086/O/05	67 20 15 115 50 10	05 VEIN IN FAULT-BRECCIA ZONE IN BASALT CU 7
B-2	514**	PICKLE CROW 350 360 361 & 370 FRANKLIN NO 2 VEIN	086/O/05	67 17 55 115 48 55	05 VEINS ALONG FAULT IN BASALTIC FLOWS CU 2 AG 6
B-2	519	PIT	076/N/06	67 23 20 109 06 35	07 QTZ VEINS/ UNDERLAIN BY DIABASE & SEDS CU 7 ZN 7 AG 7 AU 7
B-2	523	PORT EPWORTH	076/M/12	67 39 50 111 31 00	05 IN METAVOLCS CU 7 PB 7
B-2	525	PRO/ HOC/ KIL	086/O/05	67 20 55 115 39 55	05 FRACTURE FILLINGS & VEINS IN BASALTIC FLOWS CU 7
B-2	536	RAH	086/K/14	66 50 117 00	01 U IN FRACTURES+RELATED VEINS#ALSO DISS IN GRANITE U 7 AU 7 AG 7 PT 7
B-2	539	RAY ADAM	086/P/08	67 17 112 16	05 IN CARBONATE (INCLUSIONS?)IN QTZ VEIN CUTTING GRNS CU 7
B-2	540	RAY GROUP	086/N/09	67 35 20 116 17 30	05 IN BASALT BORDERING FAULT ZONE CU 7 AG 7
B-2	541*	RED	076/D/03	64 06 24 111 17 48	03 DISSEM TO MASSIVE SLFDS IN RHYOLITES-ANDESITES AU 6 CU 7
B-2	545	RIT GROUP	086/N/11	67 35 20 117 25 10	05 STOCKWORK VEINS IN FRACTURED DOLOMITE CU 7
B-2	547	ROB AND SOP	086/N/08	67 21 116 25	05 DISSEM IN BASALT FLOW HORIZON CU 7
B-2	548	ROBB GROUP ROBB 1-10	086/N/08	67 20 25 116 00 15	05 VEINS ALONG SHEARS & FAULTS IN BASALT CU 7
B-2	551	RON/ TER/ HED/ MAS-SHOWING 1	086/O/06	67 28 35 115 29 20	05 FRACS/REPL/ AMYGDULES/ DISS IN BRECCIAS/ IN BASALT CU 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	552*	RON/ TER/ HED/ MAS-SHOWING 2	086/O/06	67 26 06 115 26 54	05 SHEAR ZONE & FAULT BRECCIA ZONE IN BASALT CU 6
B-2	553*	RON/ TER/ HED/ MAS-SHOWING 3	086/O/06	67 25 48 115 29 12	05 VEIN/ STRINGERS/DISS IN FAULT BRECC ZONE/IN BASALT CU 6
B-2	554	ROX	076/E/14	65 48 40 111 03 17	03 GNT-CMNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 7 AG 7 CU 7 AS 7
B-2	556	ROY	076/B/13	64 55 108 00	M IN VOLCANICS CU 7 ZN 7
B-2	557	RT/ EH	086/O/06	67 21 115 27 20	05 VEINS/FRACS/BRECCIA/DISS/REPL/FISSURES/IN BASALT CU 7
B-2	558	RUN	076/M/11	67 36 111 11	05 SLFDS AS DISSEM/ STRINGERS/ PODS IN FELSIC TUFFS CU 7 AG 7
B-2	560	SA	076/F/16	65 49 20 108 03 20	M ? CU 7 ZN 7
B-2	561*	SALMITA (SOUTHEAST VEIN) NEW DISCOVERY VEIN/ SALERNO	076/D/03	64 03 35 111 11 59	03 QTZ VEIN IN GREYWACKE/ SLATE/ MICA SCHIST AU 6 ZN 7
B-2	562**	SALMITA (NORTH ZONE) SALERNO	076/D/03	64 04 30 111 14 28	03 QTZ VEINS/ IN VOLCS/ ALSO ALONG VOLCS-SEDS CONTACT AU 2 PB 7 ZN 7 AG 7 AS 7 CU 7 W 7
B-2	563	SALMITA (OLSEN SHOWING) SALERNO	076/D/03	64 04 22 111 13 04	03 QTZ VEINS & LENSES IN SHEARED & BRECCIATED SLATE AU 7
B-2	564	SALMITA (SOUTH ZONE) SALERNO	076/D/03	64 03 22 111 12 22	03 QTZ VEIN ALONG VOLCS-SEDS CONTACT AU 7 AS 7
B-2	565	SAM GROUP-SHOWING NO 1	086/O/05	67 20 04 115 49 02	05 BRECCIA-FRACTURE ZONE IN BASALT CU 7
B-2	566	SAM GROUP-SHOWING NO 2	086/O/05	67 21 55 115 52 00	05 IN MATRIX OF BRECCIA ZONE IN BASALT CU 7 AG 7 AU 7
B-2	567	SAND	076/F/16	65 50 25 108 06 18	M ? CU 7 ZN 7 PB 7
B-2	569	SD/ NWA/ MCK - SHOWING 1 NWA 97	086/O/10	67 40 18 114 54 24	05 QTZ-CALCITE VEIN IN BASALT CU 7
B-2	570	SD/ NWA/ MCK - SHOWING 16 SD 16	086/O/10	67 37 18 114 54 30	05 BLEBS OF SULPHIDES IN BASALT CU 7
B-2	571	SD/ NWA/ MCK - SHOWING 17 NWA 69	086/O/10	67 35 24 114 54 00	05 PLATES & STRINGERS IN BASALT CU 7
B-2	572	SD/ NWA/ MCK - SHOWING 18 SD 16	086/O/10	67 37 18 114 56 24	05 PLATES & STRINGERS IN BASALT CU 7
B-2	573	SD/ NWA/ MCK - SHOWING 4/5/6	086/O/10	67 39 12 114 55 12	05 FRACTURE ZONE IN BASALT CU 7
B-2	574	SD/ NWA/ MCK - SHOWINGS 12 &13 MCK 38	086/O/10	67 35 42 114 57 24	05 MASSIVE SULPHIDE VEINS IN BASALT CU 7
B-2	575	SD/ NWA/ MCK - SHOWINGS 14 &15 SD 17	086/O/10	67 37 24 114 57 24	05 SULPHIDE ASSOCIATED WITH CALCITE IN BASALT CU 7
B-2	576	SD/ NWA/ MCK - SHOWINGS 2 & 3 SD 10	086/O/10	67 39 24 114 53 48	05 QTZ-CALCITE VEIN IN BASALT CU 7
B-2	577	SD/ NWA/ MCK - SHOWINGS 7-11 NWA 79	086/O/10	67 34 54 114 58 18	05 DISSEMINATIONS IN CALCITE VEINS IN BASALT CU 7
B-2	583	SELLWOOD RIVER	076/K/14	66 47 24 109 15 18	05 MINOR DISSEM IN GABBRO CU 7
B-2	584	SEPTEMBER MIN GROUP 3	086/N/08	67 19 30 116 02	05 DISSEM/AMYGDULE-FRAC FILLS/VEINS/BRECCIA IN BASALT CU 7
B-2	585	SEPTEMBER MT 1-SHOWING 1	086/O/05	67 28 54 115 56 30	05 IN STRINGERS/ FRACTURES/ JOINT PLANES IN BASALT CU 7
B-2	586	SEPTEMBER MT 1-SHOWING 2	086/N/09	67 30 54 116 01 48	05 IN BASALT CU 7
B-2	587	SEPTEMBER MT 2-RIVER OCCURRENC BUD	086/O/05	67 26 30 115 40 00	05 IN VEINLET & ALONG JOINT IN SANDSTONE CU 7
B-2	588	SEPTEMBER MT 2-WESTERN HILL BUD	086/O/05	67 27 18 115 52 30	05 MALACHITE & OCCASIONAL PLATES NATIVE CU IN BASALT CU 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	590	SHARON 1-OCCURRENCE NORTH THOMPSON LAKE SHOWING	086/O/11	67 33 10 115 10 00	05 IN BASALT CU 7
B-2	591	SHARON 1-OCCURRENCE 2 NORTH THOMPSON LAKE SHOWING	086/O/11	67 33 05 115 10 05	05 IN BASALT CU 7
B-2	592	SHARON 23 THOMPSON LAKE SHOWING	086/O/11	67 32 10 115 09 30	05 IN BASALT CU 7
B-2	594	SIK-SIK (CU)	076/N/12	67 43 18 109 42 36	05 QTZ-CALCITE VEINS CUTTING METASEDS CU 7
B-2	595	SIL/ SP	086/O/05	67 17 30 115 46 35	05 FAULT BRECCIA ZONES IN BASALT CU 7
B-2	604*	SP-11 SEP LAKE	076/E/11	65 42 24 111 19 42	03 GNT-CHNG-SLFD GNEISS BANDS(AMPHIBOLITE)IN METASEDS AU 6 CU 7 AG 7 AS 7
B-2	605	ST GERMAIN FAULT ZONE	086/K/09	66 39 45 116 06 00	01 YELLOW STAIN ON RHYOLITE TUFF WHERE FRACTURES CUT U 7
B-2	606	STACK	076/N/11	67 42 07 109 20 30	05 IN BASALT FLOWS CU 7
B-2	607	STAN CLAIMS (NORTHLAKE)	086/N/07	67 28 116 53	05 QTZ VEINS IN BASALT CU 7
B-2	608	STAN GROUP (LYNCH)	086/N/07	67 29 35 116 54 55	05 QTZ VEIN & AMYGDULE FILLING IN BASALT CU 7
B-2	611	STOCKPORT ISLANDS-1 MARCET ISLAND	076/N/14	67 47 109 05	05 DISS/AMYGDULES/& VEINS IN BASALTIC FLOWS CU 7
B-2	612	STOCKPORT ISLANDS-2	076/N/15	67 47 00 108 59 00	05 VEINS IN BASALT CU 7
B-2	614	SUE	076/F/16	65 57 108 28	05 MINOR GOSSAN SLFD IN SILICEOUS ZONES IN METASEDS CU 7
B-2	615	SUE GROUP	086/J/14	66 57 34 115 10 21	06 ? CU 7 NI 7
B-2	617	SWAK 11	086/N/08	67 26 30 116 04	05 IN FRACTURE ALONG BASALT-SANDSTONE CONTACT CU 7
B-2	620**	TAKIYUAK LAKE-HOOD RIVER NO 10	086/I/02	66 04 40 112 45 00	08 MASSIVE SLFDS IN METAVOLCANICS CU 2 ZN 2 AG 2 AU 7 PB 7
B-2	621**	TAKIYUAK LAKE-HOOD RIVER NO 41	086/I/02	66 03 30 112 42 00	08 MASSIVE SLFDS IN METAVOLCANICS ZN 2 CU 2 AG 2
B-2	625	TEA CLAIMS	086/N/12	67 35 35 117 31 50	05 DISS IN FAULT BRECCIA/FRAC & AMYGDULE FILLS/BASALT CU 7
B-2	630	TIL	076/N/11	67 40 28 109 15 40	05 IN BASALT FLOWS CU 7
B-2	632	TIP	086/O/12	67 37 25 115 47 20	05 QTZ VEIN IN QTZITE/ DISS-BRECCIA-REPLAC IN BASALT CU 7
B-2	633	TL	076/N/06	67 29 55 109 02 00	05 EPIGENETIC FRAC FILLS & DISS IN DOLOMITE CU 7
B-2	634*	TMK FROBISHER	076/O/06	64 16 17 111 22 37	03 SHEAR ZONE IN MAFIC VOLCS AU 5 CU 7
B-2	635	TOIVO GROUP MGB 186-189	086/N/08	67 21 00 116 18 30	05 VEIN ASSOCIATED WITH FAULT CUTTING BASALT CU 7
B-2	636*	TOM	086/O/05	67 19 48 115 51 30	05 BRECCIA-VEIN ZONES IN BASALT CU 6 AG 6
B-2	640	TRI 1	086/N/11	67 35 00 117 04 00	05 FRACTURES AND VEINS IN BASALT CU 7 BA 7
B-2	641	TRI 4	086/N/11	67 37 00 117 00 55	05 VEINS IN FRACTURED BASALT CU 7 BA 7
B-2	644*	TUNDRA (MATTHEWS VEIN) JEJA NO 2	076/O/03	64 02 11 111 10 36	03 QTZ VEIN ALONG VOLCS-SEDS CONTACT AU 3 W 7 PB 7 AS 7
B-2	645*	TUNDRA (NO 2 VEIN)	076/O/03	64 01 45 111 10 02	03 QTZ VEIN ALONG VOLCS-SEDS CONTACT AU 5
B-2	646	TUNDRA (SOUTH ZONE) JEJA 8 & ROMA 5/ REP 2	076/O/03	64 01 45 111 10 05	03 QTZ VEINS & LENSES IN MAFIC VOLCS AU 7 W 7 CU 7 AS 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-2	647+	TUNDRA MINE BULLDOG YELLOWKNIFE/ TAURCANIS	076/D/03	64 02 11 111 10 36	03 QTZ VEINS IN VOLCS & ALONG SEDS-VOLCS CONTACT AU 3 W 7 PB 7 AS 7 CU 7
B-2	648	TURNER LAKE GOLD (CCI 34 & 35)	076/N/02	67 13 05 108 56 29	03 IN BAND OF ARENACEOUS & AMPHIBOLITIC ROCKS AU 7 AS 7
B-2	649+	TURNER LAKE-1 CON	076/N/02	67 13 46 108 57 10	06 SHEAR ZONE IN METAMORPHOSED QTZ DIORITE CU 6 NI 6 AU 6 AG 6 CO 7 PB 7
B-2	650	TURNER LAKE-2	076/N/02	67 11 40 108 56 25	06 ? CU 7 NI 7
B-2	668	UO TCO	086/J/05	66 17 115 50	01 A SHEAR ZONE IN ACIDIC INTRUSIVES IS MINERALIZED U 7 TH 7
B-2	670	VERA GROUP - NIC SHOWING	086/O/05	67 18 24 115 48 37	05 LENSES & VEINS IN FRACTURE ZONE IN BASALT CU 7
B-2	671	VERA GROUP-VERA SHOWING	086/O/05	67 18 07 115 48 20	05 QUARTZ VEIN IN FRACTURED BASALT CU 7
B-2	672+	VIC GEOUP-CLAIM NO T4580-1	086/N/08	67 18 35 116 04 40	05 CHALCOCITE IN DIABASE DYKE CU 6
B-2	673+	VIC GROUP-CLAIM NO T4577 MAIN SHOWING	086/N/08	67 18 40 116 07 30	05 REPLACEMENTS IN FRACTURED BASALT ASSOC WITH FAULTS CU 6
B-2	674	WATER 22	086/N/08	67 27 35 116 02 20	05 BLEBS IN FLAT-LYING ZONES IN BASALT & SANDSTONE CU 7
B-2	679	WIG	076/L/15	66 48 21 110 50 00	03 QTZ LENSES WITHIN ACID TO BASIC VOLCANIC ROCKS CU 7 AU 7
B-2	680	WIL GROUP	086/N/09	67 31 50 116 12 30	05 BLEDS & AMYGDULE FILLINGS IN BASALT CU 7
B-2	681	WIN 102 WIN GROUP-SHOWING NO 3	086/O/09	67 37 40 114 00 18	05 VEINLETS SPECKS & PLATES IN AMYGDALOIDAL BASALT CU 7
B-2	682	WIN 90 & 76 WIN GROUP-SHOWINGS 2 & 4	086/O/09	67 37 30 114 00 20	05 QTZ VEINS & CU PLATES IN BASALT CU 7
B-2	691	XYZ 1-100/ SON/ SHEL	086/N/11	67 43 20 117 03	05 QTZ VEINS IN BASALT CU 7
B-2	692++	YAVA AGRICOLA LAKE	076/G/12	65 36 40 107 56 11	08 MASSIVE SULPHIDE IN FELSIC METAVOLCANIC FLOW ZN 2 PB 2 AG 2 CU 2 AU 2
B-2	694++	YUK MOUNTAIN LAKE PROPERTY	086/N/07	67 18 116 51	01 PITCHBLENDE IN HORNBY BAY SANDSTONE U 2
B-2	695	ZED	076/F/16	65 54 48 108 21 00	05 GOSSANS UNDERLAIN BY QTZ-MICA SCHISTS & QUARTZITES CU 7 AS 7
B-2	696	ZO GROUP	086/J/14	66 56 32 115 04 39	06 GOSSANS OVER GRANITIC GNEISSES CU 7 NI 7
B-3	20	B AND C GROUPS	076/H/14	65 56 20 105 12	01 IN GRANITE GNEISS U 7
B-3	43+	BRICK	076/O/16	67 50 50 106 24	03 QTZ IN MYLONITE BAND IN GREENSTONE BELT AU 6 CU 6 ZN 6 AG 6
B-3	74	CHESTER BAY	066/M/16	67 46 07 102 18 48	10 ? FE 7 CU 7
B-3	81	CIC GROUP - EAST 2 SHOWING CIC CLAIM 14	077/A/03	68 03 52 106 38 30	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
B-3	82	CIC GROUP - EAST 5 SHOWING CIC CLAIM 21	077/A/03	68 02 35 106 38 30	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
B-3	83	CIC GROUP - EAST 8 SHOWING CIC CLAIM 32	077/A/03	68 02 29 106 38 27	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
B-3	84	CIC GROUP - NORTH 1 SHOWING CIC CLAIM 3	077/A/03	68 03 42 106 39 40	07 DISSEM/PATCHES/VEINS/FRAC FILLS IN PORPHYRY CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
B-3	85	CIC GROUP - SOUTH 3 SHOWING CIC CLAIM 36	077/A/03	68 02 25 106 36 55	07 QUARTZ-CARB & BRECCIA VEINS IN GREENST & QUARTZITE CU 7 AG 7 PB 7 AU 7 AS 7
B-3	86	CIC GROUP-NORTH 13 SHOWING CIC CLAIM 7	077/A/03	68 04 10 106 40 50	07 VEIN CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
B-3	87	CIC GROUP-NORTH 2 & 3 SHOWINGS CIC CLAIM 4	077/A/03	68 03 45 106 40 05	07 DISSEM/ PATCHES/ VEINS/ FRAC FILLS IN PORPHYRY CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-3	88	CIC GROUP-NORTH 5 SHOWING CIC CLAIM 5	077/A/03	68 04 06 106 40 30	07 DISSEM/ PATCHES/ VEINS/ FRAC FILLS IN PORPHYRY CU 7 AG 7 AU 7 ZN 7 AS 7 FSP7
B-3	126	DENNIS LAKE	076/H/14	65 57 105 23	01 GRANITE GNEISS U 7
B-3	157	ELLICE RIVER AREA	076/I/10	66 39 00 104 52 00	05 IN GNEISS CU 7
B-3	190	FLAGSTAFF ISLAND	066/M/16	67 48 00 102 16 48	10 ? FE 7 CU 7
B-3	195	FREDDY LAKE	076/H/14	65 56 40 105 11	01 IN BANDS OF METAMORPH RX CONCORDANT W GRANITIC GN
					U 7
B-3	231+	GUNN BEC	076/O/16	67 58 35 106 28 20	03 QTZ VEIN IN BAND OF GREENSTONE-MYLONITE AU 6 CU 6 AG 6
B-3	272+	IDA POINT SILVER SHOWING RUS/ NOEL	077/A/03	68 14 15 106 31 40	04 FRACTURES & BRECCIA/ GRANITIC DYKES CUT GREENSTON AG 6 CU 7 PB 7 ZN 7 AU 7
B-3	280	JACK LAKE (NORTH)	076/I/11	66 44 00 105 02 00	M GOSSAN ON DISSEM SLFD IN GREEN DIORITIC ROCK ZN 7 CU 7
B-3	281	JACK LAKE (SOUTH)	076/I/11	66 41 105 05	M GOSSAN IN GARNETIFEROUS MAFIC GNEISS CU 7 ZN 7 PB 7 AG 7 FE 7
B-3	338	L SHOWING (PERRY RIVER PROJECT	066/M/08	67 28 30 102 11 30	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
B-3	339+	LAHTI (NORTH VEIN) WAN	076/O/16	68 00 00 106 28 00	03 QTZ VEIN SYSTEM IN GREENSTONE AU 6 CU 6 AG 6
B-3	340+	LAHTI (SOUTH VEIN) WAN	076/O/16	67 59 45 106 27 45	03 QTZ VEIN SYSTEM IN GREENSTONE AU 6 CU 6 AG 6
B-3	378	M SHOWING (PERRY RIVER PROJECT	066/M/09	67 33 25 102 11	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
B-3	456	N SHOWING (PERRY RIVER PROJECT	066/M/09	67 31 20 102 12	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
B-3	492	ORANGE DOGS LAKES EASTERN MACKENZIE SYNDICATE	076/I/06	66 22 105 09	03 GOSSAN IN QTZ-FELD-BIOTITE GNEISS CU 7 AU 7
B-3	520	PLUGGER LAKE EASTERN MACKENZIE SYNDICATE	076/I/10	66 34 00 104 51 30	05 GOSSAN IN BIOTITE GRANITE GNEISS CU 7 AG 7
B-3	546	RIVER SHOWING CIC CLAIMS/ HOPE BAY	077/A/03	68 04 106 42	07 QUARTZ VEIN CUTS GREENSTONE & INTERBEDDED SEDS CU 7 AG 7 ZN 7 CO 7 PB 7
B-3	549+	ROBERTS LAKE SILVER VAN GROUP	077/A/03	68 11 00 106 32 45	04 BRECCIATED FRACTURE OR FAULT ZONE IN METAVOLCS AG 3 CU 7 PB 7 ZN 7
B-3	676	WESTERN RIVER-1	076/G/16	65 48 36 106 27 10	05 CHALCO GRAINS OR MASSES IN GABBRO SILL CU 7 FE 7
B-3	677	WESTERN RIVER-2	076/G/16	65 46 55 106 25 15	M CHALCO GRAINS OR MASSES IN GABBRO SILL CU 7 FE 7
B-3	683	WOLF	077/A/03	68 02 106 37	05 QUARTZ-CARB ZONES IN METAVOLCS CU 7 AS 7
B-3	684	WOLF LAKE	076/I/03	66 14 105 00 30	01 IN NARROW BANDS OF CHLORITIC SCHIST & IN APLITE U 7 TH 7
B-3	685	WOLF LAKE	076/I/03	66 14 53 105 02	07 GOSSANS/ META-SED BANDS IN GRN-GNSS ROCKS & MIGMAT CU 7 AU 7 ZN 7 NI 7
B-4	4	ACE	056/E/12	65 40 095 52	01 U IN A NARROW SKARN ZONE IN CRYSTALLINE LIMESTONE U 7
B-4	8+	AMER LAKE BRO/PRO/BRE/BRI/BRU/BRY	066/H/10	65 32 48 096 45 00	01 U IN QTZ-MICA SCHISTS OR MIXED SCHIST & QUARTZITE U 5
B-4	9	ANDREWS LAKE	055/M/15	63 56 094 52	02 U IN SANDSTONE NEAR CHRISTOPHER ISLAND TYPE ROCK U 7 CU 7 AG 7 PB 7
B-4	10	ANGIKUNI LAKE-1	065/J/05	62 15 30 099 52 42	09 SLFD BEARING CARBONATE IN QUARTZO-FELD GNEISS PB 7
B-4	11	ANGIKUNI LAKE-2	065/J/05	62 16 25 099 54 00	07 IN GNEISS CU 7 PB 7
B-4	31	BLOCK G	055/L/06	62 19 095 23	07 QUARTZ VEIN IN VOLCANICS AU 7 CU 7 PB 7 ZN 7 AG 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-4	32	BLOCK I SOUTH OF ONEIL LAKE	055/L/06	62 24 52 095 16 52	07 QTZ VEINS/UNDERLAIN BY VOLCS-INTRUSIVES-GNEISS CU 7 AU 7 PB 7 ZN 7 AS 7
B-4	44	BROOKS BLUFF	046/K/01	66 11 45 084 27 09	05 SLFDS IN GRANITIC GNEISS CU 7
B-4	45	BRY GROUP	066/H/10	65 32 30 096 50 50	01 YELLOW MINERAL STAIN ON FRACTURES IN RA LENSES U 7
B-4	55	CABIN LAKE	065/H/10	61 40 096 58	03 BASAL PEBBLE CONGLOMERATE AU 7
B-4	66	CARNECKSLUCK LAKE	065/G/16	61 53 15 098 14 25	05 SULPHIDES IN VOLCANICS CU 7
B-4	67	CARR LAKE	055/E/13	61 58 55 095 38 30	08 QTZ VEIN IN GREENSTONE CU 7 PB 7 ZN 7
B-4	69	CC SHOWING	055/K/16	62 51 00 092 11 24	04 DISSEM SLFDS IN ANDESITE AG 7 CU 7
B-4	77+	CHRISTOPHER ISLAND (MAIN ZONE) BL PROJECT	056/D/02	64 04 35 094 32 53	02 CALCITE VEINS W ASSOC SULPHIDES IN SANDSTONE U 5 MO 5 CU 7
B-4	78	CHRISTOPHER ISLAND (ZONE 2) BL PROJECT	056/D/02	64 06 21 094 36 57	02 MINERALIZED VEINLETS IN FRACTURES IN SANDSTONE CU 7 U 7
B-4	79	CHRISTOPHER ISLAND (ZONE 3) BL PROJECT	056/D/02	64 06 42 094 37 12	02 MINERALIZED FRACTURES IN FAULT ZONE IN TUFF CU 7 U 7 AG 7
B-4	90	COLLIN LAKE KASBA EXPL	065/H/04	61 02 48 097 51 54	03 ? AU 7
B-4	91	COLUMBIAN NORTHLAND LTD-1 PROSPECTING PERMIT 176	065/I/04	62 10 24 097 52 15	05 DISSEMINATED IN METAVOLCANICS CU 7
B-4	97	CONTOUR LAKE WEST	065/H/11	61 42 17 097 01 59	05 SULPHIDES IN MUDSTONE-SILTSTONE OF AMETO FORMATION CU 7
B-4	102	COPPER COVE WHALE COVE/ MAR/ HI/ MINE/ CAT	055/K/02	62 13 092 36	06 MASSIVE SLFDS IN SHEAR ZONES CUTTING MAFIC VOLCS CU 7 NI 7 AU 7 AG 7 MO 7
B-4	114+	CULLATON LAKE SOUTH (SHEAR LK) HBMS/ SELCO/ ROYEX/ O BRIEN	065/G/07	61 18 24 098 30 12	03 FRACTURES IN BASAL QUARTZITE AU 5
B-4	123	DAWSON INLET	055/F/13	61 56 15 093 38 40	05 MASS TO DISS SLFDS/& VEINS/IN VOLCS NEAR GRANODIOR CU 7 AU 7
B-4	124+	DEE GROUP SPI LAKE	055/L/04	62 04 11 095 52 50	08 SLFDS IN POD-SHAPED BODIES IN ACID FRAGMENTALS CU 6 ZN 6 AG 6 AU 6 PB 6
B-4	128	DIKE LAKE HOOK CLAIMS 1-20 (?)	065/G/07	61 22 48 098 45 18	03 SLFDS IN GARNETIFEROUS PARA-AMPHIBOLITE AU 7 CU 7
B-4	152	EDEHON LAKE DOWNER LAKE	065/A/10	60 34 45 096 52 30	05 SLFD SPECKS IN METAGREYWACKE CU 7
B-4	153	EDEHON LAKE NORTHWEST	065/A/12	60 30 42 097 39 18	05 DISS SLFDS IN SHEARED METAGREYWACKE (PARAGNEISS) CU 7
B-4	159	EM/ JB/ ST TARA	065/H/01	61 10 30 096 07 30	10 MAGNETITE & SPECULARITE FE FM FE 7
B-4	161	ENNADAI LAKE LITTLE HUEY	065/C/13	60 56 56 101 31 12	03 QTZ LENSES & BODIES IN SERICITE-CHLORITE SCHIST AU 7 AG 7
B-4	182	FERGUSON LAKE-1 FERG	065/I/15	62 52 25 096 55 30	06 SULPHIDES IN ELONGATED BODIES OF HORNBLENDITE CU 7 NI 7
B-4	183	FERGUSON LAKE-2 FERG	065/I/15	62 52 30 096 49 40	06 SLFDS IN ELONGATED BODIES OF HORNBLENDITE NI 7 CU 7
B-4	184	FERGUSON LAKE-3 FERG	065/I/15	62 50 10 096 48 15	05 IN A MAFIC DYKE CU 7
B-4	203	GIANT YELLOWKNIFE MINES LTD-1 PROSPECTING PERMIT 10	065/I/01	62 00 41 096 22 06	05 MASSIVE SLFDS CU 7 ZN 7
B-4	204	GIANT YELLOWKNIFE MINES LTD-2 PROSPECTING PERMIT 10	065/I/01	62 12 50 096 05 34	06 DISSEMINATIONS CU 7 NI 7
B-4	205	GIANT YELLOWKNIFE MINES LTD-3 PROPSECTING PERMIT 10	065/I/01	62 13 00 096 03 45	05 DISSEMINATIONS CU 7
B-4	206	GIANT YELLOWKNIFE MINES LTD-4 PROSPECTING PERMIT 10	065/I/01	62 13 06 096 06 50	05 DISSEMINATIONS CU 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-4	207	GIANTS 3176 PROSPECT	055/L/05	62 19 30 095 30 30	07 GOSSAN ZONE IN VOLCANICS CU 7 AU 7
B-4	210*	GOLD ISLAND	065/H/04	61 03 18 097 48 54	03 QTZ VEINS IN SHEAR IN ANDESITE NEAR GABBRO SILL AU 6 AS 7
B-4	219	GREG SELCO	065/G/08	61 27 12 098 25 42	03 ? AU 7
B-4	222	GRIFFIN LAKE EAST SELCO	065/G/07	61 18 00 098 43 36	03 IN RUSTY FRACTURES AU 7
B-4	223	GRIFFIN LAKE NORTH	065/G/07	61 20 40 098 51 23	05 SULPHIDES IN VOLCANICS CU 7
B-4	224	GRIFFIN LAKE NORTHWEST	065/G/07	61 19 52 098 57 13	05 SULPHIDES IN VOLCANICS CU 7
B-4	225	GRIFFIN LAKE SOUTHWEST	065/G/02	61 13 12 098 49 00	03 IN QUARTZITE OR GREENSTONE AU 7 AG 7
B-4	227	GUN GROUP	055/K/04	62 13 48 093 54 18	07 QTZ VEINS/COUNTRY ROCKS-VOLCS/SEDS/INTRUSIVES CU 7 PB 7 ZN 7 NI 7 AU 7 AG 7
B-4	245	HAIRPIN	065/P/10	63 35 56 096 58 58	01 U IN REGOLITH AT BASE OF SOUTH CHANNEL CONGLOM U 7
B-4	246*	HAR WAGER BAY-HAYES RIVER PROJECT	056/K/07	66 18 15 092 33	06 ALONG BEDS IN SEDS/ VEINLETS IN SEDS NEAR AMPHIBOL CU 5 NI 5 FE 7
B-4	250*	HENINGA LAKE GEMEX / TOWER / SKIM	065/H/16	61 46 25 096 12 10	08 MASSIVE & DISSEM SULPHIDES IN PYROCLASTIC VOLCANIC CU 5 ZN 5 AG 5 PB 5 AU 5
B-4	264	HOOK LAKE - ZONE 4 SELCO	065/G/07	61 20 30 098 52 48	03 QTZ VEINS IN MAFIC VOLCS AU 7 CU 7 FE 7
B-4	265	HOOK LAKE-ZONE 3 SELCO	065/G/07	61 20 54 098 51 12	03 QTZ VEINS & STRINGERS IN HORNBLENDE GNEISS AU 7
B-4	267	HUD YANDLE-KAMINAK PROJECT	065/H/16	61 49 06 096 07 00	05 DISSEM IN CHLORITIZED TUFF CU 7 FE 7
B-4	268	HURRICANE SELCO	065/G/07	61 22 30 098 35 54	03 MAGNETITE FE FM WITHIN METASEDS AU 7 FE 7
B-4	269	HURWITZ LAKE WEST PROSPECTING PERMIT 126	065/B/16	60 57 30 098 02	03 QTZ VEIN STOCKWORK IN CHLORITIZED VOLCS AU 7 AS 7
B-4	274*	INK YANDLE-KAMINAK PROJECT	065/H/09	61 42 30 096 08 15	07 SLFD LAYERS IN GABBRO & VOLC XENOLITHS CU 6 AG 6 ZN 6 FE 7
B-4	277	ISLAND IN KAMINAK LAKE	055/L/02	62 13 39 094 53 14	05 IN GABBRO OR DIORITE CU 7
B-4	304	K (COLUMBIAN NORTHLAND LTD)-2 PROSPECTING PERMIT 176	065/I/04	62 11 00 097 49 50	05 ? CU 7
B-4	312	KAZ 1-12	065/P/10	63 41 30 096 53 05	05 QTZ VEINS IN DUBAWNT PORPHYRIES CU 7
B-4	335	KIM & TEQUILA	065/H/15	61 52 30 096 40	01 2 RAD HORIZONS AT BASE OF CONGLOMERATE U 7 AG 7
B-4	336	KIRPATRICK LAKE KASBA EXPL	065/H/04	61 05 12 097 54 12	03 ? AU 7
B-4	341	LAKE 345-1	065/P/11	63 36 13 097 15 19	01 U IN FRACTURE IN CHRISTOPHER ISLAND VOLCANICS U 7
B-4	342	LAKE 345-2	065/P/11	63 36 16 097 16 23	01 U IN FRACTURE IN CHRISTOPHER ISLAND VOLCANICS U 7
B-4	343	LAKE 430-1	065/P/11	63 30 44 097 27 20	02 SULFIDES & URANIUM IN NE SHEAR ZONE U 7 CU 7
B-4	344	LAKE 430-2	065/P/11	63 30 50 097 27 19	01 U IN FRACTURE IN BASEMENT GNEISS U 7
B-4	345	LAKE 520-LONGSPUR GRANITE	065/P/12	63 37 48 097 45 42	01 GARNET-FLUORITE VEINLETS IN VOLCANICS NEAR GRANITE U 7 FSP7
B-4	372**	LONE GULL	066/A/05	64 27 097 36	01 FRAC AND DISSEM IN APHEBIAN GRAPHITIC METAQTZT U 2
B-4	374*	LOWO LAKE SCOTT (SELCO)	065/H/04	61 03 06 097 51 24	03 / QTZ VEIN ALONG SHEAR IN ANDESITE AU 5 AS 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-4	379	MAG	065/H/16	61 48 096 08	03 VEIN IN QTZ-PORPH SILL/ ALSO DISS IN SHEARED RHY AU 7 AG 7 CU 7 ZN 7 PB 7
B-4	382	MAGUSE LAKE (P GROUP) CARR LAKE PROJECT	055/E/14	61 52 30 095 28 26	11 VEINS IN GABBRO INTRUDING DACITE/ & DISS IN BASALT CU 7 MO 7 AU 7
B-4	435	MILLER SHOWING	055/M/13	63 58 40 095 43 12	01 FRACTURES IN CHRISTOPHER ISLAND VOLCANICLASTIC SED U 7
B-4	438	MISTAKE BAY IRON-AREA 1	055/K/03	62 12 093 04	10 FE FM (INTERBEDDED MAGNETITE & ARGILLITE) FE 7
B-4	439	MISTAKE BAY IRON-AREA 2 GIANT IRON MINE	055/K/03	62 13 093 10	10 FE FM (INTERBEDDED MAGNETITE & ARGILLITE) FE 7
B-4	443	MONTGOMERY LAKE NORTHEAST	065/H/12	61 34 36 097 43 30	05 SULPHIDES IN SHEARED ANDESITES CU 7
B-4	444	MONTGOMERY PROJECT CLAIM BLOCK	065/H/15	61 45 096 50	01 U ASSOC WITH PYRITE IN CONGLOMERATE U 7
B-4	445	MORSO ISLAND-MAR 1-18 CLAIMS	055/K/02	62 02 092 40	07 QTZ& PEGMT VEINS CUT VOLCS & DERIVED SCHIST-GNEISS CU 7 AU 7 AG 7 NI 7
B-4	450	MOUNTAIN LAKE SOUTH AXE GROUP/ SELCO	065/G/02	61 09 098 37 00	03 PROBABLY ASSOC WITH FE FM AU 7
B-4	460**	NATARAWIT LAKE	065/O/01	63 04 42 098 21 06	01 TH-U IN ALKALINE SYENITES U 2 TH 2
B-4	472	NORTH KAMINAK (ONEIL LAKE 5) PROSPECTING PERMIT 102	055/L/03	62 04 08 095 23 06	07 SHEAR ZONES & QUARTZ VEINS/ ASSOC SULPHIDES CU 7 AU 7
B-4	475	NOW 8	065/K/10	62 31 100 48 24	05 CHALCOCITE IN SHEARED RHYOLITE CU 7
B-4	476	NOWYAK LAKE WEST PP 175	065/G/15	61 47 42 098 32 21	05 IN VOLCANICS (?) CU 7
B-4	477	NUELTIN PROJECT-1 PROSPECTING PERMIT 132	065/C/02	60 11 08 100 31 25	07 SLFD ZONES IN SEDS CU 7 AU 7 AG 7
B-4	478	NUELTIN PROJECT-2 PROSPECTING PERMIT 136	065/C/11	60 36 50 101 12 00	05 MINOR DISSEM SLFD IN GREYWACKE CU 7
B-4	486	ONEIL LAKE 1 PROSPECTING PERMIT 102	055/L/06	62 24 47 095 06 53	08 DISS TO MASS AT CONTACT AGGLOM W METASED &ANDESITE CU 7 ZN 7
B-4	487	ONEIL LAKE 2	055/L/06	62 23 27 095 05 27	08 STRINGERS & DISSEMINATIONS CU 7 ZN 7
B-4	488	ONEIL LAKE 3 PROSPECTING PERMIT 102/BLOCK A	055/L/06	62 19 30 095 08 15	07 SULPHIDES IN QUARTZ VEINS IN TONALITE INTRUSIONS CU 7 AU 7 AG 7 PB 7 ZN 7 AS 7
B-4	489	ONEIL LAKE 4 PROSPECTING PERMIT 102/BLOCK A	055/L/06	62 18 45 095 05 45	05 STRINGERS &VEINS IN GREENST/ ASSOC W HORST STRUCT. CU 7 FE 7
B-4	494	OTTER LAKE SOUTH	065/H/04	61 05 12 097 50 12	03 QTZ VEINS IN GREYWACKE AU 7 AS 7
B-4	506	PERMIT 90	055/M/13	63 45 41 095 57 39	01 RAD CALCITE FRACTURES IN CHRISTOPHER ISL VOLCANICS U 7
B-4	515**	PISTOL BAY GROUP-1 MAR 95 & 96	055/K/07	62 29 48 092 48 36	06 IN BRECCIATED QUARTZITE/ALSO IN GABBRO-PERIDOTITE CU 2 NI 2 AG 7 AU 7 AS 7
B-4	516**	PISTOL BAY GROUP-2 MAR 79	055/K/07	62 29 30 092 46 54	06 QTZ LENS AT CONTACT OF METAVOLCS & ULTRABASIC SILL CU 2 NI 2
B-4	517**	PISTOL BAY GROUP-3 MAR 15/ 16/28	055/K/07	62 28 48 092 44	06 IN GABBRO & GNEISSIC GRANITE CU 2 NI 2 AG 2 AU 2
B-4	518*	PISTOL BAY GROUP-4 MAR 43	055/K/07	62 29 18 092 44 18	06 QUARTZ VEIN CU 5 NI 5 AU 5 AG 5
B-4	529	PROJECT WAGER-KRF	056/K/06	66 21 093 15	06 DISSEMINATIONS IN QUARTZITE AND SCHIST CU 7 NI 7
B-4	532	QUARTZITE LAKE	055/L/08	62 22 094 27	11 INTERMED TO MAFIC VOLCS/CONT W SEDS & PYROCLASTICS CU 7 MO 7
B-4	533	R E P GROUP	055/K/04	62 07 30 093 49 30	03 QTZ VEINS/REGIONAL GEOL-GREENST/GNEISS/SEDS/GRN AU 7 AG 7 CU 7
B-4	538*	RANKIN INLET MINE	055/K/16	62 48 55 092 03 30	06 DISS & MASSIVE SLFDS AT BASE OF SERPENTINITE SILL CU 4 NI 4 PT 6 FE 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-4	550	ROBIN SHOWING	065/J/05	62 22 099 33	07 SLFDS IN ZONE CUTTING GRANITE W SED INCLUSIONS CU 7 AU 7 AG 7 PB 7
B-4	555	ROY	055/E/11	61 38 095 05	10 FE FM ASSOC WITH ARCHEAN GREENSTONE FE 7 CU 7
B-4	559	S W OF LAST LAKE	055/K/04	62 08 093 50	03 QTZ VEINS ALONG SHEARS IN PILLOWED ANDESITIC LAVAS AU 7 CU 7
B-4	568	SCHULTZ LAKE	066/A/13	64 47 097 46	05 QTZ VEIN ASSOC WITH FAULT ZONE IN METASEDS CU 7
B-4	578	SELCO A EXTENSION ZONE	065/G/07	61 18 42 098 32 48	03 AU ALONG SHEARS IN CHERT-MAGNETITE FE FM AU 7 FE 7
B-4	579*	SELCO A ZONE	065/G/07	61 16 12 098 30 33	03 AU IN QTZ STRINGERS & W SLFD IN CHERT-MGT FE FM AU 5 FE 7 AS 7
B-4	580**	SELCO B ZONE	065/G/08	61 17 098 30	03 AU ASSOC W SLFD/ OXIDE/ CARBONATE PHASES OF FE FM AU 2 AS 7
B-4	581	SELCO C ZONE	065/G/01	61 13 00 098 28 12	03 CHERT-MAGNETITE FE FM AU 7 AS 7 FE 7
B-4	582	SELCO D ZONE	065/G/07	61 18 06 098 38 06	03 IN FE FM LENSES IN TUFFS NEAR QTZ-MONZ DYKES AU 7 FE 7
B-4	597	SINK (STEW/ BLACKJACK) YANDLE-KAMINAK PROJECT	065/H/09	61 40 22 096 11 30	07 PODS &LENSES IN ALTERED FELSIC TUFFS WITHIN GABBRO CU 7 ZN 7 AG 7
B-4	599	SON YANDLE-KAMINAK PROJECT	065/H/16	61 50 00 096 05 48	07 LAYERS OF DISSEM TO SEMI-MASSIVE SLFDS IN TUFFS CU 7 ZN 7
B-4	600	SOUTH OF KAMINAK LAKE	055/L/03	62 03 15 095 12 17	05 IN GABBRO OR DIORITE CU 7
B-4	601	SOUTHEAST OF LAKE 430	065/P/11	63 33 45 097 26 10	01 U IN FRACTURES IN BASEMENT GNEISS U 7
B-4	602	SOUTHEAST OF ONEIL LAKE	055/L/06	62 21 46 095 08 15	08 IN SCHIST & AMPHIBOLITE CU 7 ZN 7
B-4	603	SOUTHERN LAKE	055/L/01	62 08 39 094 17 34	06 SLFDS DISSEM IN GREENSTONES ADJACENT SHEAR ZONES CU 7 NI 7
B-4	613*	STONECALF LAKE	055/L/07	62 26 53 094 50 27	05 IN PARAGNEISS & AMPHIBOLITE CU 6 AG 7 ZN 7
B-4	616	SW RANKIN INLET WP 1-2/ BETH 1-6 CLAIM GROUPS	055/K/10	62 38 092 50	05 SLFD STRINGERS & QTZ VEINLETS IN METAVOLC & GNEISS CU 7
B-4	622*	TAVANI ZONE - DDH S S	055/K/03	62 08 18 093 19 30	05 DISSEMINATED SLFDS IN ACID TO INTERMEDIATE LAVAS CU 6
B-4	623*	TAVANI ZONE - DDH S 6	055/K/03	62 08 18 093 19	07 DISSEMINATED SLFDS IN ACID TO INTERMEDIATE LAVAS CU 6 ZN 7 AG 7 AU 7
B-4	624*	TAVANI ZONE-DDH S 1& S 2 CRI	055/K/03	62 07 42 093 11 18	05 SLFDS IN RHYOLITE BRECCIA CU 6 ZN 7 AG 7
B-4	626	TEB 1-18 CLAIMS	065/O/09	63 34 45 098 28 15	05 VEINS ALONG FRACTURES IN SHEARED PORPHYRIES CU 7 PB 7
B-4	627	THI 1-4 CLAIMS THIRTY MILE LK/ PP 213/ TMT	065/P/10	63 38 05 096 41 25	07 VEINS & BRECCIA IN GNEISS & DIABASE CU 7 PB 7 AG 7 ZN 7 SB 7 BA 7
B-4	629	THLEWIAZA RIVER	065/A/07	60 29 096 51	11 IN GRANITE MO 7
B-4	638*	TORIN GROUP-1	055/K/03	62 07 07 093 21 46	06 DISS IN SCHIST (ALTERED UM LENS)/ & SHEAR IN VOLCS CU 6 NI 6 AU 6 AG 6 CO 7
B-4	643	TUL 9-15 & 26-36 CLAIMS	065/O/03	63 10 45 099 22	05 STRINGERS BLEBS & FRACTURES IN SHEARED PORPHYRY CU 7
B-4	651	TURQUETIL LAKE	055/E/13	61 55 49 095 56 26	08 DISSEM IN GREENSTONE CU 7 ZN 7
B-4	675	WEST RIDGE SELCO	065/G/07	61 18 00 098 30 36	03 FRACTURES IN QUARTZITE AU 7
B-4	678	WHALE COVE GROUP MAR 1-72/CAT/JAN/MINE/HI	055/K/02	62 11 42 092 32 48	07 QTZ VEINS & SHEARS/VOLCS-SEDS-INTRUSIVES MO 7 CU 7 NI 7 AU 7
B-4	693	YENS	065/H/15	61 55 096 45 30	01 RAD ASSOC WITH PYRITE MATRIX IN RUSTY CONGLOM U 7

Appendix 1B (cont.)

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-4	698	4 MI SE SOUTHERN LAKE	055/L/01	62 08 07 094 07 52	05 IN GREENSTONE CU 7
B-4	699	4 MI W OF KAMINAK LAKE	055/L/03	62 11 37 095 30 00	05 IN HORNBLENDE SCHIST & AMPHIBOLITE CU 7
B-4	700++	68-1 CHRISTOPHER ISLAND	056/D/02	64 04 43 094 33 06	02 RAD-IMPREGNTN/FRACTURES IN KAZAN ARKOSE NEAR DIKES U 2 CU 2 MO 2
B-4	701++	68-2	056/D/02	64 10 10 094 33 34	02 RAD IN XENOLITHIC PART-FELSITE DIKE/FRACT IN DIKE U 2 MO 2
B-4	702++	68-4 69-4/PIC-14/PIC-15	055/M/12	63 41 25 095 46 27	02 FAULT-FRACTURE ZONES CUTTING GRANODIORITE GNEISS U 2 CU 2 AG 2
B-4	703	68-4 SHOWING PROSPECTING PERMIT 208	055/M/12	63 41 095 46	02 MINERALIZED FRACTURES IN PARAGNEISS & AMPHIBOLITE U 7 CU 7
B-4	704	68-4A 69-4A	055/M/12	63 40 58 095 43 55	02 FAULT ZONES CROSSCUTTING GRANODIORITE GNEISS U 7 CU 7
B-4	705+	69-9 CHRISTOPHER ISLAND	056/D/02	64 06 26 094 37 22	02 RAD FRACTURES IN CHRISTOPHER ISLAND TRACHYTE U 5 CU 5 MO 5
B-4	706	69-9A CHRISTOPHER ISLAND	056/D/02	64 06 46 094 37 14	02 RAD FRACT IN KAZAN & CHRISTOPHER ISL ARKOSE/VOLC U 7 CU 7 AG 7 MO 7
B-4	707	7 MI SE SOUTHERN LAKE	055/L/01	62 07 18 094 04 07	05 IN GREENSTONE CU 7
B-4	708	71-1 NORTH CHANNEL OCCURRENCES	056/D/02	64 09 15 094 30 45	01 RADIOACTIVE FELSITE DIKE IN GNEISS U 7
B-4	709	71-2 NORTH CHANNEL OCCURRENCES	056/D/02	64 08 53 094 32 48	02 U-BREXIATED GNEISS-PERIPHERAL TO ALKALINE INTRSN U 7 CU 7 TH 7
B-4	710	71-4	056/D/02	64 04 50 094 31 36	02 FRACTURES IN CHRISTOPHER ISLAND VOLCANIC PLUGS U 7 CU 7
B-4	711	71-4 ZONE CHRISTOPHER ISLAND/ BL PROJECT	056/D/02	64 04 30 094 31	02 SHEARED-FRACTURED CONTACT OF DIABASE DYKE-SANDSTON U 7 CU 7
B-4	712	71-5	055/M/12	63 42 56 095 40 27	01 FRACTURES IN CHRISTOPHER ISLAND VOLCANICLASTIC SED U 7
B-4	713++	74-1 WEST	055/M/13	63 49 02 095 35 07	02 U IMPREGNATION AND BANDS IN KAZAN ARKOSE NEAR DIKE U 2 CU 2 AG 5
B-4	714++	74-1E	055/M/13	63 48 19 095 33 17	02 U IMPREGNATION IN KAZAN ARKOSE NEAR TRACHYTE DIKE U 2 CU 2 AG 2
B-4	715	75-1	065/P/09	63 39 25 096 25 31	02 RAD FRACT IN CHRISTOPHER ISL VOLCANIC FLOW U 7 CU 7
B-4	717	75-3	055/M/14	63 47 45 095 07 38	02 U IMPREGNATION IN KAZAN ARKOSE NEAR TRACHYTE DIKE U 7 CU 7
B-4	718	75-5 BISSETT LAKE	055/M/11	63 44 57 095 14 08	02 U-IMPREGNATION IN S-CHANEL CONGLOMERATE NEAR DIKES U 7 CU 7
B-4	719+	75-6	055/M/13	63 50 10 095 35 22	02 U IMPREGNATION IN KAZAN ARKOSE NEAR DIKE ROCK U 5 CU 5
B-4	724	76-1D	055/M/14	63 49 32 095 25 13	02 U-CU IN ARKOSE ADJACENT TO ALKALINE DIKE U 7 CU 7
B-4	735	76-2	055/M/12	63 43 27 095 52 14	01 U IN BIOTITE K-FELDSPAR PEGMATITE U 7
B-4	739	76-4B	055/M/15	63 56 59 094 45 34	02 CU-U IN ARKOSE ADJACENT TO ALKALINE DIKE U 7 CU 7
B-4	746+	76-9W	065/P/09	63 40 04 096 17 52	02 FRACTURE IN PORPHYRITIC CHRISTOPHER ISL TRACHYTE U 6 CU 6 PB 6 ZN 6
B-4	747	8 MILES NW CARR LAKE	065/I/01	62 10 54 096 03 26	05 SULPHIDES IN VOLCANICS CU 7
B-4	748,	9 MILES NNW OF CARR LAKE	065/I/01	62 12 34 096 01 00	05 SULPHIDES IN VOLCANICS CU 7
B-5	63	CAPE REID	046/K/09	66 38 47 084 09 33	05 COUNTRY ROCK-DIORITE AND GABBRO CU 7 FE 7
B-5	117	D 1 SHOWING (CLAIM NI 86) GAVIN RIVER CLAIMS	066/N/05	67 16 20 101 36 20	06 RUSTY BAND OF QUARTZ-PYROXENE GRANULITE OR GNEISS CU 7 NI 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
B-5	118	D 10 SHOWING (NI 236/ 246/ 247 GAVIN RIVER CLAIMS	066/N/05	67 15 45 101 40 30	06 SULPHIDES IN GNEISS CU 7 NI 7 AU 7 FE 7
B-5	119	D 3 SHOWING (CLAIM NI 36) GAVIN RIVER CLAIMS	066/N/05	67 16 45 101 38 45	06 SULPHIDES DISSEMINATED IN QUARTZ-DIORITE CU 7 NI 7 FE 7
B-5	120	D 4 SHOWING (CLAIM NI 166) GAVIN RIVER CLAIMS	066/N/05	67 16 10 101 39	06 GOSSAN IN PYROXENITE CU 7 NI 7 AU 7
B-5	121	D 7 SHOWING (CLAIM NI 1) GAVIN RIVER CLAIMS	066/N/04	67 10 45 101 37 15	06 SULPHIDES IN GARNET GNEISS CU 7 NI 7 AU 7
B-5	122	D 8 SHOWING (CLAIM NI 118) GAVIN RIVER CLAIMS	066/N/05	67 17 50 101 40	06 SULPHIDES IN GRANULITE CU 7 NI 7
B-5	154	EIRA PERRY RIVER CLAIMS	066/N/05	67 22 45 101 44 45	06 IN GABBRO-NEAR PYROXENITE BAND IN GNEISS CU 7 NI 7
B-5	249+	HEB WAGER BAY-HAYES RIVER PROJECT	056/J/12	66 42 40 091 42	06 MASSIVE SULPHIDE IN ULTRAMAFIC INTRUSION CU 6 NI 6
B-5	416	MELVILLE PENINSULA-1	046/N/04	67 06 04 085 57 04	01 RADIOACTIVITY ASSOC WITH GREY AUGEN GNEISS U 7 TH 7
B-5	417	MELVILLE PENINSULA-2	046/K/13	66 59 02 085 52 25	01 SLIGHTLY RADIOACTIVE BIOTITE/K-FELDSPAR GRANITE U 7
B-5	424	MIC	057/B/04	68 03 45 095 08	11 PYRITIC SCHIST BAND IN GRANITIC RX# & CU IN PEGMT CU 7 MO 7
B-5	464	NIG	057/B/02	68 02 45 093 11	M IN META-VOLCANICS AT CONTACT WITH ULTRAMAFIC PLUG CU 7 ZN 7 NI 7 AG 7 CO 7
B-5	481	OAT-LIK	066/N/05	67 23 10 101 46 15	06 IN AMPHIBOLE-BIOTITE BANDS IN GNEISS CU 7 NI 7
B-5	482	OCCURRENCE (PERRY RIVER PROJ)	066/N/12	67 33 45 101 57 45	06 SULPHIDES DISSEMINATED IN DIABASE CU 7 NI 7
B-5	493+	OTOK PERRY RIVER CLAIMS	066/N/05	67 24 18 101 46 36	06 IN PYROXENITE & GRANULITE BANDS & MAFIC INTRUSION CU 5 NI 5 FE 7
B-5	526	PROJECT WAGER-CURTIS LAKE	056/I/11	66 39 089 06	06 BANDS OF SLFDS IN METAGREYWACKE SCHIST & QUARTZIT CU 7 NI 7
B-5	527	PROJECT WAGER-KR HAYES RIVER	056/J/13	66 47 091 55	06 DISSEMINATIONS IN METAGREYWACKES AND METAQUARTZIT CU 7 NI 7
B-5	528	PROJECT WAGER-KRA	056/J/14	66 57 091 00	06 DISSEMINATIONS IN METASEDIMENTS CU 7 NI 7
B-5	530	PROJECT WAGER-PERMIT 225	056/P/04	67 12 089 47	06 ALONG NW MARGIN AND WITHIN ULTRAMAFIC BODY CU 7 NI 7
B-5	531	PROJECT WAGER-PERMIT 228	056/P/07	67 21 088 58	06 IN METASEDS ADJ TO & ENCLOSED BY ULTRAMAFIC BODY CU 7 NI 7
B-5	618	SWAN SHOWING (PERRY RIVER PROJ	066/N/12	67 38 45 101 54	06 IN AMPHIBOLE-BIOTITE-QTZ BANDS IN GNEISS CU 7 NI 7
B-6	598	SOMERSET ISLAND	058/B/15	72 53 093 53	07 ALONG A FAULT IN LIMESTONE & SILTSTONE CU 7 PB 7 ZN 7
OTHER	25	BARRY GROUP	048/C/02	73 02 22 085 04 15	05 DISSEM IN DOLOMITE ADJACENT TO GABBRO DYKE CU 7
OTHER	33	BLUE LEAD DUBLIN GULCH	106/D/04	64 01 50 135 48 00	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
OTHER	41	BOYLENS EASTERN CLAIM GROUP	087/H/10	71 31 113 14	05 IN BASALT CU 7
OTHER	42	BOYLENS WESTERN CLAIM GROUP	087/H/04	71 03 20 115 52 30	05 BASALT? CU 7 AG 7
OTHER	68	CASSIAR CREEK CALEY	116/C/08	64 18 140 13	M STOCKWORK IN SERPENTINITE ASB7
OTHER	89++	CLINTON CREEK CASSIAR	116/C/07	64 27 140 42	M STOCKWORK IN SERPENTINITE ASB1

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
OTHER	146	DUBLIN GULCH	106/D/04	64 02 30 135 49 55	03* BRECCIATED FAULT ZONES IN METASEDS CU 7 SN 7 AG 7 AU 7
OTHER	147+	DUBLIN GULCH	106/D/04	64 02 135 50	03 IN STREAM GRAVELS AU 3 W 3 SN 7 BI 7 PB 7 TI 7 FE 7 AS 7
OTHER	150+	EAGLE DUBLIN GULCH	106/D/04	64 01 38 135 48 35	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 6 AG 6 AS 7
OTHER	151++	ECLIPSE EAST SHOWING	068/H/09	75 31 30 096 08	09 OPEN SPACE FILLING IN LIMESTONE & DOLOMITE BRECCIA ZN 2 PB 2
OTHER	191	FORT RELIANCE	116/B/03	64 09 139 29	05 SLFDS IMPREGNATE LAYERS OF SCHIST CU 7
OTHER	212	GOODENOUGH	106/M/13	67 56 30 135 31 00	05 SLFD IN DYKE/ COUNTRY RK-JURASSIC SEDIMENTS CU 7
OTHER	244+	HAGGART CREEK	106/D/04	64 01 135 51	03* IN STREAM GRAVELS AU 3 W 3 SN 7 BI 7 PB 7 TI 7 FE 7 AS 7
OTHER	279	JAC 10 AND 11 CLAIMS MELVILLE PENINSULA	047/B/02	68 12 30 085 30 27	07 MINOR VEINS/ GOSSAN/ UNDERLAIN BY GREENST & SCHIST CU 7 AG 7 ZN 7 PB 7 FE 7
OTHER	283	JAY G	106/D/04	64 00 30 135 38 30	04 VEINS/SHEET-LIKE BODIES PARALLEL TO BEDS/IN SCHIST AG 7 PB 7 ZN 7 AU 7 SB 7 FE 7 MN 7
OTHER	329	KENT PENINSULA	077/B/01	68 12 108 11	05 DISS SLFDS IN MUDSTONE & SHALE/ STRATIFORM DEPOSIT CU 7
OTHER	330	KENT PENINSULA 8	077/B/01	68 07 108 21	05 DISSEM(ASSOC W DIABASE DYKES & SILLS)IN DOLOMITE CU 7
OTHER	371	LOCALITY-1	046/K/16	66 59 32 084 11 22	01 RADIOACTIVE FELSIC SILL IN CRYSTALLINE LIMESTONE U 7 TH 7
OTHER	406	MELVILLE PENINSULA-GOSSAN G-11	047/B/02	68 13 27 085 31 56	06 GOSSAN ZONE IN QUARTZ-CHLORITE GREENSTONES CU 7 AG 7 NI 7 FE 7
OTHER	407	MELVILLE PENINSULA-GOSSAN G-13	047/B/02	68 12 25 085 33	06 MASSIVE SLFDS IN QUARTZ-RICH ZONE IN GREENSTONE CU 7 NI 7 AG 7 AU 7
OTHER	408	MELVILLE PENINSULA-GOSSAN G-14	047/B/02	68 12 24 085 31 42	07 MASSIVE TO DISS SFLD IN QTZ PEBBLE CONGL & QTZITE CU 7 ZN 7 PB 7 NI 7 AG 7 FE 7
OTHER	409	MELVILLE PENINSULA-GOSSAN G-17	047/B/02	68 12 06 085 27 54	05 GOSSAN AT CONTACT OF MGNT-CHERT-FE FM & SCHIST CU 7 AG 7 AU 7 FE 7
OTHER	410	MELVILLE PENINSULA-GOSSAN G-18	047/B/02	68 12 24 085 16 24	05 GOSSAN ZONE IN GNEISS/ QUARTZITE/ & AMPHIBOLITE CU 7 AG 7 AU 7 FE 7
OTHER	411	MELVILLE PENINSULA-GOSSAN G-7	047/B/07	68 19 48 085 11 42	05 GOSSAN IN GREENST QTZITE & GNEISS NEAR GRN CONTACT CU 7 AG 7 FE 7
OTHER	412	MELVILLE PENINSULA-LOCATION 2	046/N/01	67 01 53 084 01 01	01 RADIOACTIVE FELSIC INTRUSIVE U 7
OTHER	413	MELVILLE PENINSULA-LOCATION 5	046/N/04	67 02 06 085 46 30	01 RADIOACTIVE SKARN IN CONTACT WITH GRANITIC INTRUSV U 7 TH 7
OTHER	414	MELVILLE PENINSULA-LOCATION 8	046/N/01	67 05 25 084 03 44	01 DISSEM RADIOACTIVE MINERAL IN FELSIC INTRUSIVE U 7
OTHER	415	MELVILLE PENINSULA-LOCATION 9	046/N/01	67 04 19 084 03 45	01 DISSEM RADIOCATIVE MINERAL IN FELSIC INTRUSIVE U 7
OTHER	434	MILLER CREEK	116/C/02	64 01 140 55	05 REPLACEMENTS ALONG A SHEAR ZONE IN SEDS CU 7 PB 7
OTHER	452	MUSKOX SHOWING W-5	087/H/16	71 52 112 43	05 DISS VEINS & REPL IN FAULT BRECCIA/ IN BASALT CU 7 AG 7
OTHER	453	MUSKOX SHOWING-M-125	087/H/10	71 37 113 22	05 DISS IN AMYGDALOIDAL BASALT ALONG A FAULT CU 7 AG 7
OTHER	454	MUSKOX SHOWING-M-134	087/H/07	71 28 113 38	05 MALACHITE SURROUNDS RED AGGLOMERATE FRAGMENTS CU 7
OTHER	455	MUSKOX SHOWING-M-148	087/H/16	71 52 30 112 59	05 DISS IN FRACTURED BASALT & UNDERLYING SEDIMENTS CU 7
OTHER	459++	NANISIVIK STRATHCONA SOUND	048/C/01	73 03 40 084 30 30	09 MASSIVE SULPHIDES IN DOLOMITE PB 1 ZN 1 AG 1
OTHER	474	NORTHEAST CORWALLIS ISLAND	058/G/06	75 21 15 094 09	09 FRACTURE FILLINGS IN DOLOMITE & LIMESTONE CU 7 PB 7 ZN 7 NI 7 AG 7

AREA	ID NUM	DEPOSIT NAME(S)	NTS AREA	LOCATION	DEPOSIT TYPE AND CHARACTER --- COMMODITIES AND STATUS
OTHER	485	OLIVE DUBLIN GULCH	106/D/04	64 02 23 135 46 50	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
OTHER	501*	PATCH AID	086/K/11	66 31 30 117 22 30	07 QTZ VEIN SYSTEMS & STOCKWORKS CUTTING GRANITICS CU 6 BI 6 AG 6 AU 6
OTHER	502*	PAUL MOUNT CAMERON	106/D/03	64 05 20 135 00 30	04 FAULT VEIN IN LIMESTONE AG 5 PB 5 ZN 5 CU 7 FE 7
OTHER	507**	PESO & REX	106/D/04	64 00 45 135 57 20	04 FAULT VEIN SYSTEMS IN QUARTZITE/ PHYLLITE/ SCHIST AG 2 PB 2 ZN 6 SB 6 AS 6 CU 6
OTHER	508**	PESO NO 1	106/D/04	64 00 45 135 58 00	04 FAULT VEIN IN QTZITE/ PHYLLITE/ SCHIST AG 2 PB 2 ZN 6 SB 6 CU 6 AS 6
OTHER	509	PESO NO 4 & NO 6	106/D/04	64 01 05 135 58	04 FAULT VEIN IN QTZITE/ PHYLLITE/ SCHIST AG 7 PB 7 ZN 7 SB 7 CU 7 AS 7
OTHER	510	PESO NO 5	106/D/04	64 01 30 135 58	04 FAULT VEIN IN QTZITE/ PHYLLITE/ SCHIST AG 7 PB 7 ZN 7 SB 7 CU 7 AS 7
OTHER	521**	POLARIS BANKENO	068/H/08	75 23 10 096 56	09 MASSIVE & DISSEM SULPHIDES IN LMS & DOL BRECCIA ZN 2 PB 2 AG 2 CD 2
OTHER	524	POTATO HILLS AREA	106/D/04	64 02 135 47	04 VEIN CLUSTERS W-BEARING PEGMATITES AND SKARNS W 7 AU 7 AG 7 SN 7
OTHER	537	RAMBLER HILL	106/D/03	64 04 35 135 15 30	04 VEIN ALONG FAULT CUTTING SCHIST & GREENSTONE CU 7 AU 7 AG 7 PB 7 ZN 7 FE 7
OTHER	542*	RED GROUP-SHOWING NO 5	086/K/06	66 27 54 117 26 54	02 SLFDS IN A GIANT QTZ VEIN (SLOAN DYKE) CU 7 U 7 V 7
OTHER	543	RED GROUP-SHOWING NO 6	086/K/06	66 28 18 117 26 54	05 IN A DIABASE DYKE CU 7 AG 7
OTHER	544**	REX VEIN	106/D/04	64 00 10 135 54	04 VEIN IN SHEARED QUARTZITE & PHYLLITE AG 2 PB 2 ZN 7 SB 7 AU 7 AS 7 CU 7
OTHER	589	SHAMROCK DUBLIN GULCH	106/D/04	64 02 35 135 46 25	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
OTHER	596	SILVER CITY	116/B/05	64 18 20 139 52 00	04 IN QUARTZ-CARBONATE ROCK AG 7 PB 7 ZN 7 AU 7 CU 7
OTHER	609*	STAND-TO HILL	106/D/03	64 02 00 135 10 15	04 FAULT VEIN BETWEEN GREENSTONE & SEDS CU 6 AG 6 PB 6 AU 6 ZN 6 MN 7
OTHER	610	STEWART-CATTO DUBLIN GULCH/ CABIN VEIN	106/D/04	64 02 03 135 47 30	04 QTZ VEINS IN METASEDS ALONG GRANODIORITE CONTACT AU 7 AG 7 AS 7
OTHER	639	TRAIL RIVER	106/L/03	66 14 135 21	02 BRECCIA IN PROTEROZOIC SEDIMENTS U 7 FE 7 CU 7 CO 7 AS 7 AG 7 MN 7
OTHER	697	18 MILES EAST OF CAPE SIBBALD	047/B/07	68 17 10 085 02 33	05 IN GRANITIC ROCKS CU 7

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APPENDIX 2

DETAILS OF CRITERIA USED IN APPRAISAL OF AREAS

CRITERIA FOR ESTIMATION OF LEAD-ZINC POTENTIAL

J.W. Lydon

Most lead and zinc are produced from ore deposits of the following types:

1. Volcanogenic massive sulphides, which are associated with rocks of submarine volcanic origin. Although massive sulphide deposits have been found in association with a variety of lithologies, volcanic sequences of calc-alkaline affinity have been the most productive.
2. Sediment-hosted massive sulphide deposits are formed in a submarine environment contemporaneously with the enclosing host rocks, which most commonly are shales or greywackes but may also consist of other lithologies such as carbonates. It is probable that volcanic-hosted and sediment-hosted deposits are end members of a complete spectrum of massive sulphide types, which is marked by a gradual decrease in the volcanic component of the host rocks concomitant with a decrease in the relative copper content of the ores. In the case of both groups, other types of chemical sediments, such as iron formations, manganese formations, and chert, are often associated with the sulphide deposits. Genetically, massive sulphide deposits appear to be associated with thermal and/or tectonic events that are contemporaneous with their deposition.
3. Carbonate-hosted deposits in the sense used here excludes those of the massive sulphide or related types. The main representatives of this group are lead-zinc deposits that have been emplaced after lithification of their carbonate host rocks, and are often referred to as the "Mississippi Valley" type. Their genetic controls are controversial, but among the more popular views may be included: deposition in reefs or at carbonate/shale facies changes, especially at the "hinge line" of a major sedimentary basin and in association with marine evaporites; in solution cavities and collapse breccias below a major unconformity; in carbonates overlying a basement high.
4. Sandstone-hosted deposits. A limited amount of world production of lead, usually with subordinate zinc, is from shallow water arenaceous sediments. It is the author's opinion that such deposits have been formed by the in situ reduction of oxygenated, metal-bearing groundwaters, and that the most common geological environment favourable for this event is where organic or sulphide rich shales or carbonates overlie red sandstones.
5. Miscellaneous types of deposits. Under specialized circumstances, zinc and lead is won from other types of ore deposits either as the primary product or as a by-product. Such deposits include veins, skarns, placers, etc. However, because the economic viability of such deposits is the exception rather than the rule, they are not considered in the present assessment.

For this report it was the writer's responsibility to evaluate parts of area A-4 (District of Keewatin), parts of B-5 (Northern District of Keewatin), B-6 (Boothia, Somerset and Prince of Wales islands) and A-7 and A-8 (Ellesmere and Axel Heiberg islands) in the light of the general criteria given above. For these purposes the designated areas were divided into three categories:

a) Those areas within which the geological environments outlined above have not been recognized. At the present time these are considered to hold little or no potential for major lead-zinc ore deposits. These areas are left unshaded on the sketches in the main text of this report (Figs. 5, 6, and 7).

b) Those areas within which geological environments similar to those outlined above have been indicated. These areas are considered favourable targets for exploration, and may contain major lead-zinc ore deposits. These areas are shaded with vertical lines on Figures 5, 6 and 7.

c) Those areas which contain proven lead-zinc deposits of economic significance. There are no examples of this category in the specific areas here considered. Elsewhere, however, base metal exploration of the Arctic Islands has to date defined two such areas: the Cornwallis lead-zinc District (Kerr, 1977b) in Ordovician carbonates of Little Cornwallis and Cornwallis islands; and an area extending southeastwards from Arctic Bay-Strathcona Sound across the Borden Peninsula of northwestern Baffin Island.

CRITERIA FOR ESTIMATION OF GOLD AND SILVER POTENTIAL

R.I. Thorpe

Gold and silver potential has been estimated with a number of specific types of deposits in mind. Some characteristics and factors that may control the occurrence of these deposits are given in the following sections.

Gold in sequences of submarine volcanic rocks

An overall criterion is that these rocks be of Archean age since these have proven far more favourable than similar rocks of younger age.

1. Deposits associated with carbonate-facies volcanic exhalative products. Favourable factors include:
   - i) evidence for mafic to felsic volcanic cycles;
   - ii) presence of felsic volcanics, especially contacts between felsic volcanics and overlying mafic volcanics or sediments;
   - iii) other evidence for volcanic exhalative processes, such as may be provided by sulphide-facies iron formation, other "weak" or poorly developed iron formations, or chert units;
   - iv) known occurrences of this type.
2. Structurally-controlled deposits. Some of these are simple Au-bearing quartz veins. Others are of schist or "shear-zone" type. Since, especially in the case of the larger zones of the latter type, the controlling structural features are often not evident due to erosion of the highly altered rocks, the main criterion (other than the presence of occurrences of this type) is the presence of submarine basaltic lavas (pillowed lavas) and/or ultramafic lavas.
3. Exhalative deposits associated with ultramafic flows. The principal criterion is the presence of ultramafic volcanics since details of the geology that would be considered as favourable indicators, such as, for example the presence of exhalative horizons of chert and/or sulphides are usually not known.
4. Deposits associated with subvolcanic felsic porphyries. The potential for this type of deposit has generally been neglected, because the required level of information regarding the character of felsic rocks within the greenstone belts is generally not available.

Gold deposits of the Contwoyto Lake type

These deposits are considered to have formed by volcanic exhalative processes. They differ from other volcanic-exhalative types in that: (a) arsenides always form a significant part of the disseminated mineralization; (b) while some carbonate may have originally been present this is not now evident; and, (c) most occurrences are in sequences that are predominantly sedimentary, although a tuffaceous component may well have been present. The known occurrences are within the Slave Province (Mackenzie District), and it has been assumed for purposes of this study that the main potential for undiscovered deposits of this type is similarly restricted.

Apart from the latter general guideline, it is difficult to define more precisely the areas most favourable for this type of deposit, based on presently-available information. The reasons for this include: (a) the known occurrences are widely scattered throughout the Slave Province; and, (b) the host rocks are sediments of the Great Slave Supergroup and, especially in terranes that have been moderately to highly metamorphosed, these rocks may be difficult to recognize.

Gold deposits of Paleoplacer type

The principal criterion is the presence of fluviatile sediments. Fluviatile sequences may be considered especially favourable in areas where: (a) potential sources are evident in basement terranes, as reflected by the presence of numerous gold occurrences; and, (b) where the sedimentary sequence includes very mature sediments such as quartz pebble conglomerates.

Gold deposits of the classic Witwatersrand-type of South Africa, generally interpreted as being of paleoplacer origin, may be suspected where pyritic quartz-pebble conglomerates and less favourable pyritic polymictic conglomerates are known, as in eastern District of Keewatin.

Silver deposits of complex U-Bi-Co-Ni arsenide type

Within the general areas under consideration deposits of this type appear to be restricted to the Bear Province. The presence of felsic subaerial volcanics is a prime criterion. By projection from the known occurrences near Great Bear Lake the presence of northeast-striking tensional (?) faults (or subsidiary fractures) also appears to be an important criterion. There are no doubt other important factors in the genesis of these deposits, but these have not been clearly defined. However, in a number of cases diabase sills are closely associated with this type of deposit.

Vein silver deposits of simple mineralogy

Deposits of this type are known in the Slave Province in the Hope Bay area east of Bathurst Inlet. The controls on these veins are not obvious but could include: (a) small tensional (?) fractures in the host metavolcanic rocks; and, (b) nearby diabase sills which may have overlain the vein sites within a very short distance (75 metres?) at the time the veins were formed. A genetic association with the diabase sills is apparently supported by a lead isotope model age of about 1500 m.y. for the silver-bearing veins and a comparable age for a similar sill farther to the west.

Silver in volcanogenic massive sulphide deposits

The criteria used here are the same as those for the massive sulphide deposits that contain silver. A qualification is that the massive sulphide deposits are generally richer in silver (and lead) when they are contained in rock sequences which have a significant sedimentary or felsic volcanic component.

CRITERIA FOR ESTIMATION OF NICKEL POTENTIAL

O.R. Eckstrand

Virtually all significant nickel sulphide deposits occur in, or are associated with, mafic and/or ultramafic magmatic rocks. The favourable host rocks fall into three categories:

1. Layered, differentiated, quasi-conformable mafic plutons, (e.g., Sudbury, Ontario; Norilsk, U.S.S.R.; Duluth complex, Minnesota). Deposits in these rocks are characterized by ores having similar nickel and copper contents; various geological ages; pre- or early syn-tectonic emplacement; and, large size.

2. Weakly-differentiated ultramafic flows and sub-volcanic sills and dikes (e.g., Kambalda, Australia; Thompson(?), Manitoba; Perseverance, Australia). Deposits in these rocks are characterized by ores having nickel usually greatly in excess of copper; Precambrian age (associated or host flows are Archean); pre- or early syn-tectonic emplacement; and, small to moderate size.

3. Pipe-like or lens-like, differentiated mafic plutons (e.g., Lynn Lake, Manitoba; Carr Boyd, Australia; Empress, Rhodesia). Deposits in these rocks are characterized by ores having similar nickel and copper contents; various geological ages; post-, syn- or pre-(?) tectonic emplacement; and, small to moderate size.

In the case of ultramafic plutonic rocks, those of ophiolitic, Alpine, kimberlitic, and carbonatitic affiliation appear to have little or no economic potential for nickel. As for mafic plutonic rocks, only those of ophiolitic affiliation are relatively safely excluded from consideration. Beyond that, positive criteria for their nickel potential are uncertain, and all should be regarded as having some potential.

Vein occurrences of nickel and nickel-copper sulphides, unless closely associated with rocks of categories 1, 2 or 3 tend to be of little economic significance.

Lateritic or paleo-lateritic nickel deposits of economic significance are unknown in Canada.

CRITERIA FOR ESTIMATION OF COPPER POTENTIAL

R.I. Thorpe

The most likely copper deposits in the areas assessed in this report are of the volcanogenic massive sulphide type, for which the criteria are given by Lydon (Pb-Zn criteria) elsewhere in this report.

For sedimentary copper deposits the prime site of formation is in basal, anoxic sediments of a marine transgressive cycle deposited on continental sediments accumulated in equatorial arid or semi-arid regions (Kirkham, 1978, p. 132). Thus the presence of fluviatile sandstones or similar sediments overlain by marine shale or shale-limestone sequences is the main sedimentary setting to be sought.

Deposits or occurrences of the Coppermine River type must be assessed through analogy with economically-important deposits of similar type of the Keweenaw Peninsula, Michigan.

For copper and copper-molybdenum deposits of the porphyry-type assessment is by analogy with numerous well-described deposits of this type. The criteria include the presence of high-level (relatively shallow), often small, felsic plutons that are generally porphyritic, the presence of extensive, generally pyritic, alteration zones associated with these plutons, and the presence of scattered chalcopyrite (with or without molybdenite) that is controlled by minor fractures.

APPENDIX 3

DETAILED DISCUSSION OF MINERAL POTENTIAL OF INDIVIDUAL AREAS

The main body of this report has attempted to assess the general potential of the various regions or area groupings to contain undiscovered deposits of various commodity-types. It must be appreciated – as has been frequently emphasized in the text – that this should be considered a very "coarse" assessment and that there are many local areas within the general regions here discussed where detailed and systematic appraisals are required but cannot be made at this time because of the lack of an adequate geological and metallogenic data base. Given these restrictions, the sections that follow, dealing with more specific mineral potential observations in individual areas – including the proposed park areas – must be considered to provide only a framework within which more detailed work is needed to achieve meaningful assessments. In many cases the additional work must include field investigations.

Because many of the areas involved in this assessment are so large, and contain a variety of geological environments, attempts are not made in the following sections to provide detailed discussion of all sub-areas of potential exploration interest. In general, the discussions are limited to those localities for which a reasonable database exists or for which individual contributors to this report have personal knowledge based on past field work.

1. NORTHERN YUKON (A-1) NORTH-CENTRAL YUKON (B-1)

A-1 (Northern Yukon)

Little more can be said about this area than has already been noted in the body of the report. Based on present knowledge, the principal areas of potential interest lie outside the proposed park area to the east (Barn Uplift) and to the south (Old Crow Range). However, as already noted, the results of initial reconnaissance geochemical survey work carried out by the Geological Survey in 1978 suggest that there are localities within A-1 where additional follow-up work is warranted although there are, based on recent data, no indications of spectacular geochemical anomalies[9].

In the extreme northwest part of A-1, near the Alaska-Yukon border, chromite and tungsten have been found in heavy metal concentrates from creeks (e.g. Aspen Creek, Sheep Creek) in the area between Firth River and Malcolm River. This area is underlain by Proterozoic and Cambrian sedimentary and volcanoclastic rocks. It was investigated during the course of the above-mentioned geochemical survey in 1978 but no mineralization in bedrock was noted. Based on higher than background tungsten and copper in stream sediments from the area and locally (e.g. Mountain Creek) higher nickel and cobalt values, the area nevertheless warrants further investigation. In the same Malcolm River-Firth River area, Sheep Creek was the site of a small placer gold operation, and as recently as 1979 about 55 ounces of gold was recovered (G. Gilbert, personal communication, 1980). Gold has also been recovered from bars of the Firth River and from Anker Creek, north of Mount Fitton.

In the southern part of A-1, north of Old Crow Flats, terrane underlain in part by Carboniferous carbonates and clastic sediments of the Lisburne Group may have some potential for carbonate-hosted lead-zinc deposits. In the Timber Creek area, for example, reconnaissance stream sediment geochemical results suggest subtle enrichment in lead and zinc values and perhaps copper (Open File Report 565).

B-1 (North-Central Yukon)

As earlier noted, this area contains a variety of known mineralized geological environments as well as many localities considered as favourable on the basis of present information, particularly in the southern part of B-1. Much of the latter area in Selwyn Basin and along the western extension of Mackenzie Fold Belt (Wernecke and Ogilvie mountains) has been documented in recent years and better geological and metallogenic knowledge is becoming available. However the central and northern parts, including Porcupine Ranges on the west, Porcupine Basin-Eagle Plain in the interior and Richardson and Barn mountains on the east and north includes much little-explored terrane that contains, on the basis of available reconnaissance geological information[10] environments that may have potential for a number of commodities. In particular, the extensive carbonate terranes in the general area would seem to warrant exploration for possible lead-zinc deposits.

Iron

The Delta iron prospect mentioned earlier in this report was described briefly in Open File 492, Geological Survey of Canada (1978). The following is extracted from that report:

> "Cretaceous sediments consisting of interbedded black shale, sandy shale and siderite are exposed in the northern part of the Richardson Mountains along Cache Creek, Fish River, Boundary Creek, and Rapid River, between latitude 68°25' and 68°35' (Young, 1972, 1973). Sections containing numerous siderite beds range in thickness from 500 to 1500 feet and contain 15% to 20% iron and 1.5% to 3% phosphorus, with some individual layers containing as much as 14% to 20% P_2O_5.
>
> The siderite occurrences are of little interest as an iron resource because of their low grade, the intimate admixture of clay and phosphate minerals and their remote location. It is technically feasible to produce iron from this material but the processing methods are complicated and costly and involve high energy consumption.
>
> The abnormally high amount of phosphate associated with the siderite beds may be an indication of phosphate resources in this sequence of rocks but no samples of a quality and grade suitable for fertilizer raw materials have been reported. The phosphate is known to occur as apatite and in phosphatic silicate minerals. Some of the occurrences of phosphatic

[9] Goodfellow, W.D., 1979, op. cit.

[10] A series of 1:250 000 scale compilation geology maps covering parts of these areas has recently been published by D.K. Norris. See Geological Survey of Canada Open File Report 499 and 621.

silicate material contain exotic assemblages of minerals that are in demand for museums and by collectors and the area may possibly sustain a small industry for the supply of mineral specimens in the future.

The sequence of rocks containing siderite and black shale represents sedimentary fillings of trenches and grabens in a highly faulted euxinic marine environment and is of considerable general metallogenic significance. Mudstones containing abnormal amounts of copper, zinc, lead and precious metals may be present in this rock succession but significant occurrences are not known at present.

According to Young et al., (1976) the bedded ironstone and shale facies of the Albian flysch facies are distributed over the Cache Creek High and westward through the area where the above-named exposures were examined. Possible occurrences of other metalliferous mudstone could be associated with the ferruginous facies of the Albian stage sediments."

West of Porcupine Basin-Eagle Plain in Porcupine Ranges south of Old Crow a bed of massive dense oolitic magnetite, estimated to be about 30 m thick, has been traced in outcrop about 150 m along strike (Norris, 1976). It occurs about 150 m above the base of the Jurassic and Lower Cretaceous Kingak Formation and has the potential of recurring at the same stratigraphic level elsewhere in the Kandik Thrust Belt. The occurrence is located at longitude 140°16' West, latitude 66°31.2' North.

Little is known about two occurrences of iron that are probably within area B-1. "Extensive" deposits of hematite were reported by a Dawson City prospector on the east fork of Hart River "about 30 miles north of the height of land between the Yukon and Mackenzie river basins"[11] (in Young and Uglow, 1926, p. 13). The same authors mention hematite and magnetite in sediments of the Tindir group, near the Alaska border at about latitude 65°N to the south of Cathedral Creek. Beds .6 to 3 m thick contain up to 30% Fe. In the same general area red conglomerates on a small tributary of Tatonduk River reportedly contain 5 to 25% Fe.

In the extreme southwest part of B-1, Algoma-type black slaty magnetite and thin-banded, cherty, magnetite facies iron formation are associated with quartz-chlorite and quartz-mica schists at Shell Creek, a tributary of Yukon River about 80 km northwest of Dawson (Listing No. 593 in Appendix 1A). Thin banded grey chert containing pyrite and pyrrhotite occurs near the magnetite iron-formation (Gross, 1969).

On Bear River about 25 km southeast of its junction with the Wind River, massive specular hematite is irregularly distributed in argillite. Drilling indicated lack of continuity with depth. Near the ore zone the argillites contain 12-15% hematite (Findlay, 1969a).

The Snake River iron deposit is located about 80 km east of the southern part of area B-1 in strata of the Mackenzie Mountains Rapitan Group. This deposit constitutes one of Canada's major resources of iron and contains several billion tons of iron-formation suitable for open-pit mining. Development of this deposit might result in railroad construction in or adjacent to area B-1. Within area B-1, Eisbacher (1978) shows two areas in the Wernecke and Ogilvie mountains in which strata previously mapped and described by Green (1972) are possibly correlative with the iron-bearing Rapitan Group of Mackenzie Mountains.

[11] This "location" takes in a lot of territory but from the sketch map given by Young and Uglow (p. 12) the site would appear to be somewhere in the Hart River Sheet (116 H) south of the junction of the Hart and Peel rivers. According to Norris, 1979 (GSC Open File Report 621) this area is underlain mainly by Devonian and Carboniferous carbonates and clastics.

Uranium

The southern part of area B-1 (Ogilvie and Wernecke mountains) has recently attracted uranium exploration attention, mainly as a result of initial discoveries in the area by Archer, Cathro and Associates. Bell (1978), Bell and Jones (1979) and Bell and Delaney (1977) have recently reported on uranium occurrences in northern Yukon, particularly in Wernecke and Ogilvie mountains. In the latter area uranium mineralization (mainly brannerite; subordinate pitchblende and uraninite) occurs – locally with copper, cobalt and iron – associated with silicified breccia zones and quartz veins in Precambrian (Helikian?) sedimentary strata ("Wernecke succession"). Although of the order of 200 showings of this type are known in a discontinuous belt extending some 200 km from Fairchild Lake in the eastern Wernecke Mountains to the Mt. Tombstone area in the southern Ogilvie Mountains, no deposits of economic significance have as yet been discovered. This belt is, however, likely to continue to be considered favourable for exploration for uranium as well as other metals in the future.

In the northern part of Area B-1, at least two geological environments that hold some potential for uranium mineralization (locally in association with other minerals) are known. Small Devonian granite plutons in the British and Barn mountains, in addition to carrying minor tungsten (scheelite), molybdenum and copper mineralization exhibit higher than background radiometric responses. Bell and Jones (1979) report that the Mt. Sedgwick pluton, for example, "shows up to 5 times background radiometric response in creek-bed outcrops" (p. 397). Other small plutons in this region (Mt. Fitton, Mt. Hoidal) may show similar characteristics.

In this same northern region radiometric anomalies are associated with weathered rubble derived from siliceous and cherty Carboniferous(?) strata south of the Barn Uplift and near Bonnet Lake. Similar radiometric anomalies have been found associated with Lower Paleozoic cherts and intraformational chert-breccias to the south of Bonnet Lake (Bell, 1979). These and similar occurrences in the Barn Mountains have recently been under investigation by Aquitaine of Canada Ltd.

Because of the general lithological and structural complexity of the Barn Uplift region and because recent reconnaissance geochemical work conducted by the Geological Survey shows higher than background values in a number of metals in stream sediments from the region, it seems clear that the Barn Uplift area warrants further exploration.

Other commodities

Numerous occurrences of a variety of commodities are known in Area B-1 (See Fig. 1, Fig. 3), although no major deposits have yet been discovered. As noted earlier in this report, however, much of this region, particularly in the central and northern parts, has not yet been subjected to extensive exploration.

The association of tungsten and locally molybdenum, copper and possibly uranium with small granitic plutons in Barn and British mountains in northern B-1 has been noted (see Appendix 1A, Mt. Sedgwick, Mt. Fitton) and in Old Crow Range (Appendix 1A, Listing No. 484). The potential of the extensive carbonate and shale-carbonate packages (Cambrian to Carboniferous) of the central parts of the area for lead-zinc mineralization has similarly been noted although it should be emphasized that, to date, no mineralization is known in these rocks.

Minor copper mineralization is known in a few localities in the central and northern part of B-1, the best-documented site being at Bern Creek (Appendix 1A, Listing No. 26). Other indications of copper or other base metals have been reported from time to time in the past, but verification has proved difficult.

In the southern part of B-1, along the Mackenzie Mountain trend extending through Wernecke and Ogilvie mountains a variety of showings and occurrences are known, including the previously-noted uranium (copper-iron-cobalt) mineralization in the belt. Copper, copper-silver, copper-cobalt and minor lead-zinc mineralization occurs in the eastern Wernekes and the general Bonnet Plume River area and as noted earlier, east and south of the southeast boundary of B-1 potentially important zinc and silver-lead-(zinc) mineralization has been discovered in recent years (Goz Creek; Rackla River area).

Probably the most significant deposit known at present in southern B-1 is the Hart River (Mark) volcanogenic(?) massive sulphide deposit (Appendix 1A, Listing No. 397) in southwest Wernecke Mountains. This deposit, investigated in the late 1960s and early 1970s by Hart River Mines Limited (now North Hart Resources Ltd.) contained 524 000 tonnes of ore grading: Au-1.405 g/tonne; Ag-49.7 g/tonne; Cu-1.45%; Pb-0.87%; and, Zn-3.65%[12]. Earlier, the company had also reported an additional 544 000 tonnes of probable ore of similar grade[13].

In the southwestern part of B-1, in addition to the previously-noted Shell Creek iron occurrence, lead-zinc mineralization is present in the Coal Creek area (Appendix 1A, Listing No. 447).

2,3. EASTERN DISTRICT OF MACKENZIE (B-2, A-3, B-3)

2. Eastern District of Mackenzie: West Part (B-2)

The area B-2, as outlined, includes a number of known deposits with published or inferred reserves (see Table 2). These deposits include Cu, Zn, U, Pb, Ag and Au. More than 50% of the known or inferred reserves represented by these deposits have been proven by exploration and development programs conducted in the past 10 years, during which time the most intensive exploration to date has been carried out for volcanogenic massive sulphide (polymetallic Cu, Zn, Ag, Au and Pb) deposits in the northern part of the Slave Province and for uranium deposits in the Bear Province.

Copper

This area is favourable for the occurrence of a number of types of copper deposits, and can best be treated by division into a number of subareas.

Sediments north of lavas of the Coppermine River Group. In this area there is at least a moderate potential for copper deposits of the sedimentary type within sediments of the Rae Group (Kirkham, 1970, 1974). An occurrence of copper mineralization of this type is known here in the first appearance of green-grey marine beds that overlie a thick sequence of flood basalts and redbeds. The underlying flood basalts are notable for their numerous minor copper occurrences. To quote from Kirkham (1974):

> "Although only subeconomic concentrations of chalcopyrite, bornite, and chalcocite have been found in the sedimentary rocks..., the regional geology, tectonic setting, stratigraphy, age and the position of the cupriferous sediments are all remarkably similar to those of the Keweenaw Peninsula."

This area has not been adequately explored for this type of deposit although some exploration along these lines is currently in progress.

Coppermine River Group volcanics. Staking, started on a large scale in 1966, spread out to cover most of the belt of basalt lavas for a length of 215 km and widths from roughly 20 to 55 km. The ensuing exploration programs, carried out by more than 100 companies that held properties or interests in properties in the area, during the period 1967-1969 resulted in the location of great numbers of copper occurrences (Thorpe, 1970; Kindle, 1970) in areas covered by three 4-mile topographic sheets (86 M, N and O). The most significant discovery was the No. 47 deposit of Coppermine River Mines Ltd. which contains 3 239 000 tonnes averaging 3.44% Cu, or 3 724 000 tonnes averaging 3.07% Cu after allowing for 15% dilution by wall rock containing 0.6% Cu. This deposit is not currently economic because of its location, but the possibility for development in the future should be left open. A few deposits with smaller tonnages were also defined. In view of the rather intensive exploration carried out during this period, the potential for discovery of additional significant deposits of this type is only considered to be moderate. This conclusion is reached in spite of the fact (Kirkham in GSC Open File 492, 1978) that the large and important conformable native copper deposits of the Keweenaw Peninsula of Michigan occur in this general type of geological environment. Although the majority of the copper occurrences in the Coppermine River basalts are of the discordant type, there remains some potential for discovery of concordant deposits within these rocks.

Hornby Bay and Dismal Lakes groups of sediments. Hoffman (1969) suggested that the lower clastic sediments of the Hornby Bay Group, particularly in the area between the Coppermine River and the Muskox Intrusion, could be a favourable stratigraphic horizon for copper mineralization. He also suggested that basal black mudstone of the Dismal Lakes Group in the Dismal Lakes area was similarly favourable. Also, stratigraphically controlled copper might be expected near the contact between dolomite of the Dismal Lakes Group and the overlying basalts of the Coppermine River Group, since such mineralization is known at the contact between dolomite of the Parry Bay Formation and lavas of the Coppermine River Group in the Bathurst Inlet area to the east.

However, although a few minor structurally-controlled occurrences of copper are known in dolomite of the Dismal Lakes Group (Thorpe, 1970, p. 111; Watts, 1968), there is no direct evidence for the type of stratigraphically-controlled copper mineralization postulated by Hoffman.

Muskox Intrusion. The potential for Cu-Ni mineralization of magmatic type in association with this layered mafic-ultramafic complex is discussed under nickel.

[12] Canadian Mines Handbook, 1978-79, p. 232.

[13] Northern Miner, January 3, 1974, p. 22.

Great Bear Batholith and Hepburn Batholith area. Within the B-2 area these belts underlie a triangular area northeast of Great Bear Lake. By analogy with deposits farther to the south in the Bear Province there is considered to be some potential in this area for porphyry-type copper deposits as well as for stratigraphically-controlled deposits such as occur in sedimentary rocks and subaerial felsic pyroclastic rocks of the Echo Bay Group within the Terra Mine. Terra Mine is located south and west of the B-2 area on the Camsell River just south of the east part of Great Bear Lake.

There is also considered to be potential for significant copper in association with complex U-Ag-Ni-Co-As vein deposits in the area, such as those at the Echo Bay mine at Port Radium.

Epworth Group Sediments (Epworth Fold Belt). Hoffman (1969) suggested that a favourable stratigraphic horizon for copper mineralization is located in clastic sediments near the base of the Epworth Group between Eokuk Lake and Port Epworth, and along the Tree River. No copper occurrences are known to support this suggestion although a little copper mineralization, probably structurally controlled, in dolomite of the Epworth Group, is known. However, there has been insufficient exploration in these highly folded and thrusted rocks to allow a meaningful assessment of their potential.

Slave Structural Province. Rocks within the Slave Province proper are of Archean age and include what may be considered typical Archean greenstone belts, although there are some differences between these and greenstone belts of the Superior Province. By analogy with the Superior Province, and with the more southerly part of the Slave Province, the B-2 area must be considered to have excellent potential for polymetallic (Cu, Zn, Pb, Ag, Au) massive sulphide deposits and for gold deposits. This conclusion is supported by the presence of significant deposits and occurrences in the area (Table 2, Figure 4).

Within the area, copper forms a significant part of the Izok Lake, High Lake and Takiyuak volcanogenic massive sulphide deposits. In the Hackett River massive sulphide deposits, lying near the east boundary of the B-2 area, copper forms a less significant part.

The potential for discovery of further massive sulphide deposits must be rated as excellent, since there has only been concerted exploration for this type of deposit in the northern Slave Province over the last 10 years.

Silver

Although minor silver occurs in association with discordant copper deposits and occurrences in the Coppermine River basalts, and also in association with copper deposits in similar rocks in the Keweenaw Peninsula, Michigan, the potential for economic concentrations of this type must be considered to be very low.

Within the Great Bear Batholith belt in the area northeast of Great Bear Lake there is a moderate to high potential for the occurrence of complex Ag-U-Co-Ni-As-Cu veins of the Echo Bay type. These veins often show an association with NE-striking (tensional?) faults, and sometimes with giant quartz veins having similar trends.

Some uranium occurrences near Hunter Bay, and Co-Ni arsenide and bismuth occurrences around the east end of Great Bear Lake, suggest that there is potential for this complex type of vein deposit along major northeast-striking faults and their subsidiary breaks in the area extending from Great Bear Lake northeast to the Coppermine River. The Echo Bay and Terra mines in the Great Bear Lake area are proof that this type of deposit can be successfully mined in the area.

Within the portion of area B-2 falling in the Slave Province, silver will be an important by-product from volcanogenic massive sulphide deposits if these achieve future production. The Hackett River deposits are especially rich in silver and lead, relative to other deposits of this type.

Gold

Within the B-2 area significant gold occurrences are known only in Archean rocks of the Slave Province. While there are no doubt possibilities for gold deposits of paleoplacer type in some of the Proterozoic sedimentary rocks of the Epworth, Snare and Hornby Bay groups, the potential of these Proterozoic sequences must be rated low relative to that of the Archean rocks of the Slave Province.

In the Slave Province, as in Superior Province, gold is commonly associated with volcanic and associated sedimentary rocks which comprise the greenstone belts. The deposits are often controlled, at least in their present form, by structural features that range from minor fractures and shears to major schist or "shear" zones. Numerous occurrences of this type, especially in the southern part of Slave Province, suggest that the potential is good for this type of deposit.

The most significant type of gold deposit that has been discovered to date in the B-2 area is known as the Contwoyto Lake type (Baragar and Hornbrook, 1963, p. 13-22; Schiller and Hornbrook, 1964a, p. 10-16; and 1964b; Schiller, 1965, p. 12-14; Bostock, 1967a and 1968; Tremblay, 1967; McConnell, 1964). This type consists of gold-bearing amphibolitic beds in a sedimentary sequence that contain disseminated arsenides (loellingite and arsenopyrite) and sulphides, and bears many similarities to the Homestake gold deposit, South Dakota (McConnell, 1964). The Contwoyto Lake deposit was discovered in 1960 and explored extensively for three years by Inco Limited. No comprehensive tonnage and grade figures have been released but Knutsen (1974) suggested that a zone with a potential of 53 400 tonnes per vertical metre, but at an unstated grade, had been outlined. He also noted that the zone included several million tons of material at a grade of at least 10 g/tonne gold. However, if the deposit was to be mined it would probably be as a large-tonnage low-grade type of operation. Numerous other occurrences of this type of mineralization are present in the Contwoyto Lake area, mainly south of the lake, and a number of these could perhaps be developed to supply additional tonnage.

The other type of gold mineralization with at least some proven potential is in the Tree River area near the Arctic Coast (Schiller, 1965; Thorpe, 1966) where quartz veins, in many cases 1 to 2 metres wide, cut gneissic, generally granitic, rocks. Five zones on one property have an aggregate length of 410 metres, an average width of about 1 metre and a grade of approximately 20 g/tonne gold.

Lead-Zinc

Within Epworth Group sediments of the Epworth Fold Belt a carbonate to shale facies change is represented by the change from the Kuuvik Formation (carbonate) to the Cowles Lake Formation (Hoffman, Fraser and McGlynn, 1970) and may suggest some potential for Mississippi Valley type lead-zinc deposits (Sangster, 1970 and in GSC Open File 492, 1978). Hoffman (1969) suggested that stromatolitic dolomite in the Epworth Group could be a possible host for lead-zinc mineralization, but no occurrences are known that lend support to this suggestion.

Within the Great Bear Lake-Dismal Lakes area there could be some possibility for stratigraphically-controlled lead-zinc deposits in stromatolitic dolomite of the Hornby Bay and Dismal Lakes Groups, as suggested by Hoffman (1969). However, there are no occurrences, and little evidence from such sediments elsewhere in the world, to support this suggestion. Areas in which carbonate sediments overlie basement highs could, however, have significant potential.

Hoffman (1969) also noted that in Hadrynian sediments of the Rae Group above the Coppermine River basalts, there could be potential for mineralization of the Mississippi Valley or Pine Point type in shelf-edge carbonates adjacent to basinal shales and evaporites. Such facies boundaries probably also exist in the Richardson River and Hornaday River basins, and on Victoria Island within the Shaler Group sediments.

The greatest potential for zinc, and possibly for lead as well, in B-2 area lies in the volcanogenic massive sulphide deposits in which some proven reserves exist and for which there is excellent potential for future discoveries (see Copper).

Nickel

Nickel occurrences are associated with the Muskox intrusion, a Neohelikian layered mafic-ultramafic pluton discovered by the Canadian Nickel Company Ltd. in 1956, and subsequently explored extensively by that company and others. The intrusion is exposed over a north-south extension of 118 kilometres, has a dike-like plan and a funnel-shaped cross-section (Smith, 1962; Smith and Kapp, 1963). It intrudes Aphebian basement paragneisses and schists and the overlying Helikian Hornby Bay Group of sedimentary rocks. Nickel and copper, with some palladium and platinum, occur in two modes (Chamberlain, 1967): a) as Ni-Cu sulphide concentrations along the east and west walls of the Marginal Zone and the Upper Border Zone; in the latter, although continuous, the sulphide-bearing bands are too narrow and low grade to have economic potential, and, b) disseminated Ni-Cu sulphides in two thin chromite-rich bands within the Central Layered Series of the pluton.

Elsewhere in B-2 area minor occurrences of nickel are known but, to date, none are of economic interest. Sulphides in gabbroic to ultramafic rocks explored in 1975 north of Contwoyto Lake (Gumbo Lake, 66°18'N, 111°12'W) reportedly contain traces of copper and nickel. An occurrence of niccolite is known near Itchen Lake (about 65°34'N, 112°48'40"W) but it is of mineralogical interest only.

Molybdenum

Occurrences of molybdenum are known within both the Bear and Slave provinces, but only one occurrence of molybdenite (approximately 67°41'N, 111°17'W) in a pegmatitic quartz vein at the contact of a granite body, is known within the B-2 area. The potential for molybdenum is considered to be low relative to the potential for other metals.

Chromite

Chromite is present in a thin "Merensky-type" band, in one horizon within the Muskox mafic-ultramafic layered complex, but the known occurrences are not of economic significance. It is possible but unlikely that chromite in more substantial concentration may be present in hidden zones elsewhere in the complex.

Iron

Thin beds of cherty iron-formation have been reported approximately 25 km southwest of Regan Lake, probably in NTS 76C/16 near the east boundary of B-2 area.

Bostock (1967b) reports thin beds typically less than 2 metres thick of siliceous magnetic iron formation, in rocks of the Yellowknife Supergroup near the mouth of Itchen River at Point Lake. In the same area, Henderson (1975) describes siderite iron formation as "black carboniferous locally pyritiferous mudstone and thin-bedded to laminated siderite iron-formation with minor chert layers and local magnetite concentrations." Henderson (1977) also recorded occurrences of oxide, carbonate, silicate and sulphide facies iron formation in the Contwoyto Formation.

Iron formation has been reported in sediments of the Yellowknife Supergroup in the vicinity of the Back River volcanic complex on the edge of area B-2 (Lambert 1977, 1978; Henderson, 1977; Shegelski and Thorpe, 1972) and at Wolverine Lake both oxide and sulphide facies occur (Baragar, 1975). Magnetite iron formation occurs in argillite within the greenstone belt south of James River (Fraser, 1964) and oxide iron formation is present about 10 kilometres west of Concession Lake (Thorpe, 1972b).

Banded oxide iron formation and carbonate and sulphide facies of exhalite in the Back River-Hackett River region have been reported by Frith et al. (1977).

Four occurrences of oxide iron formation, one of which is oxide-sulphide-silicate iron formation, are known in the general area of Contwoyto Lake (Thorpe, 1972b, Table 5).

Titanium, Vanadium

A differentiated gabbroic (possibly gabbroic to ultramafic) body 15 kilometres northwest of Kathawachaga Lake in the Contwoyto Lake area has been found to contain vanadium-bearing titaniferous oxides (Laporte et al., 1978). An estimate for one of two mineralized areas was 183 000 tonnes per vertical metre of 18.42% Fe, 0.22% V and 11.86% Ti, suggesting titaniferous magnetite rather than ilmenite as the oxide phase (E.R. Rose, personal communication). Considering the remote location, the titanium and vanadium are probably not of economic significance.

Uranium

B-2 includes an area from Great Bear Lake to Dismal Lakes in which there is significant current exploration for uranium. The most promising recent discovery in this area is a deposit near Dismal Lakes that is currently under investigation by Imperial Oil Limited. This deposit occurs in a sandstone unit within the Hornby Bay Group, the exact age of which is not known but which may be equivalent to that of the Athabasca sandstone. In addition to Imperial Oil Ltd., the Hornby Bay Group is being explored by several other companies, including BP Minerals Ltd., Hudson Bay Oil and Gas Co. Ltd., Gulf Minerals Canada Ltd., Uranerz Exploration and Mining Ltd., Noranda Mines Ltd. and Cominco Ltd. (Aquitaine option).

The most favourable unit within the Hornby Bay Group consists of quartzose sandstone and basal and intraformational conglomerate. It is at least 160 metres thick and extends for more than 300 kilometres. It is reasonable to expect that other deposits may be discovered in this favourable geological environment.

A-3 (Bathurst Inlet)

Gold

The previously-described Contwoyto Lake type of deposit is represented by a gold occurrence east of Bathurst Inlet (about 66°42'55"N, 107°27'10"W) and within the A-3 area (Thorpe, 1972a, p. 109). In one pit a grade of approximately 10 g/tonne gold across a width of 4 metres was obtained. A gold occurrence that is probably of similar type is located (approx. 67°03'N, 108°47'W) on the NOEL claims (Schiller, 1965; Thorpe, 1966; Thorpe, 1972a, p. 100) just west of the Hood River and roughly on the west boundary of the A-3 area. In trenching and drilling on the property between 1965 and 1967 some very good gold values were obtained across narrow widths, including an exceptional value in one trench of 162 g/tonne or 4.74 ounces/short ton across 3 feet.

These occurrences, together with others of this type near Contwoyto Lake and elsewhere in Mackenzie District, indicate that this type of gold mineralization is widespread in rocks of Archean age in the Slave Province. Thus further exploration directed specifically at Archean rocks in the vicinity of Bathurst Inlet would seem to have a good chance of resulting in further discoveries, and the gold potential of the area must be rated as moderate (within Archean terranes).

There may be some potential, probably low, for paleoplacer gold deposits in Proterozoic sediments of the Kilohigok Basin (Bathurst Inlet). The best potential is probably within quartz pebble conglomerate at or near the base of the Western River Formation, but the Tinney Cove and Ellice Formations could also host such deposits (Campbell and Cecile, 1975).

Copper

The lavas of the Coppermine River Group in the Bathurst Inlet area contain many occurrences of native copper, chalcocite and bornite similar to those that are known in the Coppermine River area (Kindle, 1970; Thorpe, 1970). The sequence of lavas here, based on gravity and other evidence, is much thinner than it is in the Coppermine River area. According to some genetic models, this might be considered a negative factor in so far as the potential for economic mineralization is concerned, but in any case the potential for significant volcanic-hosted deposits of the Coppermine River-type is considered to be low.

Potential geological environments for copper deposits of sedimentary type in the Bathurst Inlet area (Kilohigok Basin) have not been adequately explored. Some fairly rich chalcocite is known to occur in a thin bed at the top of dolomite of the Parry Bay Formation where this dolomite is in slightly unconformable contact with basalts of the Coppermine River Group on Ekalulia Island. The general stratigraphy of the Kilohigok Basin has been studied by Campbell and Cecile (1975) but the details of sedimentary environments are not generally known. However, there may be potential for sedimentary copper deposits within the Western River Formation (W_{2A} or W_{2E} members?) and Peacock Hills Formation (P_3 or P_4 members?) or again, at the base of the Quadyuk Formation.

Lead-Zinc

Galena veins in granite occur at Galena Point in Bathurst Inlet but, in spite of the fact that a small tonnage of ore was mined and shipped out via barge to Hay River about 10 years ago, the veins are not of great economic significance.

Within Proterozoic sediments of the Kilohigok Basin (Bathurst Inlet) there is some potential for sedimentary Pb-Zn deposits. One possibility would be for Mississippi Valley type deposits in association with carbonate-to-shale facies transitions, but specific location of such facies boundaries have not been defined. Likewise, the possible sites for unconformity-related or karstic-associated deposits are probably not fully known from the geological studies done to date, but the Brown Sound Formation (Campbell and Cecile, 1975) might provide a suitable environment for such deposits.

Sandstone-hosted Pb-Zn deposits could also possibly occur in sediments in the Kilohigok Basin. Most formations within the basin contain sediments with suitable characteristics (Campbell and Cecile, 1975) but the Western River Formation is probably the most likely host, since the model for genesis of these deposits suggests that the presence of nearby granitic basement rocks may be important, and perhaps essential. The potential for the exploitation of deposits of this type must, however, be considered as low since known deposits of this type elsewhere are too low in grade to be economic at this remote location.

Nickel

Numerous gabbro sills and dikes of several ages near the Bathurst Trench show no recognizable differentiation and have little indicated potential for magmatic nickel-copper sulphides. Only minor chalcopyrite has been noted in the oldest gabbros which intrude Yellowknife-type metasedimentary rocks (Tremblay, 1971).

A niccolite occurrence is known in the vicinity of Bathurst Inlet (about 67°14'N, 108°57'W) but like a similar occurrence near Itchen Lake, it is of mineralogical interest only and has no economic significance.

Uranium

The A-3 area is underlain mainly by Archean and Proterozoic rocks. Cominco Ltd. and other companies have conducted exploration for uranium in recent years and at least two radioactive anomalies have been detected. Although no uranium deposits have been discovered in this area to date, it must be considered as having potential for uranium mineralization, particularly the part underlain by Proterozoic strata.

B-3 Eastern District of Mackenzie; East Part

Gold

One area with gold potential within area B-3 is the Hope Bay volcanic belt (Fraser, 1964). A considerable number of gold occurrences are known in the belt, which contains a high proportion of pillowed basaltic lavas. The most significant gold occurrences may be those on Ida Point (68°14'30"N, 106°34'W), where arsenopyrite-bearing quartz veins occur in minor shear zones, and those explored by Radiore Uranium Mines Ltd. (68°01'10"W, 106°46'15"W) which are narrow but high grade quartz veins (Thorpe, 1972a). A small tonnage is indicated for the latter property, but for a normal mining width the grade would be uneconomic or marginal on the basis of the small tonnage proven to date. The gold potential in the Hope Bay volcanic belt must be rated as at least moderate.

One occurrence of gold, probably of the Contwoyto Lake type, is known near the east boundary of the B-3 area (Laporte et al., 1978, p. 60). This occurrence, and others previously described, indicate that this type of mineralization is widespread in the Slave Province, and suggest that further exploration directed specifically toward this type should be carried out. Pending further exploration, the potential for this type of deposit in Archean rocks of the Slave Province in area B-3 cannot be evaluated in detail but from general considerations it must be judged to be moderate to high.

Copper

The Hope Bay volcanic belt lying just south of Elu Inlet must be considered to hold at least some potential for volcanogenic massive sulphide deposits, although this potential probably should be considered low since Cominco Ltd. and Noranda Mines Ltd. have recently done reconnaissance surveys and concluded that the geology is not particularly favourable.

Silver

Native silver is known to occur in veins in and near the margin of the Hope Bay volcanic belt toward the northeast limit of the Slave Province (Thorpe, 1972a). Two main veins, both short and lenticular, were discovered near granitic rocks which intrude the margins of the volcanic belt. Although of small size, the veins were spectacularly rich in native silver. In 1974 a small mill was established here by Hope Bay Mines Ltd. and 1998 kilograms of silver were produced from 765 tonnes of ore (Laporte et al., 1978). In 1975 another 335 kilograms were obtained from 646 tonnes of ore. This production was in addition to 9.1 tonnes of hand-sorted ore averaging 166 733 g/tonne Ag that were shipped in 1973. The total silver production from the veins in the period 1973 to 1975 was thus 3850 kilograms.

The small size of the Hope Bay veins means that, unless additional larger veins are located, the deposits do not have important economic significance at present. However the native silver in these veins is, in part at least, in beautiful tree-like dendritic forms in calcite so that if similar additional veins are found they could be mined on a small scale or possibly worked for mineralogical specimens.

Lead-Zinc

The greatest potential for zinc, and to a lesser degree, lead, within the B-3 area probably lies in the possibility of discovering more deposits of the volcanogenic massive sulphide type (see Copper).

Molybdenum

Molybdenite occurs extensively at scattered localities at Elu Inlet (approx. 68°08'30"N to 68°13'15"N at 105°57'45"W) along the contact between a small volcanic belt and granitic intrusive rocks, possibly granodioritic in composition. The volcanics are moderately metamorphosed, especially at the contact with intrusive rocks. Mineralization occurs here and there for a distance of about 13 kilometres but outcrop along the contact is very poor. The potential for economic mineralization however is considered to be low.

Uranium

The B-3 area is underlain by rocks that are mainly of Archean age and is therefore considered less favourable for the discovery of deposits than are areas underlain by Proterozoic sequences in the A-3 (Bathurst Inlet) area.

Iron

In the Beechey Lake area, Tremblay (1963, 1964) has reported fine-grained banded iron formation with an estimated iron content of 40%. In addition, a unit of oxide iron formation 50 metres thick and interlayered with argillite and locally chert, causes a prominent anomaly on an aeromagnetic map of this area (Henderson, 1975). Elsewhere in this general region, Henderson also reported "thin discontinuous layers to lenses of silicate chert magnetite iron-formation" similar to that associated with greywacke in the Point Lake-Contwoyto Lake area. Frith et al. (1977) also refer to banded oxide iron formation and carbonate and sulphide exhalite facies sedimentary rocks in the Back River-Hackett River region.

Nickel

Discovery in 1970 of nickel- and copper-sulphide-bearing norite boulders[14] at the mouth of the Perry River near the east boundary of the B-3 area generated exploration in the "up-ice" direction (south) in attempts to locate the bedrock mineralized source-rocks. At least 8 showings containing nickel and copper were found, at distances up to 40 km south of the boulders and in part in the B-5 area, but grades were mostly low (Padgham et al., 1976, p. 29-32). It appears uncertain whether the source of the mineralized boulders has yet been identified, so the presence of significant, probably drift-covered deposits remains a possibility. Furthermore, one of the showings (OTOK claims) merits some exploration interest (3.91% Cu, 0.16% Ni over 5.5 ft.) as a distinct type of base metal deposit. However counterbalancing these possibilities is the need for extreme richness and/or size of deposits in order to be economically viable in this remote area.

[14] Assays up to 3.9%Ni, 2.2% Cu.

A-4 (Wager Bay)

Copper-Zinc-Lead-Silver (Volcanogenic Massive Sulphides)

Volcanic rocks of Archean age that belong to or are comparable to rocks of the Prince Albert Group are included within the north part of the A-4 area and are exposed again a short distance to the west. These rocks, as discussed more fully for the B-5 area, have some potential for volcanogenic massive sulphide deposits.

Gold

The group of rocks noted above as having potential for polymetallic massive sulphide deposits, also has potential for gold mineralization of a number of types, specifically for those associated with mafic or ultramafic volcanic rocks, or with felsic porphyry bodies that commonly occur in such volcanic belts.

Nickel

As noted in a following section for the B-4 area, both intrusive and extrusive ultramafic rocks occur in the Prince Albert Group immediately west of the Wager Bay (A-4) area. These rocks have some potential as hosts for nickel deposits. The Prince Albert Group rocks are also considered, as noted above, to have some potential for massive sulphide and gold deposits. The metamorphosed volcanic rocks within the north part of the A-4 area are probably equivalent to rocks of the Prince Albert Group and thus may warrant exploration.

Iron

Immediately west of the A-4 area Laporte (1974b, p. 46) has reported oxide iron formation containing minor nickel and copper. Other oxide and sulphide facies iron formations occur both within and in the vicinity of the A-4 area.

Iron formation associated with either greywackes or meta-ultramafic rocks of the Prince Albert Group has been reported at a number of general locations, including 56 J, in the region (Campbell, 1973, 1974; Schau, 1974). These occurrences may lie outside area A-4, but exact locations are unknown.

None of these occurrences of iron formation are considered to be of economic interest as a resource of iron.

Uranium

Rocks in this area are Archean and/or Proterozoic gneisses, granites, intermediate to mafic volcanic rocks and ultramafic intrusions.

Only a reconnaissance radiometric survey has been conducted in this area, but neither uranium deposits nor significant uranium anomalies are known.

The area has not yet been formally assessed for uranium potential by the Geological Survey, but a preliminary geological evaluation indicates a relatively low favourability for uranium mineralization.

B-4

Copper, Zinc, Lead, Silver

These metals will first be discussed collectively since, aside from the potential for copper in Cu-Ni deposits, they are most likely to occur together in deposits of the volcanogenic massive sulphide type.

Volcanic rocks of the Kaminak Group in the Padlei to Tavani portion of the Rankin Inlet-Ennadai belt have been shown to be a series of submarine calc-alkaline lavas, compositionally identical with those of the highly productive Abitibi belt of Ontario and Quebec (Ridler and Shilts, 1974a). Although the Rankin Inlet-Ennadai belt lies within the Churchill Province, an Archean age has been documented for the volcanic rocks. Volcanogenic massive sulphide deposits are commonly associated with the upper felsic parts of volcanic cycles and with volcanogenic sediments (exhalites) that also occur in this position. Five cycles, each with exhalite zones, have been recognized in the Padlei-Tavani area, and a large part of the area contains exhalites of the favourable carbonate and sulphide types (Ridler and Shilts, 1974a). The most favourable felsic volcanic centres are located in the vicinity of Spi and Quartzite lakes, and less well documented centres are present at Maguse River, Munro Lake and Copperneedle River.

The presence of a small body of massive sulphide mineralization at Spi Lake, just west of Carr Lake, and of 3 small massive sulphide lenses on the property of Gemex Mines Inc. (optioned to St. Joseph Explorations Ltd.) in the Heninga Lake area are also evidence of the base metal potential. Drilling has been and is still being carried out on several other sites of massive sulphide occurrences, particularly around Heninga, Turquetil, Munro and North Kaminak lakes. The area must be considered to have excellent potential for Cu-Zn-Ag-Pb-Au deposits of the massive sulphide type.

Extensive geochemical surveys of the eastern part of Keewatin District also provide some evidence bearing on the base metal potential. Copper anomalies in the clay fraction of tills were defined in two areas: in the area between Yandle and Turquetil lakes and extending to the northwest (and southwest?) from there; and, in the Quartzite Lake area (Shilts, 1974; Ridler and Shilts, 1974a). This latter area corresponds with one of the two main felsic volcanic centres; the former anomaly is associated with the less well known volcanic cycles around the Heninga Lake pluton. Zinc analyses on the clay fraction of till samples in the eastern part of Keewatin District (east of approx. 98°W longitude) indicate a large local anomaly southwest of Turquetil Lake and extending northwest from there across Heninga Lake. This anomaly corresponds in part with a known zone of exhalative mineralization and lies within a larger, northwest-trending area of zinc-rich glacial deposits (Shilts, 1977).

Unpublished data also indicate a regional enrichment of zinc in glacial deposits north of a line from Rankin Inlet to Baker Lake. It is possible that this regional anomaly could extend farther west and northeast of this line but these areas have not yet been sampled.

Widely-spaced glacial drift samples collected within 60 km of the proposed Hudson Bay Polargas pipeline route (Fig. 2) indicate broad regions of zinc enrichment from Baker Lake northward to the north tip of Somerset Island. The significance of these zones cannot presently be evaluated, but the areas of particularly zinc-rich drift just north of Baker Lake and on the north tip of Somerset Island probably warrant further scrutiny because they also show enrichment in copper and nickel. Specifically, high copper values were obtained in the area north of Rankin Inlet. These, along with the zinc data, may indicate that the greenstone belt around the north shore of Rankin Inlet and more metamorphosed volcanic and sedimentary rocks (in an area of very poor exposure) between there and Chesterfield Inlet, have good potential for massive sulphide deposits. Further evaluation of the geochemical data for this area would be desirable.

Copper

Aside from its presence as a constituent in massive sulphide deposits, the potential for copper in the area is probably fairly low.

Kirkham (1974) noted that some disseminated base metal mineralization has been reported to occur in clastic sediments of the Hurwitz Group in Keewatin District. However, the locations and character of these occurrences are not known. The geological features of the basal part of the Ameto Formation (Bell, 1970) would seem to offer some possibility for environments favourable to the deposition of sedimentary copper deposits. Relative to the potential for massive sulphide deposits, the potential for this type of deposit is probably low.

There is also some potential for the porphyry copper or copper-molybdenum type of deposits. For example, north of Whale Cove (approx. 62°27'N, 92°34'W) Cu-Mo mineralization occurs in veins spaced about 3 metres apart over an area of 930 square metres. In general, however the potential for economic deposits of this type is considered to be low.

Lead

Aside from volcanogenic massive sulphide deposits, there is some possibility for the discovery of lead in sandstone-hosted deposits in coarse clastic sediments of the Hurwitz Group. However, deposits of this type are generally low grade, and they would thus probably be uneconomic in this area.

Gold

Numerous gold occurrences are known within the B-4 area, mostly in association with the Archean greenstone belts (Ridler and Shilts, 1974a). In the southwest part of the B-4 area gold deposits of several types, but of relatively small size, were defined by drilling by Selco Exploration Co. Ltd. in the Cullaton Lake area in the mid 1960s. One of these deposits consists of a lens of mineralization rich in arsenopyrite and pyrrhotite that is closely associated with a band of siliceous oxide iron formation. The sulphide lens terminates abruptly along strike, and thus an exhalative origin is questionable. This deposit, the "B" zone deposit, is now held by O'Brien Energy and Resources and is considered to contain about 272 000 tonnes of ore to a depth of 400 ft (130 metres) at a grade of 25.7 g/tonne (The Northern Miner, July 19, 1979, p. 3). At the present price of gold the deposit is considered economic. Two other small deposits of lower grade are also known in the area. One of these is the Shear Lake deposit, near the Cullaton Lake airstrip, in which mineralization is controlled by a fault and subsidiary fractures cutting quartzite of the Hurwitz Group.

In the Padlei-Tavani area the potential for gold deposits of several types in the Archean greenstones is also considered to be excellent. The possible types of deposits include gold-bearing carbonate exhalite zones (numerous occurrences of this type are shown by Ridler and Shilts, 1974a), non-layered quartz-carbonate (green-mica-bearing?) zones of the Kerr Addison type (one occurrence of this type is shown by Ridler and Shilts, 1974a), and deposits controlled by minor and major schist or "shear" zones. A further possible type of mineralization consists of gold associated with sub-volcanic felsic porphyries, with Quartzite Lake being at least one favourable area in this regard.

Ultramafic volcanic rocks are known within the Prince Albert Group within the northern part of the B-4 area about 210 km north of Baker Lake. Since some gold deposits are closely associated with exhalative horizons that are in turn closely associated with ultramafic lavas, this suggests some potential for this type of deposit in the area. There would appear to be possibilities for gold deposits of paleo-placer type in some of the formations of the Hurwitz Group (Bell, 1970). Favourable strata may include the basal sequence, known as the Montgomery Lake sediments, and the Kinga Formation (possibly in orthoconglomerates of the lower Maguse member, or in the upper Whiterock Lake member). In the Montgomery Lake sediments, occurrences of pyritic quartz-pebble conglomerate are known, suggesting a potential for gold, and for uranium as well, using the major Witwatersrand deposits of South Africa as a model. Within area B-4 sediments of the Hurwitz Group are exposed in discontinuous belts between Padlei and the Pork Peninsula south of Rankin Inlet, and possibly correlative sediments are exposed between Baker Lake and Schultz Lake and again to the northwest of these in a relatively large area around Amer Lake.

Molybdenum

In addition to its association with copper near Whale Cove, a number of other molybdenite occurrences are known in Keewatin District. Molybdenite has been reported northwest of Maguse Lake and south of Carr Lake (Thorpe, 1972a, p. 147). It has also been mentioned by Laporte (1974a) to occur with other sulphides in narrow quartz veins in a granodiorite body north of Whiterock Lake (about 62°20'N, 93°15'W). Claims staked by Canadian Superior Exploration in 1971 near Carr Lake cover molybdenite-bearing aplite and quartz veins in gabbro that intrudes dacitic volcanics. In the Quartzite Lake area (approx. 62°22'N, 94°27'W) a number of gossans were found to contain minor chalcopyrite and molybdenite (Laporte, 1974b, p. 28). The MOL claims (east of Baker Lake in area NTS 56D/11) are on an apparently insignificant molybdenite-bearing quartz vein. Molybdenum also occurs in association with uranium in a significant number of the uranium occurrences near the east shore of Baker Lake, both on Christopher Island and on the north shore of the lake.

In spite of this significant number of occurrences, the potential for economic molybdenum deposits in the B-4 area is considered to be low.

Iron

Many aeromagnetic anomalies in the B-4 area are attributable to magnetite iron formations. To date, only a few of these occurrences have been shown to have a size, grade or location favourable for development as sources of iron. In the case of the McConnell River and Mistake Bay deposits located, respectively, about 100 km west of the settlement of Eskimo Point (on Hudson Bay) and about 140 km northeast of Eskimo Point on Hudson Bay, significant tonnages of concentrating-grade iron ore have been indicated by diamond drilling.

Iron formations as much as 60 metres thick are widely distributed in sedimentary and metasedimentary rocks of the Kaminak Group in the Mistake Bay and Wilson Bay areas, and about 50 km north of Mistake Bay. As noted above, a significant tonnage of concentrating-grade iron ore has been established at Mistake Bay. Heywood (1973) reported that the iron formations "consist of alternating 1/8 inch to 12 inch layers of magnetite and quartz interbedded with chert, jasper, very fine-grained quartz or slate as much as 4 feet thick". In the Eskimo Point and Dawson Inlet map-areas thinly inter-bedded iron formation and siltstone have been found in outcrop and black, very fine-grained thick bedded magnetite iron formation occurs in drift along linear aeromagnetic anomalies that extend for many miles, especially between Magusi Lake and Wallace River (Davidson, 1970). A bed of iron formation as much as 15 metres thick composed almost entirely of iron oxides was reported southeast of Kaminak Lake by Davidson (1968). Thin bands of quartz-magnetite iron formation were observed at several locations in an area northeast of Gibson Lake (Reinhardt and Chandler, 1973); minor magnetite iron formation also occurs in Watterson Lake map area (Eade & Chandler, 1974).

In NTS 66A/9 Laporte (1974a, p. 95-98) reports several bands of iron formation and aeromagnetic and ground magnetic anomalies, some attributable to iron formation. Ground surveys outlined good conductors associated with some of the iron formations. Oxide, sulphide and minor carbonate facies of iron formation were reported.

Heywood (1977) and Tippett and Heywood (1978) have reported two occurrences of magnetite iron formation in the Amer Lake area (66H), one of which is about 10 m thick (approx. 96°15'W, 65°28'N).

Sizeable deposits of magnetite-hematite-chert iron formation occurs near McConnell River. It has been noted above that significant tonnages of concentrating-grade iron ore have been established by drilling in these deposits. Several occurrences of jasper-hematite, siliceous magnetite-hematite and cherty-magnetite iron formations have been reported west of South Henik Lake by Eade (1974).

Near the north boundary of the B-4 area rocks of the Prince Albert Group contain iron formation associated with either greywackes or meta-ultramafic rocks in areas 56 J and K (Campbell, 1973, 1974; Schau, 1974). Some of these occurrences are assumed to be within the B-4 area, but exact locations are unknown.

Apart from interest as a possible source of iron ore the presence of iron formation – particularly carbonate and sulphide facies – is of importance as a metallogenic indicator in assessing the area for its potential to contain volcanogenic massive sulphide deposits and gold deposits (see Appendix 2 – Criteria).

It should also be noted that the development of major iron deposits outside of the B-4 area, such as the large deposits on Melville Peninsula, where the best deposits are located near Committee Bay, could be dependent on transportation corridors within this area.

Niobium, Rare Earths, Uranium

The alkaline complex at Quartzite Lake, which has an associated carbonatite phase, could have some potential, probably low, for niobium, rare earths and uranium (Ridler and Shilts, 1974a).

Tin

Laporte et al. (1978) mention the presence of fluorite-bearing granites of Paleohelikian age that intrude the Archean and Aphebian rocks in Keewatin District. One such body of granite may be that on the property of Urangesellschaft Canada Ltd. in the Yathkyed Lake area that hosts uranium mineralization. Such bodies of granite could possibly host tin mineralization. However, in general, the potential for economic tin deposits is considered to be very low.

Nickel

The Ferguson Lake Cu-Ni sulphide deposits discovered and explored by the Canadian Nickel Company in the mid-1950s are associated with a east-west striking hornblendite unit in two segments totalling about 5 km in length and averaging 35 metres in width. Poorly-substantiated reports indicate moderate tonnages of submarginal grade, but no reserve figures have been published (Wright, 1967). There may be potential for additional deposits in similar rocks to the west, and further exploration would probably be triggered if construction were to proceed on the gas pipeline that is proposed nearby.

The Rankin Inlet Ni-Cu deposit was mined as a small, high-grade operation from 1957-62, producing about 363 000 tonnes at a calculated recovery grade of about 2.6% Ni and 0.7% Cu, from a weakly-differentiated ultramafic sill. Subsequent exploration and mapping has located other ultramafic bodies in the same general area but without encountering significant mineralization to date.

Regional geochemistry of glacial tills from a large area in the Keewatin District has identified two areas of anomalous nickel values. One of these is an area of about 260 square kilometres between Yandle and Heninga lakes east of Padlei Lake (Shilts, 1975) which is overlapped by a somewhat larger area showing anomalous copper values. These metal values seem to be associated with a gabbroic body to the northwest (up-ice), but it is not known whether they represent sulphide concentrations with economic potential, or simply high background levels in the mafic intrusion.

The second area (Shilts, unpublished data) is a broad, poorly-defined, northwest-trending belt extending from Rankin Inlet to north of Baker Lake. Many of these samples also contain anomalous zinc values, but only two contain anomalous copper. The source and explanation of these nickel-zinc anomalies is not known, but should not be disregarded in future exploration.

Nickel-copper sulphides occur in carbonate-altered serpentinite lenses on the Torin Group of claims (about 62°06', 93°22') on the lower Ferguson River, but no other ultramafic rocks are reported in this area. Ni-Cu sulphides are also known to occur in mafic volcanics at Southern Lake (about 62°09', 94°15'), but the association suggests little economic significance.

Nickel-copper sulphides occur as disseminations in altered gabbro (62°51'N, 92°02'W) about 6 km north of the settlement of Rankin Inlet, and as minor occurrences in westward-trending adjacent volcanic amphibolites.

The Prince Albert Group, where it outcrops farther to the northeast (area B-5), is known to contain numerous ultramafic bodies with possible nickel potential and it may have similar potential where it projects into the northern part of the B-4 area north and west of the Back River.

Immediately west of area A-4 and within B-4 numerous ultramafic bodies, both intrusive and extrusive, occur in the Archean Prince Albert Group. Associated sulphide zones contain low values of nickel (maximum 0.51%) and copper (maximum 0.15%), however, at least some of these appear to represent synsedimentary sulphides related to the surrounding quartzites and metasedimentary schists rather than to the ultramafic rocks. Nevertheless, such ultramafic rocks are considered favourable and because the area has not been intensely explored, it should be considered to have some potential for nickel deposits.

Uranium

Area B-4 includes a part of Thelon Basin, and the Baker Lake, Amer Lake-Schultz Lake and Garry Lake Proterozoic belts. Uranium mineralization has been found: (a) in rocks of the Amer Group and their temporal equivalents; there are two groups of uranium occurrences here, one in the vicinity of Amer Lake and the other in the vicinity of Schultz Lake; and (b) in rocks of the Dubawnt Group in Baker Lake and Garry Lake belts. The former type of mineralization has been investigated by Aquitaine Co. of Canada Ltd. (optioned to Cominco Ltd.) Uranerz Exploration and Mining Ltd., Western Mines Limited and Urangesellschaft Canada Ltd.; the latter has been explored by Pan Ocean Oil Limited, Cominco Limited, Uranerz Ltd. and other companies.

This region includes the area withdrawn from exploration during parts of 1977 and 1978, by the Department of Indian and Northern Affairs.

A large exploration project prepared by Urangesellschaft Canada Ltd. north of Sissons Lake in the Schultz Lake area testifies to a high favourability of the Amer Lake-Schultz Lake segment[15].

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5. NORTHERN DISTRICT OF KEEWATIN (B-5)

Copper-Zinc-Lead

Most of the rocks of this area are highly deformed and metamorphosed which, combined with the reconnaissance nature of the geological data, makes interpretation of their original nature rather tenuous. For the purposes of this assessment, the rocks of the area may be conveniently divided into three groups.

i) Granitic and gneissic rocks that underlie more than 70% of the general area, and are considered to hold relatively low potential for Cu-Zn-Pb deposits.

ii) A volcanic group, composed mainly of mafic to intermediate volcanics (Heywood, 1961, 1967) and including some sedimentary rocks. These rocks are known as the Prince Albert Group in southern Melville Peninsula and may be the stratigraphic equivalents of similar lithologies mapped by Heywood (1961) as map units 1 and 2 west of longitude 90°. Quartz-magnetite iron formation is extensively developed in the Prince Albert Group on Melville Peninsula, east of the B-5 area, and also forms thinner and more discontinuous horizons further to the southwest in the Chantrey Inlet-Wager Bay area. These lithologic associations are typical of the environment of volcanogenic massive sulphide deposits. Therefore, based on present knowledge, it must be concluded that rocks of this group have some potential for volcanogenic massive sulphide deposits, although mineralization that is unquestionably of this type has not been reported to date. Minor showings of pyrite, pyrrhotite, chalcopyrite, bornite, sphalerite and galena, sometimes with nickel and molybdenum values, have been reported from rocks of this group, but commonly this mineralization appears to be intimately associated with mafic and ultramafic intrusions.

iii) A sedimentary group composed of the metamorphosed equivalents of limestones, quartzites, shales and greywackes. In the southern part of Melville Peninsula rocks of this type are known as the Penrhyn Group, in the Rasmussen Basin area as the Chantrey Group and in the Baker Lake-Wager Bay area as the Hurwitz Group. Although the distribution of these three groups suggests that they are parts of the same discontinuous structural belts, they may or may not be the stratigraphic equivalents of one another. As pointed out earlier, there are no definite lithologic criteria which are peculiar to sediment-hosted massive sulphide deposits, and the structural complexity of the area precludes a reconstruction of its synsedimentary thermal and tectonic history on the basis of present information. However, sediment-hosted massive sulphide deposits could still be present in these rocks. On the other hand, since these sediments do not include thick carbonate sequences, the potential for significant carbonate-hosted lead-zinc deposits is considered low. Of interest are the reports of occurrences of galena, with pyrite, pyrrhotite and/or chalcopyrite, in the Hurwitz Group to the northeast of Baker Lake (TAC and QUOICHI RIVER showings) and in the Penrhyn Group near Curtis Lake (CUL showing). These occurrences may represent the sandstone-hosted type of mineralization. To the west of Foxe Basin, disseminated sphalerite has been reported from the Penrhyn Group on the DUC claims, and elsewhere in this area anomalously high zinc and lead values have been reported from boulders and geochemical samples, often with associated significant values of Cu, Ni, and Mo.

Areas underlain by rock groups ii) and iii) are considered to have some potential for lead-zinc deposits. Prospecting permits and claims have been held in this area to cover showings of copper-nickel mineralization in metasedimentary rocks where they contain ultramafic bodies. The southeast corner of the B-5 area is underlain by an east-west trending band of group iii) rocks, 15-50 km wide, to the north of Repulse Bay. A belt of favourable group ii) and iii) rocks extends northeast from Chantrey Inlet to the vicinity of Pelly Bay. Claims have been held in the area to cover zinc-copper mineralization found around the periphery of an ultramafic plug.

Gold

The best potential for gold in area B-5 is probably within those parts where volcanic rocks of the Prince Albert Group are exposed. The volcanic belts include some ultramafic lavas. Gold deposits of volcanic exhalative type could be present in these volcanic-sedimentary belts in association with mafic or ultramafic volcanic rocks. Within or near these rocks, structurally-controlled (discordant) gold deposits could occur in minor or major schist or "shear" zones.

Iron

Rocks of the Prince Albert Group contain iron formation associated with either greywackes or meta-ultramafic rocks in area 56 J, K and O (Campbell, 1973, 1974; Schau, 1974). However, to date, none of these occurrences have been shown to be of economic interest as a source of iron.

On the east boundary of the B-5 area Reesor (1974) has reported:

> "A few thin beds of magnetite iron-formation associated with a grey fine-grained biotite-feldspar quartzite and an amphibolite layer has been found at scattered intervals, striking diagonally across map-sheet 46-N-3 from the northeast to the southwest corner".

Molybdenum

Near Rasmussen Basin in area B-5 the Turner-Chantrey Prospecting Syndicate staked the MIC claims (57 B/03; 68°03'45"N, 95°08'W) in 1971 to cover a copper-molybdenum showing that consists of a pyritic schist band in granitic rocks (Laporte, 1974b, p. 51). However, it is considered that there is a very low probability of economic molybdenum mineralization in the B-5 area.

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[15] Subsequent work during the summer of 1978 consisted of the drilling of 40 holes of which 20 intersected uranium mineralization. On the basis of this drilling the company speculates (The Northern Miner, July 19, 1979, p. C21) that it may be able to prove up a reserve of 20 000 000 pounds of uranium oxide (U_3O_8).

Uranium

Within the B-5 area sequences of Aphebian sedimentary rocks are currently receiving exploration attention for uranium, and are considered to have much greater uranium potential than other rock units. Geochemical anomalies have been detected in glacial sediments near areas of these rocks in the general Repulse Bay area.

Aphebian sedimentary sequences in the B-5 area are thus considered to have a moderate uranium potential.

Nickel

Ultramafic rocks that are probably in part of extrusive origin are present in Archean rocks that make up the Prince Albert Group greenstone belts. The main belt of such rocks extends northeast from the vicinity of 66°30'N, 92°45'W to Committee Bay. These rocks are favourable for the occurrence of nickel deposits, but to date there is very little evidence from exploration as to how highly they should be rated.

The presence of copper-nickel boulders and showings in the Perry River area has been noted in discussion of the B-3 area. These showings, and related boulders, lie in part within the west part of the B-5 area. No significant deposits have been located to date in the Perry River area, but further exploration is probably warranted.

6. BOOTHIA PENINSULA, SOMERSET ISLAND AND PRINCE OF WALES ISLAND (PARTS OF) (B-6)

Lead-Zinc

The greatest potential in the B-6 area is probably for these metals, and this has been discussed within the body of this report.

Diamond Prospects

Numerous small kimberlite bodies are known on Somerset Island. Some of these have been explored by Cominco Ltd. and others were subsequently explored by Diapros Canada Ltd., the Canada exploration subsidiary of DeBeers Cons. Mines Ltd. These kimberlite bodies have been described by Mitchell and Fritz (1973); Mitchell (1975, 1976), Mitchell and Clarke (1976) and Brummer (1978). In 1974 Diapros Canada Ltd. constructed a small test mill on Somerset Island and 400 tonnes of kimberlitic material were run through a heavy mineral concentration process. The concentrates were examined in South Africa and were found to contain a few small diamonds (Laporte et al., 1978).

Although there are a number of sets of linears evident on ERTS (LANDSAT) satellite photographs of Somerset Island, and a few large linears such as that defined by the east coast of the island, the relationship between these linears and structural controls for the kimberlitic breccia pipes and other bodies is not obvious.

It would appear that diamond exploration to date has not been too promising, and that structural controls and other criteria for kimberlite occurrence have not been well defined. Nevertheless the area must be considered to have some potential for economic deposits.

Uranium

This area contains a tongue of Precambrian rocks of the Churchill Structural Province surrounded by Phanerozoic sediments. No uranium occurrences are known at present in this area. However the presence of prominent structures (including unconformities) and of Aphebian sedimentary rocks are factors that make the area geologically analogous to areas that contain uranium deposits and occurrences elsewhere in the Churchill Structural Province and suggest some potential for the discovery of uranium.

Nickel

Several small ultramafic masses occur near the northern tip of Boothia Peninsula. Associated sulphides and gossans are known (Blackadar, 1967) but no nickel occurrences have been reported. These bodies may have some small potential for nickel deposits.

7. ELLESMERE AND AXEL HEIBERG ISLANDS (A-7, A-8)

A-7 (Eastern Part of Axel Heiberg Island)

Uranium

This area is part of the Sverdrup Basin and contains Mesozoic and Cenozoic sediments. A preliminary reconnaissance for uranium conducted by the Geological Survey in another part of the Sverdrup Basin in 1977 revealed weak uranium anomalies spatially related to evaporites[16]. On Ellesmere Island the Mesozoic sediments also show some radioactivity. This area is considered to have a low potential for uranium mineralization on geological grounds; however no uranium deposit or significant anomaly is known at present within the A-7 area.

A-8 (North-Central Ellesmere Island)

Copper-Lead-Zinc

The potential for volcanic-hosted and sediment-hosted massive sulphide deposits of Cu-Zn-Pb-Ag(Au) and Pb-Zn-Ag types, respectively, and for Mississippi Valley type Pb-Zn deposits is considered to be good. The potential for these deposit types has been reviewed in the main body of this report.

Other types of copper deposits, such as sedimentary deposits related to terrestrial-marine transitions, could be present in the A-8 area, but in general the geology is not known in sufficient detail to permit a satisfactory assessment for such deposits.

[16] See Jonasson and Dunsmore, 1979.

Uranium

This area is partly covered by ice. The exposed rocks are mainly Phanerozoic sediments, Precambrian metamorphic rocks and minor granitic and allied plutonic rocks. Because of the remoteness of this area any deposits discovered would have to be of relatively high grade to be economically mineable.

Although the area has not yet been formally assessed for uranium, the potential for discovery of uranium mineralization cannot be excluded.

Nickel

Norite and peridotite are known as part of an apparently differentiated complex on Cape Richard of Ellesmere Island (Christie, 1957), which intrudes the Cape Columbia basement rocks. No nickel-copper sulphides have been reported, and the economic potential would appear to be low.

Iron

Trettin (1966, p. 7) reports "a few tens of feet of low grade cherty iron-formation" and banded chert with minor hematite in the M'Clintock Inlet Region of northeastern Ellesmere Island.