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**GEOLOGICAL AND ROCK GEOCHEMICAL REPORT
on the
NORTHWEST TARGET AREA**

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VANCOUVER, B.C.

MOUNT POLLEY PROJECT

Cariboo Mining Division

N.T.S. 93A/12E

Latitude 52°33'N

Longitude 121°38'W

IMPERIAL METALS CORPORATION

D. Gorc

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,704

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1.0 INTRODUCTION

The Mount Polley copper-gold project is owned by Imperial Metals Corporation.

This report pertains to a geological mapping and rock geochemical exploration program conducted during the period September 14 - 24, 1992. This work was done in the Northwest Target area on claim PM 1. The Northwest Target area is located north of the presently outlined ore bodies. Previous sampling in this area returned up to 0.6% Cu and 0.20 gr/t Au.

2.0 LOCATION, ACCESS AND TOPOGRAPHY

The property is located between Bootjack and Polley Lakes, 56 km northeast of Williams Lake, British Columbia, in the Cariboo Mining Division.

Paved highway to Likely provides year round access to the property along the 70 km between Morehead Lake and Highway 97 at 150 Mile House. The Bootjack Lake forestry road connects the property to the highway 14 km to the north, 1.5 km east of Morehead Lake. The Gavin Lake forestry road crosses the southern claims which cover the proposed tailing disposal site, and intersects the highway, 12 km west of Morehead Lake.

Mount Polley rises over 300m out of wetlands to the north and south, to obtain a peak elevation of 1,259m above the sea level.

The area is timbered with spruce, balsam, cedar and fir. Cedar is best developed in the southern and northern parts of the claim group. Since 1975, extensive logging has resulted in over half the property being cleared. Thick secondary growth has obscured many roads and trenches, while logging has obliterated old claim and survey lines.

3.0 CLAIMS

The Mount Polley property consists of 21 contiguous claims (342 units) that cover approximately 8,550 ha (21,127 acres). The list of claims and their location are shown in Table 1 and Figure 2.

A legal survey of the property was completed in 1989.

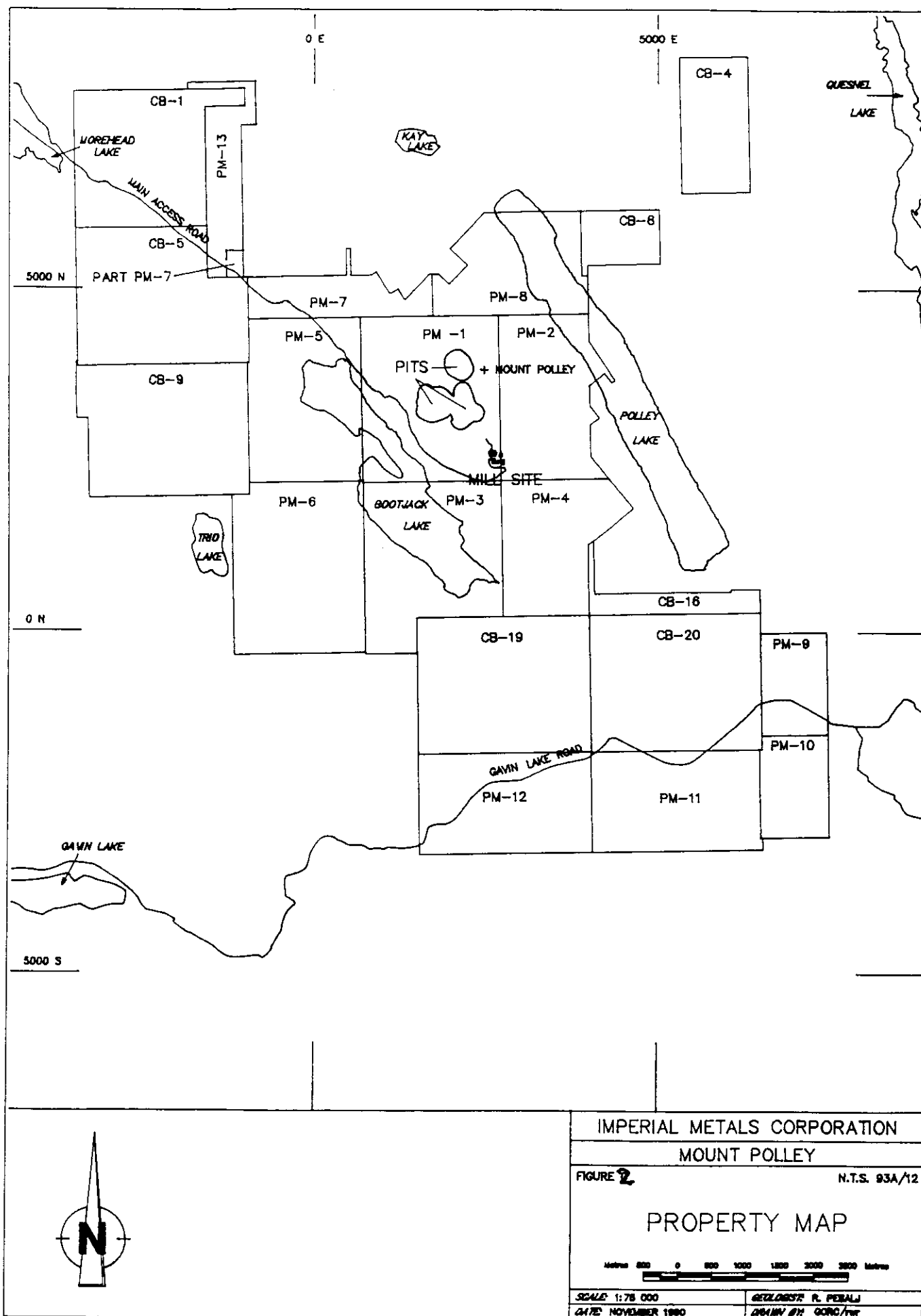


TABLE 1

List of Claims

<u>Claim</u>	<u>Number of Units</u>	<u>Record Date</u>
CB1	20	May 4, 1981
CB4	8	May 4, 1981
CB5	20	May 4, 1981
CB8	8	May 4, 1981
CB9	20	May 4, 1981
CB16	20	May 4, 1981
CB19	20	May 4, 1981
CB20	20	May 4, 1981
PM1	20	Sept. 17, 1989
PM2	20	Sept. 17, 1989
PM3	20	Sept. 17, 1989
PM4	20	Sept. 14, 1989
PM5	20	Sept. 29, 1989
PM6	20	Sept. 29, 1989
PM7	12	Sept. 17, 1989
PM8	20	Sept. 17, 1989
PM9	6	Feb. 23, 1990
PM10	6	Feb. 23, 1990
PM11	15	Feb. 23, 1990
PM12	15	Feb. 21, 1990
PM13	12	Sept. 26, 1990
<hr/>		
21	342	

4.0 EXPLORATION HISTORY

The following is a brief chronology of mineral exploration on the property:

- | | |
|-----------|---|
| 1964 | Copper was discovered on Mount Polley by Mastodon-Highland Bell Mines and Leitch Gold Mines in association with a magnetic anomaly indicated on newly published federal-provincial airborne survey maps. |
| 1966-1972 | Cariboo-Bell Copper Mines, later joined by a consortium of Japanese companies, conducted ground surveys and completed 270 holes totalling 31,956 meters of diamond and percussion drilling. Geophysical surveys consisted of airborne magnetic, seismic and induced polarization. Groundwork included trenching, mapping and geochemistry. The Japanese consortium withdrew on recognition of metallurgical difficulties resulting from oxidation of the deposit. |
| 1978 | Highland Crow Resources acquired Cariboo-Bell Copper Mines Ltd. and completed 5 percussion holes (354m). |
| 1979 | Teck Corporation completed 6 holes totalling 533 meters of percussion drilling. |
| 1981-1982 | E & B Explorations Inc. ("E & B") (amalgamated with Corona Corporation in 1988) under an option agreement with Highland Crow Resources Ltd. (amalgamated with Noramco Mining Corporation in 1988) completed 42 holes totalling 8,162 metres of rotary and diamond drilling. Ground surveys included soil geochemistry and ground control. The program confirmed and expanded the known widespread tonnage of low grade copper-gold material. |
| 1982-1988 | E & B was joined by Imperial Metals Corporation Group as a joint venture partner. E & B carried out 2,490 metres of rotary drilling in 22 holes in 1986 on behalf of the joint venture. Ground surveys were carried out including soil geochemistry, mapping, magnetometer, IP and VLF. Operatorship was transferred to Imperial Metals Corporation. |

Imperial Metals Corporation, as an operator on behalf of the joint venture, conducted an IP survey and trenching, and completed 99 diamond drill holes totalling 8,883 metres. This program successfully identified higher copper-gold concentrations near Mount Polley within the widely mineralized terrain. An evaluation of the Mount Polley zone indicated potential for a profitable open pit mine and mill operation.

1989-1990 In 1989, a further 139 holes totalling 18,639m of diamond drilling were completed to detail reserves in 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 by Knight and Piesold, which included preliminary design of open pit slopes, waste dump and tailings storage facilities. Environmental studies related to quality and quantity of surface water and groundwater, acid generation potential and tailings disposal were also initiated in 1989, as well as assessments of the environmental and socioeconomic impacts likely to result from development of the property. In 1990, Wrights Engineers completed a feasibility study on the Mount Polley project.

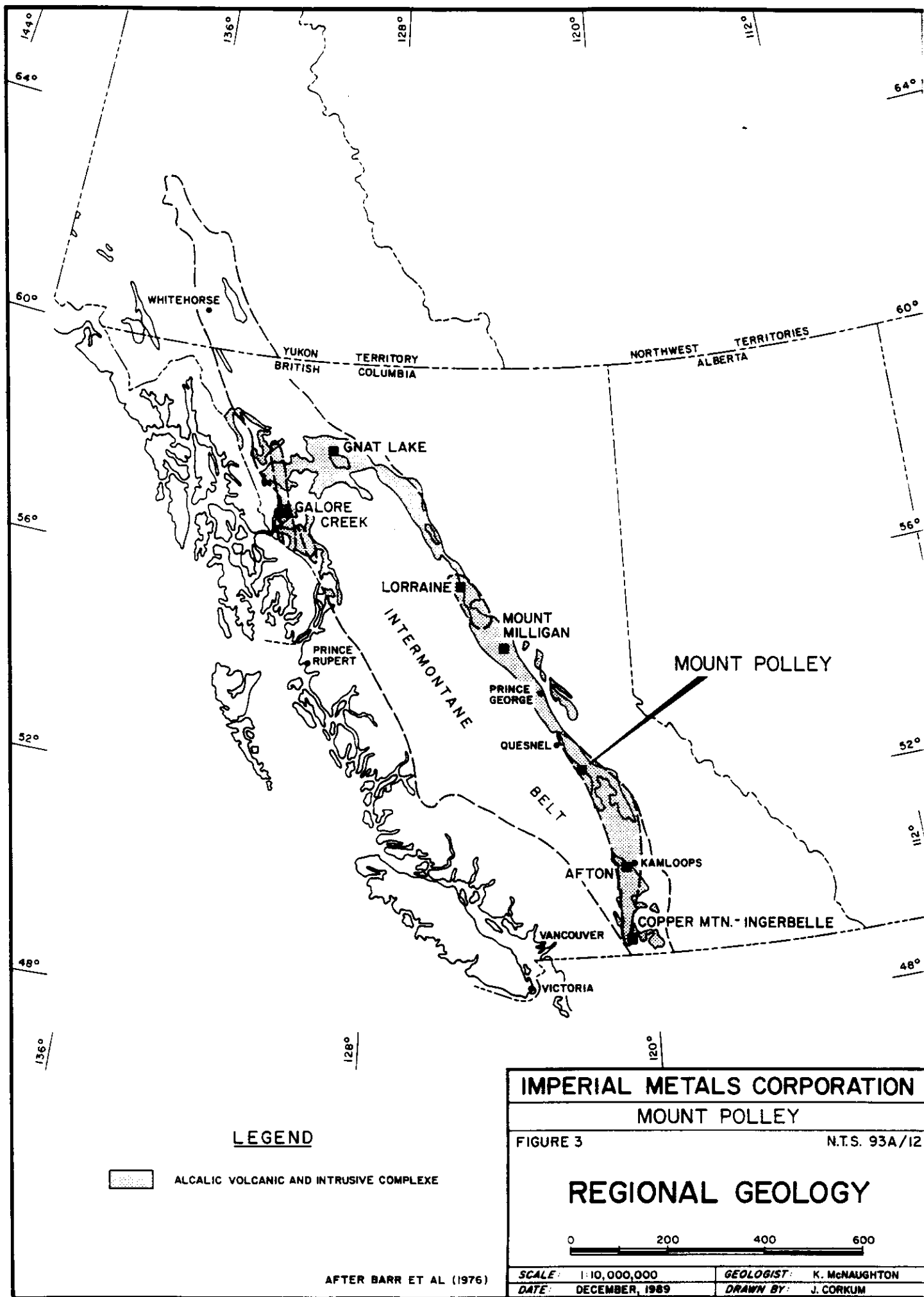
A total of 528 percussion, rotary and diamond drill holes, comprising 61,254m of drilling, have been completed on the Mount Polley property to date.

5.0 REGIONAL GEOLOGY

The Mount Polley porphyry copper-gold deposit occurs in an alkalic intrusive complex in the Quesnel Trough. The trough is a 35 km wide belt of northwest trending, early Mesozoic volcanic-sedimentary rocks that form a near continuous complex of alkalic and sub-alkalic intrusives and volcanics.

The belt is host to other similar porphyries such as Copper Mountain, Afton, Mount Milligan, Lorraine, Gnat Lake and Galore Creek (Figure 3). The Pinchi Fault system marks the western boundary of the Quesnel Trough with the oceanic crystal assemblage of the Paleozoic Cache Creek Group. To the east, the Omineca Crystalline belt is defined in part by stratigraphy and partly by structures.

Within the trough, a succession of twelve distinct units have been recognized. Early stages of the trough were development in a shallow basin lined with argillites and sandstones then infilled by basalts which over time became more alkaline and olivine rich. Three hiatus in the volcanism allowed disposition of carbonates, conglomerates and sediments, the latter two being derived from the local basalts. Intrusives were emplaced progressively westward and include: the Mount Polley stock of monzonites and syenites with subordinate syenodiorites and pyroxenites; nepheline syenites of Bootjack Mountain stock; calci-alkaline Gavin Lake stock, which is host to small copper/molybdenum showings; and numerous small plugs of porphyritic, sodic trachytes, syenite and monzonite. A veneer of tills and fluvial glacial gravels cover the entire region and range



AFTER BARR ET AL (1976)

in thickness from nil to up to 150 feet, with extreme cases of 600 feet where paleo-river channels have been buried.

Regional fault systems are parallel to the general trend of the trough. Secondary extension faults occur perpendicular to the regional pattern. The result is a series of block faulting with only a minor amount of folding associated.

Placer mining has been very active in the area for at least 140 years, especially on the ground between Quesnel Forks and Spanish Mountain. Some, as in the case of the Bullion Pit, have been very prolific, while others are well known for their smaller but very rich pay streaks. The origin of this gold has remained a subject of speculation.

6.0 LOCAL GEOLOGY

The Mount Polley intrusive complex is located between Bootjack Lake on the west side and Polley Lake on the east. Detail mapping of the property combined with drill information suggests that its length is approximately 6 km and its thickness at the centre 2-3 km. The shape of the complex, being concordant with the northeast dipping volcanic strata resembles a laccolith.

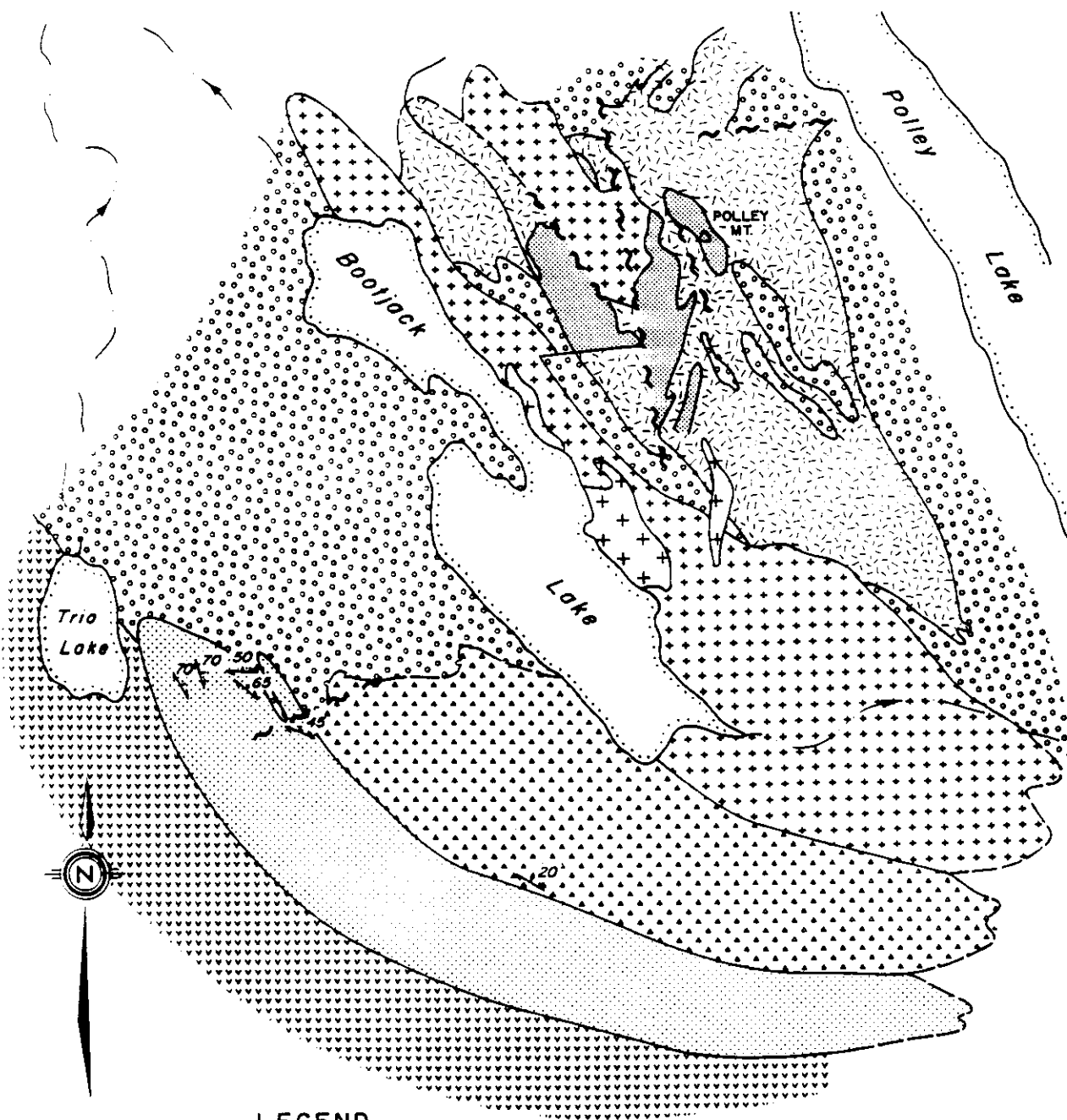
6.1 Lithology:

The complex is represented by five lithological members that constitute different phases of the intrusive. The sixth and the most important unit is a breccia which hosts copper-gold mineralization. First two units are exposed outside the area covered by detail mapping.

Mafic pseudoleucite syenite forms the westernmost or stratigraphically lowest member of the complex. The unit is grey-weathered, medium to coarse grained rock composed of 20% pseudoleucite phenocrysts in a fine grained groundmass of K-spar, nepheline, albite, aegirine-augite, hornblende and magnetite. Mafic minerals comprise 15-25% of the rock. The unit is exposed east of Trio Lake.

Pseudoleucite syenite consists of less than 5% mafic minerals and 30%-90% pseudoleucite phenocrysts often up to 4 cm in diameter. The phenocrysts stand out on a weathered surface and the rock is called "golf ball syenite" in the field.

Syenite is exposed along the east shore of Bootjack Lake, forming a long lens that boardens southeast toward Polley Lake. Large inclusions of syenodiorite occur throughout the property. These inclusions are within the monzonite porphyry, suggesting that syenodiorite represents an earlier phase of the complex. The rock is grey, fine to



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 4

N.T.S. 93A/12

LOCAL GEOLOGY

km 0 2 km

SCALE:

DATE: DECEMBER, 1989

GEOLOGIST: K. McNAUGHTON

DRAWN BY: J. CORKUM

AFTER HODGSON ET AL (1976)

medium grained, porphyritic, with plagioclase 55%, orthoclase 20%, augite 1% and biotite 5%. Accessory minerals are amphibole, magnetite, sphene, zircon and apatite.

Monzonite porphyry (M₁) is buff to pink rock with up to 40% subparallel plagioclase laths in a fine grained matrix of K-spar, plagioclase and augite. Accessory minerals include biotite, magnetite, sphene and apatite. Its colour index is lower than of syenodiorite, K-spar content is higher and has abundant plagioclase phenocrysts. Mirolitic cavities are common in this unit and usually filled with prehnite and zeolite.

Intrusion breccia underlies the central part of the property including the top of Mount Polley. Two out of three main breccia bodies outlined by drilled to date host economic concentrations of porphyry type copper-gold mineralization. The western breccia, as indicated by drilling, is steeply plunging pipe discordant with enclosing intrusive phases and volcanoclastic strata. The eastern breccia appears to be partly concordant with easterly dipping intrusive phases and volcanoclastics and partly discordant. The third main breccia that underlies the top of Mount Polley is void of mineralization and appears to be younger than other two breccias. This is supported by a presence of sanidine porphyry dyke fragments in the breccia. These dykes crosscut other major units of the intrusive complex elsewhere in the property.

The breccia consists of fragments of syenodiorite, monzonite porphyry and volcanoclastics cemented by pink, fine grained syenite matrix made up to 70% K-spar and 30% plagioclase. Fragments of up to 30m in the length have been seen in drill core.

Superimposed on the intrusion breccia is crackle breccia which consists of a stockwork of irregular veinlets, pods and drusy cavities containing magnetite, chalcopyrite and various alteration products. The distribution of crackle breccia usually coincides with intrusion breccia, but it can be developed over volcanoclastic and monzonite porphyry. The intensity of copper-gold mineralization is directly proportional to degree of crackle breccia development.

The most acceptable interpretation of intrusive breccia formation is that it was formed by mechanical fragmentation of the intrusive and volcanoclastics.

The western breccia is interpreted as a pipe, whereas the eastern breccia could be its sill-like offshoot.

The formation of crackle breccia probably involved mechanical fragmentation under violent bursts of vapour that occurred when buildup of pressure exceeded lithostatic pressure of the volcanic pile. The fragments were not ejected but remained "in-situ", creating channelways for circulation of mineralized fluid. The breccia can be classified as phreatic and its formation could involve either sea or meteoritic water.

Monzonite porphyry (M₂) dykes occur adjacent to intrusion breccia. The unit is similar to the main mass of monzonite porphyry but contains up to 60% of plagioclase laths and represents a crowded porphyry. A dyke of this type measuring 145m in length has been drilled in the northern section of the eastern intrusion breccia body.

Monzonite porphyry (M₂) dykes are common in the upper portion of the laccolith and as fragments in the Mount Polley breccia. This porphyry is characterized by prominent tabular sanidine phenocrysts up to 2 cm in length, together with phenocrysts of plagioclase, augite and apatite in a matrix of K-spar and plagioclase with accessory biotite.

Pyroxenite/gabbro has been encountered in several holes east of Bootjack Lake and its surface area interpreted mainly from the ground magnetic survey maps. The rock is massive, coarse grained and probably represents the source for augite porphyry dykes to which this unit is related.

Augite porphyry dykes are the youngest intrusives in the laccolith. They cut all phases east of Bootjack Lake except pyroxenite/gabbro lens. These dykes that occur as a north-south trending swarm were probably feeders for compositionally similar trachybasalt flows.

Volcanics chemically similar to the intrusive phases are represented by augite trachybasalts, less by analcite trachybasalts and abundant pyroclastics. Pyroclastic deposits in the immediate area adjacent to mineralized zones are mainly feldspatic crystal and lapilli tuffs. Polymictic volcanic breccia that represents lahar deposit formed by downslope transport along the flanks of an interpreted volcanic centre is symmetrically distributed on both east and west side of the complex.

6.2 Mineralization

Two principal zones of copper-gold mineralization, the Central Zone and West Zone, have been outlined by closed spaced drilling. The Central Zone is a tabular sill-like body of mineralized intrusion breccia with northerly strike and moderate easterly dip. The zone measures 1,100m along strike and is 200 to 450m wide. The West Zone forms the central portion of a westerly plunging pipe of mineralized intrusion breccia measuring 450m in diameter and extending to at least the drilled depth of 275m.

Principal primary minerals, magnetite and auriferous chalcopyrite, occur as disseminations and veinlets in the breccia. The contact between breccia and breccia hosting lithologies is gradational.

Although several parts of the deposit are strongly oxidized, as a result of weathering, the very limited amount of supergene copper mineralization formed reflects the low pyrite content of the deposit. Pervasive potash K-spar-biotite-diopside alteration, coincident with the breccia, is surrounded successively by garnet-epidote and epidote alteration zones in the volcanic and intrusive wall rocks. A pyrite halo measuring 4,500m by 1,000m occurs well outside and structurally above the two main mineralized breccia bodies. Calcite veinlets occurring throughout the ore body and wall rocks and the absence of pyrite make the ore and waste rock acid-consuming.

6.3 Rock Alteration

The most common type of alteration seen in the core and outcrop is intense pervasive K-spar biotite diopside alteration in the central section of the deposit. Alteration is in the form of discontinuous veinlets, patches and drusy cavities in mineralized intrusion breccia. Alteration mineralogy includes prehnite, calcite, analcite, thompsonite, biotite, diopside, K-spar and sphene. An intense salmon-pink colour seen in the breccia could be caused by:

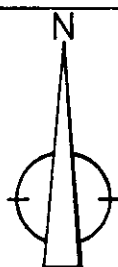
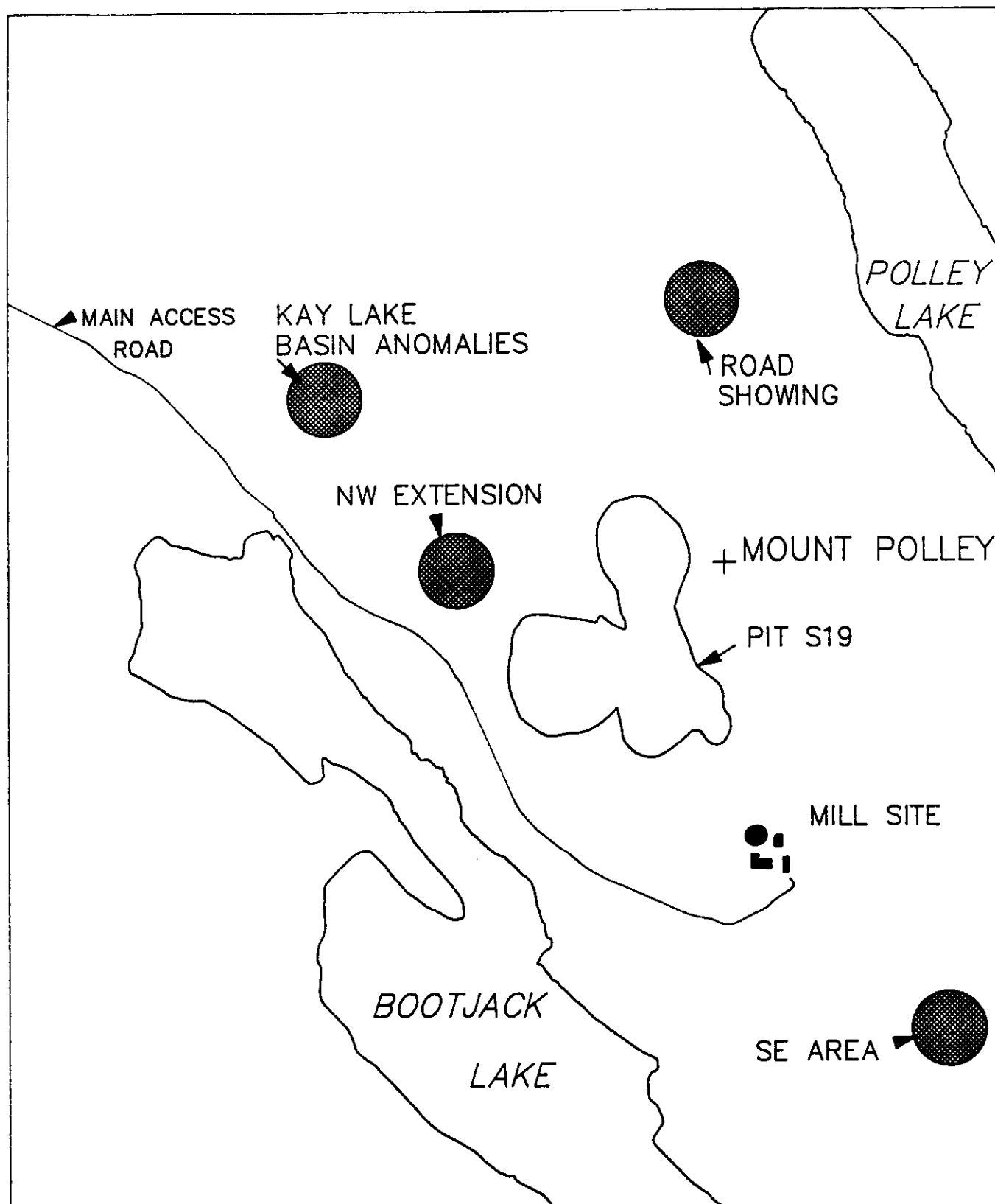
- a) primary K-spar in the monzonite matrix,
- b) superimposed veinlets and patches of secondary K-spar, and
- c) alteration of primary and secondary K-spar to an orange mixture of clay minerals and hematite.

Going outward from the centre, a garnet epidote zone surrounds the central zone of alteration. The peripheral epidote alteration zone extends to the limits of monzonite porphyry and represents the lowest grade of alteration seen in the deposit.

7.0 NORTHWEST TARGET AREA

7.1 Introduction

Mapping has extended the host intrusion breccia of the West Zone to the northwest. Within the zone itself, the mineralization may be offset by an east-west trending block of syenodiorite and monzonite porphyry. Beyond the pit limit, a single inclined drill hole (MP-214) intersected 220 feet with .33% Cu and .40 gr Au, possibly an extensive of the zone cut by hole S-250. Surface grab samples on the same trend ranged up to .6% Cu and .5 gr/tonne Au. This area, being in proximity to a proposed pit, ranks very high against the other targets.



IMPERIAL METALS CORPORATION

MOUNT POLLEY

FIGURE

N.T.S. 93A/12

EXPLORATION TARGETS

Metres 250 0 250 500 750 1000 Metres

SCALE 1:25000

DRAWN BY R. PEBALJ

DATE JANUARY 1992

BY GORD/ter

Trending further to the northwest is a prominent soil anomaly known as the Kay Lake Basin anomaly. Copper values in the soil peak at about 10 times the local background. The anomaly coincides with a local glacial dispersion train from the West Zone and these values may represent some post glacial surface concentration effect. However, the values are substantially above those in the dispersion train and in light of the breccia trend, warrant further investigation.

7.2 1992 Program

Geological mapping and rock chip sampling was done in the Northwest Target area. This work concentrated on areas previously mapped as intrusive breccia. Previous sampling had returned values of 0.43% Cu and 0.51 gr/t Au.

Traverses in 1992 discovered only sparse small outcrops except for the topographical highs near drill sites S-250 and S-218. The 1992 rock geochemical sample sites are shown on Figure 5. Results are given in Table 2 and Appendix I.

I have also included a compilation of exploration results in this area including drill sites, magnetic anomalies (> 61,000 gamma), gold-in-soil anomalies (> 50 ppb Au), copper-in-soil anomalies (> 500 ppm Cu).

The 1992 mapping confirmed the previous mapping of intrusive breccia in this area. In most cases the breccia was well developed with abundant angular to sub-angular clasts of syenodiorite within a matrix of monzonite porphyry. Potassic, K-spar alteration, was ubiquitous but varied from almost non-existent to completely altered. The alteration is fracture controlled and often limited to narrow 0.25 to 1 cm wide selvages alongside fractures. The most widespread K-spar alteration noted was in the vicinity of sample sites 92-23 to 92-28 near the northern boundary of Pit S-19.

Elsewhere K-spar alteration was variable with intense zones of K-spar alteration limited to narrow 3-5m zones. However because outcrops are small and sparse it is difficult to judge areal extent of alteration. The intensity of the K-spar alteration is often, but not always, related to the intensity of fracturing.

Fracturing was also generally noted within the outcrops seen in 1992. The intensity of fracturing varied from low to intense with the most intense fracturing noted near sample sites 92-23 to 92-27 near the northern border of Pit S-19. Other areas of intense fracturing appeared to be quite localized.

TABLE 2 ROCK GEOCHEMISTRY-NORTHWEST TARGET AREA

SAMPLE NUMBER	DESCRIPTION	Cu ppm	Au ppb
MP-92-1-R	INTRUSIVE BRECCIA-STRONG KSPAR ALTERATION MINOR DESSEMINATED PYRITE, MAGNETITE, FLOAT	822	6
MP-92-2-R	INTRUSIVE BRECCIA-SIMILIAR TO 92-1R VEINLETS OF CALCITE, NOTICEABLE FRACTURING MALACHITE ALONG FRACTURES	2112	330
MP-92-3-R	IDENTICAL TO 92-2R	1201	230
MP-92-4-R	INTRUSIVE BRECCIA-VERY IRON STAINED, MINOR DESSEMINATED PYRITE, ABUNDANT MAGNETITE IN NEARBY FLOAT	2934	690
MP-92-5-R	INTRUSIVE BRECCIA-GREYISH CUT BY ABUNDANT FRACTURES WITH THIN KSPAR SELVAGES, ABUNDANT DESSEMINATED MAGNETITE	815	130
MP-92-6-R	INTRUSIVE BRECCIA-LARGELY GREYISH WITH OCCASIONAL FRACTURES AND PATCHES OF KSPAR ALTERATION	2636	600
MP-92-7-R	INTRUSIVE BRECCIA-STRONG KSPAR ALTERATION VERY IRON-STAINED	634	71
MP-92-8-R	FRACTURED SYENODIORITE?, INTR. BRECCIA? MODERATELY FRACTURED, MINOR DISSEMINATED PYRITE, OCCASIONAL KSPAR ALTERATION ALONGSIDE FRACTURES, EPIDOTE ALONG MANY FRACTURES	656	30
MP-92-9-R	INTRUSIVE BRECCIA-STRONG KSPAR ALTERATION CUT BY MAGNETITE VEINLETS	939	39
MP-92-10-R	INTRUSIVE BRECCIA-MINOR THIN (2-10CM) ZONES OF KSPAR ALTERATION	785	160
MP-92-11-R	INTRUSIVE BRECCIA-SIMILIAR TO 92-10R BUT WITH MORE KSPAR ALTERATION	657	51
MP-92-12-R	INTRUSIVE BRECCIA-SIMILIAR TO 92-10R BUT WITH MORE KSPAR ALTERATION	268	32
MP-92-13-R	INTRUSIVE BRECCIA-INTENSE KSPAR ALTERATION ABUNDANT DESSEMINATED MAGNETITE, MINOR DESSEMINATED PYRITE	856	31

MP-92-14-R	INTRUSIVE BRECCIA-SIMILIAR TO 92-13R	1296	49
MP-92-15-R	INTRUSIVE BRECCIA-STRONG KSPAR ALTERATION 1% DISS. PY., SOME MALACHITE	618	36
MP-92-16-R	INTRUSIVE BRECCIA-SIMILIAR TO 92-15R	966	44
MP-92-17-R	INTRUSIVE BRECCIA-STRONG KSPAR ALTERATION SLIGHTLY BRECCIATED, SOME SMALL VUGS	1207	78
MP-92-18-R	INTRUSIVE BRECCIA-MINOR KSPAR ALTERATION SOME PATCHES OF FINELY DISS. MAGNETITE	405	32
MP-92-19-R	ALTERED SYENODIORITE?-PATCHY VERY STRONG KSPAR ALTERATION	237	9
MP-92-20-R	SIMILIAR TO 92-19R	200	6
MP-92-21-R	SYENODIORITE-HIGHLY FRACTURED, PATCHY KSPAR ALTERATION	1917	110
MP-92-22-R	SIMILIAR TO 92-21R	1944	120
MP-92-23-R	SYENODIORITE-MODERATELY FRACTURED, MODERATE KSPAR ALTERATION, SOME MALACHITE ALONG FRACTURES	593	57
MP-92-24-R	SIMILIAR TO 92-23R	1202	120
MP-92-25-R	INTRUSIVE BRECCIA-HIGHLY FRACTURED PATCHY KSPAR ALTERATION, FLOAT BUT NOT MOVED FAR ABUNDANT MAGNETITE INCLUDING 0.5CM VEINS MALACHITE ALONG FRACTURES	4885	96
MP-92-26-R	SIMILIAR TO 92-25R EXCEPT LESS KSPAR ALTERED AND NO MALACHITE, OUTCROP	1873	100
MP-92-27-R	SIMILAR TO 92-25R	4030	60
MP-92-28-R	INTRUSIVE BRECCIA-STRONGLY FRACTURED, PATCHY FRACTURE CONTROLLED KSPAR ALTERATION	596	67
MP-92-29-R	INTRUSIVE BRECCIA-ABUNDANT SUB-ANGULAR TO ANGULAR CLASTS TO 20 CM ACROSS	2568	340
MP-92-47-R	INTRUSIVE BRECCIA-STRONG KSPAR ALTERATION NEARBY MONZONITE PORPHYRY	1654	250
MP-92-48-R	INTRUSIVE BRECCIA-MODERATE KSPAR ALTERATION SOME CALCITE FILLED VUGS	3405	180
MP-92-49-R	INTRUSIVE BRECCIA-PATCHY MODERATE KSPAR ALTERATION, MINOR MALACHITE	6146	470

MP-92-50-R	MONZONITE PORPHYRY-MALACHITE ALONG SOME FRACTURES	4144	220
MP-92-51-R	SYENODIORITE? INTRUSIVE BRECCIA?-STRONGLY FRACTURED,PATCHY KSPAR ALTERATION,MALACHITE ALONG FRACTURES	1364	140
MP-92-52-R	SIMILIAR TO 92-52R,ANGULAR FLOAT	1296	110
MP-92-53-R	SIMILIAR TO 92-52R EXCEPT MUCH MORE INTENSE KSPAR ALTERATION,MORE MALACHITE THAN 92-52R	3586	400
MP-92-54-R	SIMILIAR TO 92-52R EXCEPT NO MALACHITE	484	460
MP-92-55-R	INTRUSIVE BRECCIA-FLOAT,STRONG KSPAR ALTERATION,MALACHITE ALONG FRACTURES	4762	1090
MP-92-56-R	SYENODIORITE?-PATCHY KSPAR ALTERATION 1% pyrite,patchy epidote	324	37

Disseminated magnetite and more rarely magnetite veinlets were noted throughout but again quite variable. Overall zones of abundant magnetite were quite small (2-5m across) and localized. Often such zones were associated with intense K-spar alteration or fracturing.

Some disseminated pyrite was noted at a few localities but was limited to small 2m x 3m areas and not significant.

No direct evidence of fault structures was noted however several prominent topographical linears, suggestive of fault structures were noted. A topographic linear striking NNW-SSE occurs between sample sites 92-52 and 92-13. It is interesting to note a gold-in-soil anomaly (> 50 ppb Au) occurs in this vicinity along the same trend. A topographic linear striking NE-SW occurs just west of drill site S-219. A topographic linear striking NW-SE occurs near sample site 92-8R.

Some additional geological observations include:

- a) area of sample sites 92-23 to 92-29R may include much more intrusive breccia then previously thought.
- b) The area between sample sites 92-13 and 92-50R may include a greater proportion of monzonite porphyry then previously thought.
- c) The area in the vicinity of sample site 92-54 may include a greater proportion of syenodiorite then previously thought.

Copper mineralization seen was limited to malachite along fractures. Such mineralization was found throughout the area examined in 1992 but appeared to be limited to small 2m x 5m areas. This is impossible to confirm because of the sparsity of outcrop. As seen in Table 2 samples taken generally returned several hundred ppm Cu with a high of 4,885 ppm Cu. Gold values were generally lower with few samples returning greater than 100 ppb Au. Sample 92-55 returned a high of 1,090 ppb Au. In general, samples which returned greater than 1,000 ppm Cu returned greater than 100 ppb Au.

The compilation of previous exploration results (Figure 6) indicate roughly coincident magnetic (> 61,000 gamma) and copper-in-soil anomalies (> 500 ppm Cu) located just north of Pit S-19 within the area examined in 1992. These anomalies cover an area approximately 250m x 250m.

Further to the northwest, the northern boundary of an elongate copper-in-soil (> 500 ppm Cu) anomaly is adjacent to sample sites 92-1 to 92-12. The elongate shape of the anomaly may reflect glacial dispersion.

7.3 Recommendations

Although the mineralization and alteration noted in the 1992 program were sporadic, localized and overall weak, the presence of some mineralization and alteration in addition to soil and magnetic anomalies suggest that further work in this area is warranted.

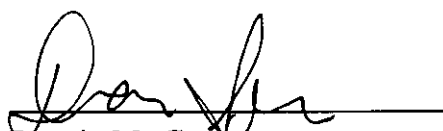
Detailed geological mapping as well as magnetometer and soil surveys along a picketed grid with surveyed base line, is recommended followed by drill testing based on results and past drill results. The possibility of buried targets should be kept in mind during this program.

8.0 STATEMENT OF QUALIFICATIONS

I, DENNIS M. GORC, residing at 105, 10662-151A Street, Surrey, British Columbia, V3R 8T3, state that:

1. I graduated from Queen's University, Kingston, Ontario with a B.Sc.(Eng.) degree in mineral exploration in May 1976.
2. Since 1976, I have supervised mineral exploration programs in British Columbia, Northwest Territories, Manitoba and Ontario;
3. I am presently self-employed as a consulting geologist.

DATED THIS 17 DAY OF DECEMBER, 1992.



Dennis M. Gorc

Vancouver, British Columbia

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APPENDIX I

Geochemical Data

GEOCHEMICAL ANALYSIS CERTIFICATE

Imperial Metals Corporation PROJECT MT. POLLEY File # 92-3292 Page 1

800 - 601 W. Hastings St., Vancouver BC V6M 5A6 Submitted by: Z. MICKIC

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	U	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
MP-92-1-R	2 822	10	128	.3	6	17	1551	3.08	8	5	ND	1	31	.2	2	2	2	82	1.92	.076	7	7	.75	214	.15	8	1.23	.07	.12	2	6
MP-92-2-R	4 2112	8	70	.4	3	12	651	4.01	6	5	ND	1	29	.2	2	2	2	110	1.29	.056	7	4	.34	779	.20	6	.84	.07	.11	1	330
MP-92-3-R	4 1201	11	78	.3	6	13	630	4.33	9	5	ND	1	24	.2	2	7	115	1.19	.058	6	15	.38	352	.20	8	.99	.07	.11	1	230	
MP-92-4-R	2 2934	9	51	1.2	6	8	919	2.01	21	5	ND	1	41	.2	2	2	2	51	3.21	.068	6	7	.44	123	.13	15	2.41	.06	.08	2	690
MP-92-5-R	1 815	5	47	.3	4	10	729	3.31	17	5	ND	1	46	.5	2	2	2	113	1.42	.086	7	5	.22	146	.16	12	1.10	.06	.11	1	130
MP-92-6-R	1 2636	7	123	.8	8	19	1506	6.58	39	5	ND	1	39	.3	2	2	2	264	2.79	.095	6	11	1.29	118	.19	11	2.34	.04	.07	1	600
MP-92-7-R	1 634	2	70	.1	7	14	1077	5.05	50	5	ND	1	24	.2	2	3	175	1.52	.079	5	9	.78	115	.16	7	1.43	.03	.12	1	71	
MP-92-8-R	1 656	7	56	.1	4	8	669	3.26	7	5	ND	1	39	.3	2	2	2	83	1.43	.075	4	6	.20	157	.15	10	1.17	.08	.11	1	30
MP-92-9-R	1 939	10	79	.2	7	18	827	5.31	6	5	ND	1	43	.3	2	2	2	180	1.52	.103	4	14	1.05	302	.29	9	1.62	.05	.23	1	39
MP-92-10-R	2 785	9	74	.1	6	9	903	3.04	5	5	ND	1	32	.2	2	2	2	104	4.51	.042	4	8	.49	75	.10	13	3.28	.05	.06	2	160
MP-92-11-R	1 657	11	88	.2	4	12	965	3.65	7	5	ND	1	30	.2	2	2	2	104	2.66	.061	4	2	.46	129	.12	11	2.05	.04	.10	1	51
MP-92-12-R	2 268	9	54	.1	5	6	572	2.79	5	5	ND	1	16	.2	2	2	2	114	.90	.046	3	13	.15	80	.17	6	.79	.05	.13	1	32
MP-92-13-R	4 856	22	113	.3	7	13	655	3.32	8	5	ND	1	129	.3	2	2	2	54	1.22	.071	8	8	.42	1068	.15	12	1.90	.61	.19	1	31
MP-92-14-R	5 1296	20	131	.4	5	17	1006	4.61	35	5	ND	1	131	.5	3	3	2	102	2.38	.074	8	3	.63	152	.16	21	2.05	.05	.09	1	49
MP-92-15-R	24 618	18	68	1.0	5	10	549	3.41	13	5	ND	1	73	.2	2	2	2	73	.82	.073	7	16	.27	163	.17	6	.89	.05	.13	1	36
MP-92-16-R	26 966	15	75	1.1	7	13	557	3.69	14	5	ND	1	73	.2	2	2	2	75	.84	.074	8	12	.33	147	.17	5	.88	.05	.14	1	44
MP-92-17-R	2 1207	5	117	.4	4	14	811	5.11	29	5	ND	1	79	.2	2	2	2	213	3.70	.088	7	8	.76	71	.16	12	1.55	.03	.12	1	78
MP-92-18-R	7 405	12	251	.1	12	18	1088	3.90	24	5	ND	1	370	.9	2	2	2	160	3.42	.113	10	12	1.77	90	.23	27	3.35	.03	.11	1	32
MP-92-19-R	3 237	6	188	.1	6	6	744	1.84	17	5	ND	1	23	.2	2	2	2	41	1.25	.048	6	7	.19	82	.13	8	.71	.08	.08	3	9
MP-92-20-R	2 200	6	80	.1	5	4	919	3.02	14	5	ND	1	20	.2	2	2	2	93	1.05	.046	4	14	.13	102	.15	3	.52	.06	.11	3	6
RE MP-92-16-R	27 1016	19	79	1.1	7	13	579	3.83	14	5	ND	1	75	.2	2	2	2	79	.88	.076	8	10	.37	131	.18	6	.92	.05	.15	1	35
MP-92-21-R	1 1917	8	38	.1	6	10	603	3.85	3	5	ND	1	45	.2	2	2	2	140	.53	.080	5	13	.97	254	.13	2	1.13	.03	.19	1	110
MP-92-22-R	1 1944	6	44	.1	6	14	752	4.85	6	5	ND	1	56	.2	2	7	137	1.20	.077	5	12	1.14	215	.15	7	1.85	.04	.10	1	120	
MP-92-23-R	1 593	4	39	.1	3	16	628	4.54	10	5	ND	1	44	.3	2	2	2	121	1.45	.105	7	4	1.20	135	.10	6	1.71	.06	.08	1	57
MP-92-24-R	2 1202	5	32	.1	5	10	390	3.25	3	5	ND	1	45	.2	2	3	87	.93	.057	7	13	.47	216	.13	5	.86	.05	.14	1	120	
MP-92-25-R	6 4885	70	194	1.4	17	32	641	6.55	14	5	ND	1	83	.8	7	11	151	3.79	.052	7	6	2.05	132	.21	21	3.36	.04	.26	1	96	
MP-92-26-R	3 1878	5	80	.2	8	29	711	5.74	9	5	ND	1	133	.2	2	8	143	1.60	.094	5	5	2.14	153	.27	10	2.81	.15	.42	1	100	
MP-92-27-R	6 4030	6	81	.6	15	32	649	7.07	9	5	ND	1	82	.2	2	8	145	2.50	.055	6	9	2.11	109	.22	14	3.16	.21	.35	1	68	
MP-92-28-R	2 596	3	25	.2	4	7	506	2.83	7	5	ND	1	37	.2	2	2	2	109	1.14	.079	6	7	.08	131	.15	6	.73	.07	.14	1	67
MP-92-29-R	1 2568	9	59	.8	8	29	475	5.79	9	5	ND	1	55	.2	2	5	116	1.31	.069	7	8	1.13	205	.20	7	2.01	.44	.23	1	340	
MP-92-30-R	2 848	6	35	.2	5	6	189	3.83	3	5	ND	2	85	.2	2	2	2	163	.81	.064	6	13	.41	74	.14	5	1.06	.07	.13	1	170
MP-92-31-R	1 634	2	48	.1	8	16	482	5.92	15	5	ND	1	203	.2	2	2	2	170	1.66	.172	6	9	2.09	49	.22	7	2.27	.06	.10	1	160
MP-92-32-R	1 297	6	38	.1	4	10	400	4.25	7	5	ND	1	115	.2	2	2	2	158	1.20	.066	7	6	1.15	65	.22	5	1.51	.07	.10	2	19
MP-92-33-R	5 263	5	19	.1	5	7	190	2.69	16	5	ND	1	188	.2	2	2	2	71	.68	.064	9	17	.58	56	.17	6	.94	.10	.05	1	46
MP-92-34-R	6 209	14	73	.1	5	5	506	4.01	26	5	ND	1	893	.7	2	2	2	104	2.04	.105	9	7	1.00	70	.29	16	2.83	.05	.08	1	36
MP-92-35-R	2 739	3	80	.2	10	26	982	7.50	16	5	ND	1	319	.2	2	2	2	183	1.55	.189	6	8	2.07	23	.17	15	2.04	.06	.08	1	44
MP-92-36-R	2 8545	8	48	.2	3	17	562	1.49	11	5	ND	1	161	.2	3	2	2	78	.99	.034	7	4	.66	81	.16	6	1.10	.04	.12	2	150
STANDARD C/AU-R	18 64	42	130	7.0	72	31	1109	3.96	41	21	7	39	52	17.0	15	21	56	.52	.086	38	61	.93	182	.08	33	1.97	.06	.13	10	540	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B V AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 22 1992 DATE REPORT MAILED: Sept 25/92 SIGNED BY: D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

SEP-25-1992 11:01

FROM ACME ANALYTICAL

TO IMPERIAL METALS

P.002



ACME ANALYTICAL

Imperial Metals Corporation PROJECT MT.POLLEY FILE # 92-3292

Page 2



ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	AU ppm	Th ppm	Sr ppm	Ca ppm	Sb ppm	Bi ppm	V ppm	Ce %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	U ppm	Au* ppb
MP-92-37-R	1	7065	11	91	.5	7	26	816	7.77	13	5	ND	2	62	.2	2	6	193	1.48	.066	5	9	1.53	66	.16	4	1.97	.05	.12	1	360
MP-92-38-R	2	10394	5	83	.2	11	26	829	4.88	13	5	ND	1	109	.2	2	10	139	2.71	.066	7	9	1.60	59	.13	6	2.88	.05	.11	1	190
MP-92-39-R	2	5044	4	60	.3	7	16	624	3.69	12	5	ND	1	109	.2	2	2	112	1.74	.063	6	11	1.06	72	.14	5	1.86	.03	.12	1	110
MP-92-40-R	2	8056	4	53	.3	6	17	573	3.93	14	5	ND	1	96	.3	2	2	133	2.54	.052	7	4	1.00	72	.12	6	2.45	.02	.10	1	210
MP-92-41-R	3	12977	7	53	.3	5	17	446	1.21	8	5	ND	1	100	.2	3	3	52	.79	.029	6	11	.40	87	.13	4	.92	.04	.12	1	160
MP-92-42-R	1	1166	5	48	.5	6	16	564	9.24	4	5	ND	1	62	.2	2	2	202	1.00	.100	4	5	1.14	37	.16	8	1.18	.04	.14	1	150
MP-92-43-R	2	575	13	51	.3	6	12	575	3.83	16	5	ND	1	126	.3	2	2	91	1.83	.122	5	10	1.31	44	.20	15	2.09	.04	.13	1	120
MP-92-44-R	77	443	12	44	1.3	4	11	454	7.10	38	5	ND	2	187	.3	2	2	94	.30	.117	4	9	.99	84	.25	4	1.15	.03	.23	1	190
MP-92-45-R	25	442	10	29	2.9	3	9	346	7.71	37	5	ND	1	211	.2	3	2	103	.30	.165	6	7	.65	94	.25	4	.89	.03	.33	1	450
MP-92-46-R	5	270	6	31	.2	1	3	438	3.27	9	5	ND	1	156	.2	2	2	65	.61	.078	4	1	.81	57	.15	3	1.46	.06	.08	1	83
MP-92-47-R	1	1654	8	46	.3	5	10	452	3.22	13	5	ND	1	32	.2	2	3	97	1.21	.068	6	10	.30	185	.15	6	1.10	.07	.10	1	250
MP-92-48-R	1	3405	6	118	2.8	6	28	820	6.95	12	5	ND	1	198	.2	2	3	157	3.13	.078	7	6	1.40	37	.16	13	1.98	.03	.08	1	180
RE MP-92-44-R	74	455	9	44	1.3	4	12	450	7.21	40	5	ND	1	187	.2	2	2	95	.30	.118	3	10	.99	81	.24	3	1.15	.03	.22	1	190
MP-92-49-R	2	6146	8	111	1.0	8	31	630	6.37	14	5	ND	1	139	.4	2	6	132	1.79	.035	7	9	1.15	285	.14	11	1.99	.09	.09	1	470
MP-92-50-R	4	4144	6	97	2.4	6	12	625	3.23	14	5	ND	1	55	.5	2	2	78	1.60	.035	6	9	.61	86	.11	4	.83	.03	.12	1	220
MP-92-51-R	2	1364	9	127	.4	5	16	633	6.03	2	5	ND	1	33	.5	2	2	131	1.55	.074	4	7	.41	81	.15	7	1.25	.04	.11	1	140
MP-92-52-R	2	1296	9	186	.5	6	15	606	5.55	3	5	ND	1	42	.6	2	2	129	1.73	.083	5	8	.52	131	.17	7	1.44	.05	.14	1	110
MP-92-53-R	7	3586	9	91	3.2	7	19	665	4.30	2	5	ND	1	31	.2	2	2	84	1.86	.064	6	10	.40	352	.15	6	1.45	.05	.12	1	400
MP-92-54-R	1	484	3	49	.2	3	11	572	3.99	2	5	ND	1	32	.2	2	2	117	1.26	.091	6	2	.20	389	.13	7	1.02	.05	.10	1	460
MP-92-55-R	8	4762	13	105	1.6	10	16	1056	4.77	21	5	ND	1	36	.4	2	6	89	1.64	.033	5	18	.64	114	.17	7	1.31	.11	.10	1	1090
MP-92-56-R	2	324	7	127	.1	6	9	945	3.85	21	5	ND	1	42	.3	2	2	91	1.68	.069	4	8	.42	171	.14	5	1.04	.05	.10	1	37
MP-92-57-R	2	400	4	24	.1	2	6	200	2.34	16	5	ND	2	80	.2	2	2	62	.49	.054	6	3	.62	54	.12	3	1.01	.06	.05	1	69
STANDARD C/AU-R	19	64	39	130	7.2	72	31	1068	3.96	41	22	7	40	52	17.0	15	19	57	.49	.087	38	62	.93	183	.08	33	2.00	.07	.14	10	510

Sample type: ROCK. Samples beginning 'RE' are duplicate samples.

SEP-25-1992 11:03

FROM ACME ANALYTICAL

TO IMPERIAL METALS

P.003

APPENDIX II

Cost Summary

APPENDIX II

COST SUMMARY

Northwest Target Area 1992 Assessment Program

Wages:

D. Gorc - Sept. 14-24, 1992	\$2,200
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Accommodation - Travel

4 wheel drive truck	\$600	
Food and accommodation	<u>340</u>	940

Geochemical

39 rock samples - 30 element ICP and Au (aa)	497
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Miscellaneous

Supplies, Equipment, Gasoline	400	
Report, computer, drafting, typing, etc.	<u>750</u>	1,150

Total	<u>\$4,787</u>
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