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Sept 25/1990

MOUNT POLLEY PROJECT

STAGE I ENVIRONMENTAL AND SOCIOECONOMIC
IMPACT ASSESSMENT

Volume I of II

PREPARED FOR:

The B.C. Mine Development Steering Committee

SUBMITTED BY:

*IMPERIAL METALS CORPORATION
800-601 West Hastings Street
Vancouver, B.C.
V6B 5A6*

JULY 1990

MINE DEVELOPMENT REVIEW PROCESS
PROJECT FACT SHEET

CORPORATE DATA:

PROJECT NAME:

MOUNT POLLEY PROJECT

COMPANY NAME(S) AND ADDRESS(ES):

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601 West Hastings Street
Vancouver, B.C.
V6B 5A6
Telephone: (604) 669-8959
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Corona Corporation
Suite 1440
800 West Pender Street
Vancouver, B.C.
V6C 2V6
Telephone: (604) 689-5453
Facsimile: (604) 689-1220

CONTACT/TITLE:

Rad Pesalj, P. Eng., Project Manager
Imperial Metals Corporation

Peter M. Cain, P. Eng., Vice President-Mining
Imperial Metals Corporation

Zarko T. Nikic, Vice President-Exploration
Imperial Metals Corporation

T. C. (Tom) Griffing, Ph.D., Environmental Consultant
Griffing Consultants Inc.
Telephone: (604) 940-0424

PROJECT DETAILS:

PROJECT LOCATION:

Cariboo Region of central British Columbia, 56 air kilometres of northeast
of Williams Lake, B.C.

ESTIMATED CAPITAL COST:

✓ \$131,410,000

MINERALS:

Copper and gold

MINING METHOD:

Open pit

ESTIMATED PRODUCTION:

✓ 13,700 tonnes per day

PROCESS PLANT/MILL:

Crushing, grinding and froth flotation to yield a copper-gold concentrate.
No cyanide.

PROPOSED MINE LIFE:

✓ 14 years

MINERAL RESERVES/RESOURCES:

RESERVES/RESOURCES:

✓ Total mineable: 51,402,000 tonnes

56,666,279 tons !

AVERAGE GRADE OF ORE:

✓ 0.38% copper and 0.55 gr gold per tonne

CUT-OFF GRADE:

0.39% recovered copper equivalent

POTENTIAL FOR ADDITIONAL RESERVES:

A number of mineralized zones are known on the property. Several of these have been only partially explored.

STRIPPING RATIO:

1.76:1

ACCESS/TRANSPORTATION:

ROAD:

All weather provincial paved road from Williams Lake to Morehead Lake, then 14 kilometres of gravel road.

RAIL:

B.C. Rail service to Williams Lake

AIR ACCESS:

Commerical jet service to Williams lake from Vancouver; helicopter and fixed wing charter from Williams Lake.

POWER SUPPLY:

REQUIREMENTS:

Estimated 20 MW.

SOURCE:

B.C. Hydro

WORKFORCE INFORMATION:

TOTAL OPERATIONAL WORKFORCE:

✓ 162 employees

HOUSING OPTIONS:

No camp or new town proposed; employees will make their own decisions and arrangements for housing.

CONSTRUCTION WORKFORCE:

153 man years

CONSTRUCTION CAMP:

A 150 man camp at the mine site

WORKFORCE ROTATION:

Mill - 2 twelve hour shifts/day, 7 days/week.

Mine - 2 twelve hour shifts/day, 7 days/week.

DEVELOPMENT SCHEDULE:

STAGE I SUBMISSION FILED:

August 1990

SITE CONSTRUCTION STARTUP:

May 1991

PRODUCTION STARTUP:

✓ August 1992

EXECUTIVE SUMMARY

This Stage I Environmental and Socioeconomic Impact Assessment of the Mount Polley project presents geology, reserves, mining, ore processing, infrastructure requirements, waste and water management and conceptual reclamation and environment protection plans for review by the British Columbia Mine Development Steering Committee.

The Mount Polley project, located 56 km northeast of Williams Lake, is a joint venture between the Imperial Metals Corporation Group (61.59%) and Corona Corporation (38.41%).

The Mount Polley deposit contains 51,402,000 tonnes of ore grading 0.38% Cu and 0.55 g/tonne Au. The reserves provide a mine life of 14 years.

Production of the proposed mine is targeted at an average rate of 13,700 tonnes per day or 5,000,000 tonnes per year. The ore processing plant located on the site will produce copper/gold concentrate by standard froth flotation at an average rate of 160 tonnes per day. The ore will be mined year-round by open pit mining method using electric shovel and mechanical drive haulage trucks. Waste, ore and tailings are acid consuming, with no acid generating potential indicated by extensive static and kinematic tests. The process plant and the tailings pond will be operated with a negative water balance and no effluent will be discharged to the environment.

Tailings will be deposited conventionally by gravity in a tailings disposal area behind an impervious till dam constructed initially by a centerline and later by an upstream configuration. Surface runoff from waste dumps, mill site as well as pit water will be collected in sediment ponds, tested and if environmentally acceptable released to the environment. Water not meeting water quality guidelines will be sent to the tailings pond or treated before release to the environment.

Access to the property from the Likely Road will be via the existing 14 km forestry road that will be upgraded to meet the project transport requirements.

Power will be obtained by a 3-phase 69 KV transmission line that will tap the Gibraltar Mine line at McLease Lake, approximately 25 km north of Williams Lake.

Freshwater for the project will be pumped from a 0.70m high water storage at Polley Lake, which will provide freshwater requirements for the mine and mill, as well as downstream fish habitat.

The Mount Polley project will create significant economic benefits to the region and British Columbia. Project capital costs of \$131,400,000 and an average operating cost of \$32,595,000 per year are projected over fourteen years of mine life.

The construction workforce will peak at 200 persons. The direct mine operating workforce will comprise employment of 162 persons. The current under-utilization of existing infrastructure in the region means that the project will not require significant enlargement of public facilities. The expected closure of similar operations in the province will provide a labour pool that can be partly assimilated by the project.

The project concept is a fully mitigated design with careful consideration for efficiency and environmental acceptability. Potential impacts will be minor and of short duration. The protection of the environment will be ensured by implementation of strategies described in the report, including, for example, sedimentation ponds, water monitoring and testing to meet both provincial and federal criteria, and maximizing recycling of process water in the mill.

Much of the project area has been subject to recent logging operations, however the proposed development will result in a temporary loss of vegetation cover and consequently have a temporary impact on wildlife, hunting, trapping and cattle grazing. A three stage reclamation plan to be initiated in the first year of operation has been developed with the main objective to return all mine-affected lands to their original use and capability.

1.0 INTRODUCTION

1.1 PREAMBLE

The Mount Polley copper/gold project is a joint venture between Imperial Metals Corporation Group (61.59%) and Corona Corporation (38.41%). The operator of the project is Imperial Metals Corporation.

The Mount Polley project is located in central British Columbia, fifty six air kilometres northeast of Williams Lake. The name of the project is derived from Mount Polley, a low mountain that rises about three hundred metres above the rolling and forested terrain. Elevations around Mount Polley are generally less than one thousand metres.

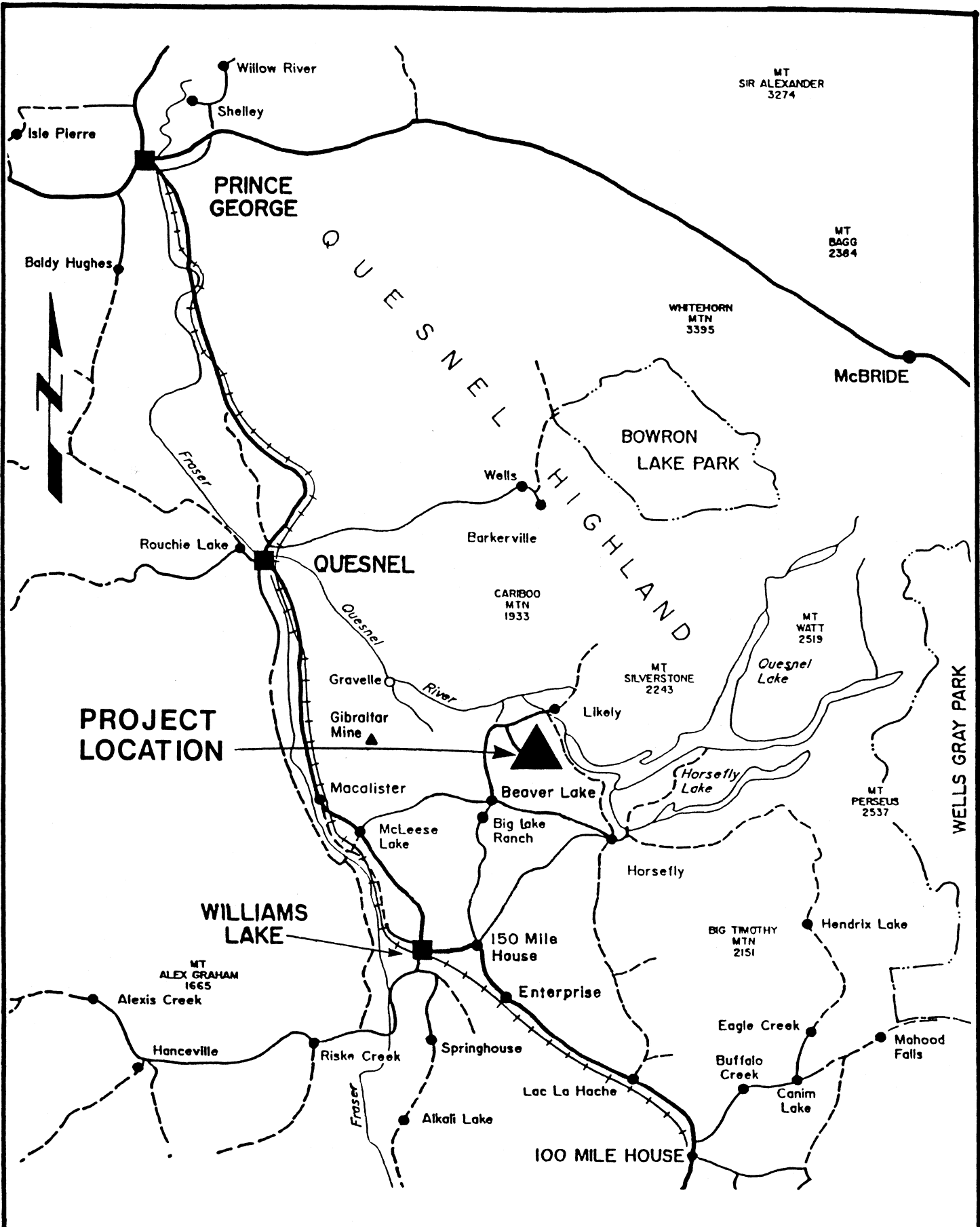
The mining method that will be employed is open pit mining, ultimately involving three adjoining pits. The scheduled mining rate is 13,700 tonnes of ore per day. The lifespan of the mine is expected to be fourteen years.

Processing of the ore will consist of crushing, grinding and froth flotation producing a copper-gold concentrate at the rate 164 tonnes per day. The concentrate will be shipped by trucks to a B.C. Rail loading point.

1.2 PROJECT LOCATION AND SETTING

The general location of the Mount Polley project in central British Columbia is illustrated in Figure 1-1. The property consists of 330 units representing a total surface area of 9,075 hectares. The outline of the claim blocks is indicated in Figure 1-2 along with the general layout of project facilities. The approximate coordinates for the project are Latitude 52° 33' north and Longitude 121° 38' west on NTS Map 93 A/12 (Hydraulic). An overall plan of the proposed development is provided in the back pocket of this report (Figure 1-3).

The Mount Polley project is located in the Cariboo Region of central British Columbia. Likely is the closest community, and is situated at the outlet of Quesnel Lake where it discharges to the Quesnel River. Two smaller lakes in the headwaters of minor drainages in this



PROJECT LOCATION

IMPERIAL METALS CORPORATION
MOUNT POLLEY PROJECT
 WILLIAMS LAKE BRITISH COLUMBIA

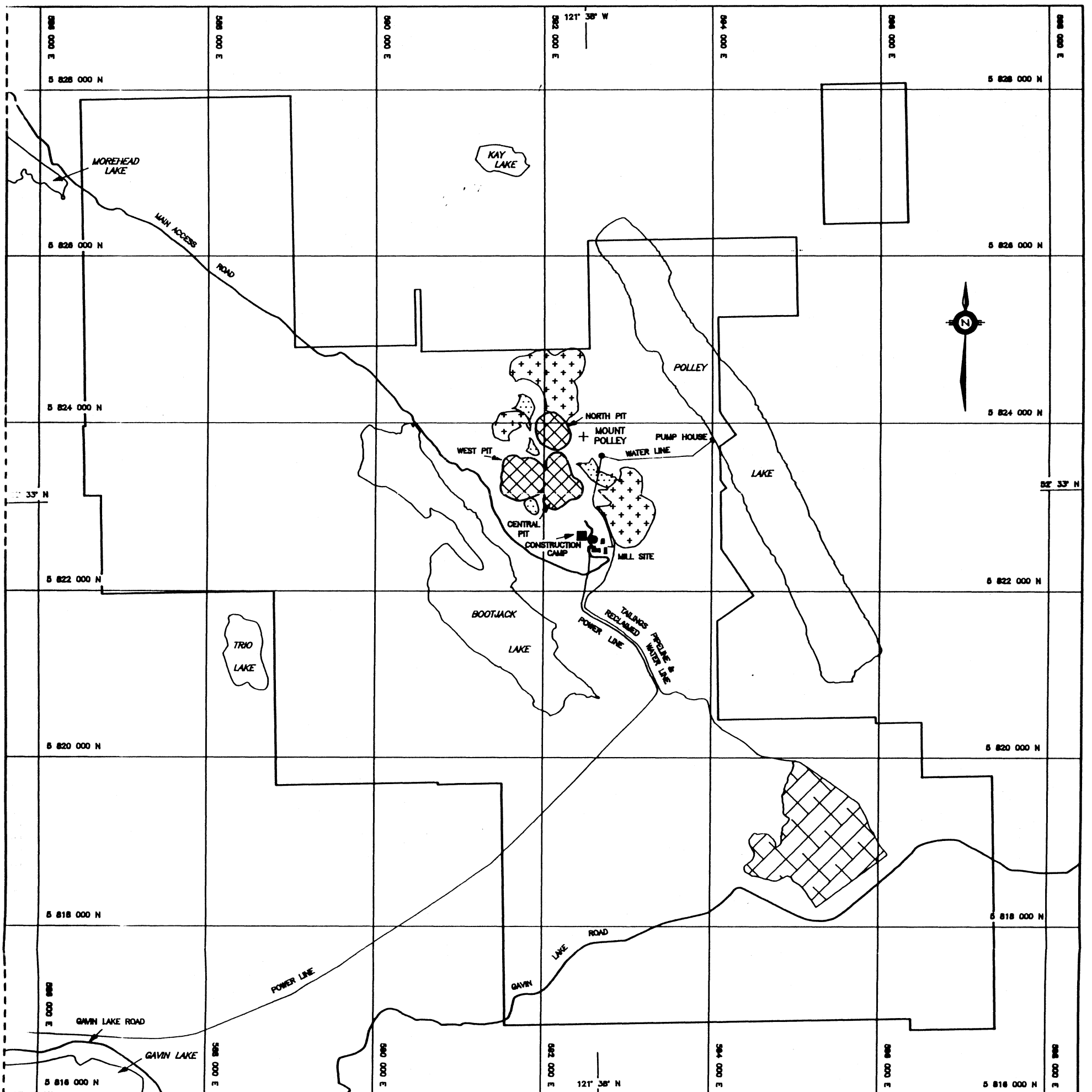
LOCATION PLAN





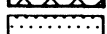


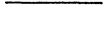
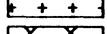
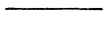

WRIGHT ENGINEERS LIMITED
 VANCOUVER CANADA

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| | | |
|------------|-----|-----|
| FIGURE No. | | REV |
| A | 1-1 | |



LEGEND

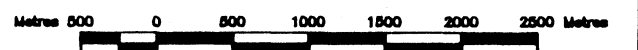
- | | | | |
|---|-----------------|---|-------------------|
|  | Proposed Pit |  | Road |
|  | Overburden Dump |  | Transmission Line |
|  | Waste Rock Dump |  | Pipeline |
|  | Tailings Pond |  | Property Boundary |
|  | Building | | |

IMPERIAL METALS CORPORATION
MOUNT POLLEY

FIGURE 1-2

N.T.S. 93A/12

AREA GENERAL ARRANGEMENT



SCALE: 1:50 000
DATE: MARCH 1990

GEOLOGIST: R. PESALJ
DRAWN BY: S. HAWORTH

2.0 PROJECT DESCRIPTION

2.1 PROJECT HISTORY

Although the copper showings on Mount Polley probably were known for many years in this historic placer mining area, the first recorded exploration was in 1964 when Mastodon-Highland Bell Mines Limited and Leitch Gold Mines jointly reported copper oxide minerals at the site of a prominent aeromagnetic anomaly outlined by a federal-provincial survey.

Results of this initial work led to the formation of a new company, Caribou-Bell Copper Mines Limited. Drilling began in 1966 following earlier bulldozer trenching and geochemical/magnetometer surveys. Caribou-Bell was subsequently joined by a group of Japanese companies that later withdrew. In 1969, Teck Corporation acquired control of Caribou-Bell Copper Mines Limited.

In the period from 1966 to 1972, a total of 21,624m of diamond drilling (18,341m) and percussion drilling (3,283m) in 208 holes were completed. In addition, geophysical surveys including magnetic, seismic and induced polarization were carried out in 1970. Reserves based on this drilling were reported to be 25 million tonnes grading 0.49% Cu and 0.56 g Au/tonne (Hodgson, et al., 1976).

In 1978, Highland Crow Resources (subsequently amalgamated with Noramco Mining Corporation in January, 1988) acquired control of Caribou-Bell Copper Mines and completed five percussion holes totalling 354m. The following year, Teck Corporation completed six percussion holes totalling 533m.

E & B Explorations Inc. (subsequently amalgamated with Corona Corporation in 1988) optioned the property from Highland Crow in 1981. During that year E & B completed 1,746m of diamond drilling, 1,295m of rotary drilling, a soil geochemical survey and a ground control survey.

Under a purchase agreement dated August 31, 1982, E & B acquired a 100% interest in the property subject to a 22% net profit royalty payable to Noramco. E & B operated the project on its own behalf and that of the joint venture partners (Geomex Partnerships and Imperial Metals

Corporation) until September 10, 1987, when operatorship was transferred to Imperial Metals Corporation.

Work completed from 1982 to 1987 included 3,585m of diamond drilling and 4,026m of reverse circulation drilling, as well as soil geochemistry, geological mapping, magnetic, VLF-EM and IP surveys.

In 1988, Imperial Metals Corporation, as operator, completed an IP survey and trenching, plus an additional 99 diamond drill holes totalling 8,883m. Higher grade copper-gold mineralization was identified near Mount Polley within the widely mineralized porphyry system. A preliminary economic evaluation was also completed which indicated potential for a profitable open pit mine operation.

In 1989, a further 139 holes totalling 18,639m of diamond drilling were completed to detail reserves on the Central and West Zones and to determine the nature and distribution of non-sulphide copper mineralization in greater detail. Six bulk samples were collected from surface trenches for a pilot plant test. Metallurgical testing was also carried out on a number of drill core composites.

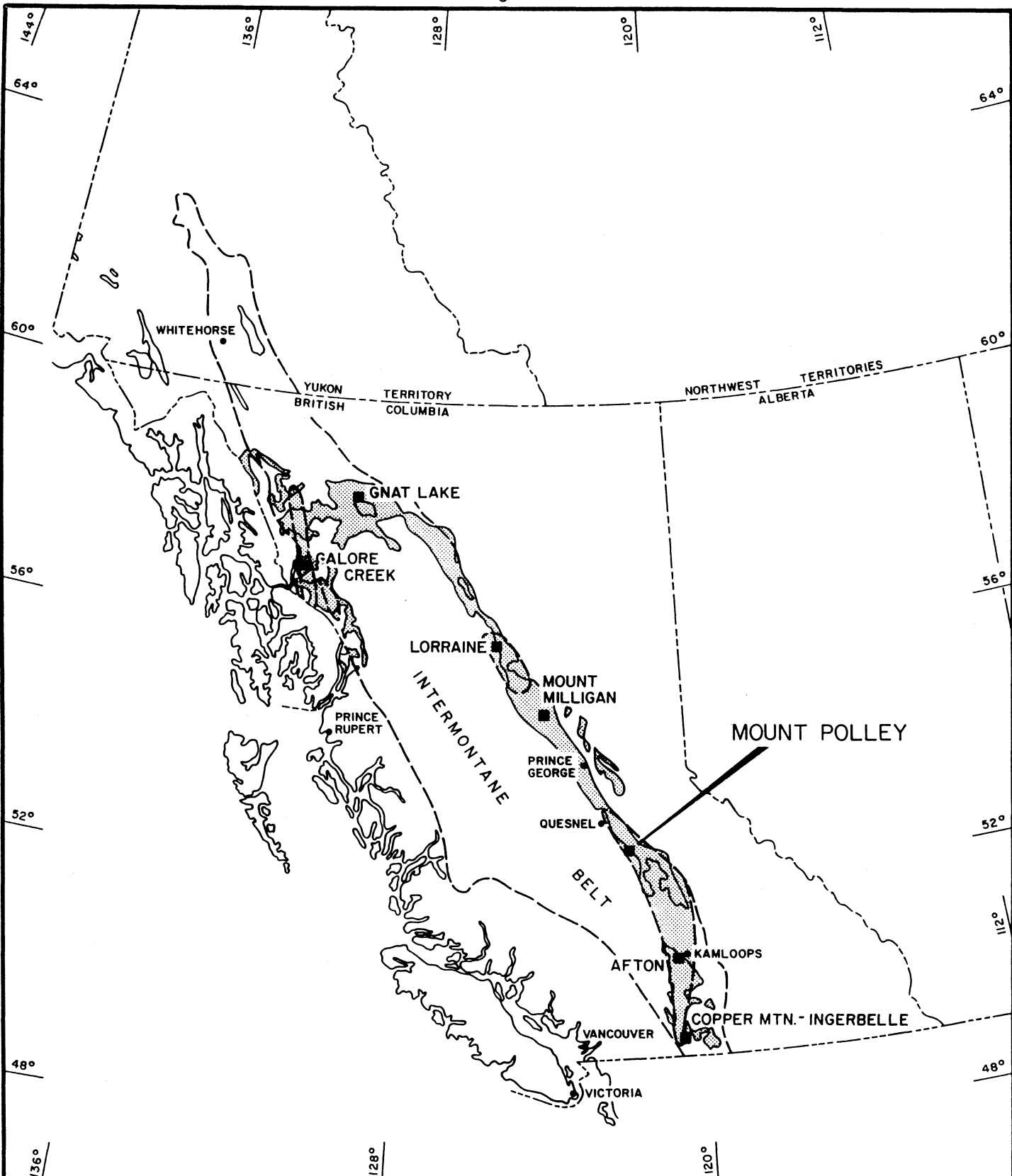
A geotechnical study was completed which included preliminary design of open pit slopes, waste dump and tailings storage facilities. Environmental studies related to surface and groundwater quality and quantity, acid generation potential, tailings disposal and assessments of the environmental and socioeconomic impacts were also initiated in 1989.

A total of 528 percussion, rotary and diamond drill holes, comprising 61,302m of drilling, have been completed on the Mount Polley property to date.

2.2 GEOLOGY, MINERALIZATION AND ORE RESERVES

2.2.1 Regional Geology

The Mount Polley deposit occurs in an alkalic intrusive complex within the Quesnel Belt (formerly Quesnel Trough) which is an allochthonous terrane of predominantly Upper Triassic-Lower Jurassic, mafic to intermediate volcanic rocks that lie along the eastern margin of the Intermontane Belt (Figure 2-1). The northwesterly trending Quesnel Belt, which



LEGEND


 ALKALIC VOLCANIC AND INTRUSIVE COMPLEXE

AFTER BARR ET AL (1976)

IMPERIAL METALS CORPORATION
MOUNT POLLEY

FIGURE 2-1

N.T.S. 93A/12

REGIONAL GEOLOGY



SCALE: 1:10,000,000

GEOLOGIST: K. McNAUGHTON

DATE: DECEMBER, 1989

DRAWN BY: J. CORKUM

includes rocks of the Quesnel River, Nicola, Takla, Stuhini and Rossland Groups (Panteleyev, 1987), is 35 km wide. The Quesnel terrane is a fault-bounded region flanked to the east by Precambrian to Paleozoic rocks of the Barkerville and Slide Mountain Terranes (Struik, 1986) and to the west by rocks of the Cache Creek terrane.

The intrusive complex hosting the Mount Polley deposit is one of several alkalic complexes in the Cordillera that lie within the belts up to several hundred kilometres long. All alkalic plutons and associated porphyry deposits occur within the Intermontane Zone and coincide with the outcrop area of the Upper Triassic Nicola-Takla-Stuhini volcanic assemblages. The isotopic age of these deposits falls in the 175 to 198 Ma range, with Mount Polley dated at 185 ± 7 Ma. (Christopher and Douglas, 1976, Hodgson et al., 1976).

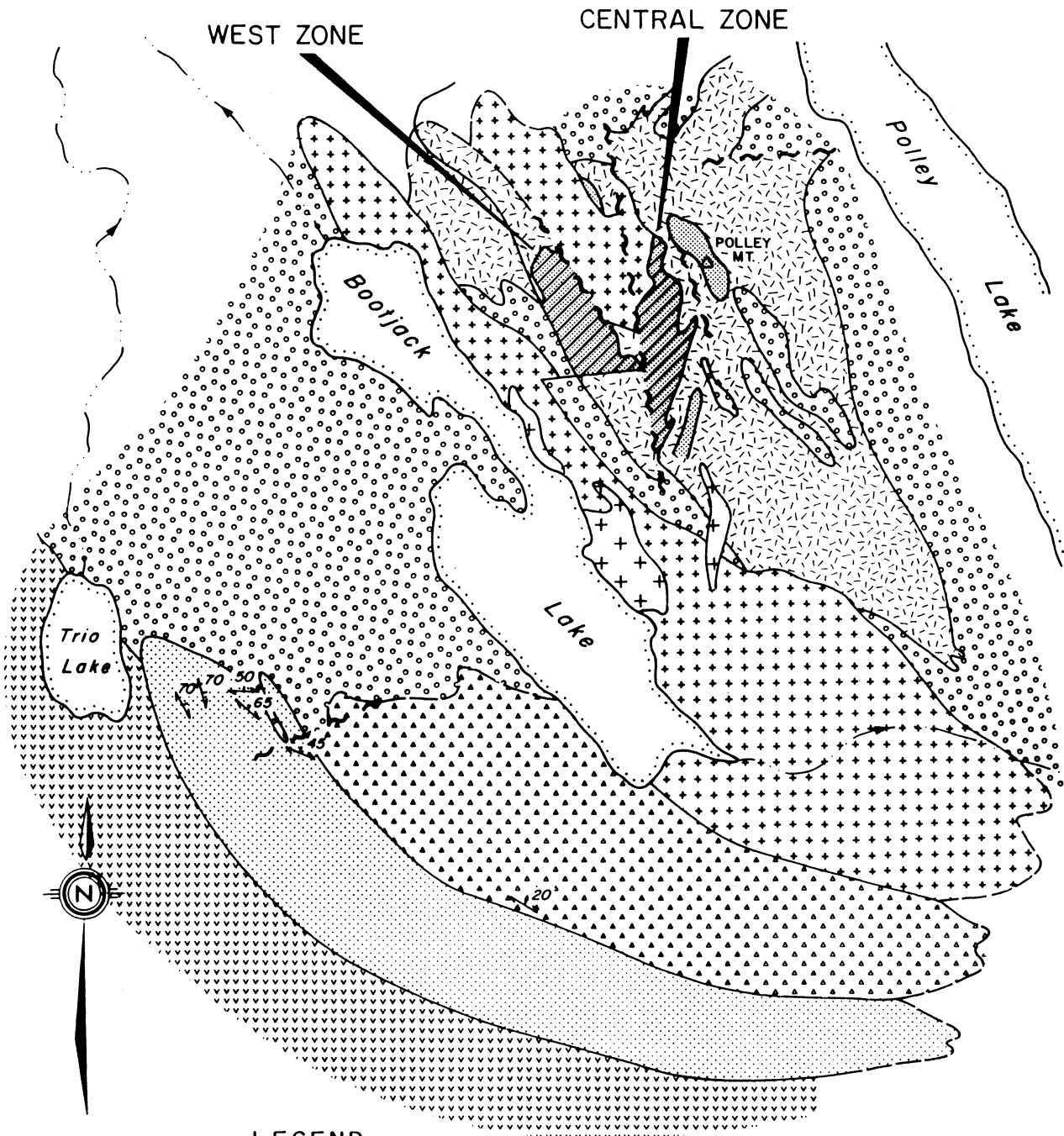
Alkaline-suite porphyry deposits, of which Mount Polley is an example, are recognized as a separate deposit type, distinct from the calc-alkaline porphyry deposits (Barr et al., 1976). Other significant deposits include Copper Mountain, Afton, Mount Milligan, Lorraine, Gnat Lake and Galore Creek.

In comparison to calc-alkaline deposits, alkaline deposits lack appreciable amounts of molybdenite and are usually richer in gold and silver.

2.2.2 Property Geology







The Mount Polley intrusive complex is located between Bootjack Lake on the west side and Polley Lake on the east side (Figure 2-2). The intrusion is a tilted laccolith approximately 6 km long and up to 2 to 3 km thick at the centre (Hodgson et al., 1976). Six lithologically distinct phases are recognized, of which five comprise one or more stacked lenses concordant with the northeast-dipping host strata, and the sixth, the Cu-Au-bearing breccia which is partly concordant and partly discordant.

The principal lithological phases of the intrusive complex recognized are mafic pseudoleucite syenite, pseudoleucite syenite







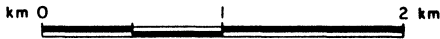
LEGEND

LACCOLITH

-  PYROXENITE
-  INTRUSION BRECCIA
-  MONZONITE PORPHYRY
-  SYENODIORITE
-  PSEUDOLEUCITE SYENITE
-  MAFIC PSEUDOLEUCITE SYENITE

UPPER TRIASSIC STRATA

-  CRYSTAL AND LAPILLI TUFF
-  TRACHYBASALT
-  IGNEOUS FOLIATION
-  FAULT

| | |
|--|--------------------------|
| IMPERIAL METALS CORPORATION | |
| MOUNT POLLEY | |
| FIGURE 2 - 2 | N.T.S. 93A/12 |
| PROPERTY GEOLOGY | |
|  | |
| SCALE: | GEOLOGIST: K. McNAUGHTON |
| DATE: DECEMBER, 1989 | DRAWN BY: J. CORKUM |

AFTER HODGSON ET AL (1976)

syenodiorite, monzonite porphyry (M1) and intrusive breccia.

Several younger rocks intrude the complex. There are two stages of monzonite porphyry dykes known as M1 and M3, respectively. M2 dykes occur adjacent to intrusion breccia and this unit is similar to the main mass of monzonite porphyry.

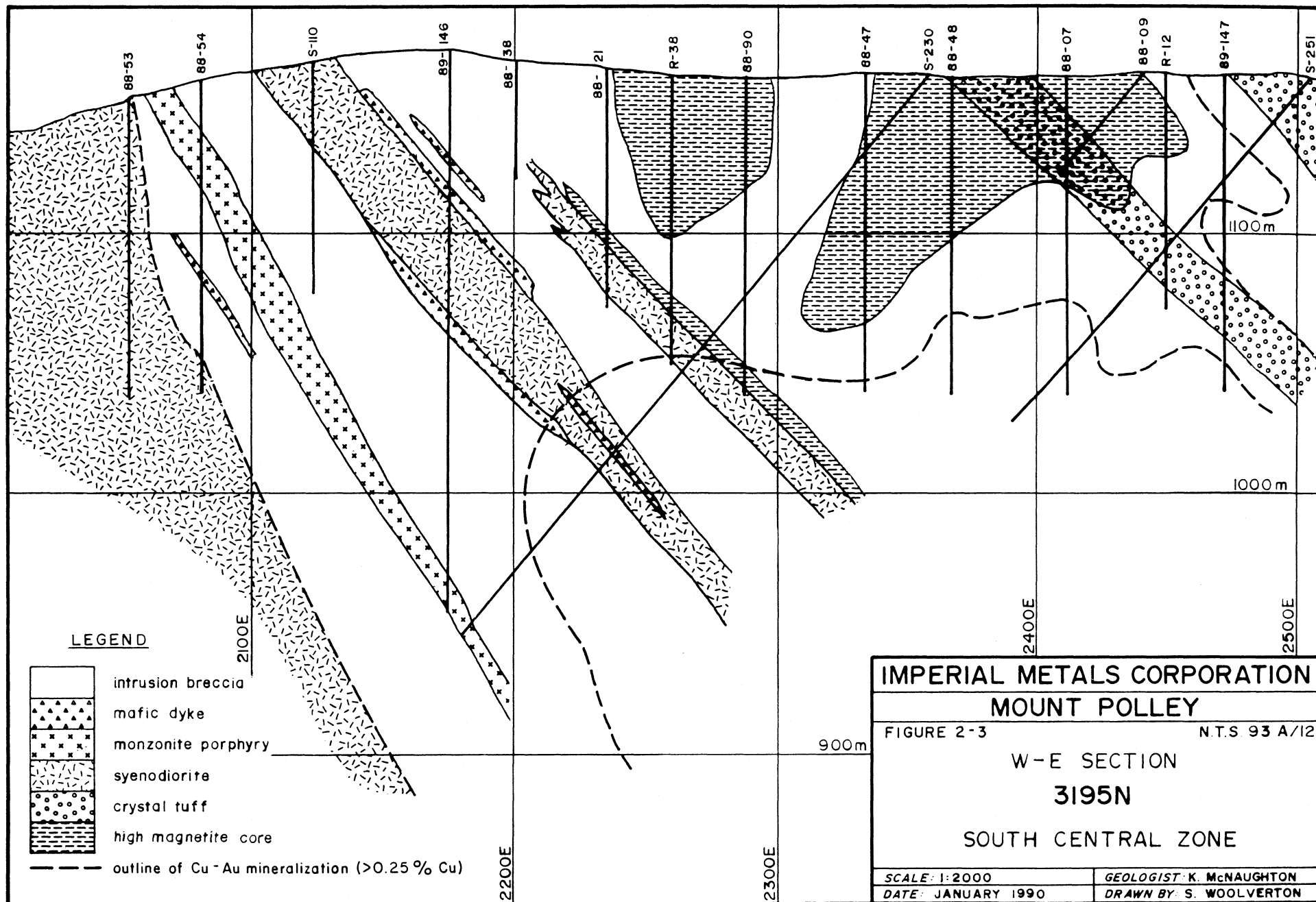
M3 dykes are common in the upper portion of the laccolith and as fragments in the Mount Polley breccia. Pyroxenite gabbro has been encountered in several holes east of Bootjack Lake and its surface area has been interpreted mainly from the ground magnetic surveys. These intrusions are considered to be coeval with augite porphyry dykes, the youngest intrusives in the laccolith, that cut all phases east of Bootjack Lake with the exception of the pyroxenite gabbro lens.

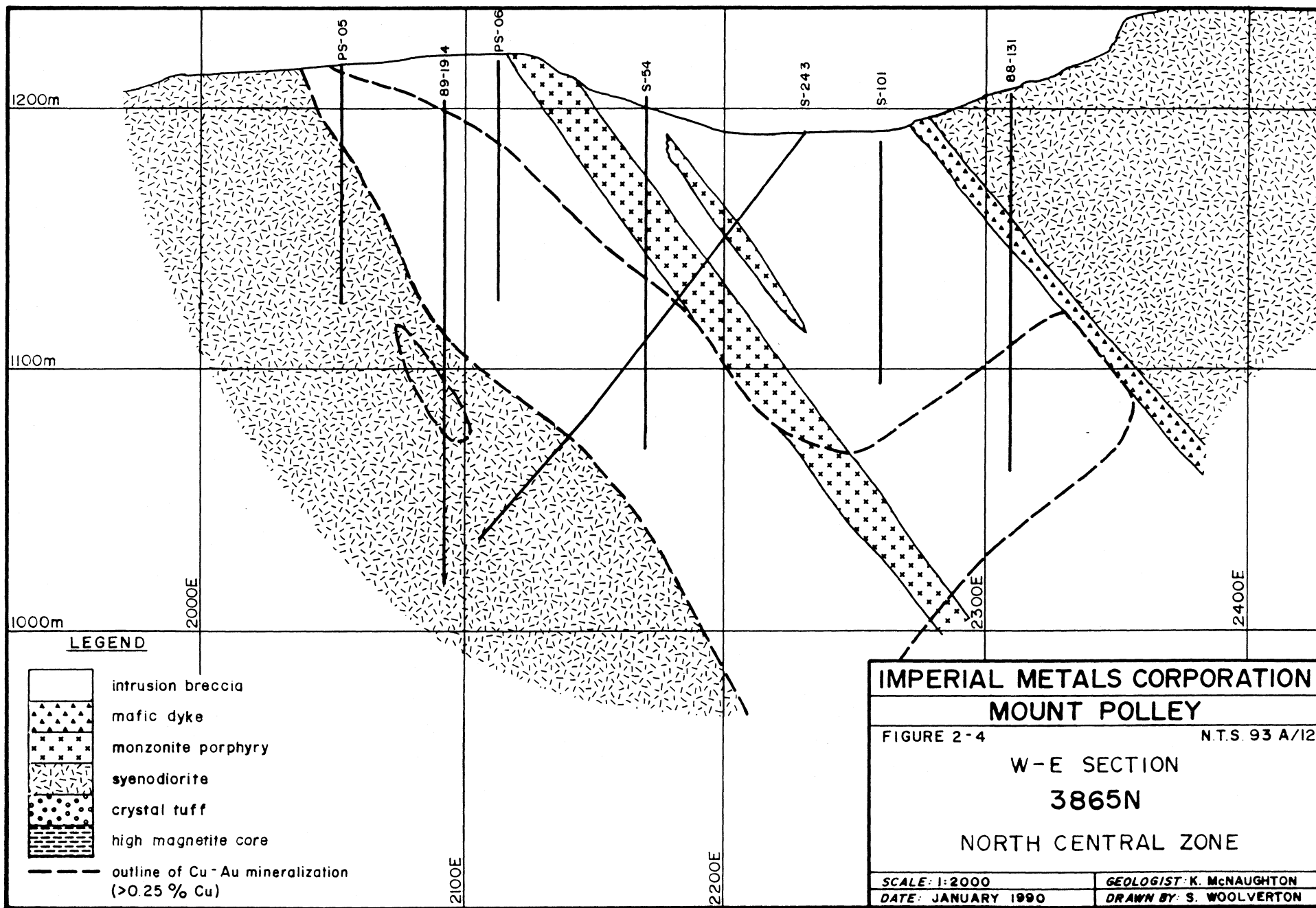
The volcanic rocks are coeval with the alkalic complex and are represented by augite trachyte basalts and lesser analcite trachyte basalts and abundant pyroclastics. Pyroclastic deposits in the immediate area adjacent to the mineralized zones are mainly feldspathic crystal and lapilli tuffs. Polymictic volcanic breccia that represents a lahar deposit is systematically distributed on both east and west side of the complex.

2.2.3 Au-Cu Mineralization








The Mount Polley porphyry-copper-gold deposit is hosted by intrusive and crackle breccia in monzonite porphyry or in crackle breccia in lapilli crystal tuff. Work by Imperial Metals Corporation has outlined two principal zones of significant Cu-Au mineralization known as the Central and West Zone.

A third breccia, known as the Mount Polley breccia, is barren and is considered to be younger than the Cu-Au-bearing breccias. These breccia zones are separated by a major north-south striking fault. Figures 2-3 and 2-4 are east-west geological cross sections through the Central and West Zone along 3195N and 3865N.





LEGEND

-  intrusion breccia
-  mafic dyke
-  monzonite porphyry
-  syenodiorite
-  crystal tuff
-  high magnetite core
-  outline of Cu - Au mineralization (>0.25 % Cu)

| | |
|------------------------------------|--------------------------|
| IMPERIAL METALS CORPORATION | |
| MOUNT POLLEY | |
| FIGURE 2-4 | N.T.S. 93 A/12 |
| W-E SECTION | |
| 3865N | |
| NORTH CENTRAL ZONE | |
| SCALE: 1:2000 | GEOLOGIST: K. McNAUGHTON |
| DATE: JANUARY 1990 | DRAWN BY: S. WOOLVERTON |

Magnetite, chalcopyrite, minor pyrite, trace bornite and native gold are the primary ore minerals in the deposit. Supergene minerals include malachite, amorphous chrysocolla, native copper, cuprite, digenite and covellite.

Magnetite and chalcopyrite occur as disseminations and in fractures and drusy cavities. In the southern section of the Central Zone there are small skarn-like concentrations of massive magnetite with blebs or stringers of chalcopyrite hosted by intrusive breccia or tuff that form high-grade sections of the deposit when chalcopyrite is abundant.

The Central Zone is a tabular sill-like body of mineralized intrusion breccia with a northerly strike and a moderately eastward dip. The zone measures 1,100m along strike and is 200 to 450m in width. The West Zone forms the core of a westerly-plunging pipe of mineralized intrusion breccia measuring 450m in diameter and extending to a drilled depth of 275m. A pyrite "halo" measuring 4,500 by 1,000m is located outside and structurally above the two main mineralized breccia zones.

The laccolith displays a complex history of rock alteration in which a wide variety of hydrothermal minerals formed at different periods during its intrusive and post-intrusive history. The most intense alteration developed contemporaneously with mineralization in three coaxial zones: a central zone of potash feldspar-biotite-diopside; intermediate garnet-epidote zone; and a peripheral epidote zone. Alteration effects, not directly related to mineralization, include pervasive moderately intense sericitic and argillic deuteric alteration of feldspars and syenodiorite, monzonite porphyry and post-mineral monzonite porphyry dykes, and intense argillic alteration of feldspars and shear zones.

Structurally, four main episodes of deformation are recognized at the Mount Polley deposit. The first was the intrusion of the high-level laccolith with formation of the intrusive breccia. The next and most important stage was formation of crackle breccia by phreatic activity which resulted in shattering and fine comminution

of the intrusion breccia and adjacent rock units within the complex.

Au-Cu mineralization was deposited during this stage. Post-mineralization events include block faulting which tilted the strata near the close of Upper Triassic volcanism and uplift and erosion during the Tertiary and Quaternary periods. Although several parts of the deposit, in particular the upper portions of the Central Zone, are strongly oxidized as a result of weathering during this erosional period, the very limited amount of supergene copper mineralization formed reflects the very low pyrite content of the deposit.

2.2.4 Ore Reserves

The Mount Polley ultimate pit mineable reserves, using 0.39% copper equivalent cutoff, are estimated at:

Probable: 48,771,000 tonnes at 0.383% Cu and 0.556 g Au/tonne
Possible: 2,631,000 tonnes at 0.322% Cu and 0.461 g Au/tonne
Total Mineable: 51,402,000 tonnes at 0.380% Cu and 0.551 g Au/tonne

In addition 26,192,000 tons of low grade material grading 0.218% Cu and 0.242 g Au/tonne will be stockpiled for processing when mineable reserves are exhausted.

An inverse distance cubed method with 20m x 20m x 10m blocks utilizing geostatistical method to assess continuity of grade and the search distance was used in ore reserve estimate. Due to the presence of a high grade area at the south end of the Central Zone a 25m search distance was used in this part of the deposit, whereas a 50m search distance was applied to the remainder of the deposit.

The ratio of oxide copper and total copper for the above reserve is 27% and the waste to ore ratio is 1:1.76.

The reserves of the Mount Polley deposit were estimated by Mintec, Inc. using MEDSYSTEM software developed by Mintec, Inc.

The copper equivalent grade has been calculated using a recovery formula determined by Wright Engineers based on linear regression of metallurgical recovery data and metal prices of U.S.\$1.00/lb copper and US\$400/oz gold. A copper treatment charge of US\$0.25/lb was also used. The ultimate outline for the Mount Polley open pit was designed by Mintec based on criteria selected by Wright Engineers using a floating cone algorithm to determine the economics of mining each 20m by 20m by 10m reserve block. A reserve block, or column of reserve blocks was included within the pit if it yielded sufficient revenue to cover the cost of removing the increment of waste above it, plus the cost of mining and processing the ore. Reserve blocks which did not meet this test were excluded from the pit.

The MEDSYSTEM DIPPER program was used to determine the ultimate pit limits based on an overall wall slope of 45°. The resulting pit configuration was smoothed and ramps included with 52° wall slopes between ramps as recommended by Knight and Piesold Ltd. The final pit design envelope was then used as the basis for preparing the mineable reserve estimate.

Table 2-1 is a summary of mineable reserves for the ultimate Mount Polley pit by the inverse distance cubed method. The open pit mineable reserves do not have the effect of external dilution incorporated in the ultimate pit designed by Mintec and Wright Engineers. An analyses of dilution factors, including external dilution from open pit walls, internal dilution from selecting 10m x 10m x 10m mining units based on blasthole estimated values rather than actual values, and dilution from barren dykes, indicated that no adjustment to mineable reserves is necessary to account for dilution.

The Mount Polley reserves are classified under National Policy 2A and 2B and British Columbia Policy 3.01. The latter classification is based on the reserve nomenclature of the Association of Professional Engineers of Ontario which uses the terms "Proven", "Probable" and "Possible".

TABLE 2-1

MINEABLE RESERVE SUMMARY

ULTIMATE PIT
INVERSE DISTANCE CUBED METHOD

| | <u>(% Cu Equiv. Cut-Off Grade)</u> | | | | | |
|-----------------------------|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| | <u>0.35</u> | <u>0.37</u> | <u>0.39</u> | <u>0.41</u> | <u>0.43</u> | <u>0.45</u> |
| <u>Probable</u> | | | | | | |
| Tonnes (x 1,000) | 55,486 | 51,996 | 48,771 | 45,491 | 42,482 | 39,585 |
| Cu Equiv (%) | 0.626 | 0.645 | 0.663 | 0.682 | 0.701 | 0.720 |
| Total Cu (%) | 0.366 | 0.375 | 0.383 | 0.392 | 0.401 | 0.410 |
| Au (g/tonne) | 0.524 | 0.540 | 0.556 | 0.574 | 0.591 | 0.608 |
| Oxide Cu (%) | 0.103 | 0.105 | 0.105 | 0.107 | 0.109 | 0.110 |
| Oxide Percentage | 27.4 | 27.2 | 26.9 | 26.8 | 26.6 | 26.4 |
| Waste * (tonnes x 1,000) | 79,176 | 82,666 | 85,891 | 89,171 | 92,180 | 95,077 |
| Stripping Ratio | 1.427 | 1.590 | 1.761 | 1.960 | 2.170 | 2.402 |
| <u>Possible</u> | | | | | | |
| Tonnes (x 1,000) | 3,096 | 2,860 | 2,631 | 2,328 | 2,186 | 2,091 |
| Cu Equiv (%) | 0.535 | 0.549 | 0.564 | 0.586 | 0.598 | 0.605 |
| Total Cu (%) | 0.306 | 0.313 | 0.322 | 0.334 | 0.340 | 0.344 |
| Au (g/tonne) | 0.437 | 0.449 | 0.461 | 0.477 | 0.487 | 0.494 |
| Oxide Cu (%) | 0.074 | 0.074 | 0.075 | 0.076 | 0.077 | 0.079 |
| Oxide Percentage | 24.6 | 24.0 | 23.7 | 23.3 | 23.3 | 23.5 |

* Includes 26,192,000 tonnes grading 0.218% Cu and 0.242 g/tonne Au.

"Probable Reserves" or "indicated reserves" are those materials for which tonnage and grade are computed partly from specific measurements, samples, or production data, and partly from projections for a reasonable distance on geological evidence.

The sites available for inspection, measurement, and sampling are too widely or otherwise inappropriately spaced to outline the material completely or to establish its grade throughout. It should be stated whether the tonnage and grade of "probable" or "indicated" reserves are in situ or extractable. Dilution factors and cutoff grades, if used, should be clearly explained and the vertical and horizontal projections from intersections or sample points should be given.

"Possible reserves" and "inferred reserves" are those materials for which estimates are based largely on broad knowledge of the geological character of the deposit and for which there are few samples or measurements. The estimates are based on an assumed continuity or repetition for which there are reasonable geological indications. Bodies that are completely concealed may be included if there is specific evidence of their presence.

Figures 2-5, 2-6 and 2-7 are north-south and east-west cross sections through the Mount Polley deposit.

2.3 MINE PLAN

2.3.1 General Description

Mount Polley open pit process plant and waste rock disposal sites will be situated on the ridge of land which rises to an elevation of 1,220m above sea level between Bootjack and Polley Lake. The ultimate open pit will consist of three interconnected pits, namely the Central, North and West Pit (Figure 2-8). The Central and North Pits will extend approximately 1,100m in a north-south direction and the Central and West Pits approximately 1,110m in an east-west direction. The total area of the open pits at the conclusion of operations will be approximately 60 hectares.

NOTE:

SELECTED DRILL HOLE
ASSAY INTERVALS OMITTED
TO AVOID OVERPLOTING

LEGEND:

SEARCH DISTANCE
FROM THE SECTION: 15M
10 METRE COMPOSITE
TOTAL COPPER ASSAY

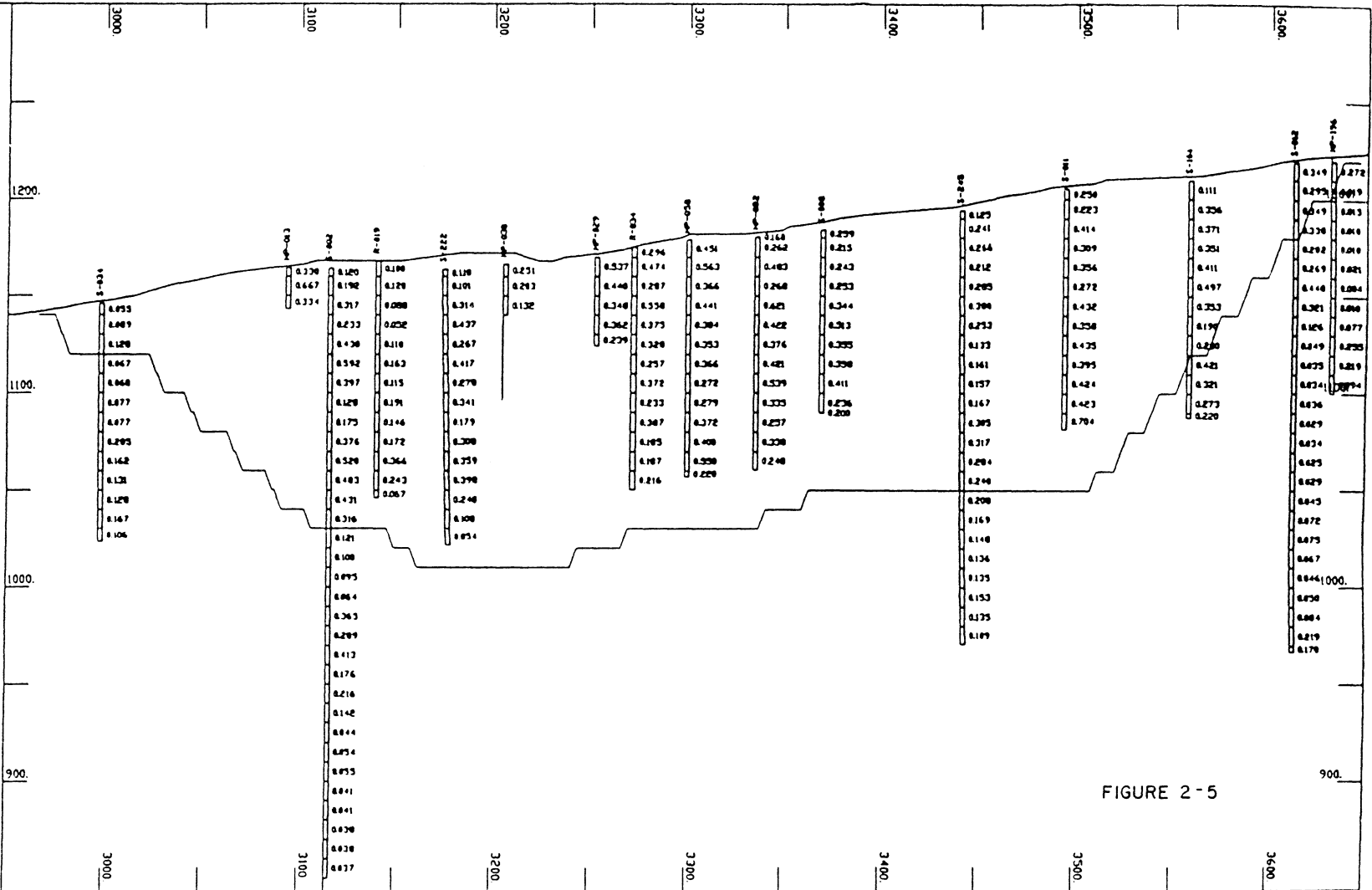
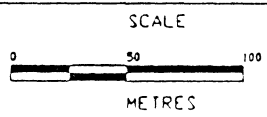


FIGURE 2-5



N-S SECTION 2150 EAST
LOOKING WEST
CENTRAL PIT AREA

WRIGHT ENGINEERS LIMITED
MOUNT POLLEY
IMPERIAL METALS CORP.



DRAWING NO. DATE: FEB 2, 1990

NOTE:
SELECTED DRILL HOLE
ASSAY INTERVALS OMITTED
TO AVOID OVERPLOTTING

LEGEND:
SEARCH DISTANCE
FROM THE SECTION: 30M
10 METRE COMPOSITE
TOTAL COPPER ASSAY

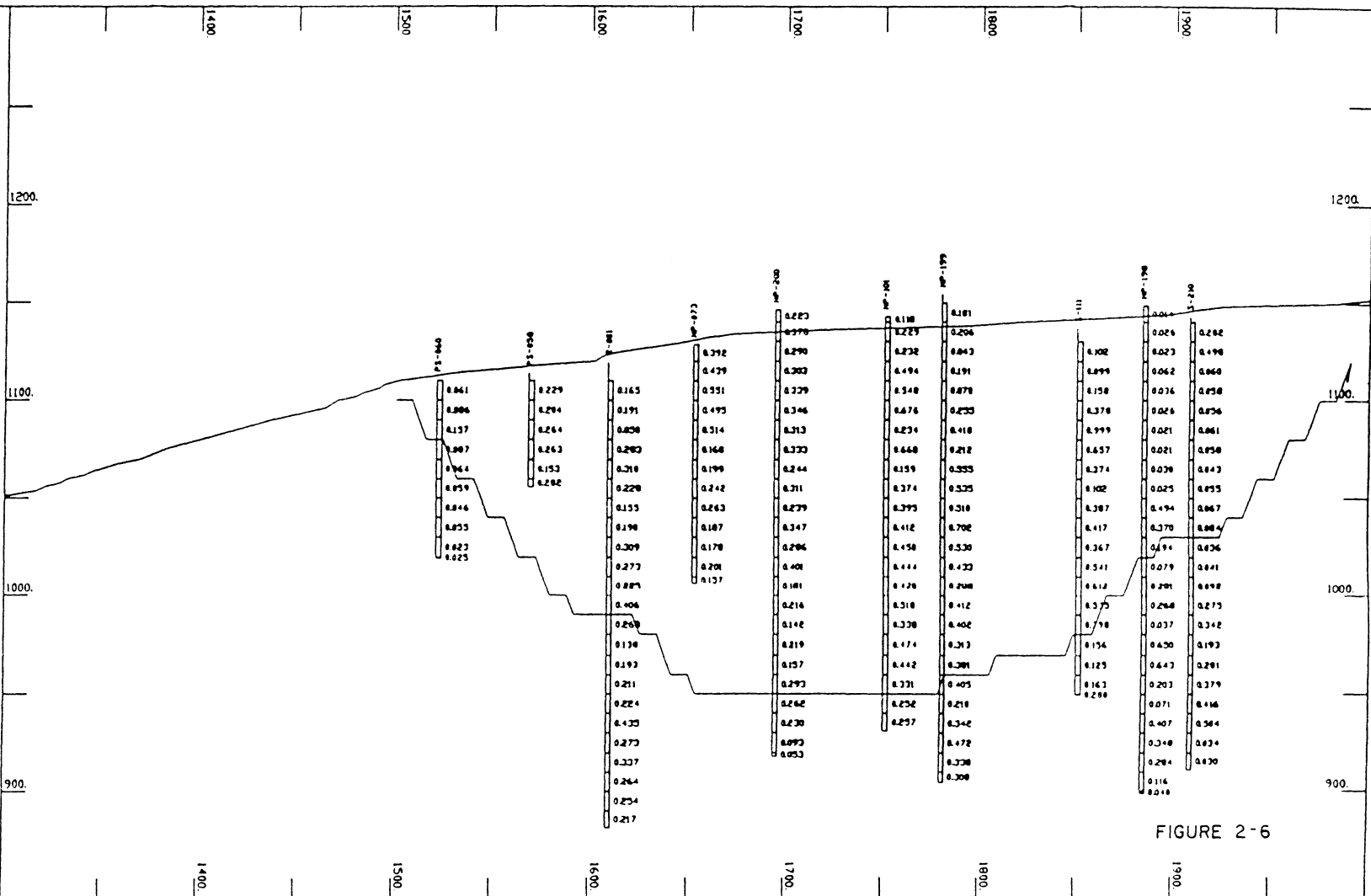
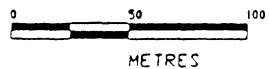


FIGURE 2-6

SCALE



E-W SECTION 3300 NORTH
LOOKING NORTH
WESTERN PIT AREA

WRIGHT ENGINEERS LIMITED

MOUNT POLLEY
IMPERIAL METALS CORP.



DRAWING NO.

DATE: FEB 2, 1990

NOTE:
 SELECTED DRILL HOLE
 ASSAY INTERVALS OMITTED
 TO AVOID OVERPLOTING

LEGEND:
 SEARCH DISTANCE
 FROM THE SECTION: 30M
 10 METRE COMPOSITE
 TOTAL COPPER ASSAY

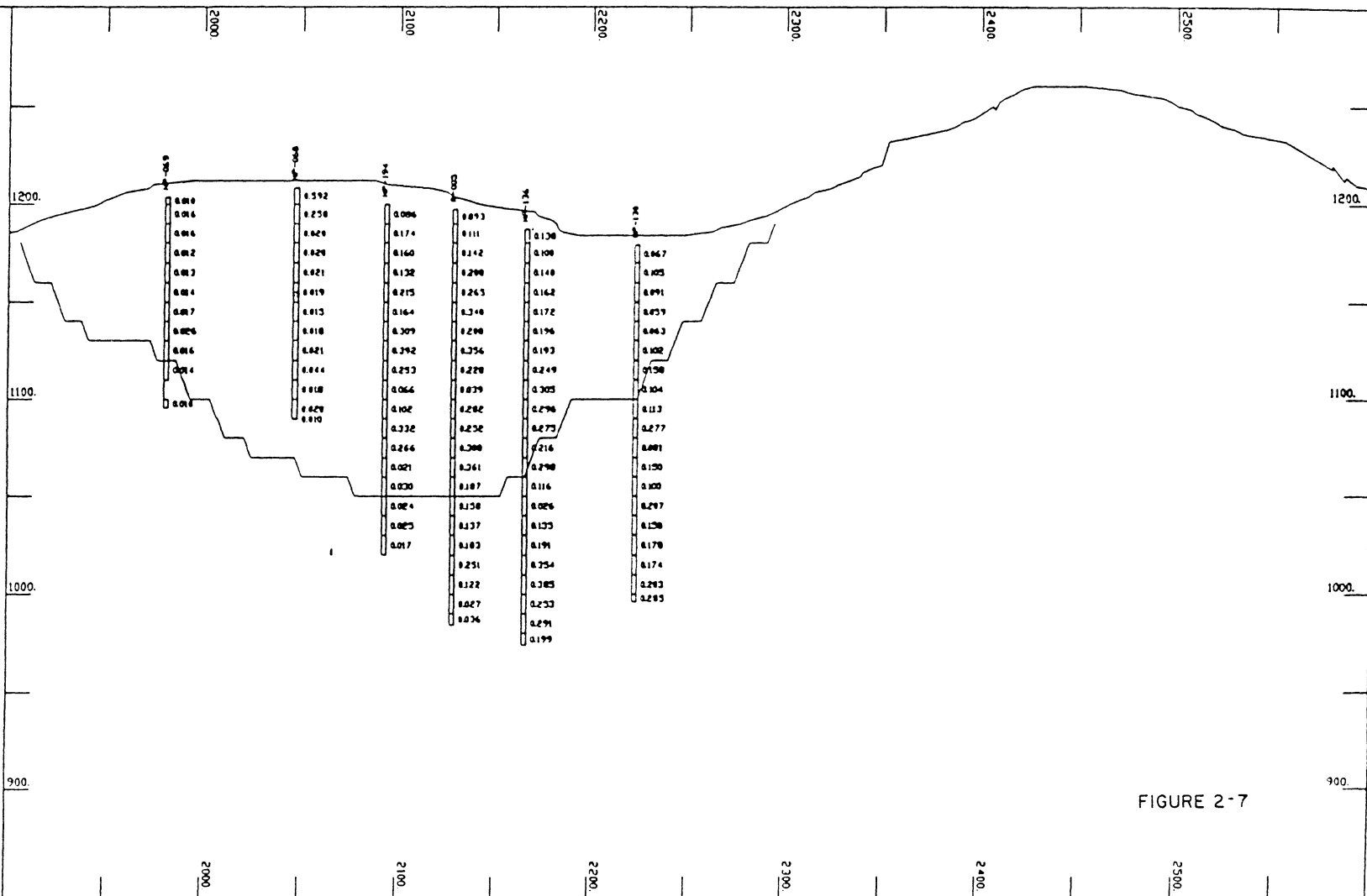
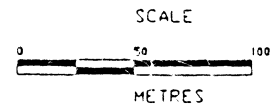


FIGURE 2-7



E-W SECTION 3900 NORTH
 LOOKING NORTH
 NORTH PIT AREA

WRIGHT ENGINEERS LIMITED
 MOUNT POLLEY
 IMPERIAL METALS CORP.

DRAWING NO. DATE: JAN 23, 1990