GM 46932

GEOLOGICAL REPORT, KENTY LAKE AREA, CAPE SMITH BELT

GEOLOGICAL REPORT
ON THE

IMPERIAL PLATINUM WEST PROPERTY
PERMIT NO. 722
TOWNSHIPS 7922, 7923 AND 7924
KENTY LAKE AREA
CAPE SMITH BELT - UNGAVA REGION - QUEBEC

FOR

IMPERIAL PLATINUM CORPORATION

BY

A.C.A. HOWE INTERNATIONAL LIMITED

Report: #
January 12, 1988
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N.T.S.: 35 G/6 & 35 G/7
Lat. 61°26', Long. 75°05'
(approximate)

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SUMMARY

Results from a mineral exploration program carried out during the 1987 field season on the Imperial Platinum West property delineated targets worth further investigation. On the west plate, further sampling and mapping is recommended in the nose and core of a major syncline as well as along its southern limb. Also, further sampling of an interpreted tightly folded ultramafic sill in the north-central area and another tightly fold anticline/syncline structure in the northeast corner of the plate. (See Map IPW Plate 1). The east plate contained the most interesting values. In particular a Pb-Zn-Ag showing within a fault-zone associated with an EM conductor was discovered returning grades > 20,000 ppm for both Pb and Zn and 30 g/ton Ag. Based on geophysics, the most interesting part of the zone is under water. It is suggested that detailed geophysical (VLF, magnetics, HLEM) surveys and lithogeochemical sampling and mapping programs as well as a geochemical soil survey be conducted over the area south of the conductor (the zone is interpreted to be steeply south dipping to vertical). This target would also be a worthwhile drill target.

Further sampling and mapping should be conducted over the dunite sills in the southeast corner both north and south of the river and at the eastern boundary on the north side of the lake.

A geochemical stream sediment survey is also recommended over a portion of a major lake-river system which follows a fault valley cutting through many of the ultramafic and volcanic units, including the Pb-Zn-Ag showing.

The proposed budget for implementing the recommended exploration program is broken down into two phases. Phase I consists of a detailed geophysical program costed at $100,000 and Phase II, a

geological mapping and sampling and drill program budgeted at $400,000.

Total cost for the proposed program is $500,000.

1.0 INTRODUCTION

The purpose of this report is to summarize and present the results of field work performed during the 1987 field season, in the Cape Smith Fold Belt, by A.C.A. Howe International Limited, Toronto, on behalf of Imperial Platinum Corporation, Toronto. The work entailed reconnaissance geological mapping at a scale of 1:10,000; reconnaissance geophysical surveying; and geochemical sampling and assaying for Pt, Pd, Au, Ag, Cu, Ni, Pb, Zn, and Cr.

A portion of the property was previously explored by Getty Mines N.E. LTD. in 1972. In addition, both the Quebec Ministry of Energy and Ressources (MER) and the Geologic Survey of Canada (GSC) have performed regional reconnaissance mapping.

This report has been prepared with reference to field data, QMER reports and maps, and technical reports written for Imperial Platinum Corporation.

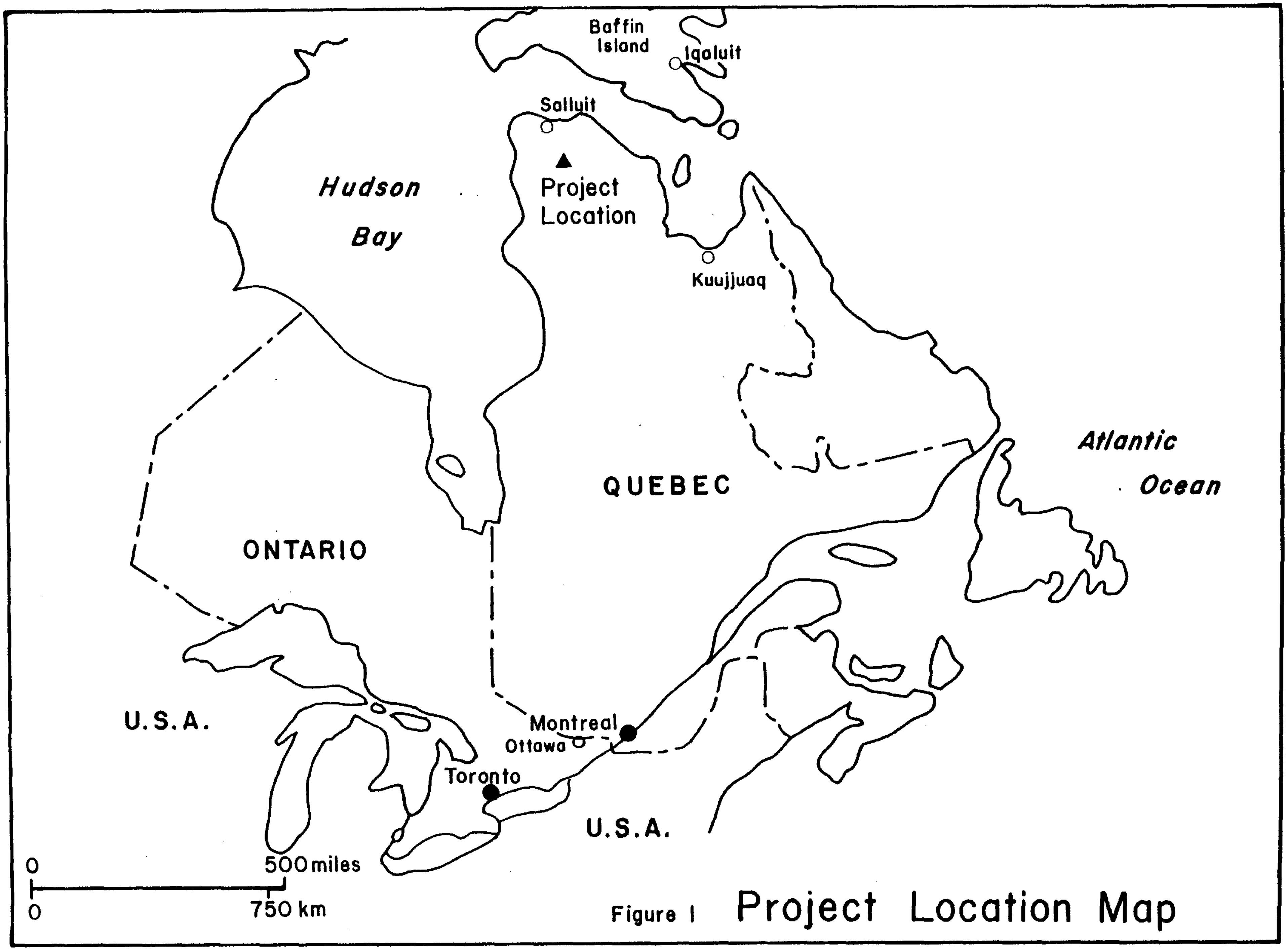

Figure 1 Project Location Map

2.0 PROPERTY DESCRIPTION, LOCATION AND ACCESS (See figures 1 & 2)

The Imperial West property is located 1,880 km north of Montreal; 425 km southeast of Frobisher Bay; and 76 km south of Deception bay, on the Hudson strait. It is situated within the Cape Smith fold belt in the Ungava region of New Quebec (see Fig. 1). The area is officially registered as permit No. 722 with the Quebec MER and consists of approximately 74.0 square km located in townships 7922, 7923 and 7924. The longitude and latitude given by NTS map sheets 35G/6 and 35G/7 are 74°54' to 75°16' and 61°24' to 61°28' respectively. (See appendix for official coordinates).

The permit has been issued to Imperial Platinum Corporation for a five year duration, expiring June 15, 1991. Quebec mining regulations stipulate that the permit may be extended for an additional five years. Assessment work and rental requirements are as follows: (Willy, 1987)

Table 1

YEAR	ASSESSMENT $ PER SQ. KM	ASSESSMENT $PER 74 SQ. KM	ANNUAL RENTAL $ PER 74 SQ. KM	TOTAL ASSESSMENT AND RENTAL $ PER 74 SQ. KM
1986	100	7,400	4,440	11,840
1987	200	14,800	4,440	19,240
1988	500	37,000	4,440	41,440
1989	500	37,000	4,440	41,440
1990	1,000	74,000	4,440	78,440
1991	1,000	74,000	4,440	78,440
1992	1,500	111,000	4,440	115,440
1993	1,500	111,000	4,440	115,440
1994	2,000	148,000	4,440	152,440
1995	2,000	148,000	4,440	152,440
TOTALS	10,300	762,200	44,400	806,600

Access to the area is via jet aircraft from Montreal via Canadian Airlines International to Fort Chimo, Quebec, or to Frobisher Bay, Baffin Island, N.W.T., via Bradley First Air. Bradley Air also operates a charter fixed wing aircraft service to Asbestos Hill or Esker Lake. The latter is approximately 30 km north of the property.

Locally, the property is accessed via ski or float equipped fixed wing aircraft, or by helicopter.

There are limited accommodation facilities at Asbestos Hill in the event of adverse weather conditions (arrangements can be made with Asbestos Corporation, Thetford Mines, Quebec).

3.0 CLIMATE, TOPOGRAPHY, VEGETATION AND WILDLIFE

The climate is typically arctic with temperatures dropping to between -20 to -48°C from November to April and 10 to 12°C during July and August. Precipitation ranges between 20-50 cm with an annual snowfall of about 140-220 cm (Willy, 1987). For all intents and purposes, the area is snowfree from July to late September. Break-up usually occurs by mid-July. The entire region is subject to extremely unpredictable weather, with high winds blowing from all directions. Storms move in within a matter of hours and it is not unusual for fog and rain to prohibit field work and air transportation for up to 3-4 consecutive days. Due to the short summer, the ground remains permanently frozen with permafrost as deep as 500 metres.

Being above the tree line, the area is very sparse in terms of plant life. The principal types of vegetation are lichens, caribou moss, arctic cotton, grasses, dwarf willow bushes, and assorted summer flowers. Wildlife primarily consists of lemmings, arctic foxes, caribou, snowy owls, ptarmigan, ducks, geese, gulls and falcons. The occasional polar bear sighting is reported, but they generally restrict themselves to the coast. The lakes are replete with lake trout and arctic char.

Topography is comprised of northwesterly trending ridges averaging 15-45 m above the land surface which is approximately 400 m above sea level. Exposure in the area is approximately 35-45 per cent with moderate to sharp gradients.

4.0 HISTORY AND DEVELOPMENT

4.1 Regional History

Exploration began in 1931-32 by Watts and McCart who represented a mining syndicate comprised of the Cyril Knight Prospecting Co. Ltd., Huronian Mining and Finance Co., Newmont Exploration Ltd. and Quebec Prospectors Ltd. (Gunning in Samis, 1978). Watts mapped 240 km inland from the Hudson's Bay Coast locating a number of sulphide showings, none of which resulted in the discovery of an economic mineral deposit.

From 1955-57, the Cape Smith belt was the site of a staking rush for nickel-copper mineralization. In 1957, Watt's persistance led to the discovery of the Asbestos Hill deposit later optioned to the Asbestos Corporation and brought into production in 1972 (Foster, in Willy, 1987). The mine was subsequently placed on standby due to low asbestos prices, and is presently being decommissioned. In 1957-58, 1961 and 1962-63 three nickel-copper deposits were located in the central part of the Cape Smith Belt by New Quebec Raglan, a subsidiary of Falconbridge Ltd. Underground development has been done on the Donaldson deposit, but none of the deposits has proven economic.

From 1968-74 Amax Exploration Ltd. explored the Ungava area. In March 1974, Cominco optioned all of Amax's properties, implementing geological mapping, geophysical and diamond drill programs.

The QMER has been responsible for the majority of work in the area since 1980, performing extensive regional geological mapping and geochemical sampling.

In 1986, Falconbridge acquired a 333 square kilometre exploration permit containing the delta sill. The Imperial Platinum West property shares a common boundary with the southwest portion of

Falconbridge's permit. By June 1986, eight Junior Mining Companies initiated a permit rush, by acquiring some 1,471 square kilometres (575 square miles) and this has since expanded to 18 parties holding 2,000 square kilometres. Falconbridge, through Raglan Mines Ltd., maintains mining claims of about 190 square kilometres. From July to August, Falconbridge and Stockman Energy Ltd. actively explored their permit areas. Falconbridge's expenditure totalled $875,000 and involved geophysical and geochemical surveys as well as geological mapping. Oasis Resources has an agreement with Falconbridge, where it can earn a 40% interest in the property for $1.75 million investment in exploration by February 28, 1988 (Willy, 1987).

Stockman Energy Ltd. performed geological reconnaissance mapping and prospecting in 1986 on their four permits, located west and east of Falconbridge's permit.

The QMER continued its activity in the Cape Smith Belt conducting 1:50,000 reconnaissance mapping and sampling programs (Lamothe et al, 1987).

In 1986, the G.S.C. conducted regional geologic mapping in the Lac Watt-Lac Cross-Rivière Déception area (St. Onge et al, 1987).

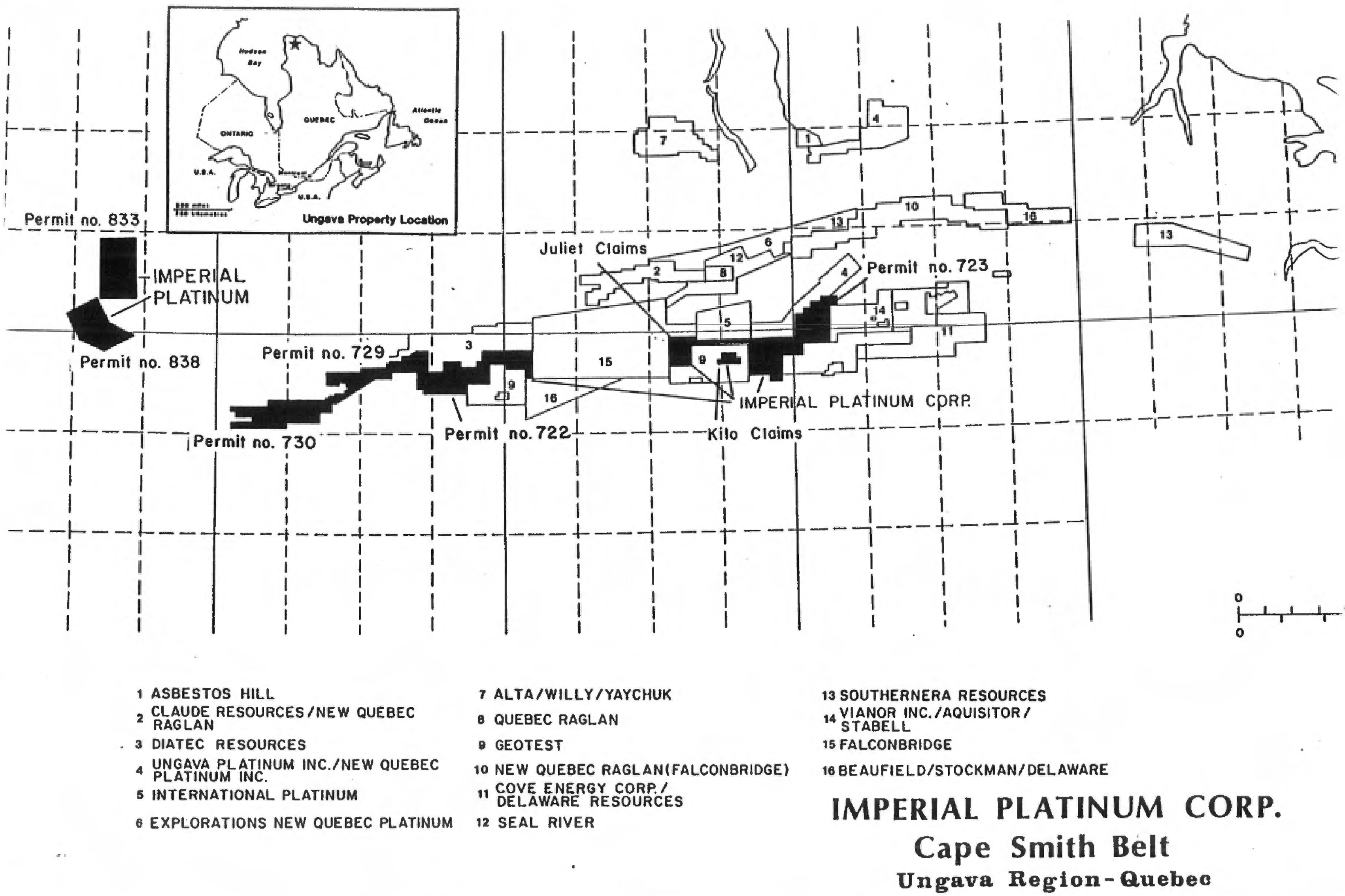

Fig. 2 - Imperial Platinum West Property and Surrounding Claims

On completion of the 1987 field season, the following developments have occurred:

a) Falconbridge/Oasis Resources completed ≈15,000 feet of drilling; grades up to 0.28 oz platinum have been quoted (Willy, 1987)

b) Stockmen Minerals Ltd./Delware Resources Corporation of Calgary, Alberta, and Beaufield Resources, Toronto, Ontario have conducted initial exploration programs on their permits (Willy, 1987)

c) International Platinum conducted geophysical and geological mapping programs in the Lac Dumas area.

d) Vianor Inc./Acquisitor Mines Ltd./Stabell Resources Inc. of Val d'Or, Quebec, explored their permits. (Willy, 1987)

e) Jascan Resources Inc., Toronto, Ontario has completed airborne geophysics, reconnaissance mapping and geochemical sampling.

f) Ateba Mines Inc., Toronto, Ontario has completed airborne geophysics, reconnaissance mapping and geochemical sampling.

g) New Quebec Inc., Calgary, Alberta, and Seal River Exploration Ltd., Burlington, Ontario, have completed an airborne survey over their permit area.

h) The QMER continued its regional mapping and metallogenic studies.

i) The G.S.C. carried out further regional mapping, structural and stratigraphic studies in the Watts Lake area.

In addition, there has been a significant amount of activity in the Labrador trough by Tundra Gold Mines Ltd., La Fosse Platinum, and several others.

4.2 Property History

QMER assessment files indicate exploration may have been performed in 1956-57 over a portion of the property. This took the form of regional geologic mapping, and some magnetic and electromagnetic grid surveys.

In 1954, regional mapping at a 1:50,000 scale and geochemistry was carried out by the QMER, part of which covered the Imperial Platinum West property. (See QMER Map DP 85-15-Lac Bélanger area).

In 1972 a part of the eastern portion of the property was explored by Getty Mining Northeast Ltd. The work involved 20 line km of geologic mapping; 57 line km of magnetic, VLF-EM and HEM surveys; and 20 line km of geochemical soil sampling (Barker, 1972).

Between February and March, 1987 the Imperial Platinum Corporation contracted Aerodat to conduct 769 km of helicopter EM, VLF-EM and magnetic surveys. The results were subsequently plotted onto 1:10,000 base maps. From June 15-August 21, field crews carried out geological mapping (1:10,000 scale); lithogeochemical sampling; and reconnaissance geophysics (magnetics, VLF-EM). The total amount of geophysics performed was 22.6 line km over 5 zones.

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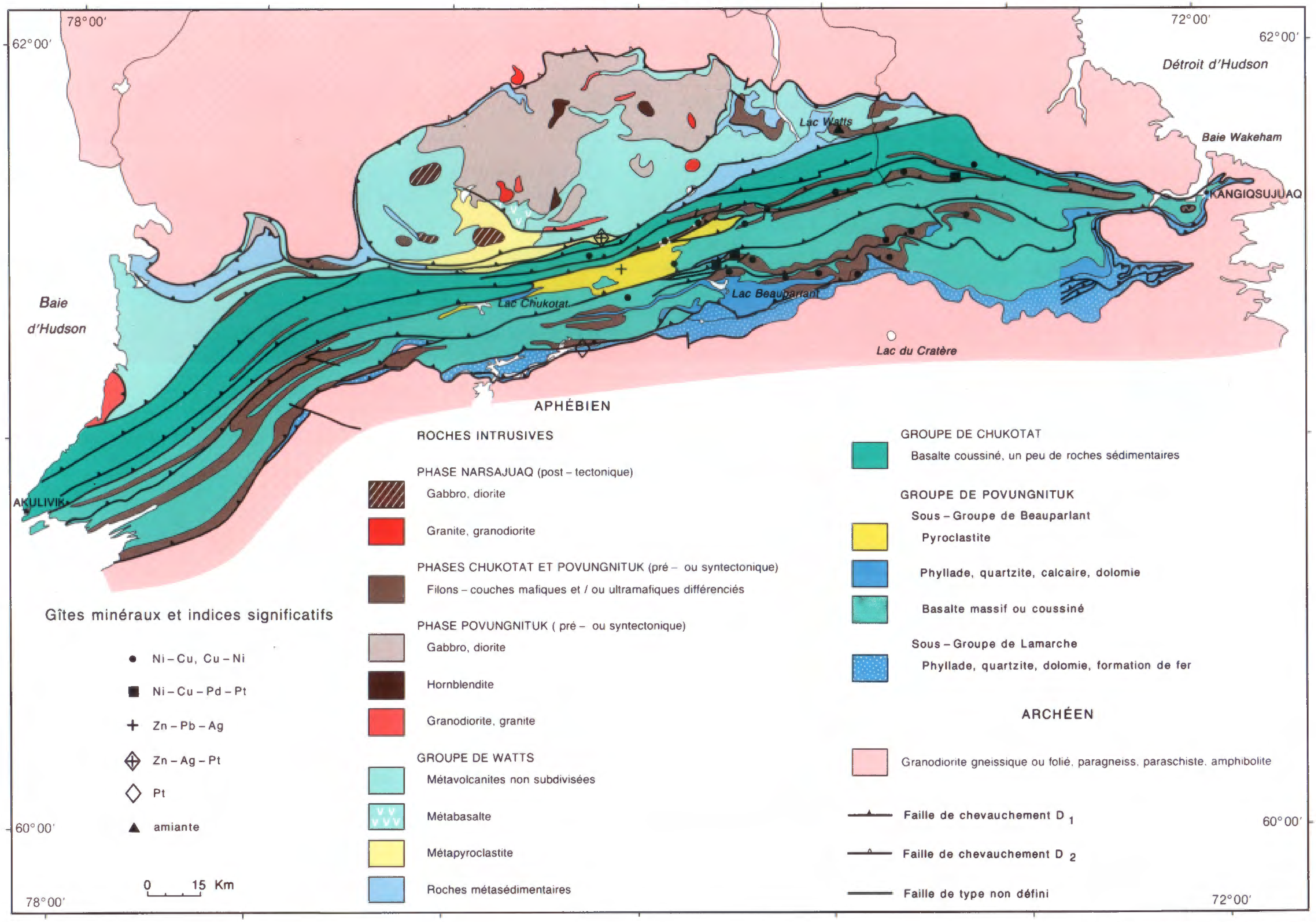
Ministère de l'Énergie et des Ressources
Direction générale de l'Exploration géologique et minérale



Géologie et minéralisations de la Fosse de l'Ungava

5.0 GEOLOGY (See fig. 3; plates 1 and 2, table II)

The Imperial Platinum West property is situated within the east-west trending Cape Smith thrust fold belt. It forms part of the Circum-Ungava geosyncline that surrounds the Ungava Craton in a wide arc opening to the South (fig. 3). The Cape Smith belt is approximately 380 km long and up to 95 km wide in its central portion and 50 km wide at the extremities. The trough is bisected by a north dipping west trending thrust fault which separates upper greenschist from upper amphibolite grade metamorphic rocks. The Ungava trough consists of moderately deformed and metamorphosed volcanics overlying a sedimentary apron which in turn rests uncomformaly, or is in faulted contact with Archean gneisses of the Superior Craton (Taylor, 1987, Hynes and Francis, 1982, Lamothe et al, 1987). Sulphide enriched mafic and ultramafic differentiated sills intrude all the units within the trough. Hynes and Francis (1982) suggest the tectonic setting of the trough as being the remnant of an oceanic basin resulting from the thinning and rifting of the Archean craton during the early proterozoic. Hoffman (1985 in Lamothe, 1987) and St. Onge (1986 in Lamothe, 1987) offer an alternative model. They suggest the trough is a klippe (the trough rocks are isolated from their original location via faulting and erosion and juxtaposed with Archean basement) resulting from the collision of the Superior craton with another continent.

The Ungava Trough consists of four lithostratigraphic groups: the Povungnituk; the Chukotat; the Spartan; and the Watts groups (the younging direction is to the north - Table 1). Francis has further subdivided the Povungnituk into: 1) the Lamarches sub-group comprised of clastic metasediments (quartzite, phyllite, dolomite) overlying Archean basement; and 2) the Beauparlant sub-group composed of tholeiitic basalts with minor rhyolite.

TABLE II- LITHOLOGICAL UNITS

(AFTER LAMOTHE, 1984)

		diabase granite gabbro pyroxenite peridotite dunite
	intrusive contact	
Watts Group		basalt: minor phyllite and quartzite quartz schist amphibole schist
	faulted contact	
Spartan Group		phyllite with minor amounts of basalt, quartzite and dolomite
	faulted contact	
Chukotat Group		basalt with minor amounts of quartzite and phyllite
	faulted contact	
	Beauparlent subgroup	basalt with lesser amounts of quartzite, rhyolite, phyllite and dolomite
Povungnituk Group	faulted contact	
	Nituk subgroup	dolomite phyllite (minor basalt) quartzite
APHEBIAN	angular unconformity	
ARCHAEN		
	Perron formation (south)	quartzofeldspathic gneiss
	Deception group (north)	granite, gneiss, granite

The Chukotat group is principally komatiitic, Mg-rich, and tholeiitic basalts, with minor quartzite and phyllite. The Spartan Group is primarily phyllite with minor basalt, quartzite, and dolomite. The Watts group consists of basalt, quartz schist and amphibolite schist, with minor phyllite and quartzite.

There are four major types of intrusives, two of which host all the major massive sulphide and PGE occurrences: 1) differentiated sills of peridotite-pyroxenite-gabbro with minor ferrogabbro; 2) zoned feeder dykes of pyroxenite-peridotite-dunite (Lamothe, 1987). It is suggested that the intrusives and the Chukotat basalts shared the same parent magma and this magma was originally highly platinum enriched (Giovenazzo, 1985; Hynes & Francis, 1982; Bédard et al, 1984).

Discovery of significant platinum palladium values in 1984 by the QMER has demonstrated the Ungava area's PGE potential. The most significant values are from the Delta sill, a portion of which lies on the Imperial Platinum property optioned from Cominco in 1987. Assays on grab samples include 0.15 oz/ton (4.2 g/t) platinum and 0.5 oz and 0.34 oz per ton palladium (14.0 and 9.5 g/tonne) (Lamothe, et al., 1987). Diamond drilling performed by Cominco Ltd. from the south Delta Sill discovered assays up to 0.32 oz pt/t over 0.4 m. 6,900 ppb (0.2 oz) Au/ton over 1.0 m (Willy, 1987).

5.1 Property Geology

The Imperial Platinum West property lies entirely within the Povungnituk Group. It forms part of a thrust sheet bounded on the north and south respectively by two major faults;

1) the northeast trending Lake Nuvilik Fault which is the concordant boundary between the south lying Povungnituk suite and the northern Chukotat volcanics; and
2) The northeast trending Povungnituk River Fault to the south.

The units are all steeply dipping 70°-90° both to the north and south. The area has undergone intense folding and the stratigraphy has been faulted and sheared. Pillows, however, have remained intact and indicate tops to the north.

The Povungnituk volcanics are intruded by MgO rich mafic to ultramafic intrusions, contemporaneous with Chukotat komatiitic-basalt activity.

The principle intrusives are of two types: 1) layered sills, a few of which have been folded into syncline/anticline structures in the northern half of the property. They typically occur as a basal zone of ultramafic rocks with a gabbro cap. The relative proportions; and composition are variable. Most, however, are gabbroic sills with a relatively thin rim of dunite (See Fig. 5). Occasionally the ultramafic zone is differentiated to peridotite and/or pyroxenite; and 2) large zoned peridotite intrusions thought to be feeder ducts and large layered peridotite-gabbro sills (See Fig. 6a, 6b, and 6c) representing magma chambers where crystal settling has occurred.

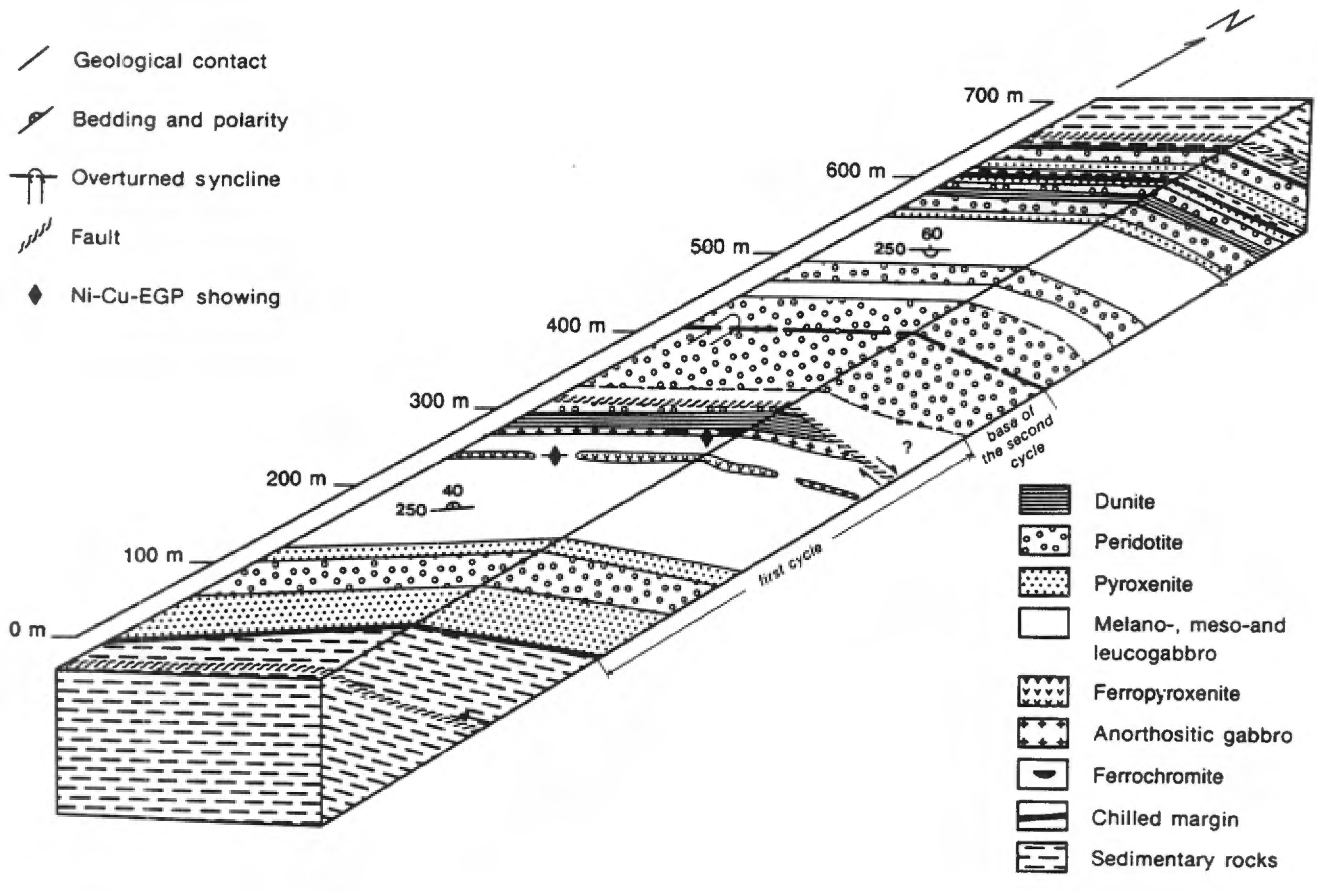


FIGURE 4 - Geological section through the central part of Delta 1 (cf. fig. 2) showing the first cycle of differentiation as welll as the remaing portion of the second cycle (Giovenazzo, 1986).

THE UNGAVA OCEANIC BASIN ABOUT 1.9 GA AGO

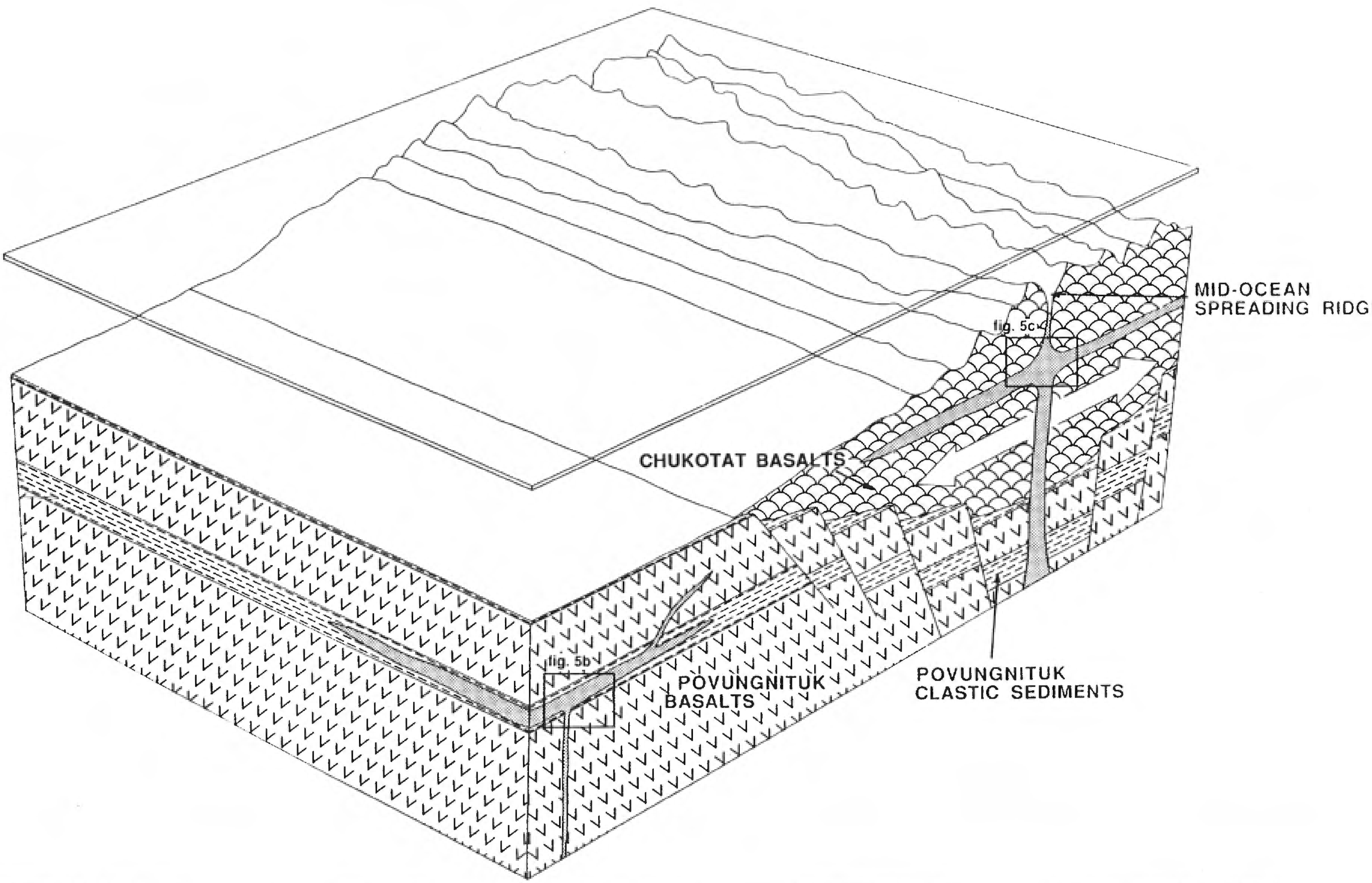


FIGURE 5a - Block diagram illustrating the volcanic feeder system in an evolving rift context (fig. 5a). The quiet environment of the Delta-type sills (fig. 5b) leads to a differentiated layered structure, while the circulation pattern inherent to the Cross Lake and Donaldson-type sills (fig. 5b) generates a zoned structure. (Lamothe, 1987)

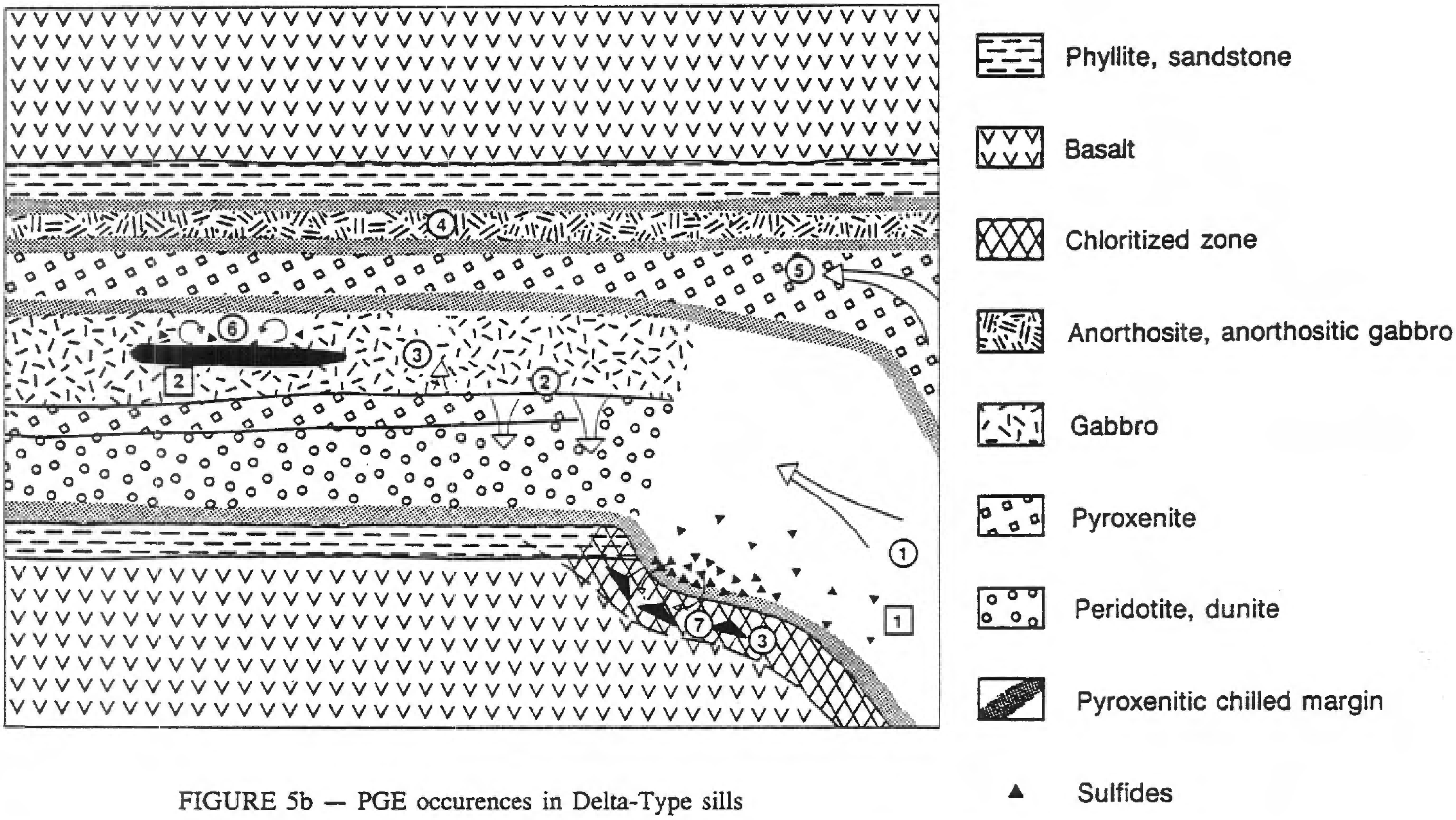


FIGURE 5b — PGE occurences in Delta-Type sills

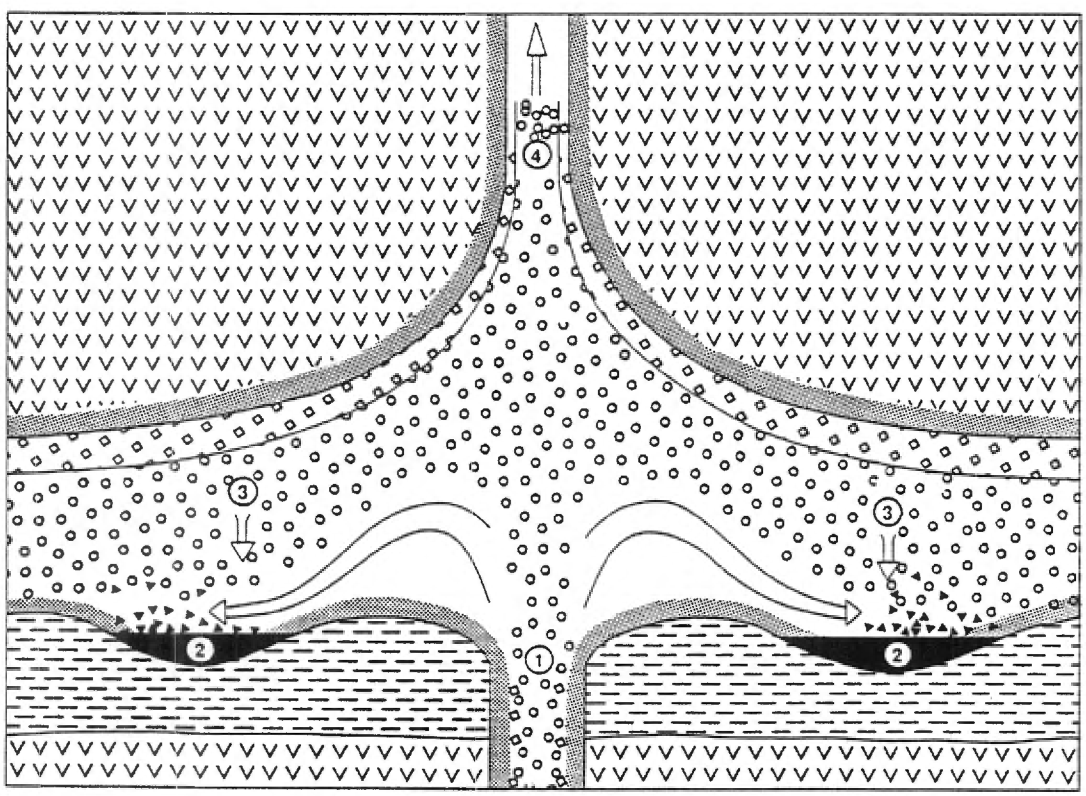


FIGURE 5c — PGE occurences in Gross Lake and Donaldson — Type intrusions (Based on Bédard etal., 1984, and Barnes etal., 1982)

5.2 Rock types

a) Pyroxenite - light greenish grey, fine to medium grained with larger more weather resistant pyroxene phenocrysts. This rock type is essentially mono-mineralic 90-95% pyroxene with minor olivine serpentine. Occasionally it alters to fine grained needle-like amphibole and contains minor mounts of pyrrhotite and disseminated pyrite (1-2%). This unit was found only on the east half of the property occurring within differentiated sills in contact with dunite.

b) Dunite - Dark green to black, coarse grained rock which weathers to a light brown. The rock is porphyritic containing 0.5-1.5 cm subhedral, and highly fractured olivine grains within a fine grained olivine groundmass. The highly resistant olivine phenocrysts, are often found as scattered, broken pebbles. The unit displays moderate serpentine alteration, and occurs in both fine grained and coarse grained fibrous habit. Locally this unit can contain 5-10% disseminated sulphides (Py, Po) and is slightly anomalous in chrome. Mineralization usually occurs at the contact with the gabbro or volcanics. The samples frequently display near perfect micro jointing resulting in surfaces displaying rectangular blocks with (and the dunite) approximately 0.5-1.0 cm sides.

c) Gabbro - occurs on the property as ophitic tremolite gabbro, mafic gabbro, and dioritic gabbro. The gabbros were not commonly seen together on the same outcrop. The gabbro forms isolated ridges or can be part of a layered intrusive sequence.

Ophitic-gabbro - light grey-green with ophitic tremolite-plagioclase intergrowth well displayed. The gabbros, as well as the dunites, may contain significant (1-10%) sulfide concentrations usually near contacts and chill margins, but no specific pattern was noted. The sulphides are usually disseminated Py, Po, Cpy, with some euhedral pyrite.

Dioritic Gabbro - very closely resembles ophitic gabbro except it contains 0.2-0.5 mm quartz grains. The geological relationships are similar and the only difference is the presence of quartz suggesting a more highly fractionated, silica rich magma.

Mafic gabbro - dark grey, displays typical gabbroic texture. Displays similar field relationships to the aforementioned gabbros, and may contain up to 5% disseminated sulphides (Py, Po, Cpy). Usually occurs as medium grained with occasional pegmatitic textures.

d) Diorite - Fine to medium grained, black with medium grained quartz grains comprising approximately 10% of the rock. It occurs as an undulating dyke sheet trending northwest and cross cutting the sills. This unit has so far proven to be barren, containing ≤1% pyrite.

e) Chert - Aphanitic, black cherty-quartzite with minor quartz veining. Jasper is in minor abundance near mineralized zones.

f) Chlorite schist - A highly fissile, fine grained, light green, soft rock. The unit almost entirely consists of chlorite (70-90%) and is likely an altered basalt or volcaniclastics with the amphiboles having become chloritized. Some samples display faint remant outlines of possible fragments (likely pyroclastic). The unit is locally carbonatized and is found in close proximity to the volcanics. The schist can be highly mineralized primarily with pyrite along schistosity plane (5-30% Py).

g) Basalt - a fine grained, black hornblende-plagioclase volcanic occurring as massive and pillowed flows. The rock is often magnetite rich and frequently displays epidote as fracture filling. The magnetite occurs both as euhedral crystals and within the groundmass. The basalt is generally sulphide poor, but can carry significant Py, Po, Cpy concentrations near the volcanic-intrusive contact. This unit may also host minor sediment (chert) and fragmental intercalations. Pillows, where present, have highly chloritized selvages and contain 2 cm garnets. This unit is highly carbonatized with amygdules and vesicles locally common.

h) Pyroclastic unit - Highly variable composition, grading from a dark grey fine grained mafic-intermediate matrix containing felsic fragments to a rhyolite fragmental white with subangular stretched fragments. Fragments are 3.0-6.0 cm x 1.5 cm. The unit contains disseminated to semimassive sulphides (5-30%), principally pyrite and pyrrhotite. The unit is frequently sheared and faulted and is the host of the Pb-Zn-Ag showing in the east-central area of the property.

5.3 Structural Geology (See plates 1 & 2)

The general regional stratigraphic trend follows a northeast direction. The lithologic units are all steeply dipping to vertical. The sill stratigraphy as well as pillow orientations suggest the younging direction to be to the north.

The principal structural feature is a broad northeast plunging syncline containing isoclinal 'S' and 'Z' drag folds on its north and south limbs respectively. The fold nose continues off the property to the west. There are five major fault zones on the property: 1) The first follows a northwest trend and is possibly related to the Pb-Zn-Ag showing; 2) The Pb-Zn-Ag mineralization is interpreted to lie within a northeast trending fault zone which is crosscut by the first fault (Barnett, 1987). This fault is interpreted to run along the river eastward where it terminates just west of a major folded layered intrusion. On the east plate, two more faults trending north and northeast are interpreted from the vertical gradient magnetic map by the author. The remaining fault is a major east by northeast zone which follows the river-lake system along the southern property boundary. To the east it becomes conductor 'W' on Aerodat's EM anomaly map.

Three periods of folding (F1, F2, F3 - aphebian in age) have been observed in the region (Taylor 1982 in Willy, 1987). F1 folding is isoclinal, and trends eastward parallel to the Archean-Proterozoic unconformity. The folds are both upright, or inclined and/or plunging. The second fold direction is along a northwest fold axis refolding the east trending folds..

The third fold direction follows a northerly trend. Within the property only the F2 period is evidenced although faulting occurs to the north and northwest.

5.4 Economic Geology

A first pass sampling program implemented on the Imperial Platinum West property delineated several interesting areas.

The most anomalous sample was an angular boulder anomalous in Pd, Pt. (540, ppb, 352 ppb) found within the mafic fragmental unit not far from a peridotite-volcanic boulder field.

West plate: Three of the four anomalous values came from the basic volcanics along the southern central property boundary, just north of the river. The assay results indicate significant copper enrichment within the basalt along the south limb of the anticline.

East Plate: The sampling of the east plate was more extensive and thus yielded a greater number of significant values. The southwest corner of the property contains some slightly anomalous Cr and Ni values within the dunite.

Just to the north, semi-massive to massive sulphides are found in a highly fractured quartz vein. These samples were anomalous in Cu (up to 20,000 ppm). Further north, an ultramafic sill is slightly higher than background in chrome. The gabbro component yielded a sample with high PGE and gold values (206 ppb, 104 ppb, 119 ppb) (Sample 74319).

Pb-Zn-Ag showing - A highly sheared fragmental unit near an intrusive contact to the north, outcrops on the south bank of a river. The area is highly gossaned and the rusty zone can be followed into the river where it outcrops on an island. There is good fluorite alteration within the fragmental unit associated with a thin rhyolite fragmental. None of the unit remains intact, although it is definitely in-situ. The shearing is well delineated by airborne E-M and in fact an interpreted NW trending fault crosscutting the stratigraphy may have some control on concentrating sulphide rich fluids. Ground geophysics supports this idea with a conductivity high following the interpreted fault trend. The samples were anomalous in Ag (22.9), Pb (>20,000), Zn (>20,000). It is interesting that the showing is further downstrike to the east near the contact of the ultramafic sill which yielded the property's best Pd, Pt, Au (206, 104, 119) values from outcrop. In fact, a little off strike to the northeast is another anomalous Au value (150 ppm).

Further east, coinciding with an isolated resistivity low is a sample containing 96 ppb Au. Other values to the east are slightly anomalous in Cr, Ni and Cu (19,000 ppm).

6.0 GEOPHYSICS (See De Carle, 1987 and Barnett, 1987)

7.0 CONCLUSIONS

The Imperial Platinum West property lies within a northeast trending thrust sheet dipping steeply to the north and south. The area has undergone intense folding with stratigraphic tops to the north. The Povungnituk volcanics are intruded by MgO rich differentiated ultramafic intrusions which are thought to represent either feeder ducts or magma chambers for the magma which extruded as Chukotat volcanics. The sills intrude along northeast planes of weakness which were formed during the D1 deformation period. The main structural features of the property are a northeast trending syncline; a few ellipsoidal ultramafic intrusions, many of which are believed by the author to be folded sills; and a northwest trending fault which truncates a folded sill. The northeast trending syncline is well differentiated, and is consistent with an ultramafic intrusive magma chamber i.e. similar to the Delta Sill.

The remaining sills are dunite or peridotite with gabbro, resembling the Cross Lake sill stratigraphy (Coats, 1980).

There are two faults interpreted by De Carle based on the geophysics. One could not be substantiated by the geology and the other can likely be doubled in strike length. Based on the topography and geology, geochemical sampling delineated several interesting targets which should be explored in much greater detail.

West: Significantly anomalous copper values were found on the southern limb of the northeast plunging syncline: to the north one assay sample taken from an angular boulder yielded the highest combined Pt-Pd values found. (Pd=540, Pt=352).

Central: The ultramafics and pillow basalt gave anomalous Cr and Ni values. In the north central area the ultramafics on the north limb of the major northeast plunging anticline gave values of 4600 ppm Cr and a Pd:Pt:Au ratio of 206:104:119. Continuing east along the north limb a significant Pb-Zn-Ag showing (>20,000 ppm;>20,000 ppm;29.9 g/ton) is encountered just south of the north limb ultramafic-mafic fragmental contact in the fragmental unit. (A well defined gossan is highly sheared and altered (fluorite), outcropping and continuing into the river.) The E-M geophysics suggests the main conductor is in the river near the island. The occurrence of a northwest trending fault supports the idea that hydrothermal fluid activity may have been structurally controlled and the sulphides remobilized. Further to the east along strike is another anomalous Au value (150 ppb). This area in particular deserves further attention. The entire north ultramafics in general seem mineralized to a greater degree than the south limb.

East: There are some minor anomalous values in Cr, Cu, Ni, Au (96 ppm) to the east which deserve further investigation.

In general, the property has very few good electrical conductors. This is not discouraging. According to current theory, we are looking for a disseminated sulphide association.

As suggested by De Carle, isolated resistivity lows contained disseminated sulphides. Occasionally these 'lows ' contained good mineralization that was not apparent on the E-M anomaly map and should be investigated in more detail. Airborne VLF didn't appear particularly effective although reconnaissance ground VLF was very useful. Mineralization is very much associated with geologic contacts and probably faulting.

There appears to be a relationship between mineralization, and intersections of cross cutting faults and VLF highs. This could be a future exploration tool.

RECOMMENDATIONS

The results of the exploration program conducted on the Imperial Platinum Corporation were very encouraging. Several areas of interest were delineated which should be followed up on with further work.

West Plate

1. Further sampling of the north limb and the nose of the east plunging syncline. The gabbro core of the syncline in the west and the anticline-syncline structure in the north central areas.

2. Sampling and mapping of an ultramafic sill (possibly folded) along the north border of the west plate as well as the altered mafic volcanic to the southwest.

3. Detailed sampling of the south limb volcanics which are enriched in copper.

East Plate:

4. Detail sampling of the dunite sills at the southwest end of the plate both north and south of the river.

5. Detailed sampling of isolated resistivity lows.

6. Mapping and investigation of the interpreted fault (E-M anomaly W in the southeast corner of the property.

7. Due to the exceptional drainage system and outcrop exposure, a geochemical lake and river bottom sediment sampling program for Pt, Pd, Au, Cr, Zn, Pb, AG, and As.

8. Detailed sampling and mapping of the 3.0 km strike length over the EM conductors O, P, R described in de Carle's report.

9. 30 km of detailed ground geophysics (April) over conductors O, P, and R, using max-min and or VLF methods. Subsequent drilling program over anomaly A line 14970.

10. Geochemical soil survey over the mineralized zone (conductors P and R).

8.0 BUDGET PROPOSAL PHASE I

A. Geophysics

1. Personnel

1 field geophysicist for 25 days @ $250/day	$6,250	
1 geophysical technician 25 days @ $200/day	5,000	
2 assistants, 10 days for grid construction $150/day	3,000	
		$14,250.

2. Support Costs

Accommodations and food 90 man days @ $150/day	13,500	
Helicopter 1 hour/dayt @ $450/hr for 35 days	15,750	
Helicopter fuel 801/hr x 1 hr/day x 25 days x $800/drum (includes shipping)	7,805	
2 skidoos and 1 sled	6,000	
supplies	3,000	
		46,055.

B. Report Writing

1 Senior geophysicist @ $400/day for 14 days	5,600	
Drafting 160 hours @ $20/hr	3,200	
Supplies (typing, copying, binding; graphics)	1,500	
	Subtotal	$70,605.

C. Other Costs

Management, engineering, supervision @ 15%	10,591	
Contingency @ 15%	12,179	
	TOTAL	$93,375

Diamond Drilling - Phase II

D. Mob/Demob

1. Personnel		
1 Senior geologist for 5 days @ $350/day	1,750	
1 Junior geologist for 5 days @ $250/day	1,250	
2. Accommodation and Food		
2 people @ $150/day for 5 days	1,500	
3. Travel		
2 round trips from Toronto @ $1,500/trip	3,000	
4. Freight		
1 drill unit, supplies, personnel, salt, fuel	85,000	
5. Drilling		
500 m @ $150/m	75,000	
		$167,500

8.1 BUDGET PROPOSAL - PHASE II

A. Field Costs

1. Personnel

1 Senior Geologist for 10 days @ $350/day field preparation	3,500	
1 Junior geologist for 10 days @ $250/day field preparation	2,500	
1 Senior Geologist 60 days @ $350/day	21,000	
1 Junior geologist 60 days @ $250/day	15,000	
1 Field assistant 60 days @ $175/day	10,500	
		$52,500

2. Support Costs

Room and Board 165 man days @ $150/day	24,750	
Communications (1 base radio, 2 VHF radios for helicopter, 1 emergency backup unit)	8,000	
Helicopter time 2 hrs/day for 60 days @ $450/hr	54,000	
Helicopter fuel 80 ltrs/hr x 2 hrs/day x 25 days @ 1 drum/2051 @ $800/drum (incl. shipping) x 60 days	37,805	
Supplies	5,000	
Travel - 6 round trip tickets from Toronto @ $1,500/trip	9,000	
		138,213

B. Geochemical Analysis

Rock Samples:

150 samples assayed for Pt, Pd, Au @ $15/sample	2,250	
150 Samples for Ag, Pb, Zn, Cu, Ni, Cr, Ar @ $16/sample	2,400	
150 Samples for Pt, Pd, Au, Ag, Pb, Zn, Cu, Ni, Ar @ $15/sample	2,250	
250 lake sediment samples for Pt, Pd, Au, Ag, Pb, Zn, Cu, Ni, Ar @ $15/sample	3,750	
Shipping Costs		
		10,650

C. Report Writing

1 Senior geologist 30 days @ $350/day	10,500	
Drafting - 160 hours @ $20/hr	3,200	
Supplies (typoing, copying, binding, photo development, graphics)	1,500	
		15,200
	SUBTOTAL	$384,063

D. Other Costs

Management, engineering, supervision	@ 15%	57,609
Contingency	@ 15%	66,251
		$507,923
		========

Submitted by:

Brian Lum, B.A.Sc.
Property Geologist

Myles Johnson, B.Sc, F.G.A.C.
Project Geologist

CERTIFICATE OF QUALIFICATIONS

I, Brian Lum, of 897 College Street, Toronto, Ontario hereby certify that:

1. I have been employed since April, 1987 as a property geologist at A.C.A. Howe International Ltd., Mining and Geological Consultants, with offices at 199 Bay STreet, Suite 400, Toronto, Ontario, M5J 1L4.

2. I am a graduate of the University of Toronto, Toronto, Ontario, with a Bachelor of Applied Sciences (1983) degree in geological engineering (Mineral Exploration Option).

3. This report is based on firsthand supervision of the geological mapping in the field and data supplied by A.C>A> Howe International Ltd.

4. I hold no interest in Imperial Platinum Corporation.

Toronto, Ontario
January 12, 1988

Brian Lum
Property Geologist, B.A. Sc.

REFERENCES

1. Barker, Robert W., 1972. Magnetometer Survey for Getty Mining Northeast Ltd. Cape Smith Project area R-72-4. Quebec assessment files #31109.

2. Barnett, G.A., 1987. Geophysical Summary Report on Ground VLF-EM and Magnetic Surveys. Lacs Nuvilik Property, Cape Smith belt, Ungava Bay Region, Province of Quebec.

3. de Carle, R.J., 1987. Report on combined helicopter-borne magnetic, electro-magnetic and VLF suvery, permit 722 Kenty Lake area, Cape Smith Belt-Ungava Region - Quebec.

4. Lamothe, D., Giovenazzo, D., Picard, C., 1987. Platinum Group Element Occurrences in the Ungava Trough, New Quebec. Ministère de l'Énergie et des Resources du Quebec.

5. Samis, A.N., 1981. 1980 Year-end report, Kenty project: Summary of 1980 exploration program on Ungava permit 567, Ungava Nickel belt, assessment report submitted to the Quebec government. QMER assessment file #37127, 32 pages, 18 maps, 10 drill logs.

6. Samis, A.N. and Andersen, E.O., 1978. 1977 year-end report, Kenty project: Summary of 1978 exploration program on Amax Ungava permit 567, Ungava Nickel belt, for submission to the Quebec Department of Natural Resources. QMER assessment files 33629, 24 pages, 28 maps, 9 drill logs.

7. Samis, A.N. and Andersen, E.O., 1979. 1978 year-end report, Kenty project: Summary of 1978 exploration program on Ungava permits 567 and 568; New Quebec Territory, for submission to the Quebec Department of Natural Resources. QMER assessment files.

8. Samis, A.N. and Andersen, E.O., 1980. 1979 year-end report, Kenty project: Summary of 1979 exploration program on Ungava permits 567 and 568; New Quebec Territory, for submission to the Quebec Department of Natural Resources. QMER assessment file 36257, 41 pg., 14 maps, 15 drill logs.

9. Willy, A.J., 1987. Geological report on the Imperial West Platinum Target Property, Ajay Minerals Company.

APPENDIX 1 - Letter from the Quebec Government containing official co-ordinates of Permit No. 722 (taken from Willy, 1987).

GOUVERNEMENT DU QUEBEC

Ministère de l'Energie et des Ressources

Description technique du territoire couvert par le permis d'exploration pour la recherche de substances minérales dans le Nouveau-Québec numéro 722 accordé à A.C.A. Howe International Ltd.

Un territoire d'une superficie de soixante-quatorze (74) kilomètres carrés situé dans le territoire du Nouveau-Québec, district électoral d'Ungava, délimité par une ligne brisée reliant les points suivants, exprimés en coordonnées transverses universelles de Mercator (U.T.M.):
Zone U.T.M. 18

POINTS	EST	NORD		POINTS	EST	NORD
A	505000	6815000		N	486000	6809000
B	505000	6810000		O	485000	6809000
C	504000	6810000		P	485000	6810000
D	504000	6812000	(P.E. 718, C)	Q	486000	6810000
E	500000	6812000	(P.E. 718, B)	R	486000	6811000
F	500000	6813000	(P.E. 718, A)	S	489000	6811000
G	497000	6813000	(P.E. 718, H)	T	489000	6813000
H	497000	6809000	(P.E. 718, G)	U	492000	6813000
I	493000	6809000	(P.E. 718, F)	V	492000	6812000
J	493000	6807000		W	495000	6812000
K	487000	6807000		X	495000	6813000
L	487000	6808000		Y	496000	6813000
M	486000	6808000		Z	496000	6815000

Le tout tel qu'indiqué en rouge sur les cartes des cantons numéros 7922, 7923 et 7924 (à l'usage du ministère) à l'échelle de 1:50 000, lesquelles sont signées par le directeur général de l'Industrie minérale du ministère de l'Energie et des Ressources et classée au dossier du Service des permis et baux de ce ministère.

QUEBEC, le 15 juin 1986.

Le directeur général de
l'Industrie minérale

Yvan Godbout

APPENDIX 2 - Geochemical data for 224 grab samples analyzed by Bondar-Clegg and Company of Ottawa. Samples were assayed for Pd, Pt, Au, Cr, Cuy, Ni, Pb, Zn, Ag.

CLIENT ACA HOWE INTERNATIONAL LTD.
PROJECT UNGAVA
SPECIAL VALUES

Values above the upper limit are shown as +uplimt
Values below the lower limit are shown as -lolmt (ie not detected)

SAMPLE	Pd	Pt	Au	Ni	Cu	Cr	Zn	Ag	Pb	DESCRIPTION
73676	-2	-15	1	22	20		8	-0.1	25	FRAGMENTAL UNIT qtz veins 5-10% py
73677	-2	-15	-1	10	12	86	6	0.4	37	FRAGMENTAL UNIT qtz veins 5-10% py
73678	-2	-15	2	21	132	148	154	-0.1	23	SHEARED FRAGMENTAL SCHIST 3-5% dis po
73679	-2	-15	28	34	580	229	56	0.1	15	SHEARED FRAGMENTAL SCHIST 3-5% dis po
73680	-2	-15	3	4	116	94	34	-0.1	20	SHEARED FRAGMENTAL SCHIST 3-5% dis po
73681	-2	-15	1	3	6	79	49	0.2	9	SHEARED FRAGMENTAL SCHIST 2-3% dis po
73682	13	-15	2			3057				GRAB SAMPLE dunite boulders
73683	-2	-15	3	3	7	101	51	-0.1	7	MAFIC VOLCANICS sheared
73684	-2	-15	3	39	34	60	66	-0.1	9	MAFIC VOLCANICS sheared py veins 0.5-1.0 cm
73685	-2	-15	1	2	5	69	29	0.5	12	MAFIC VOLCANICS sheared
73686	-2	-15	96	-2	9	87	82	0.1	12	MAFIC VOLCANICS sheared
73687	-2	-15	-1	-2	7	128	72	0.3	11	MAFIC VOLCANICS sheared qtz veins and 2-3% py
73688	-2	-15	-1	15	44	38	37	-0.1	-2	ALTERED HORNBLEND PYROX PLAG
73689	-2	-15	-1	2	20					GOSSAN slaty sheared qtz vein
73690	12	-15	-1	744	31					DUNITE
73691	-2	-15	-1	14	4					PORPHYRITIC RHYO-DACITE slate with chlorite
73692	-2	-15	-1	34	518					CONTACT gabbro\dunite 2-3% dis po non mag
73693	26	17	-1	890	489					DUNITE grab sample
73694	-2	-15	2	29	42					BOULDER frag 5-10% py
73695	-2	-15	-1	54	49					GABBRO med grain <1% dis po
73696	-2	-15	-1	19	37	59	82	-0.1	5	DIORITE magnetite
73697	9	-15	2	210	118	664	74	-0.1	16	CONTACT dunite/gabbro
73698	-2	-15	-1	4	10	70	86	-0.1	13	FRAGMENTAL slaty grade into basalt
73699	-2	-15	4	7	11		181	-0.1	143	CHLORITE SCHIST 10-15% dis py, qtz veins
73700	-2	-15	-1			521				OLIVINE PERIDOTITE chl serp fine grain 1% euhedral py
73701	-2	-15	3							GABBRO med to coarse grain, <3% py minor cpy, Cu stain
73702	-2	-15	2							GABBRO coarse grain mottled, <3% dis anhedral py
73703	-2	-15	-1							GABBRO coarse grain, <2% dis py
73704	3	-15	1							FROST HEAVE basalt fine grain strong chl, <2% py <3mm
73705	-2	-15	3							FELSIC ROCK sil very fine grain, weak mag, <3% dis py stringers
73706	-2	-15	-1							BASALT very fine grain chl slaty cleavage, 3-5% dis py
73707	-2	-15	-1							BASALT fine grain chl slaty cleavage, <5% fine dis py
73708	-2	-15	-1							FROST HEAVE gossaned, fractured sil minor to massive py
73709	2	-15	-1							FROST HEAVE gossaned, fractured sil minor to massive py
73710	-2	-15	-1							FROST HEAVE gossaned basalt, massive sulphide
73711	-2	-15	-1							BASALT altered fine grain gossaned fol calc chl, 1-2% dis py
73712	-2	-15	-1							BASALT chl fol altered, <15% py along foliation
73713	-2	-15	2							BASIC LAPILLI TUFF sil banded, <2% dis py cpy, minor Cu stain
73714	-2	-15	-1							BASIC LAPILLI TUFF very fine grain, <2-3% fine dis py
73726	5	-15	2	1380	6	4323				DUNITE with micro fractures of magnetite
73730	5	-15	-1	1385	4	4767				DUNITE with micro fractures of magnetite
73736	-2	-15	1	48	23					SCHIST & GNEISS hbld-bt-plag, chl carb frag, 3-10% py
73737	-2	-15	2	42	67					SCHIST & GNEISS hbld-bt-plag, chl carb frag, 3-10% py
73738	-2	-15	-1	12	28					SCHIST & GNEISS hbld-bt-plag, chl carb frag, 3-10% py
73739	-2	-15	1	3	38					SCHIST & GNEISS hbld-bt-plag, chl carb frag, 3-10% py
73740	-2	-15	1	7	80					SCHIST & GNEISS hbld-bt-plag, chl carb frag, 3-10% py
73741	4	-15	-1			4260				DUNITE north of gabbro ridge

SAMPLE	Pd	Pt	Au	Ni	Cu	Cr	Zn	Ag	Pb	DESCRIPTION
73742	-2	-15	-1	9	18					ALTERED SLATE med grain chl carb, 1-3% weathered py minor cpy
73743	-2	-15	-1	8	66					ALTERED SLATE med grain chl carb, 1-3% weathered py minor cpy
73744	-2	-15	-1	5	16					ALTERED SLATE med grain chl carb, 1-3% weathered py minor cpy
73745	-2	-15	-1	4	18					SLATY FRAGMENTAL 3% dis py po
73746	-2	-15	-1	9	48		514	0.6	92	SLATY SCHIST no clear frag, at conductor P south shore of lake
73747	-2	-15	4	9	72		7000	1.5	308	SLATY SCHIST no clear frag, at conductor P south shore of lake
73748	-2	-15	-1	7	16		122	-0.1	30	DUNITE BOULDER near contact with mafic volcanic
73749	3	-15	-1			3730				GRAB SAMPLE dunite
73750	-2	-15	1	15	18	133	149	-0.1	3	SHEARED MAFIC VOLCANIC 5-10% dis py po
74076	-2	-15	1			211				DUNITE-PERIDOTITE green serpentinized
74077	-2	-15	-1			625				DUNITE
74078	-2	-15	-1			519				DUNITE
74079	-2	-15	-1			167				DUNITE? fine grained green intrusive
74080	-2	-15	-1			541				DUNITE? fine grained green intrusive
74081	-2	-15	-1			174				PYROXENITE <1% py
74082	-2	-15	2			32				MAFIC VOLCANIC south property boundary
74083	-2	-15	-1							MAFIC VOLCANIC plag. phenocrysts. 1-4% py in fractures
74084	-2	-15	-1	2	132		6	0.1	23	PYROCLASTIC 5% sulphides
74085	-2	-15	-1							BASALT fine grain <1% py cpy
74086	15	21	3			298				DUNITE grab sample
74087	-2	-15	1							METAVOLCANIC/PYROCLASTIC CONTACT hematite layers, gossaned
74088	-2	-15	1	62	8					PYROCLASTIC/BASALT CONATACT fractured, cherty in places
74089	-2	-15	3	27	1980					MAFIC VOLCANIC calcareous, minor chlorite <= 5% dis py,cpy
74090	-2	-15	2	47	131					MAFIC VOLCANIC vf grain basalt <=3% dis py along foliation
74091	-2	-15	11	26	1435					BASALT vf grain with minor py and Cu staining
74092										BASALT 5% dis sulphides
74093	-2	-15	15	43	13980					BASALT calcareous veined, <=10% cpy fracture filling, amygdules
74094	-2	-15	5	103	420					BASALT med grain altered <=5% dis magnetite, minor py cpy
74095	3	-15	10	26	13120					CRYSTALLINE FELSIC weakly chloritized <=20% dis to veined py
74096	-2	-15	2	23	407					MAFIC MINERAL med grain leucocratic 3% py
74097	-2	-15	-1	40	169					MAFIC MINERALS med grain leucocratic <=2% dis py cpy
74098	-2	-15	-1							BASALT vesicular fine grain <=2% py amygdules
74099	-2	-15	-1							GABBRO altered sheared, <=2% dis blebs and stringers py
74100	-2	-15	-1							GABBRO/RHYOLITE PYROCLASTIC vf grain <=5% dis py cpy
74101	-2	-15	-1					-0.1		FELSIC TUFF 1% dis po cpy
74102	-2	-15	-1							BASALT FLOW 2% dis po blebs
74103	-2	-15	13	18	792					MELANOGABBRO BOULDER 8% cpy po
74104	20	-15	2							MELANOGABBRO BOULDER 7% dis po
74105	-2	-15	2							RHYOLITE 5% magnetite
74106	-2	-15	4							BASALT 4% po veins
74107	4	-15	7							BASALT 1cm veins of py
74108	-2	-15	-1							GABBRO sheared 3-5% dis py
74109	-2	-15	-1							GABBRO qtz amph porphyritic 1% dis py
74110	-2	-15	1							GABBRO 3% po cpy microfractures
74111	-2	-15	-1							GABBRO vf grain po cpy
74112	-2	-15	-1							INTERMEDIATE VOLCANIC with sulphides and chlorite in fractures
74113	-2	-15	-1							MAFIC FRAGMENTAL calcite siderite? qtz 1% py
74114	-2	-15	-1							MAFIC FRAGMENTAL calcite siderite? qtz 5% py lenses/veins
74115	540	352	57							PERIDOTITE BOULDER 5% cpy
74116	8	-15	7							MAFIC FRAGMENTAL highly chl epidotized 4% py po
74276	-2	-15	-1							BASALT 2-5% po cpy in granular blebs near gabbro contact
74277	4	-15	8							MELANOGABBRO with 3% py
74278	-2	-15	3							MELANOGABBRO with 5% py cpy diss along fractures
74279	4	-15	3							MELANOGABBRO with 5% po cpy

SAMPLE	Pd	Pt	Au	Ni	Cu	Cr	Zn	Ag	Pb	DESCRIPTION
74280	2	-15	2							FROST HEAVE sheared gabbro 15% dis po
74281	3	-15	5							FLOAT BOULDER basalt 10% po
74282	2	-15	5							MELANOGABBRO altered vein 1% sulphides
74283	-2	-15	6							RHYOLITE sheared up to 10% dis py
74301	-2	-15	-1	39	142	189				MAFIC VOLCANIC <3-5% py
74302	-2	-15	-1	9	10					GRAB SAMPLE sil felsic vol with qtz. augens <2mm, <5% dis py
74303	5	-15	1	29	135	81				GRAB fine grain mafic vol, <10% po, mag calcite in fractures
74304	4	-15	-1	1120	54					GRAB sil mafic vol, dunite boulder field, <1% py
74305	-2	-15	-1	27	18					black aphanitic shaley rock, <=5% py in veins and dis
74306	4	-15	-1	21	505	41				DUNITE PERIDOTITE calc magnetic med to coarse grain 15-20% po
74307	4	-15	-1	1730	15	3091				GRAB SAMPLE dunite calc and magnetic
74308	4	-15	-1	1735	13	4222				GRAB SAMPLE dunite serpentinized, calcareous
74309	6	-15	-1	1560	21	4599				GRAB SAMPLE dunite with 2% anhedral to euhedral magnetite
74310	3	-15	-1	1835	16	4683				GRAB SAMPLE dunite
74311	-2	-15	-1	60	156					GABBRO pegmatitic 5% po minor cpy <=1%
74312	-2	-15	-1	6	11					BASALT calcareous fine grained, <=2% dis anhedral py
74313	-2	-15	1	22	7800					QTZ BOULDER pyrite rich with green Cu staining
74314	-2	-15	-1	36	152					METAVOLCANIC <=10% py, calc, chloritized,
74315	3	-15	2			4118				GRAB SAMPLE magnetic dunite, 10% magnetite, <1% py films
74316	-2	-15	-1			17				BASALT calc mag epidotized qtz vein <10% magnetite
74317	-2	-15	1			30				GRAB SAMPLE gossan <20% py in microfractures & veins
74318	28	23	1			3946				GRAB SAMPLE serpentinized magnetite rich dunite, <5% magnetite
74319	206	104	119			807				LEUCOGABBRO <=5% po py along fractures
74320	3	-15	1	45	48	218	148	0.1	9	PHYLLITE TO SCHIST calc chloritized, magnetite & calcite
74321	-2	-15	-1	4	15	52	58	0.2	57	CHLORITE SCHIST siliceous, gossaned, <25% py along fractures
74322	-2	-15	-1	5	7	251	202	0.1	22	GRAB SAMPLE of limonitic gossaned qtz. boulders. very heavy
74323	-2	-15	-1	3	4	124	68	0.1	150	QTZ VEIN in chlorite schist, py, gossaned
74324	-2	-15	-1	27	84	217	333	0.1	68	ALTERED METAVOLCANIC or sed. gneiss, calc, 2% py fracture
74325	-2	-15	-1	-2	9	101	430	-0.1	43	QTZ VEIN 3mm py blebs
74326	-2	-15	-1	3	15	92	106	0.2	24	GNEISS altered, <5% py along foliation
74327	-2	-15	1	16	68	147	91	0.1	26	WHITE QTZ VEIN altered gossan <10% py, calc
74328	-2	-15	4	10	10	83	29	0.3	90	GRAB SAMPLE gossaned, sericitic chlorite schist, dis py
74329	-2	-15	1	7	16	62	69	0.4	82	CHERT calc aphanitic, <15% py cpy in fractures
74330	-2	-15	18	32	2000	61	189	5.4	366	GOSSANED massive sulphide boulder
74331	-2	-15	1	13	144	60	406	2.1	152	SILICEIOUS PYROCLASTIC bx 10% py filled fractures
74332	-2	-15	4	5	148	134	20000	3.5	3530	GRAB SAMPLE calc chl qtz vein galena sphal py cpy
74333	-2	-15	27	4	200	106	2725	29.9	20000	GOSSANED BOULDERS massive galena sphalerite, py vein
74334	-2	-15	1	4	44	61	2715	2.1	1545	GRAB SAMPLE dis galena sphalerite, py vein
74335	-2	-15	1	4	36	21	5225	0.9	740	GRAB SAMPLE porpyritic rhyolite minor galena sphal py
74336	-2	-15	-1	4	46	36	1675	1	1130	SCHIST with fluorite sil calc <20% py
74337	-2	-15	-1	22	100	45	330	0.3	96	SCHIST gossaned fine to med grain <3% dis py
74338	-2	-15	3	15	12	69	198	0.4	138	OLD TRENCH sil fine to med grain altered, <20% dis py
74339	-2	-15	3	23	44	42	442	0.6	291	OLD TRENCH sil aphanitic to vf grain 3-5% py in fractures
74340	-2	-15	2	17	12	38	195	0.6	197	OLD TRENCH massive py, gossaned very sil, clasts & bombs
74341	-2	-15	-1	2	34	-12	253	0.3	185	PORPHYRITIC calc, fine fluorite veins,<5% dis py
74342	-2	-15	-1	4	42	15	321	-0.1	46	PORPHYRITIC calc, fine fluorite veins,<5% dis py
74343	-2	-15	2	-2	40	88	84	0.1	44	MAFIC VOLCANIC chloritized with qtz vein, <5% dis py
74344	-2	-15	150							PORPHYRITIC altered grey, <2-3% dis py in blebs
74345	-2	-15	2							GABBRO/DUNITE CONTACT <1-2% py, tremolite along contact
74346	-2	-15	7							METAVOLCANIC or sediment altered chl, <1-2% py
74347	-2	-15	-1	18	27					PYROCLASTIC SCHIST altered frag sheared calc chl, <2% dis py
74348	-2	-15	-1	21	267					GABBRO med grain <15-20% very fine dis po
74349	-2	-15	-1	43	99					GABBRO med to coarse grain <5% euhedral py <=5mm
74350	-2	-15	-1	16	35					MAFIC VOLCANIC alt chl calc magnetite, minor py <3mm

SAMPLE	Pd	Pt	Au	Ni	Cu	Cr	Zn	Ag	Pb	DESCRIPTION
74351	-2	-15	-1	42	7					BASALT calc magnetic <10% magnetite
74352	-2	-15	-1	16	2					BASALT sil mag epidotized chill margin of felsic vol/mafic vol
74353	-2	-15	-1	5	2					BASALT calc, 10% magnetite
74354	-2	-15	-1	62	4					BASALT massive magnetite seam
74355	-2	-15	-1	6	33					BASALT/GABBRO CONTACT sil mag calc, minor py
74356	-2	-15	3	6	45					BASALT/GABBRO CONTACT 2 ft. chip sample of sil py contact
74357	11	-15	4	92	78					PYROCLASTIC/GABBRO CONTACT 20% mag, 1% dis py
74358	4	-15	3	42	20					PYROCLASTIC/GABBRO CONTACT magnetite, 1% py
74359	-2	-15	1	-2	30					IRON FORMATION banded magnetite jaspar, 2% py
74360	9	-15	3	1065	8					GOSSANED ERRATIC on top of pillow basalt, minor py
74361	-2	-15	1	36	12					PILLOW BASALT chill margin garnet calc
74362	-2	-15	2	33	7					PILLOW BASALT chill margin garnet calc
74363	19	21	11	714	646					PERIDOTITE boulder py vein
74364	16	19	3	731	37					GRAB SAMPLE peridotite boulder field, serpentinized, magnetite
74365	4	-15	3	702	11					PERIDOTITE boulder with magnetite
74366	-2	-15	3	5	5					CHLORITE SCHIST calc hornblend, 10% py in thin bands
74367	-2	-15	3	2	3					CHLORITE SCHIST calc hornblende 10% py in thin bands
74368	-2	-15	-1	104	112					GABBRO <2% dis cpy & minor py and galena
74369	19	18	3	369	381					PERIDOTITE 1% po blebs
74370	4	-15	2	242	58					GABBRO weathered alt 2% dis py, 2 2cm clumps py
74371	-2	-15	4	127	45					PERIDOTITE 2% dis py blebs
74372	-2	-15	16	22	519					ERRATIC gossaned from boulder field, med grain, <5% po
74373	-2	-15	-1	27	29					METAVOLCANIC fine grain, calc, dense py pod <10cm
74374	-2	-15	12	26	584					QTZ BOULDER massive py from qtz boulder field
74375	-2	-15	2	29	53					QTZ BOULDER massive py from qtz boulder field
74376	-2	-15	1	9	15140					QTZ BOULDER massive py from qtz boulder field
74377	-2	-15	3	10	64					QTZ BOULDER massive py from qtz boulder field
74378	-2	-15	3	8	17360					QTZ BOULDER massive py from qtz boulder field
74379	-2	-15	2	17	2320					QTZ BOULDER altered host, large qtz vein
74380	-2	-15	4	4	20000					QTZ BOULDER altered host, massive py & qtz vein, Cu stain
74381	-2	-15	1	17	221					QTZ BOULDER massive sulphides from qtz boulder field
74382	-2	-15	1	12	1705					QTZ BOULDER massive sulphides from qtz boulder field
74383	-2	-15	5	11	20000					QTZ BOULDER massive sulphides from qtz boulder field
74384	-2	-15	2	11	15100					QTZ BOULDER massive sulphides from qtz boulder field
74385	-2	-15	-1	5	287					GRAB SAMPLE med grain gabbro <2% py in matrix
74386	-2	-15	1	61	217					GABBRO 2% py along fractures
74387	-2	-15	1	51	118					GABBRO 2% py along fractures
74388	-2	-15	-1	50	58					BASALT massive fine grain minor epidote chl hbld, <1% py
74389	-2	-15	-1	28	30					GRAB SAMPLE across chill margin carbonate dike/dunite
74390	-2	-15	-1	13	4					GRAB SAMPLE boulder field, frag gossan calc graph schistose
74391	-2	-15	-1	28	13					GRAB SAMPLE gossan boulder field, calc sil limonitic <1% py
74392	-2	-15	-1	31	40					GRAB SAMPLE gossan boulder field, calc limonitic, <5% py
74393	-2	-15	-1	31	33					BASALT calc, <1% py cubes
74394	-2	-15	-1	4	9	12				GRAB SAMPLE boulder field pyroclastic, <5% magnetite minor py
74395	-2	-15	1	35	17					GRAB phylitic to schistose alt mafic volcanic, <18% py
74396	2	-15	2	17	69					BASALT EPIDOTE magnetite, dunite basalt chill margin <1% py
74397	-2	-15	-1	26	25					BASALT gossan calc, dunite contact chill margin
74398	-2	-15	3	28	197	75				BASALT magnetite calc, 3% dis po py
74399	-2	-15	4	18	115					BASALT sil, circular blebs py in soft chlorite
74400	-2	-15	1	9	82					GRAB sil cherty basalt, <5% py dunite contact chill margin

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