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780

1986 CUNNINGHAM CREEK PROPERTY REPORT

Cariboo M.D.

(NTS ~~83 A, H~~) 93A/14W

52°53'12" 121°19'48"

BRITISH COLUMBIA

VOLUME 1

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,262

BY: PETER R. DELANCEY, P. ENG.

Owner/Operator: IMPERIAL METALS CORPORATION

JULY 1987

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APPENDIX C	STATISTICAL TREATMENT OF SOIL SAMPLE RESULTS

1. INTRODUCTION

Imperial Metals has a 100% interest in the Cunningham Creek gold property situated 25 km southeast of the towns of Wells and Barkerville, in east-central British Columbia. The property consists of 15 claims and fractions under Mining Lease M32, 7 reverted Crown Granted Claims and 35 MGS units.

The property lies within the Cariboo Gold Belt, one of the major gold producing areas in North America. Placer gold, discovered here in 1859, sparked the great Cariboo gold rush, some 2.5 million ounces of placer gold were recovered. Although extensive exploration for the source of the placer gold was undertaken, it was not until the 1930's that lode production commenced from the Cariboo Gold Quartz and Island Mountain Mines at Wells. Gold bearing quartz veins were discovered on the Cunningham Creek property in the early 1920's but serious work did not commence until 1937. Extensive underground development was carried out on several parallel veins, however, only the Hudson Vein saw production, with 13,000 tons grading 0.40oz/ton mined and milled. The mine was closed at the outbreak of the World War II.

The Cunningham claims are located within the same belt of rocks hosting the gold deposits at Wells. The Cariboo Gold Quartz, Island Mountain and Mosquito Creek deposits occur along a favourable horizon in highly deformed metasedimentary rocks. The mines have a recorded production of approximately 3 million tons grading 0.40 oz/t. Ore occurs as two distinct types, shallowly plunging sulphide "replacement" bodies and steeply dipping quartz veins. Mosquito Creek Gold Mines is presently carrying out limited mining of replacement ore, to be stockpiled and treated at their 100 tons per day cyanide plant.

Recent exploration of the Cunningham property has focused on drill testing and underground sampling of the Shasta Vein; some 37,000 tons of 0.36 oz/ton gold has been outlined above the 200' level. The 1986 drilling showed continuity of the vein at least 600' below surface. Encouraging results were obtained from two exploration holes cutting the adjacent 605 Vein. A "replacement type" sulphide body was discovered along a similar stratigraphic horizon to that hosting the Wells "replacement" deposits.

Potential for outling a significant reserve of gold ore along the Hudson, 605, and Shasta Veins is considered excellent. Other targets, particularly the "replacement" sulphide horizon, require further exploration. The overall potential is similar to that of Mosquito Creek, Cariboo Gold Quartz and Iron Mountain Mines at Wells.

1.1 Location and Access

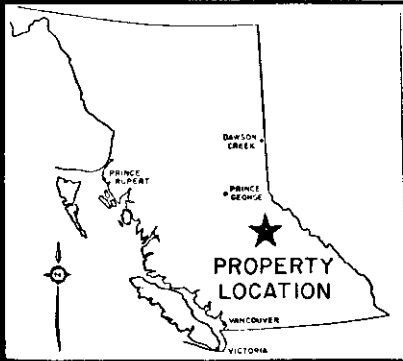
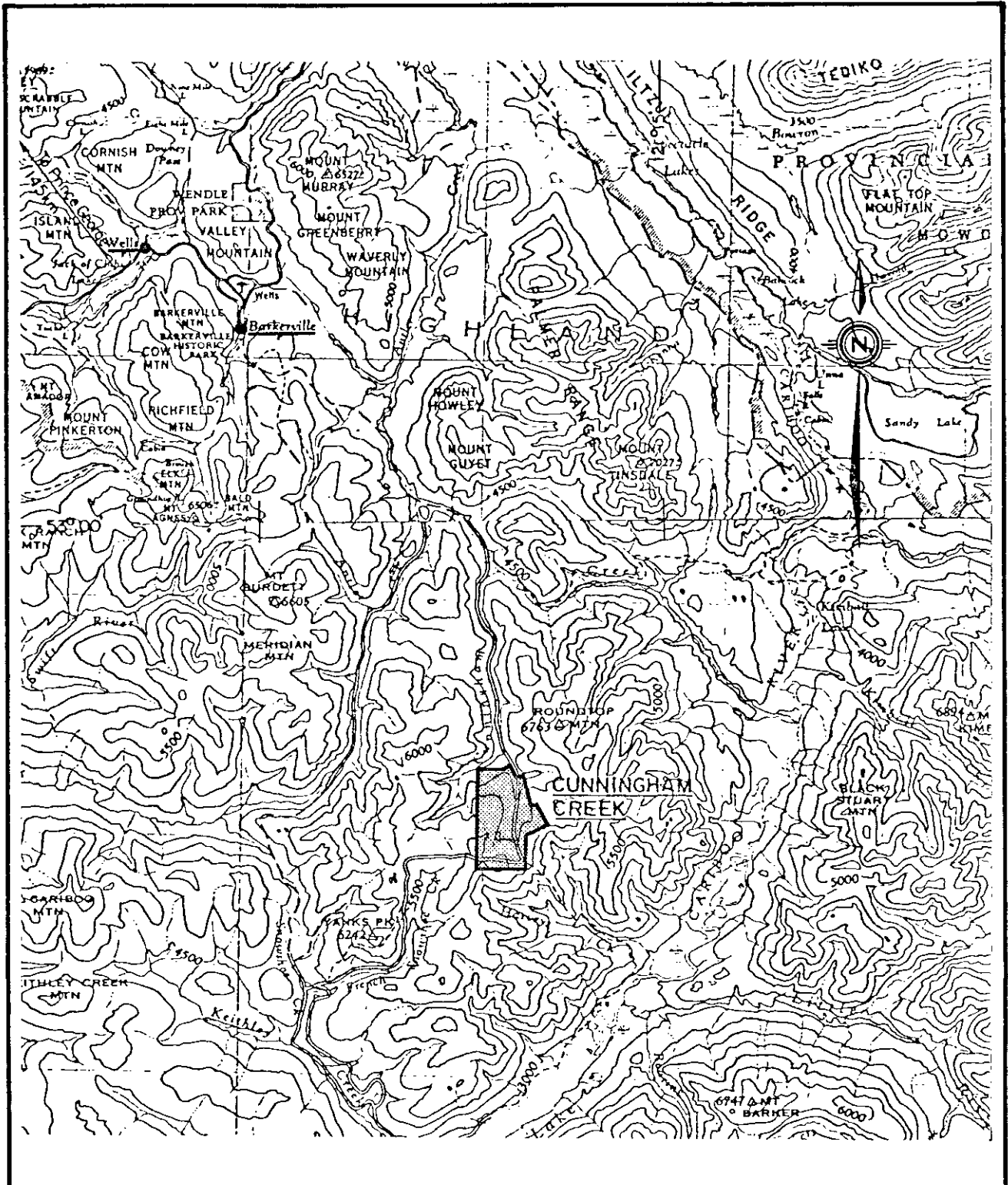
The Cunningham property is located 25 km southeast of the towns of Wells and Barkerville in east-central British Columbia. The approximate geographic center of the claims is Lat. 52° 55'N, Long. 121° 21'W on NTS Map Sheet 93 A/14 (Figure 1).

The property is easily accessible by 4-wheel drive vehicle. A well maintained forestry road (Line 3,100) branches off the Wells-Barkerville highway at the Bowron Lake turnoff; at km 17 a secondary road leads up Cunningham Creek past several placer operations to the old Hudson mine workings near the height of land. Further south the road is in poor repair; it eventually links up with logging roads near the town of Likely.

Base camp is located at the junction of Pearce and Peter Creek. Three sturdy wooden buildings provide adequate shelter. Creeks have an ample year round supply of water. All drill core is stored in camp. Although fuel, food and general supplies are available in Wells, a much better selection can be obtained in Quesnel, some 80 km to the west. The Quesnel airport has scheduled flights daily from Vancouver.

1.2 Physiography and Climate

The property lies within the transition zone between the rugged Cariboo Mountains to the east and the wooded Fraser Plateau to the west. The claims are centred on the Snowshoe Plateau at an average elevation of 1,370 m. Narrow stream valleys of Peter and Pearce Creeks flow north into Cunningham Creek. The headwaters of Harvey and Sinlock Creeks drain the southern portion of the claim and flow south into Cariboo Lake.



IMPERIAL METALS CORPORATION

CUNNINGHAM CREEK

FIGURE 1

N.T.S. 93A, H

LOCATION MAP

CARIBOO MINING DIVISION, BRITISH COLUMBIA

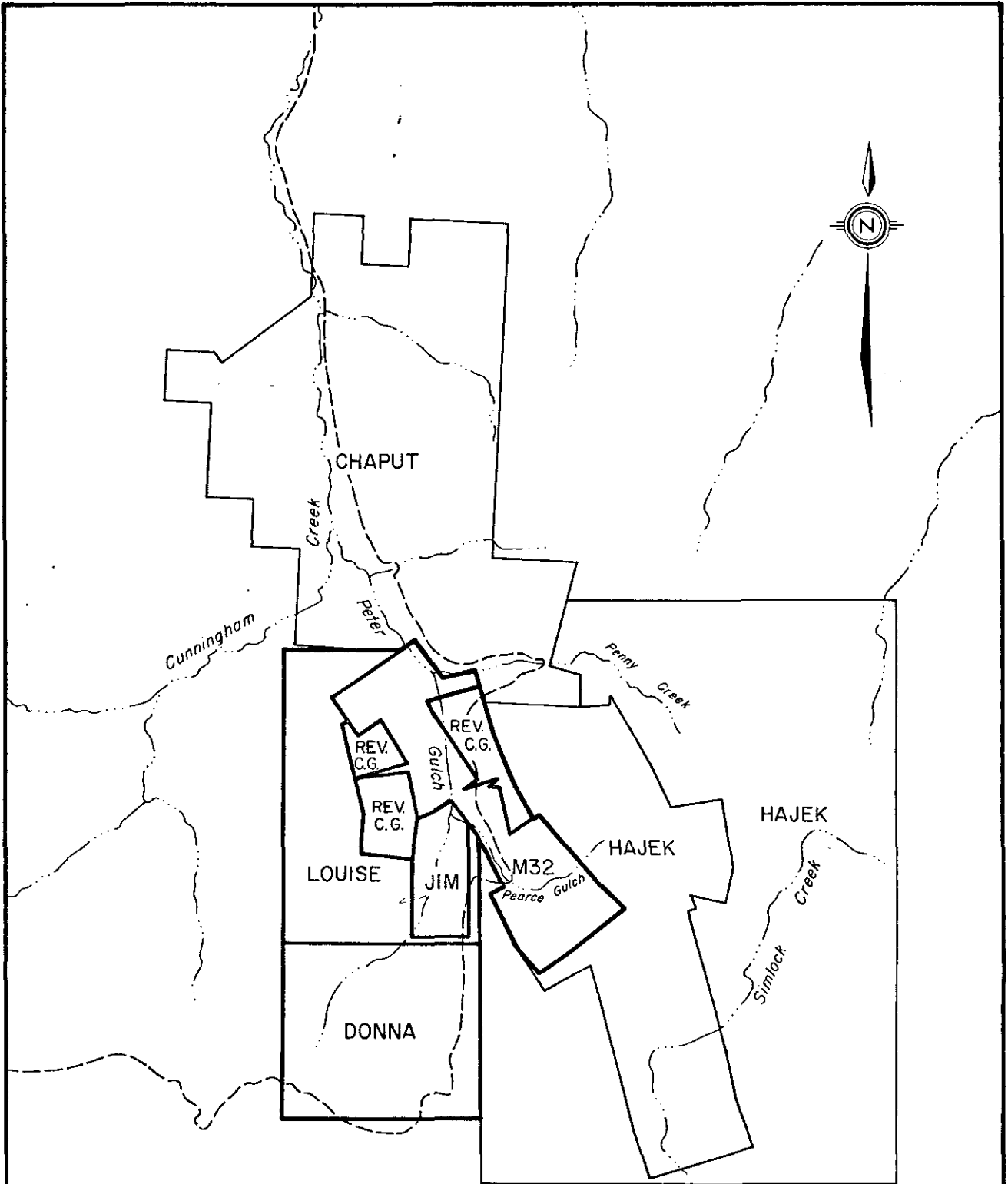
km 5 0 5 10 km

SCALE: 1:250,000

GEOLOGIST: P. DELANCEY

DATE: MAY, 1987

DRAWN BY: S. HAWORTH



IMPERIAL METALS CORPORATION	
CUNNINGHAM CREEK	
FIGURE 2	N.T.S. 93A/14
CLAIMS LOCATION MAP	
SCALE: 1: 50,000	GEOLOGIST: P.D., M.B.
DATE: APRIL, 1987	DRAWN BY: J. CORKUM

The claims are near timberline, with open park-like meadows occurring at higher elevations. Outcrop is scarce except along creek gullies. Glacial till is common in valleys at lower elevations.

The climate is typically alpine with mild summers and cold winters. Snow accumulation is heavy; most areas are clear of snow by mid June.

1.3 Claim Status

The property is owned 100% by Imperial Metals Corporation. The mineral claims and mineral lease comprising the Cunningham Creek property in the Cariboo Mining District are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Record Date</u>	<u>Expiry</u>
Mineral Lease M32	M32	Jan. 10, 1982	Jan. 10, 1987
Black Martin No. 1 & 2	1129	Aug. 14, 1979	Aug. 14, 1987
Black Martin No. 3 and Black Martin Fraction	1128	Aug. 14, 1979	Aug. 14, 1987
Sidewinder 1	4955	July 11, 1983	July 11, 1987
Sidewinder 2	4956	July 11, 1983	July 11, 1987
Sidewinder 3	4957	July 11, 1983	July 11, 1987
JIM (3 units)	251	Sept. 7, 1976	Sept. 7, 1987
Louise (20 units)	7871	Aug. 19, 1986	Aug. 19, 1987
Donna (12 units)	7955	Sept.18, 1986	Sept.18, 1987

The total area of the property is approximately 800 hectares (2,000 acres). Mineral Lease M32, comprised of 15 Crown Granted claims and fractions, require an annual rental payment of \$952.00. The Black Martin and Sidewinder Claims are reverted Crown Grants and require annual assessment of \$200 per claim. The Jim, Louise and Donna MGS claims, totalling 35 units, require annual assessment work of \$100 to \$200 per unit. All claims are grouped as the Cunningham Creek Group. 1986 drilling costs will be filed as assessment work to extend the expiry dates til 1998.

Figures 2 and 3 show claims ownership in the general Cunningham Creek area, and a detailed survey of the mining lease claims, respectively.

A placer claim lease (December 17, 1986), located at the junction of Pearce and Peter Creeks, protects the property from conflicts with placer operators.

1.4 History of Property

Placer mining has been carried out intermittently on Cunningham Creek and its tributaries since the famous 1860's Cariboo Gold Rush. The close association of placer gold with seams of detrital pyrite and the presence of quartz crystals with some of the nuggets indicated a nearby source. However, it was not until the 1920's that lode gold was discovered at the head of Pearce Creek. Short adits were driven to explore the gold-bearing Hudson Vein. Full scale development did not commence until 1937 when Cariboo-Hudson Mines Ltd. acquired the property. The following year, 2,440 m of drifting and cross cutting was carried out on 6 levels, with most development on the 200' and 600' levels which were accessed from portals on the hillside. Much of this development work was done to investigate two adjacent veins - the Shasta and 605 Veins (Figure 12). Stoping was carried out on the Hudson Vein between the 250' level and surface. Some 12,938 tons of ore were mined from which 6,186 ounces of gold were recovered using a 100 tpd cyanide mill. The mine was closed in 1939, and in 1948 the mill was dismantled and sold. During the 1940's and 50's, intermittent exploration, including extensive bulldozer trenching, was carried out in the area of the Hudson, Shasta and 605 Veins. Tungsten mineralization was discovered near the junction of Peter and Pearce Creeks in the early 50's. Two adits were driven to test the extent of the tungsten mineralization. To facilitate this exploration several of the remaining Cariboo-Hudson buildings were moved to the junction of Peter and Pearce Creeks (present camp location).

In 1971, the claims reverted to the Crown and were acquired by Resourcex and TVI Mines Ltd. These companies carried out geological, geophysical and geochemical surveys in 1973 and 1976. Five holes were drilled in 1977 to test geochemical anomalies and exposed structures. Invex Resources, a predecessor company of Imperial Metals, acquired the property the following year and in 1979 tested the Shasta Vein with 3 diamond drill holes. Imperial Metals carried out a soil geochemical program in 1983 and continued testing of the Shasta Vein with 12 short holes. In 1984 a fairly major program of drilling, trenching, mine rehabilitation (200' level) and sampling was carried out. Drilling concentrated on the Shasta Vein; 32,000 tons of ore grading 0.36 oz/t were outlined. The 1986 drilling program indicated continuity of the Shasta Vein to a depth of at least 600' below surface. Two encouraging intersections were obtained along the southern extension of 605 Vein and newly discovered "replacement" sulphide body was tested with several short holes. The following table (Figure 4) summarizes the recent programs.

YEAR - COMPANY	SUMMARY OF ACTIVITIES	SUMMARY OF RESULTS	REFERENCE
1 9 7 3 - RESOURCEX	Property reconnaissance including soil sampling (310 samples), mag. and altimeter readings on 400' spacing, VLF on 100' interval	5 north - trending anomalous zones through central portion of lease: A - Pearce Creek, B - Hudson, C - Copper Creek, D - Southwest, E - Northeast	Allen, March 1974
1 9 7 6 - RESOURCEX	Detailed soil geochemical surveys (1,306 samples) and prospecting over the 5 anomalous areas outlined in 1973; VLF over grids A and B. Line spacing 100', station intervals 50'	Anomalous zones A, B, C and D confirmed. Co-incident high soils and EM on grid A Drill targets outlined	Allen, May 1977
1 9 7 7 - RESOURCEX	Drilling - 5 holes (totalling 1,512') on principal targets	#77-4 into Shasta Vein was encouraging 12.5' averaging 0.89 oz/t gold	Allen, October 1977
1 9 7 9 - INIVEX	Drilling - 5 holes (totalling 741') tested the Shasta Vein, geological mapping, some trenching	Encouraging results from Shasta Vein 79-1 1.70 m of 0.35 oz/t Au 79-2 0.75 m of 0.06 oz/t Au 79-5 1.50 m of 0.59 oz/t Au	Quinn, B. Sc. Thesis 1980
1 9 8 3 - IMPERIAL	Detail soil geochemical surveys (2,500 samples) covering main mineral occurrence areas. Drilling - 12 holes (totalling 510 m) Shasta Vein	Geochem results indicate drill targets. Drilling Shasta Vein outlined 33,000 tons of 0.39 oz/t Au.	Quinn, December 1983 February 1984
1 9 8 4 - IMPERIAL	Drilling - 16 holes Shasta Vein, 5 holes 605 Vein, 3 holes IP target (totalling 1,132 m) Underground Rehabilitation and sampling 200' level, soil surveys (fill-in and extensions, 711 samples) Extensive trenching, showing areas IP (2 km) over south grid area. 1395 m of trenching	Drilling and underground sampling of Shasta Vein generally confirms indicated tonnage and grade, shows erratic nature of mineralization (i.e., ore shoots)	Quinn, August 1984
1 9 8 6 -	Drilling (totalling 2,327 m) 5 holes to test Shasta Vein below 200' level 5 holes to test IP target area 6 holes to test newly discovered "replacement" zone 2 holes to test S. extension of 605 Vein	Shasta Vein - 7 of 9 holes intersect vein, 2 of these holes intersected ore shoots. I.P. target probably due to graphite "Replacement" body - drilling intersects massive sulphide mineralization, low gold values. Extension of 605 - 0.8 oz/t Au over 8.2'.	Delancey, July 1987

FIGURE 4 SUMMARY OF RECENT PROGRAMS

1.5 Regional Geology

Recent work by Struik of the G.S.C. indicates the geology of south central British Columbia to be composed of four fault separated terranes; from west to east they are, Quesnel, Slide Mtn., Barkerville and Cariboo. The general Wells - Barkerville map area lies within Barkerville terrane and is underlain by a thick package of highly deformed metasedimentary rocks generally referred to as the Snowshoe Group. Age and correlation of rock units within this package is uncertain.

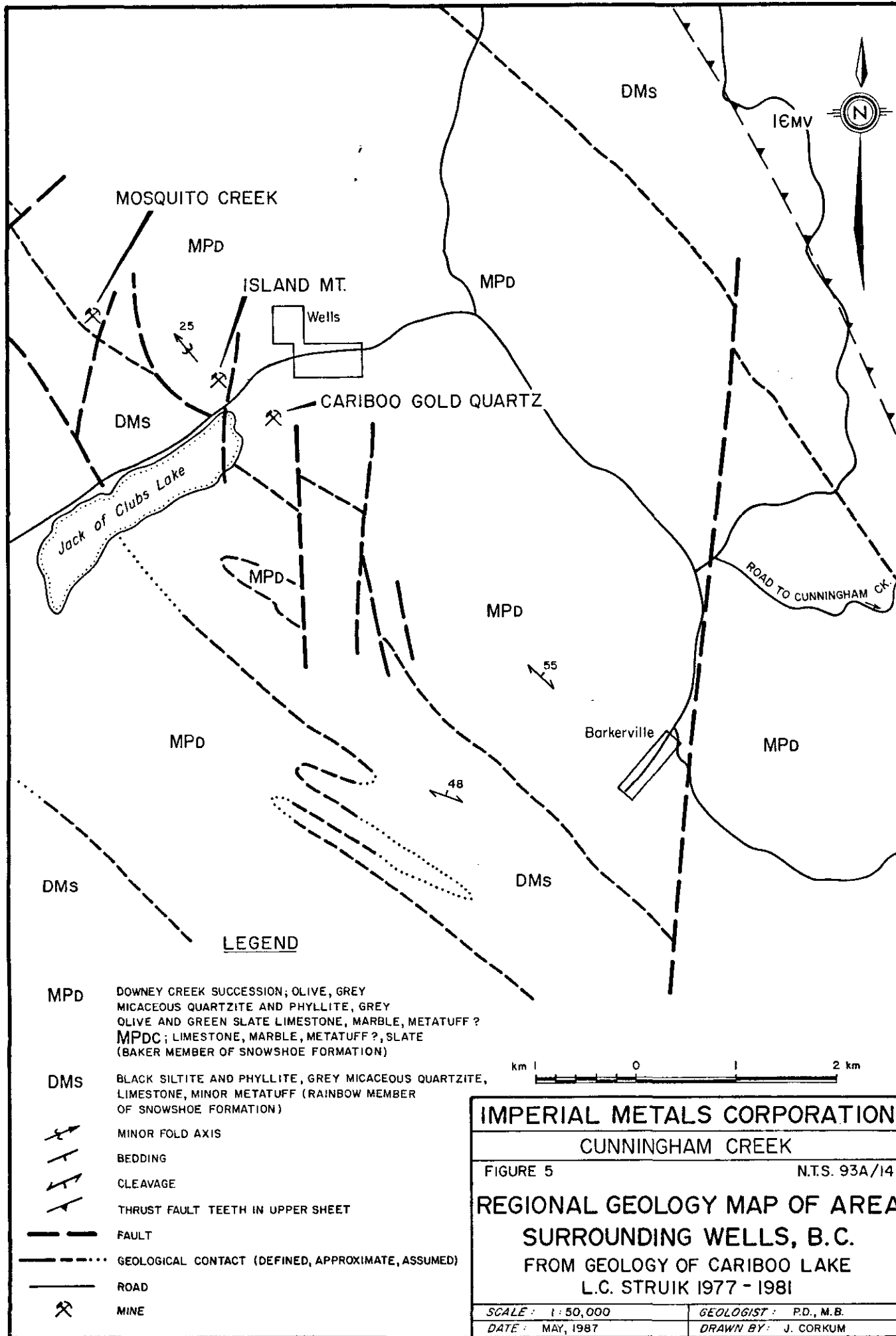
The Wells - Barkerville - Cunningham Creek area is underlain by a north west trending belt of clastic rocks (Snowshoe Group) of the Barkerville Terrane. Further to the east, these rocks are in fault contact with black clastic rocks of the Cariboo Terrane. The immediate Wells - Barkerville - Cunningham Creek mineral properties lie within the Downey Creek formation (Mississippian age?) of phyllites, slates, micaceous quartzites, limestones, marble and green meta-tuffs (Figures 5 and 6).

Regionally, the Snowshoe Group rocks have been folded into the Lightning Creek anticlinorium which trends northwest and plunges about 20 degrees north west.

1.6 Geology Of The Wells' Gold Deposits

The Mosquito Creek, Island Mountain and Cariboo Gold Quartz deposits at Wells have a recorded production of some 3 million tons grading 0.40 oz/t gold. The gold occurs with pyrite as "replacement" ore bodies and as quartz vein ore bodies, they occur near the contact between sericitic phyllites/ limestones (Baker Member) and micaceous quartzites (Rainbow Member). The "replacement" deposits are shallowly plunging pencil shaped bodies in folded limestone. The vein deposits occur as steeply dipping quartz/pyrite filled faults in micaceous quartzites and argillites (Figure 5 and 7).

Several theories have been advanced as to the origin of the deposits. One theory suggests that gold-bearing hydrothermal fluids penetrated fractured and folded strata, precipitating quartz and pyrite in the fractures (quartz vein feeders) and "replacing" chemically reactive limestone beds. Some geologists question the "replacement" origin of the massive pyrite bodies, alternatively suggesting them to be of syngenetic origin.



MOSQUITO CREEK

MPD

ISLAND MT.

Wells

CARIBOO GOLD QUARTZ

DMS

Jack of Clubs Lake

MPD

MPD

Barkerville

MPD

ROAD TO CUNNINGHAM CK.

DMS

MPD

DMS

LEGEND

MPD

DOWNY CREEK SUCCESION; OLIVE, GREY MICACEOUS QUARTZITE AND PHYLLITE, GREY OLIVE AND GREEN SLATE LIMESTONE, MARBLE, METATUFF ? MPDC; LIMESTONE, MARBLE, METATUFF ?, SLATE (BAKER MEMBER OF SNOWSHOE FORMATION)

DMS

BLACK SILTITE AND PHYLLITE, GREY MICACEOUS QUARTZITE, LIMESTONE, MINOR METATUFF (RAINBOW MEMBER OF SNOWSHOE FORMATION)

MINOR FOLD AXIS

MINOR FOLD AXIS

BEDDING

BEDDING

CLEAVAGE

CLEAVAGE

THRUST FAULT TEETH IN UPPER SHEET

THRUST FAULT TEETH IN UPPER SHEET

FAULT

FAULT

GEOLOGICAL CONTACT (DEFINED, APPROXIMATE, ASSUMED)

GEOLOGICAL CONTACT (DEFINED, APPROXIMATE, ASSUMED)

ROAD

ROAD

MINE

MINE

km 1 0 1 2

IMPERIAL METALS CORPORATION

CUNNINGHAM CREEK

FIGURE 5

N.T.S. 93A/14

REGIONAL GEOLOGY MAP OF AREA

SURROUNDING WELLS, B.C.

FROM GEOLOGY OF CARIBOO LAKE

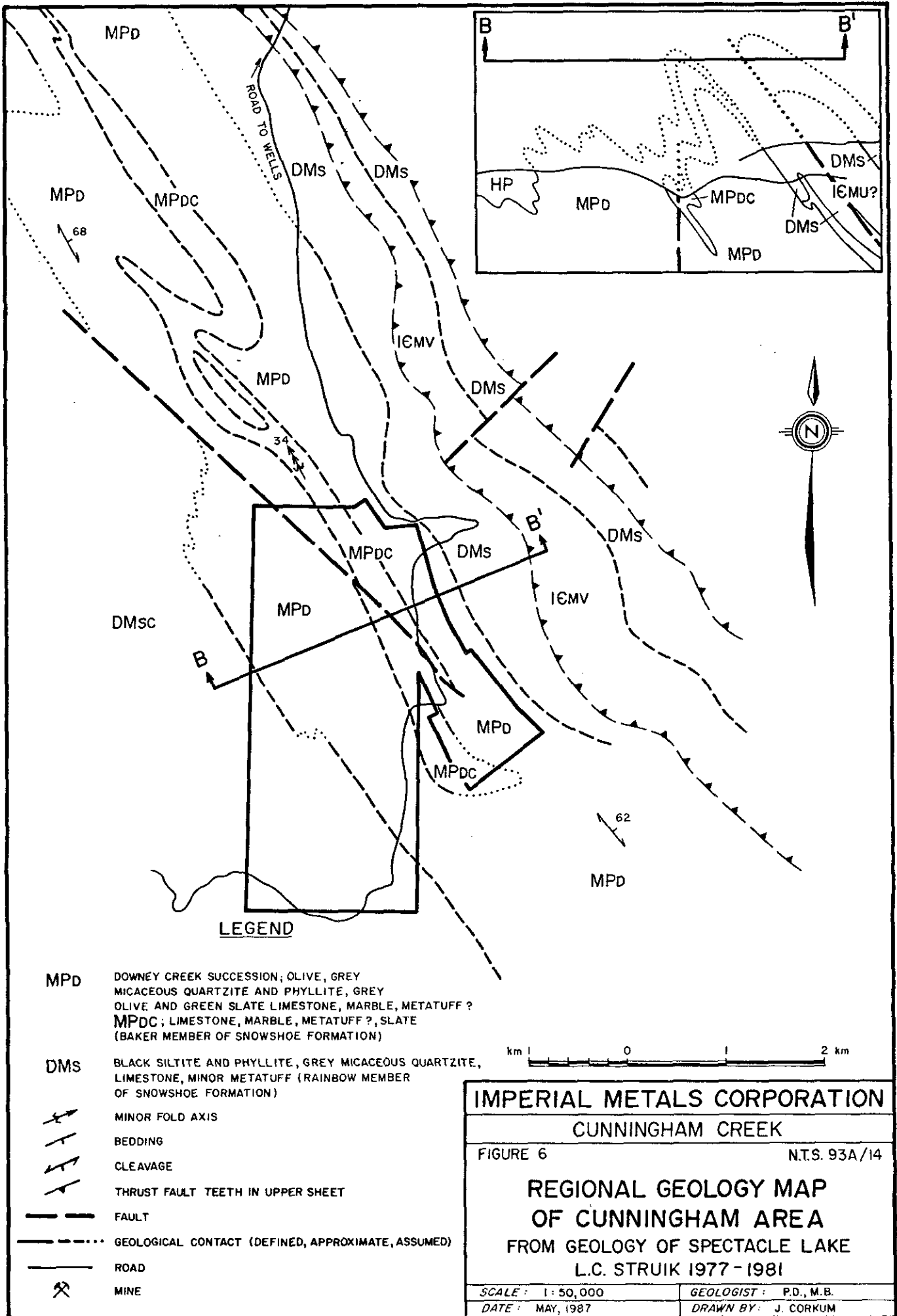
L.C. STRUIK 1977 - 1981

SCALE: 1:50,000

GEOLOGIST: P.D., M.B.

DATE: MAY, 1987

DRAWN BY: J. CORKUM



MPD DOWNEY CREEK SUCCESSION; OLIVE, GREY MICACEOUS QUARTZITE AND PHYLLITE, GREY OLIVE AND GREEN SLATE LIMESTONE, MARBLE, METATUFF ?
MPDC; LIMESTONE, MARBLE, METATUFF ?, SLATE (BAKER MEMBER OF SNOWSHOE FORMATION)

DMS BLACK SILTITE AND PHYLLITE, GREY MICACEOUS QUARTZITE, LIMESTONE, MINOR METATUFF (RAINBOW MEMBER OF SNOWSHOE FORMATION)

- MINOR FOLD AXIS
- BEDDING
- CLEAVAGE
- THRUST FAULT TEETH IN UPPER SHEET
- FAULT
- GEOLOGICAL CONTACT (DEFINED, APPROXIMATE, ASSUMED)
- ROAD
- MINE

IMPERIAL METALS CORPORATION	
CUNNINGHAM CREEK	
FIGURE 6	N.T.S. 93A/14
REGIONAL GEOLOGY MAP OF CUNNINGHAM AREA FROM GEOLOGY OF SPECTACLE LAKE L.C. STRUIK 1977 - 1981	
SCALE : 1 : 50,000	GEOLOGIST : P.D., M.B.
DATE : MAY, 1987	DRAWN BY : J. CORKUM

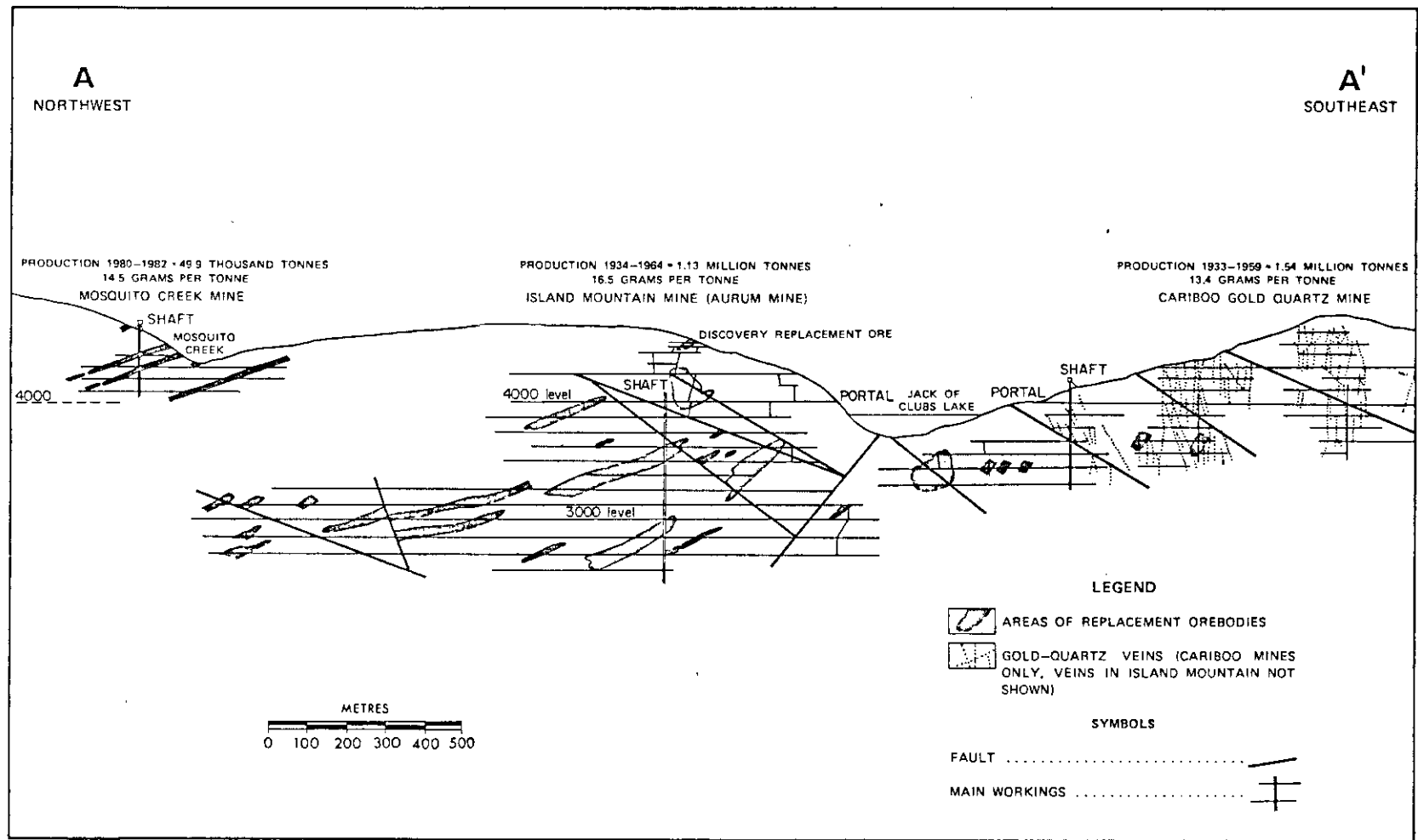


Figure 7. Longitudinal section. Projections of Mosquito Creek, Island Mountain, and Cariboo Gold Quartz mines
(From D.J. Alldrick, Paper 1983-1, Ministry of Mines, B.C.)

Mosquito Creek Gold Mining Company is presently mining a limited tonnage of "replacement" type ore and stockpiling it for processing in their 100 ton per day cyanide plant. Geological exploration of the property is continuing and old data is being reevaluated to try to get a better understanding of the geological framework for the location of the ore bodies.

1.7 Summary of Work Done in 1986

Twenty-two NQ holes, totalling 2,327m were drilled in 1986. Nine holes totalling 1,397m tested the Shasta Vein, five holes (including one abandoned) totalling 1,428m tested the I.P. or Sulphide target. Two holes totalling 303m, tested the southern extension of the 605 Vein and six short holes, totalling 198m, tested a newly discovered replacement body.

Although most of the exploration effort was concentrated on the drilling program, additional work included:

1. Re-establishing baseline and grid lines.
2. Fill-in and extension of soil grids (939 samples).
3. Detailed prospecting and sampling (1:250) in the immediate area of the Shasta and 605 Veins.
4. Prospecting, mapping and sampling areas of old workings, anomalously high soil samples, geophysical anomalies, or quartz vein/float occurrences.
5. Locating old claim posts and delineating property boundaries.
6. Building a proper core storage unit (capacity approximately 10,000') and a bulk storage area for old core.
7. Fencing off the caved portion of the Hudson Vein; rehabilitating and closing off portals to the 200' level.

All work was done on the M32 Mining Lease.

Mark Baknes, geologist, ably assisted in carrying out the 1986 program. His qualifications are presented at the end of the report.

2. PROPERTY GEOLOGY

2.1 Introduction

A portion of the Cunningham Creek property was mapped by S. Quinn as part of his 1979 B.Sc. thesis project. Only one week was spent mapping and as such, the coverage is less than adequate (Figure 8). The following observations are based largely on logging of drill core, examination of showings, and general reconnaissance of the property during the 1986 program.

2.2 Lithology

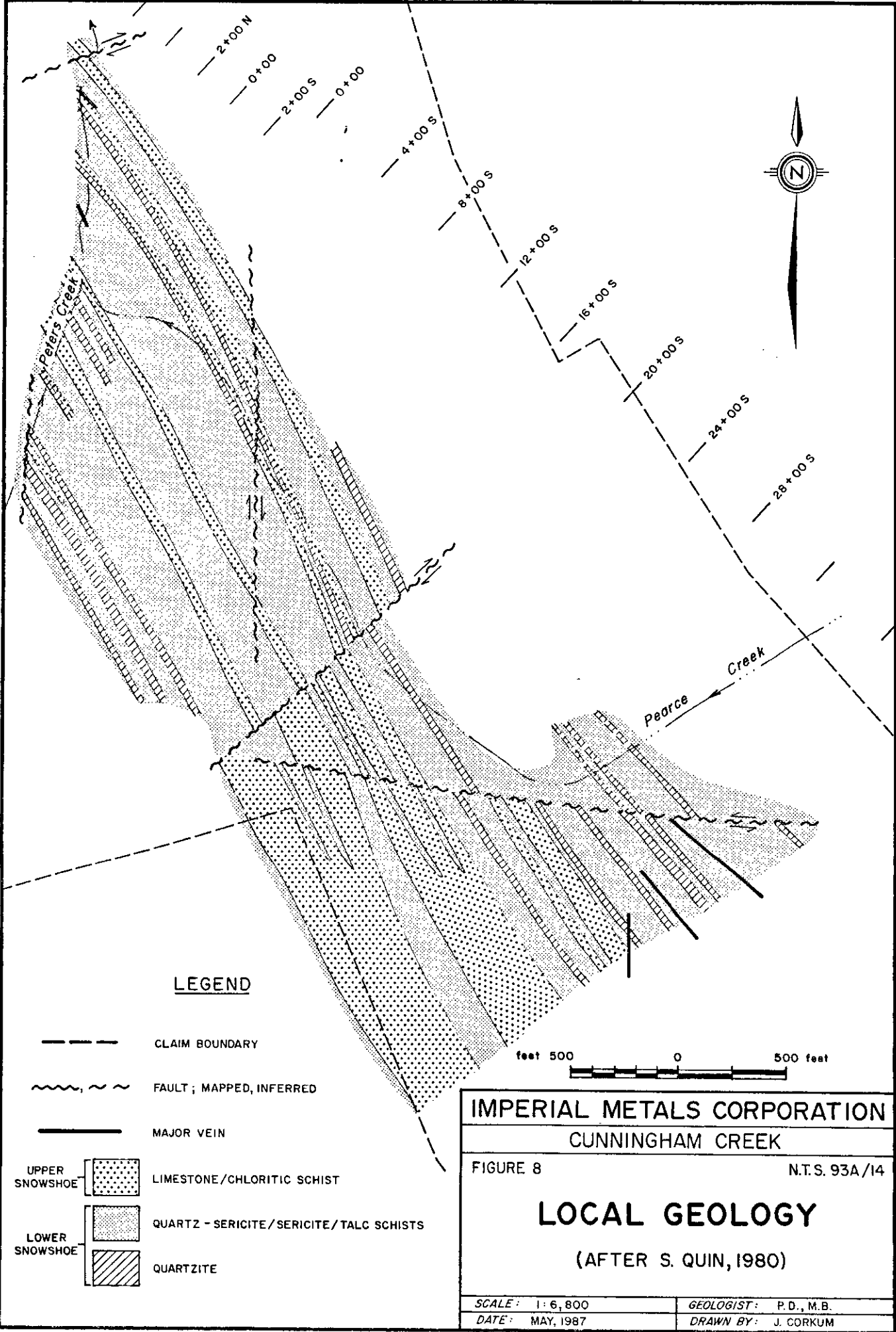
The claim area is underlain by a northwest trending belt of quartzites, sericitic quartzites, sericitic schists, limestones and chlorite schists of the Snowshoe Group (Figures 6 and 8). The rock units are frequently intercalated and contacts are often gradational.

Quartzites/sericitic quartzites/sericitic schists: The quartzites are generally massive, light to medium tan grey in colour. The size of the grains is generally less than 2mm; local beds may have grains up to "pea" size. Opalescent pale blue grains are noted locally. Graded bedding or cross bedding is generally indistinct, if present at all. Sericitic quartzite is most common and is frequently gradational to quartzite and sericitic schist. The rocks frequently contain sufficient amounts of ankerite and disseminated pyrite to impart a reddish brown colouration. These rocks are most prominent on the east half of the property and are host to the gold bearing quartz veins.




Limestones/black argillites: These rocks are generally intercalated with quartzites and chlorite schists. The limestones vary from light grey to black; locally the limestones have sufficient ankerite to weather a buff reddish brown. The unit tends to be lensey but is relatively continuous along the southwest flank of Pearce Creek. The argillites are frequently graphitic, particularly where disrupted by faulting. Locally the limestone contains lenses or pods of massive pyrite, pyrrhotite, galena and sphalerite; gold and/or silver accompanies these sulphides locally.

Chlorite Schists-Meta Tuffs: These rocks are exposed on the west side of the property. Locally these rocks contain disseminations of magnetite. They are probably of volcanic origin.

Diorites: These are the only intrusive rocks in the area. Because of their ankerite content, they weather a buff brown and hence are difficult to discern from quartzite outcrops.



LEGEND

- CLAIM BOUNDARY
- ~~~~ FAULT; MAPPED, INFERRED
- MAJOR VEIN
- UPPER SNOWSHOE  LIMESTONE/CHLORITIC SCHIST
- LOWER SNOWSHOE  QUARTZ - SERICITE/SERICITE/TALC SCHISTS
-  QUARTZITE

feet 500 0 500 feet

IMPERIAL METALS CORPORATION
CUNNINGHAM CREEK

FIGURE 8 N.T.S. 93A/14

LOCAL GEOLOGY
 (AFTER S. QUIN, 1980)

SCALE: 1:6,800	GEOLOGIST: P.D., M.B.
DATE: MAY, 1987	DRAWN BY: J. CORKUM

2.3 Structure

The rocks have a northwest strike of approximately Az. 320° and a dip of 70° to 80° northeast. Regional mapping by government geologists indicates the rocks are isoclinally folded. Foliation, crenulations, and local "kink" or isoclinal folding, and lensing of units, attest to strong structural deformation. Foliation is generally at a slight angle to bedding. Faulting is common. Previous mapping indicated a major fault (Copper Creek fault) cutting across the property; no direct evidence was seen for this structure. Quartz veins occupy various fracture systems, several veins show evidence of movement along the walls.

3. MINERALIZATION

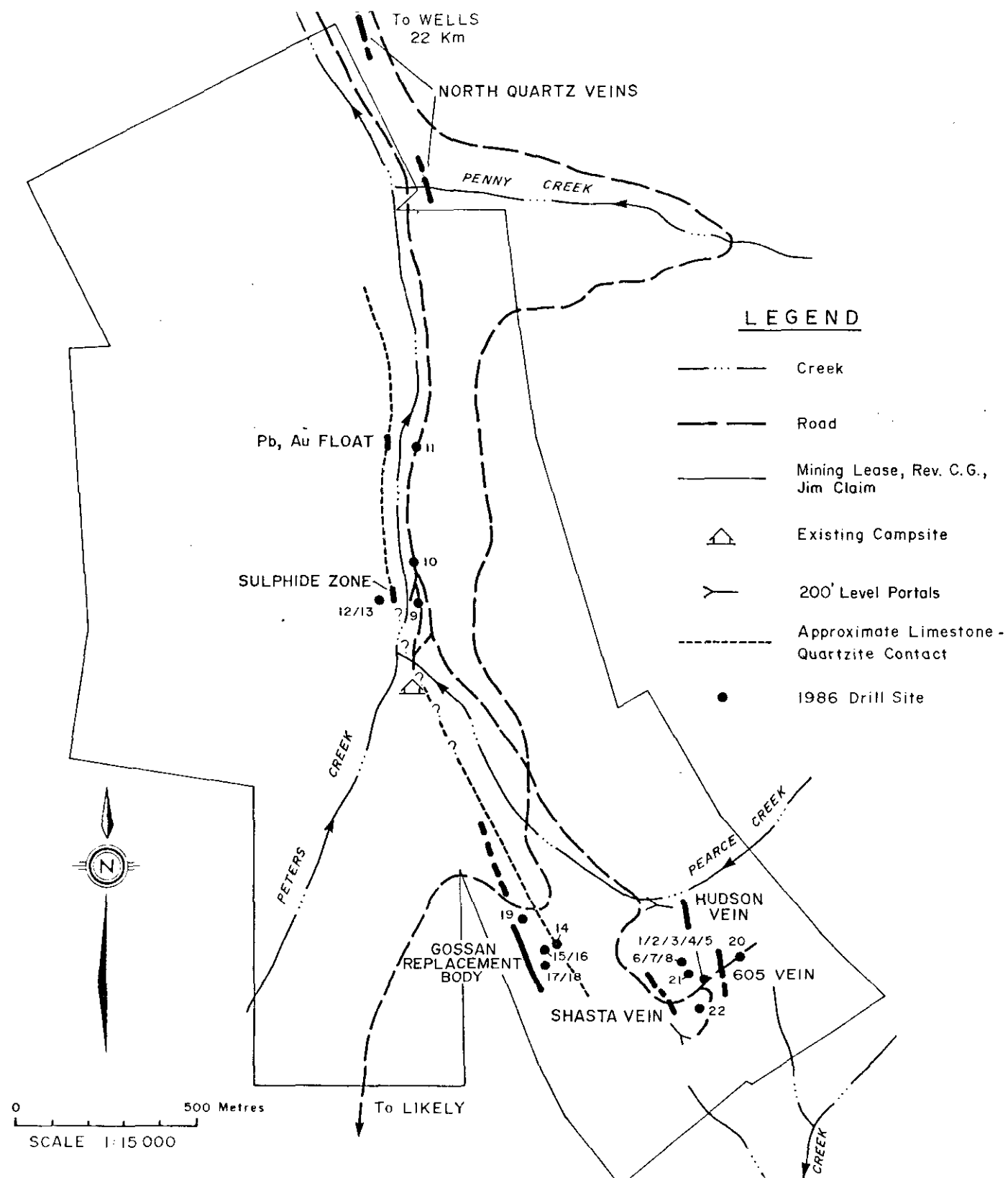
3.1 Introduction

The Cunningham Creek property is well mineralized. The most promising showings occur within a belt of quartzite, limestone and argillites trending NNW through the centre of the mining lease. Several types of mineralization are recognized - of which gold bearing quartz veins are the most prominent. "Replacement" type mineralization is less recognized to date, but is the most important type in the gold mines at Wells. Significant amounts of tungsten mineralization (scheelite) occurs in quartz veins near the junction of Pearce & Peter Creeks.

A 1986 Summary Map showing the location of the more significant gold mineralization, is presented on the following page (Figure 9) and a Composite Orthophoto Map is presented in the pocket (Figure 10).

3.2 Quartz Veins

Quartz veins are most conspicuous and have been the principal target for gold exploration. The veins range from a few centimeters to few meters wide and from a few meters to several hundreds of meters long. The strike of the veins fall in three main classes - north, northeast and east; veins striking northwesterly along foliation are generally less persistent. The north trending veins are most productive for gold mineralization. These veins, including the Shasta, Hudson and 605 Vein, occupy faults or shears which dip steeply to the east. Branching, splaying, pinching & swelling of the veins are common. These quartz veins are best developed in the more brittle quartzites.



LEGEND

- Creek
- Road
- Mining Lease, Rev. C.G., Jim Claim
- Existing Campsite
- 200' Level Portals
- Approximate Limestone - Quartzite Contact
- 1986 Drill Site

0 500 Metres
SCALE 1:15 000

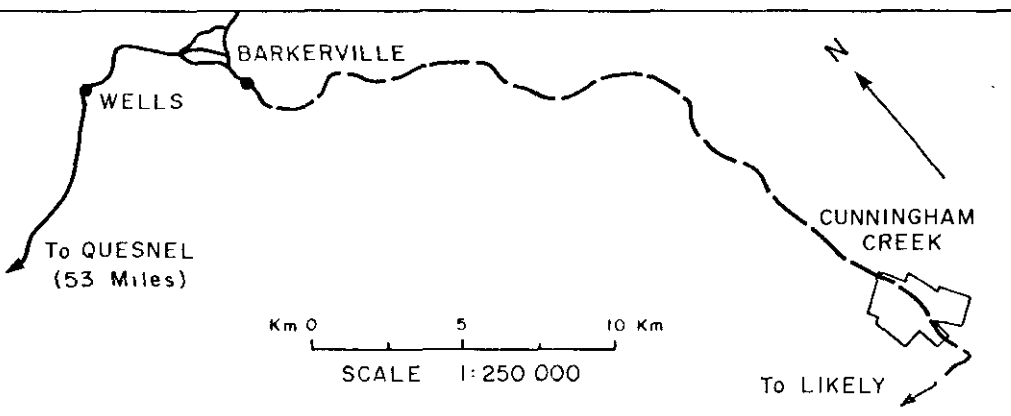
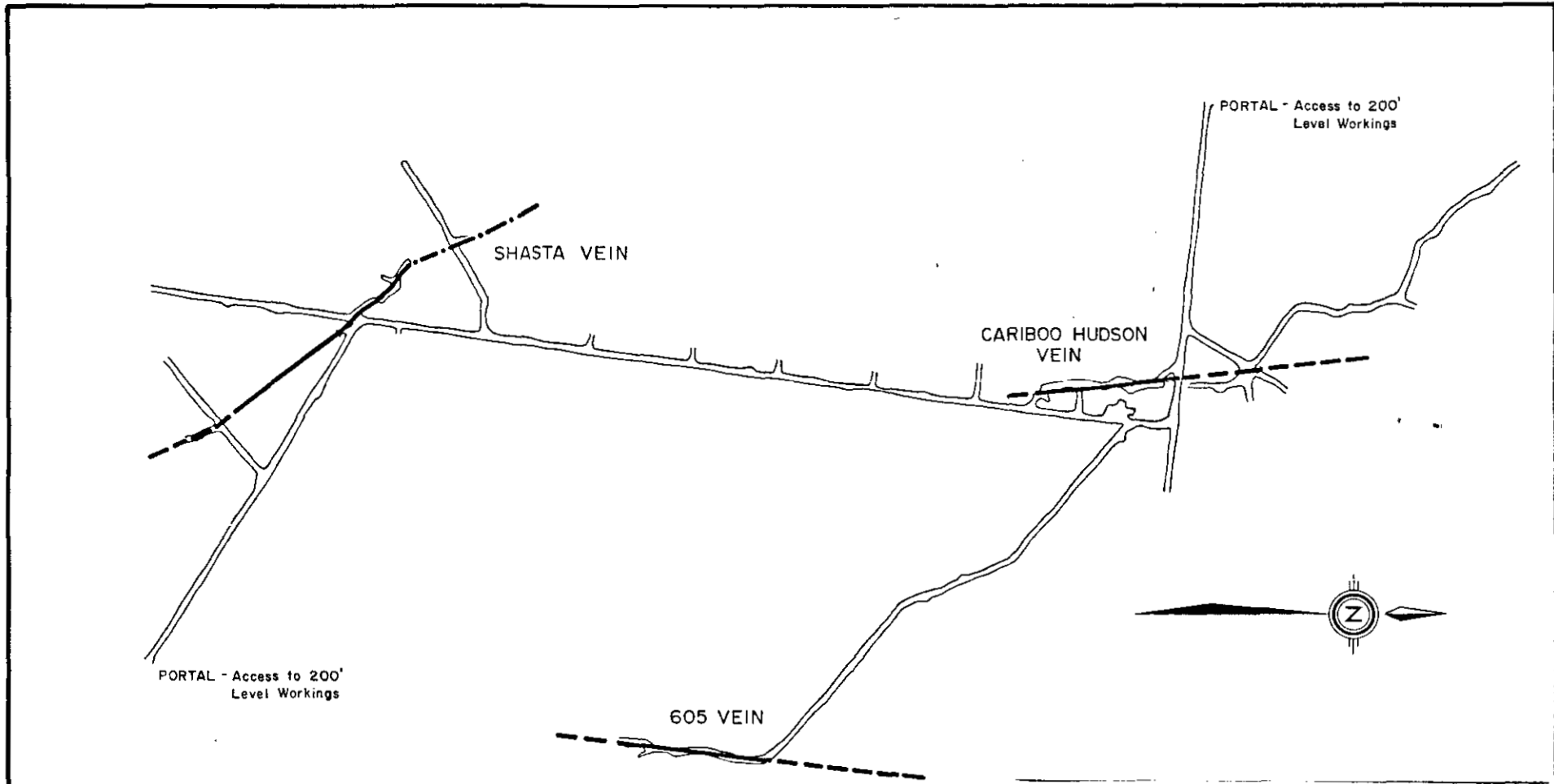


FIGURE 9
CUNNINGHAM CREEK
1986 Summary Map

The vein quartz is massive, milky white. Crystal-lined vugs and comb texture indicate relatively open fracture deposition. Ankerite is a common gangue mineral, frequently occurring along the vein walls. Sulphide content of the vein is variable. Pyrite, and less commonly sphalerite, galena and chalcopryite, occur as irregular masses, bands and disseminations. Pyrite is usually coarsely crystalline and is frequently leached out on surface exposures. Gold mineralization appears to be intimately associated with the sulphides, and a general correlation is noted between the sulphide content and gold content of the vein. Gold bearing ore shoots are associated with concentrations of sulphides within the vein system. The geometry of these steeply plunging shoots is often controlled by the intersection of structures.

3.3 Shasta Vein

In 1938 underground exploration workings on the Cariboo Hudson mine were carried through to Simlock Creek to investigate the Shasta Vein, some 150 meters to the west (Figures 11 and 12). Interest in the potential of the Shasta Vein was renewed in 1978 when an exploration hole intersected 13 feet averaging 0.89 oz/t Au. Subsequent exploration drilling in 1979, 1983, 1984 and 1986 focused on this vein (see Drilling Summary 1977-86, Figure 13). Approximately 32,000 tons of 0.37 oz/t gold were outlined above the 200' level (S. Quinn 1984); and continuity of the vein was established to 600' below surface. The vein is exposed discontinuously over a strike length of 250 m and dips steeply to the east. The width is extremely variable from less than 0.5 meters to 4.0 meters. The grade of mineralization is equally erratic with the best values accompanying concentrations of sulphide along steeply plunging ore shoots. Trench S-2 exposes a wide lense of quartz with good gold values accompanying concentrations of galena and pyrite (Figures 15 and 16). The zone probably extends to the 200 foot level where the workings expose a sulphide-quartz lense. A portion of this ore lens has been displaced some 10 meters by a steeply dipping fault. Some of the better drill intersections appear to have penetrated this shoot.



LEGEND

- Intersected Vein: Drilling and Workings
- - - Projected Vein: Partially Drilled

IMPERIAL METALS CORPORATION	
CUNNINGHAM CREEK	
FIGURE II	N.T.S. 93A/14
200' LEVEL PLAN	
Cariboo Mining Division, British Columbia	
SCALE: 1:2000	GEOLOGIST: S.P. QUIN, B.Sc.
DATE: MAY, 1987	DRAWN BY: S. HAWORTH

3.4 Hudson Vein

The Hudson Vein strikes approximately N-S and dips approximately 85° to the east. The vein averages 2 to 2.5 m wide and is continuous for approximately 75m before it horsetails, with veins running parallel to foliation. Ore shoots and pods are characterized by irregular masses and bands of sulphides, chiefly pyrite, pyrrhotite and locally sphalerite and galena. In 1938 the vein was extensively explored on four levels down to 600' (Figure 12). Mining was carried out from the 250' level to surface; 12,938 tons of ore were extracted, from which 5,186 oz of gold were recovered before the mine closed in 1939.

3.5 605 Vein

The 605 vein lies east of the Hudson and Shasta Veins. The Vein was explored in 1938 by extending the 200' & 600' levels from the Carriboo - Hudson workings. Sampling on the 200' level, at that time, averaged 0.25oz/t Au over 150' drift length (Figure 12). Five drill holes tested the 605 vein during the 1983-84 programs and another two holes, in 1986, tested the south extension. Results are particularly encouraging along the southern extension; DDH 86-20 cut 2.5 meters of quartz/sulphide vein grading 0.8 oz/t Au.

3.6 Other Quartz Veins

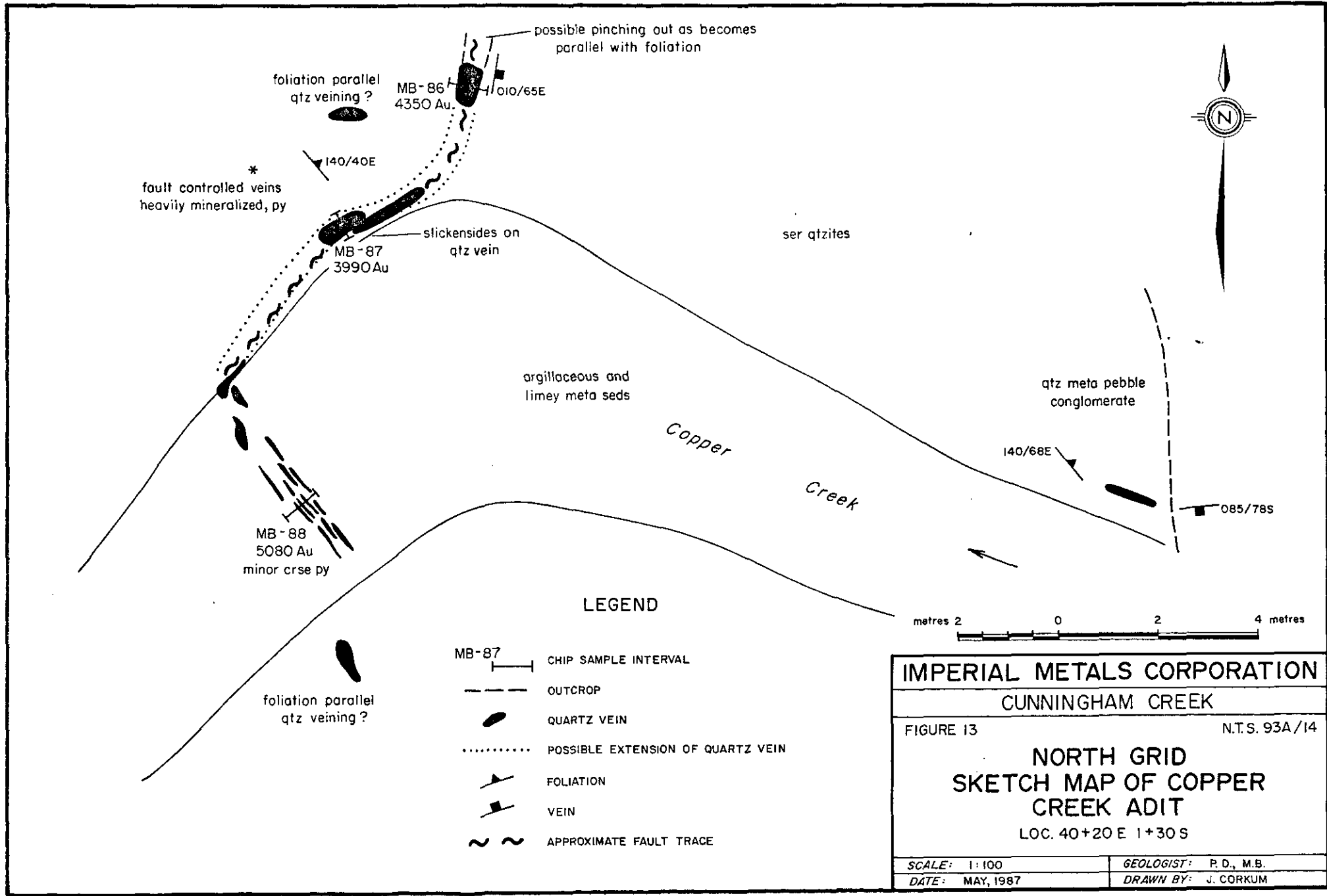
Numerous other quartz veins transect the area. In the past sampling of veins has been somewhat random and less than thorough. Most veins are barren of mineralization. Anomalously high gold values have been obtained from several veins and other gold bearing veins are suspected in areas of high gold soil anomalies. Several veins will require further investigation, these include: quartz/sulphide veins exposed southeast of the 605 vein, quartz veins in the immediate area of the newly discovered "replacement" showings, veins with accompanying pyrite, pyrrhotite and galena near the "sulphide" and "old adit" showing area, quartz/sulphide veins and stockworks on the west side of Peter Creek near the north end of the property and an extensive but erratically mineralized vein system on the ridge flank, long the east side of the claims.

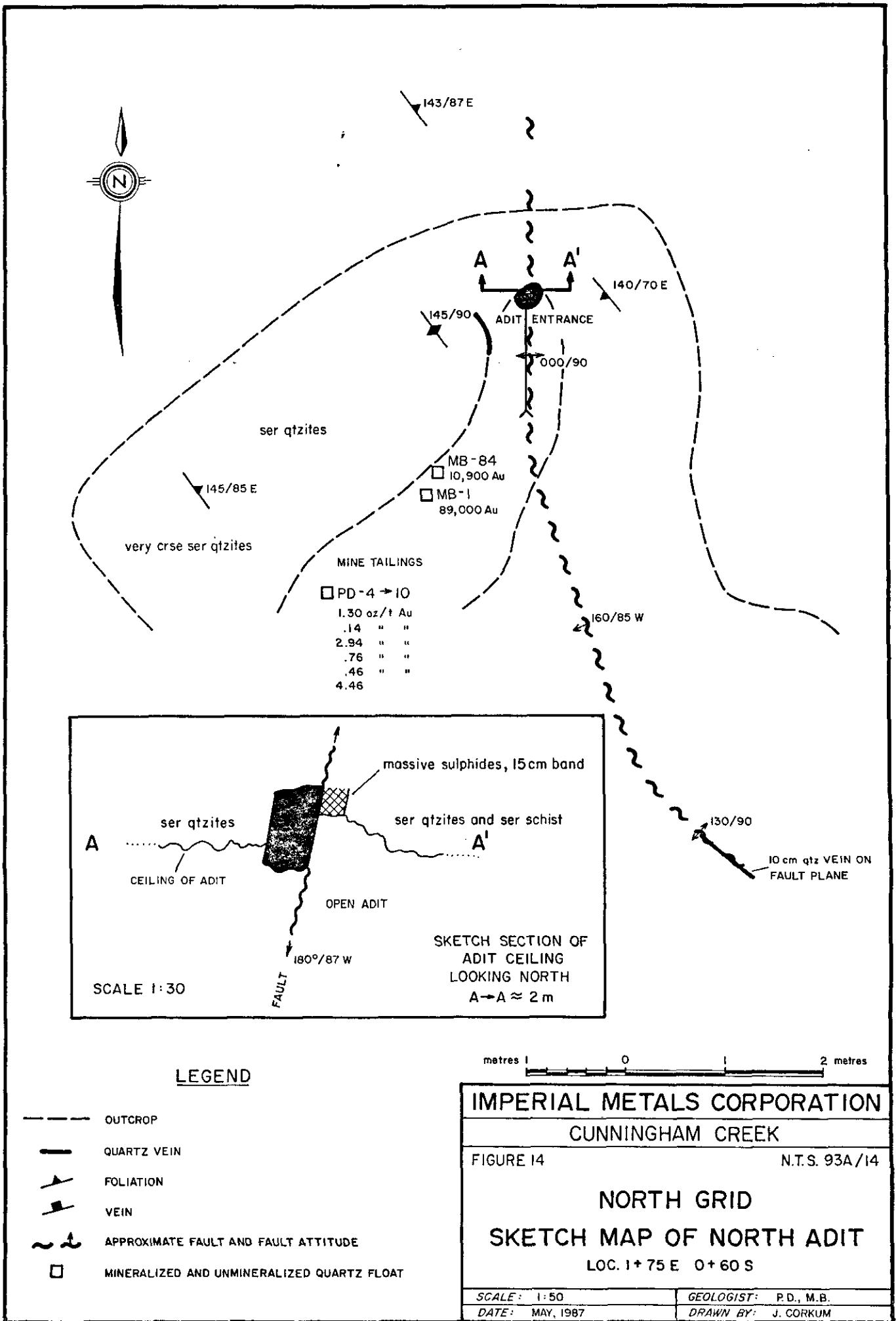
Two well mineralized quartz veins, occur near the north property boundary, close to the junction of Copper and Peter Creeks. The old adits and shallow workings are largely overgrown and partially caved. Pannel samples across the Copper Creek Vein averaged .14 oz/t over 0.5 m. Average values from dump material from the North Adit Vein are .34 oz/t with selective samples averaging 1.8 oz/t (Figures 17 and 18).

3.7 "Replacement" Type Mineralization

It was not until 1983 that the potential for discovery of "replacement" type gold deposits on the property was recognized. This is the most important type of mineralization at the Island Mt. and Mosquito Creek Mines near Wells. This "replacement" mineralization tends to be high grade (0.5 oz/t Au) and occurs as shallowly plunging pencil-shaped masses of pyrite in limestone. The so-called "sulphide and "IP" showings on the Cunningham property occur within a limestone/argillite unit just north of the junction of Pearce and Peter Creeks (Figure 15 and 15A). These mineral occurrences are characterized by small pods and irregular masses of pyrrhotite, pyrite and/or galena. High but erratic gold and/or silver values accompany the sulphides. Holes 84-22,23,24 and holes 86-12,13 tested the "sulphide" showing. Results were generally discouraging with best values occurring in a quartz lens. Holes 86-9 tested the down dip extension of the sulphide showing and holes 86-10,11 tested the strike extension of the zone along an IP target. Results suggested the IP anomaly to be due to graphite (Figure 16). North of the Cunningham Claims, similar silver-bearing galena pods have been the target of extensive trenching and drilling (Chaput's Claims).

During the 1986 program, massive gossanous, iron oxide float and outcrop was discovered adjacent to a limestone unit in a narrow north-trending valley west of the Shasta Vein (Figure 20). Samples gave anomalously high gold values up to 4,700 ppb. Drill testing with short holes, (86-14 to 19), proved difficult because the body apparently plunges shallowly northward along topography.





143/87 E

A

A'

140/70 E

145/90

ADIT ENTRANCE

000/90

ser qtzites

MB-84
10,900 Au

MB-1
89,000 Au

very crse ser qtzites

MINE TAILINGS

□ PD-4 → 10

1.30 oz/t Au

.14 " "

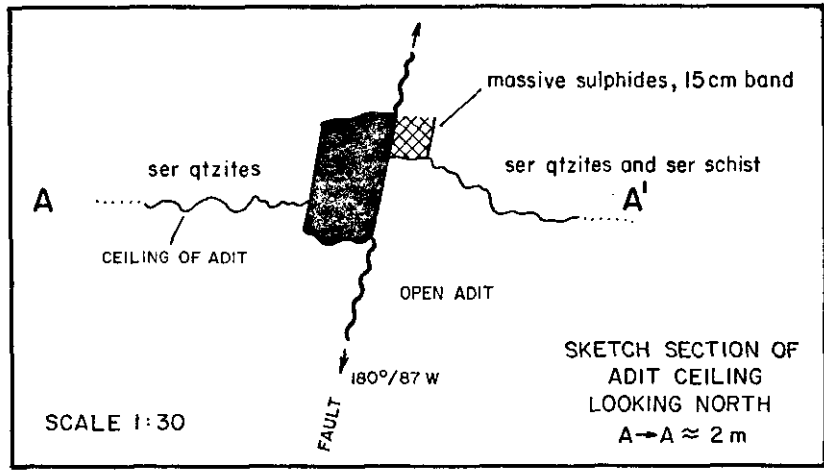
2.94 " "

.76 " "

.46 " "

4.46 " "

160/85 W



130/90

10 cm qtz VEIN ON FAULT PLANE

metres 1 0 1 2

However, DDH 86 15 and 16, intersected several feet of semi-massive, weakly banded pyrite and lesser pyrrhotite. Assays results were discouraging. The similarity of this "replacement" body to those of the Wells deposits is striking, and although the lack of gold in this occurrence is disconcerting, the discovery highlights the potential for significant sized replacement bodies on the limestone horizon.

4. DRILLING

Drilling programs were conducted in 1977, 1979, 1983, 1984 and 1986; footage totalled 1,512', 741', 1,683', 3,716' and 7,632' respectively. Most drilling focussed on exploration of the Shasta Vein. Figures 16, 19 and 20 show the location of all holes drilled on the property. A Summary Table of all drill hole data plus intersections is presented in Figure 13; a more detailed table showing significant results in 1986 is shown in Figure 14. Cross sections for all 1986 drill holes are presented in Figures 28 to 43.

The 1986 drilling was contracted to Frontier Drilling of Kelowna. A Longyear 34 was mobilized to the property on August 12 and demobilized on September 28, 1986.

All core (NQ) for the 1986 program was photographed (see Figures 21, 21A and 22) and logged (Appendix A). Selected intervals, usually with visible sulphides, were split and sent to Acme Analytical Labs in Vancouver for assay or geochemical analyses. The geochemical/assay certificates are presented in Appendix B. The 1986 drill core is stored in core racks at camp; core from previous drilling is organized and stored in a shelter at camp.

Cross-sections (1:500) for each hole are presented in Figures 28 to 43 (in pocket). Correlation with surface (Figure 15) and other holes on the same section was attempted but no clear marker horizons (i.e. coarse quartzite beds) were readily noted. Major quartz vein intersections, such as the Shasta Vein, could generally be recognized from hole to hole but correlation of narrower veins was difficult, if not impossible.

Co-ordinates of drill holes were measured by chain and compass from grid stations; elevations were approximated (see Figures 15 and 16 for drill hole locations). A survey tying in all drill hole collars is recommended -

FIGURE 17

1986 DRILLING

SIGNIFICANT INTERCEPTS

DDH#	Samp. #	From (m)	To (m)	Length (m)	Cu ppm	Pb ppm	Zn ppm	Ag oz/t	Au oz/t	Fe %
<u>Shasta</u>										
86-1	094816	101.26	101.82	0.56	17	84	13	0.06	0.426	6.30
	094817	101.82	102.20	0.38	8	13	6	0.01	0.139	1.99
	094823	109.24	109.59	0.35	3	9	33	0.01	0.029	5.89
86-2	094841	113.70	114.37	0.67	11	126	42	0.02	0.025	4.03
	094844	116.00	116.86	0.86	23	32	36	0.04	0.075	5.20
86-3	094850	28.14	28.36	0.22	2	12	33	0.01	0.031	4.91
	094854	78.35	78.40	0.05	7	23	4	0.01	0.118	4.06
86-4	094868	140.40	141.15	0.75	8	32	6	0.03	0.213	6.68
	094869	141.15	141.65	0.50	4	8	8	0.01	0.008	1.25
	094870	141.65	142.10	0.45	12	28	35	0.01	0.101	6.00
86-6	094892	103.0	103.1	0.10	101	56	12	0.05	0.055	5.47
86-7	0001	131.6	132.7	1.10	25	1291	3	0.94	0.002	0.61
86-8	no significant mineralization									
<u>Shasta</u>										
86-21	0076	90.15	(90.2)	0.05	14	28	21	0.12	0.145	18.64
	0077	91.2	91.4	0.20	9	49	105	0.02	0.144	15.50
86-22	no significant mineralization									
<u>605</u>										
86-5	094880	133.4	133.7	0.30	33	107	50	0.04	0.655	19.23
	094883	140.4	140.7	0.30	13	1894	1962	0.09	0.065	2.57
	094884	140.7	143.7	3.00	15	72	197	0.01	0.008	4.60
	094885	143.9	144.3	0.40	36	22	37	0.01	0.012	4.72
86-20	0069	125.5	127.8	2.5	19	18195	15733	0.99	0.802	4.47

Continued Figure 17

Sulphide Zone (I.P. Target)

86-9	0022	66.75	66.90	0.15'	271	22386	14902	0.77	0.001	10.93
86-10		no significant mineralization								
86-11		no significant mineralization								

Qtz Vein Sulphide Zone

86-12	0030	42.2	43.1	0.90	10	14	10	0.01	0.042	8.53
86-13		no significant mineralization								

<u>DDH#</u>	<u>Samp. #</u>	<u>From (m)</u>	<u>To (m)</u>	<u>Length (m)</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag oz/t</u>	<u>Au oz/t</u>	<u>Fe %</u>
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Replacement Zone

86-14		no significant Au mineralization								
86-15		no significant Au mineralization								
86-16		no significant Au mineralization								
86-17		no significant Au mineralization								
86-18		no significant Au mineralization								
86-19	0055	39.9	40.2	0.3	67	585	469	0.01	0.055	6.04

FIGURE 18

CUNNINGHAM CREEK DRILLING SUMMARY 1977-86

YEAR	DDH NO.	TARGET:	LENGTH (metres)	PROJECTED LENGTH	HOLE DIP	AZIMUTH	COLLAR LOCATION		INTERSECTION(metres)			TRUE LENGTH	GRADE				
							EASTING	SOUTHING	FROM	TO	LENGTH		Au(g/t)	Ag(g/t)	Pg(%)	Zn(%)	
1977	1	Recon.		0							0						
	2	Recon.		0							0						
	3	Recon.		0							0						
	4	Shasta	35.36	25	-45	225	3+67	1+60	23.5	27.4	3.9	30.51					
	5	Recon.		0							0						
1978	No Drilling																
1979	1	Shasta	49.68	21	-65	230	3+67	1+60	34	36.3	2.3	11.49					
	2	Shasta	67.37	18	-75	055	3+84	1+64	39.9	41.5	1.6	2.13		?			
									42.1	43	0.9	2.02		1.37			
	3	Shasta	23.16	18	-40	225	3+94	1+75	17.1	18.9	1.2	2.23		12			
	4	Shasta	34.75	15	-65	225	3+67	1+60	22.9	25.3	2.4	0.03		0.34			
	5	Shasta	48.77	36	-42	040	2+96	1+85	5.5	7	1.5	20.3		5.49			
1981	No Drilling																
1982	No Drilling																
1983	1	Shasta	32	23	-45	230	3+65	1+69	10.7	12.3	1.6	1.2		0.34			
									17.7	18	0.3	6.03		1.03			
	2	Shasta	36.58	28	-40	055	3+84	1+64	25.3	26.9	1.5	0.03		0.34			
	3	Shasta	42.98	21	-50	055	3+84	1+64	26.8	27.7	0.9	0.07		0.34			
	4	Shasta	57.91	15	-75	055	3+84	1+64	53.5	53.9	0.4	0.03		0.34			
	5	Shasta	41.15	32	-40	055	4+08	1+82	35.1	35.7	0.6	0.03		0.34			
	6	Shasta	47.55	24	-60	055	4+08	1+82	24.5	25.6	1.1	91.27		295.89			
	7	Shasta	41.15	21	-60	055	3+43	1+60	27.7	29.3	1.6	0.03		0.34			
	8	Shasta	36.88	28	-40	050	3+43	1+60	24.1	25.3	1.2	0.03		0.34			
	9	Shasta	53.95	14	-75	050	3+43	1+60	50.6	50.9	0.3	2.4		0.69			
	10	Shasta	41.15	29	-45	055	3+20	1+60	33.8	34.4	0.6	0.03		0.69			
									14.1	16	1.9	0.72		1.03			
	11	Shasta	35.36	25	-45	055	2+82	1+60	8.4	10.1	1.7	3.46		62.74			
	21	605	51.82	37	-45	036	3+85	0+63			0						

FIGURE 16

CUNNINGHAM CREEK DRILLING SUMMARY 1977-86

YEAR	DDH NO.	TARGET:	LENGTH (metres)	PROJECTED LENGTH	HOLE DIP	AZIMUTH	COLLAR LOCATION		INTERSECTION(metres)		TRUE LENGTH	GRADE				
							EASTING	SOUTHING	FROM	TO		LENGTH	Au(g/t)	Ag(g/t)	Pb(%)	Zn(%)
1984	1	Shasta	52.12	26	-60	225	4+08	1+67	46.8	47.4	0.6	> .01	0.34			
	2	Shasta	57	29	-60	225	3+25	1+40	48.2	48.8	0.6	77.38	24.34			
	3	Shasta	45.72	32	-45	225	3+25	1+40	40.4	40.7	0.3	13.95	27.09			
	4	Shasta	47.85	24	-60	225	3+02	1+42	37.2	39	1.8	9.15	1.37			
	5	Shasta	40.23	28	-45	225	3+02	1+42	30.6	31.7	1.1	6.82	13.37			
	6	Shasta	49.68	17	-70	225	2+85	1+45	NO INTERSECTION							
	7	Shasta	40.54	26	-50	225	2+85	1+45	28.2	29.1	0.9	10.11	5.49			
	8	Shasta	57	19	-70	225	2+62	1+35	NO VEIN							
	9	Shasta	38.4	29	-40	225	2+62	1+35	NO VEIN							
	10	Shasta	44.2	34	-40	225	2+39	1+32	NO VEIN							
	11	Shasta	53.04	22	-65	225	2+39	1+32	NO VEIN							
	12	Shasta	39.01	30	-40	225	2+22	1+32	NO VEIN							
	13	Shasta	44.2	19	-55	225	2+22	1+32	24.6	24.9	0.3	20.38	5.86			
	14	Shasta	38.1	29	-40	225	4+40	1+74	31.1	32	0.9	0.03	0.34			
	15	Shasta	52.12	22	-65	225	4+40	1+74	46.3	47.4	1.1	0.03	0.34			
	16	Shasta	64.01	41	-50	210	4+40	1+74	36.7	36.9	0.2	0.1	0.34			
1984	17	605	48.77	21	-65	245	3+94	0+11	#	12.8	14.2	1.4	0.03	0.03		
	18	605	42.67	33	-40	245	3+94	0+11	#	13.4	14.1	0.7	55.03	12.34		
	19	605	66.45	33	-60	250	3+44	0+12N	#	16.2	16.9	0.7	0.31	43.2		
										21.6	22.1	0.5	0.03	1.03		
	20	605	49.07	38	-40	250	3+44	0+12N	#	30.8	31.2	0.4	6.38	7.89		
	21	605	49.07	35	-45	250	3+70	0+02	#	39.6	41	1.4	0.21	0.34		
# LOCATION AS PLOTTED FIG. 9, 1986 REPORT																
22	IP		46.02	30	-50	065	11+00W	0+96N	#	34	34.4	0.4	65.49	73.37	1.25	1.24
										35.5	37.2	1.7	2.58	146.06	4.39	0.53
23	IP		49.07	17	-70	065	11+00W	0+96N			0					
24	IP		15.24	0	-90	-	11+00W	1+20N			0.3	0.1	64.86	7.33	4.86	

1985 No Drilling

- 17 -

FIGURE 18

CUNNINGHAM CREEK DRILLING SUMMARY 1977-86

YEAR	DDH NO.	TARGET:	LENGTH (metres)	PROJECTED LENGTH	HOLE DIP	AZIMUTH	COLLAR LOCATION		INTERSECTION(metres)		TRUE LENGTH	GRADE			
							EASTING	SOUTHING	FROM	TO		LENGTH	Au(g/t)	Ag(g/t)	Pb(%)
1986	1	Shasta	136.28	91	-48	240	3+83	0+92	101.26	101.82	0.56	14.61	2.06	84	13
									101.82	102.2	0.38	4.77	0.34	13	6
									109.24	109.59	0.35	0.99	0.34	9	33
	2	Shasta	142.38	82	-55	235	3+83	0+92	113.7	114.37	0.67	0.86	0.69	126	42
									116	116.36	0.96	2.57	1.37	32	36
	3	Shasta	206.40	53	-75	237	3+83	0+92	28.14	28.36	0.22	1.06	0.34	12	33
									78.35	78.4	0.05	4.05	0.34	23	4
	4	Shasta	151.52	103	-47	209	3+83	0+92	140.4	142.1	1.7	4.35	0.69	25	15
									143.9	144.3	0.4	0.41	0.34	22	37
	5	605	163.70	120	-43	064	3+83	0+92	133.4	133.7	0.3	22.46	1.37	107	50
									140.4	140.7	0.3	2.23	3.09	1894	1962
									143.9	144.3	0.4	0.41	0.34	22	37
	6	Shasta	118.2	81	-47	240	3+00	0+75	103	103.1	0.1	1.89	1.71	56	12
									131.6	132.7	1.1	0.07	32.23	291	3
	7	Shasta	148.5	67	-63	240	3+00	0+75	NO SIGNIFICANT MINERALIZATION						
	8	Shasta	206.4	57	-74	240	3+00	0+75	NO SIGNIFICANT MINERALIZATION						
	9	Sulphide	133.3	99	-42	245	10+57W1	+92N	66.75	66.9	0.15	0.03	26.4	22386	14902
	10	Sulphide	95.4	39	-50	245	11+41W2	+46N	NO SIGNIFICANT MINERALIZATION						
	11	Sulphide	54.5	36	-48	282	13+25W3	+92N	NO SIGNIFICANT MINERALIZATION						
	12	Q.V. Sulph.	83.8	54	-50	028	11+00W1	+10N	42.2	43.1	0.9	1.44	0.34	14	10
	13	Q.V. Sulph.	61.2	38	-52	112	11+00W1	+10N	NO SIGNIFICANT MINERALIZATION						
	14	Replacement	57.0	39	-47	240	0+05W2	+18S	NO SIGNIFICANT MINERALIZATION						
15	Replacement	35.7	25	-46	225	0+04W2	+37S	NO SIGNIFICANT MINERALIZATION							
16	Replacement	25.6	18	-46	225	0+05W2	+37S	NO SIGNIFICANT MINERALIZATION							
17	Replacement	20.4	14	-46	244	0+25E2	+50S	NO SIGNIFICANT MINERALIZATION							
18	Replacement	17.4	7	-65	244	0+25E2	+25S	NO SIGNIFICANT MINERALIZATION							
19	Replacement	42.4	30	-45	230	1+25W2	+12S	39.3	40.2	0.3	1.89	0.34	585	469	
20	605	139.3	90	-50	193	4+00E0	+38N	125.5	127.3	2.3	27.5	33.94	18195	15733	
21	Shasta	103	73	-45	230	3+23E0	+98S	90.15	90.2	0.05	4.97	4.11	28	21	
								91.2	91.4	0.2	3.91	7.89	49	105	
22	Shasta	184.5	81	-64	240	4+32E1	+28S	NO SIGNIFICANT MINERALIZATION							

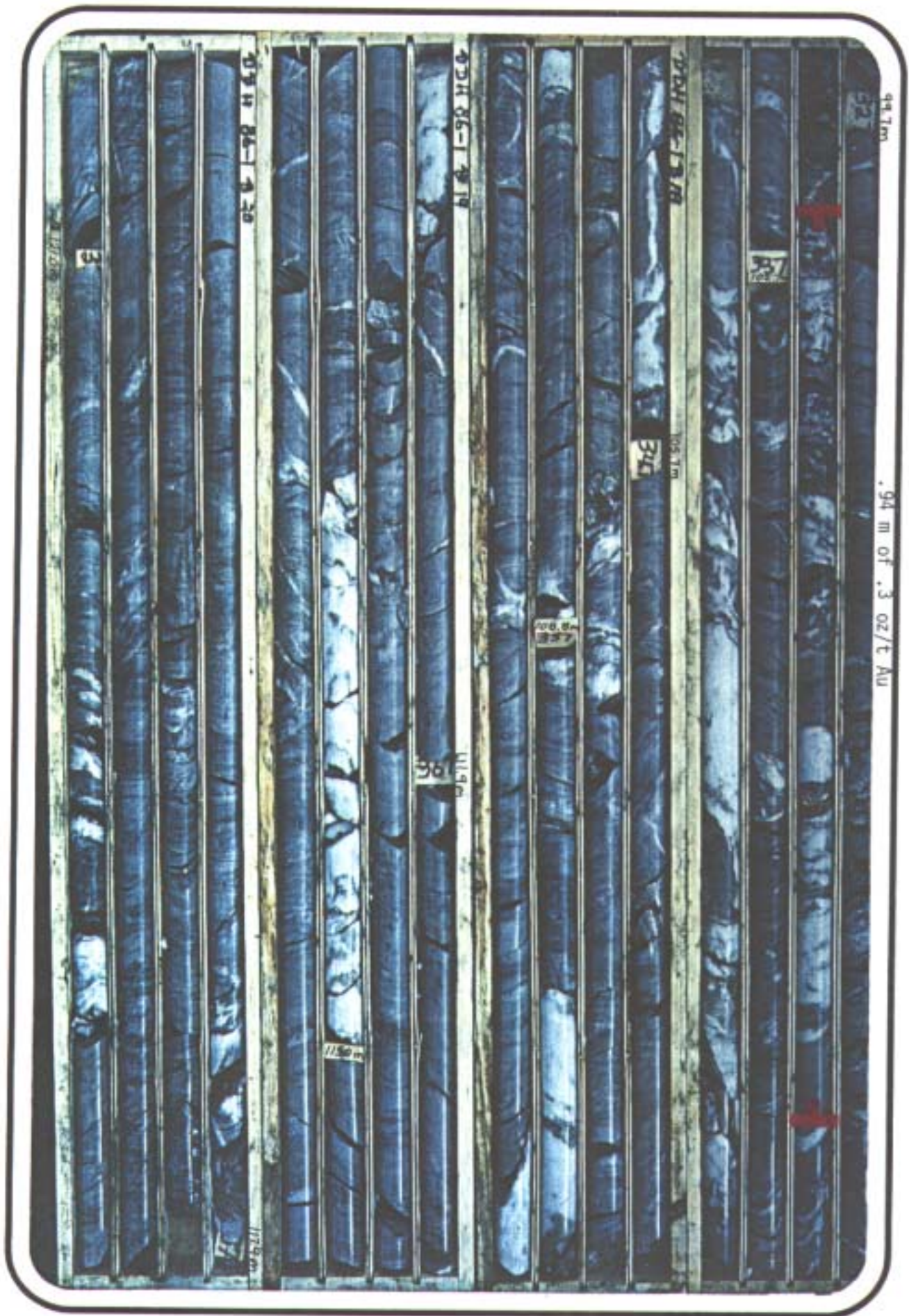


Figure 21 Photo of Shasta Vein Intersection, DDH-86-1

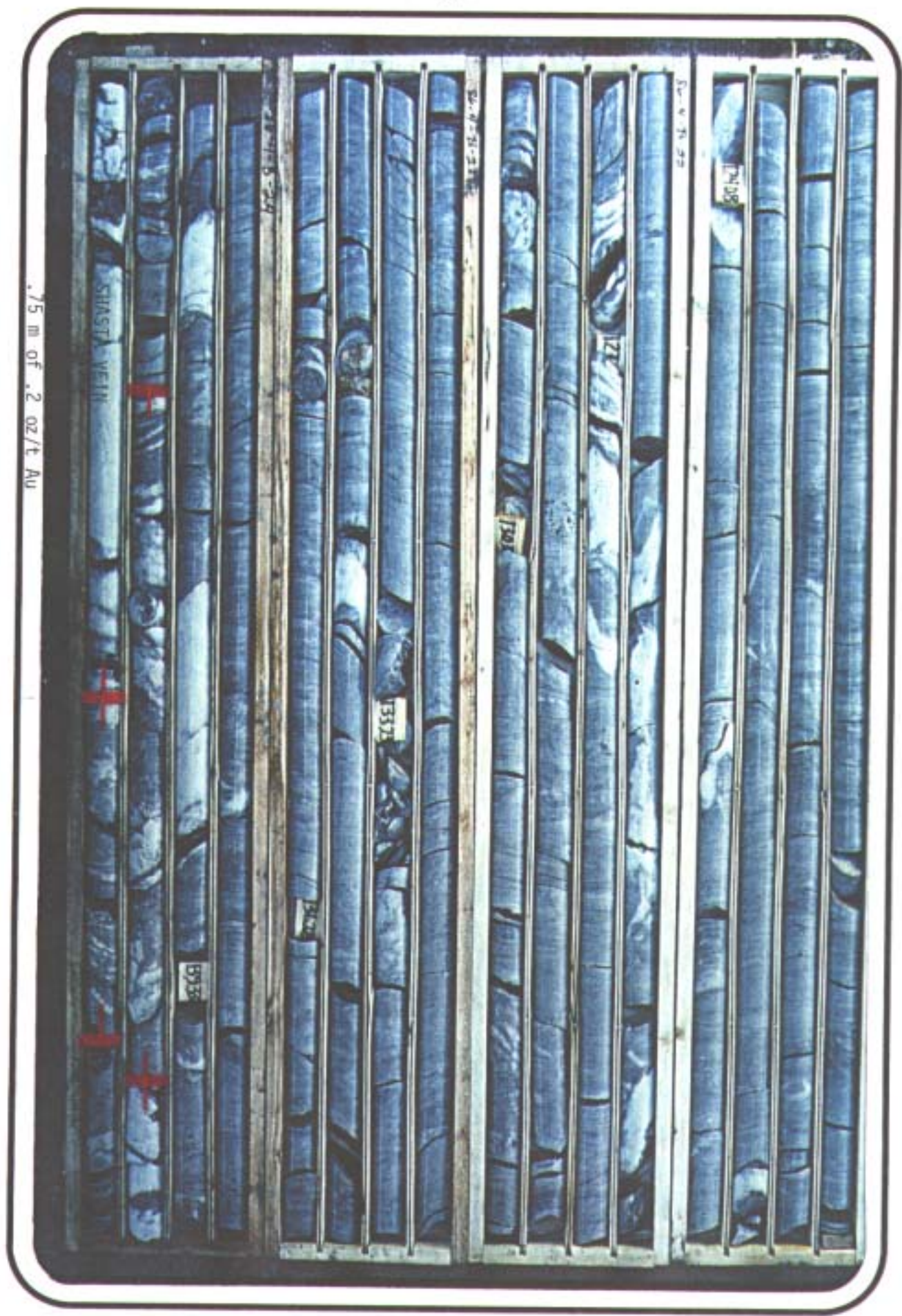


Figure 21A Photo of Shasta Intersection, DDH-86-4

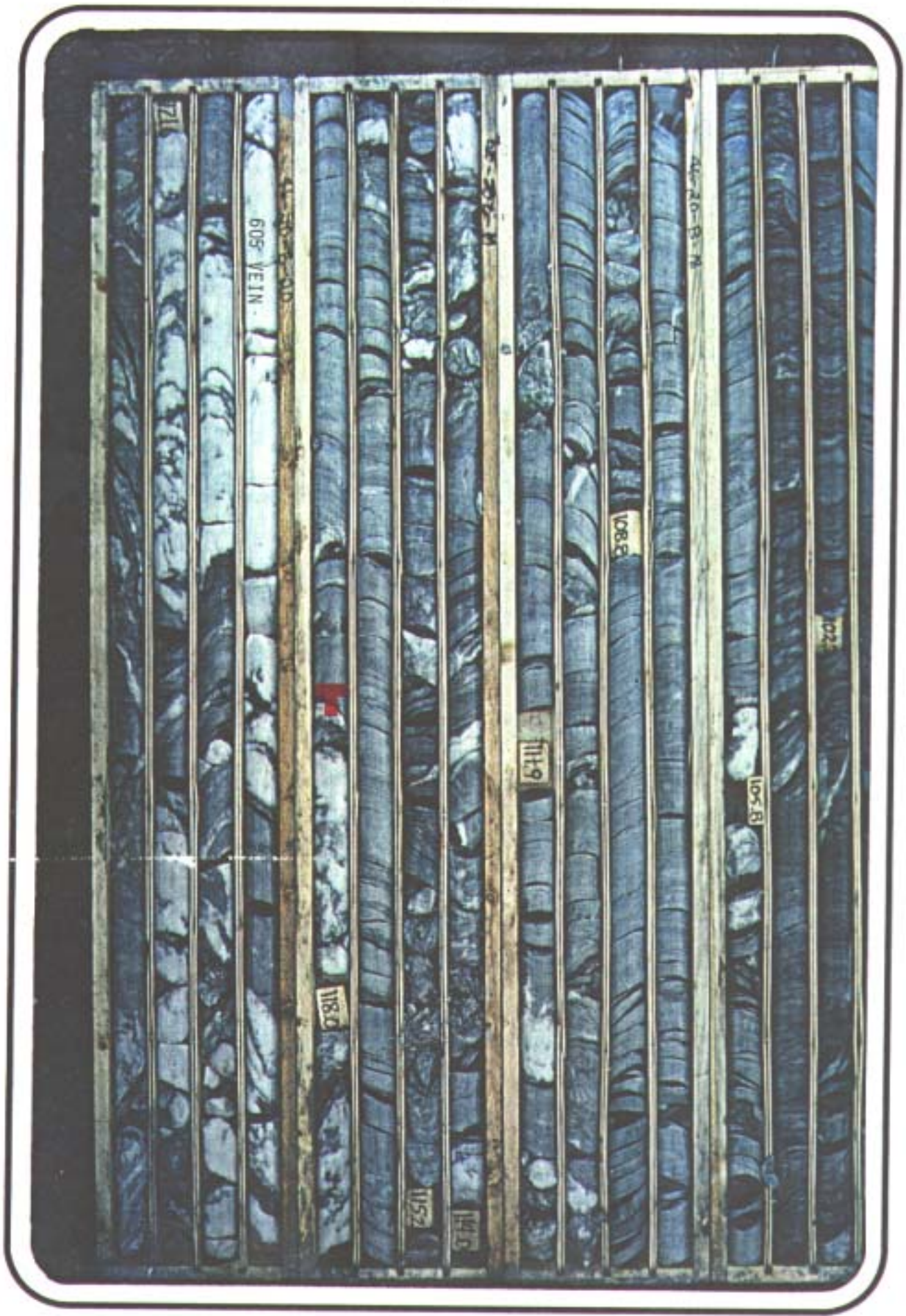
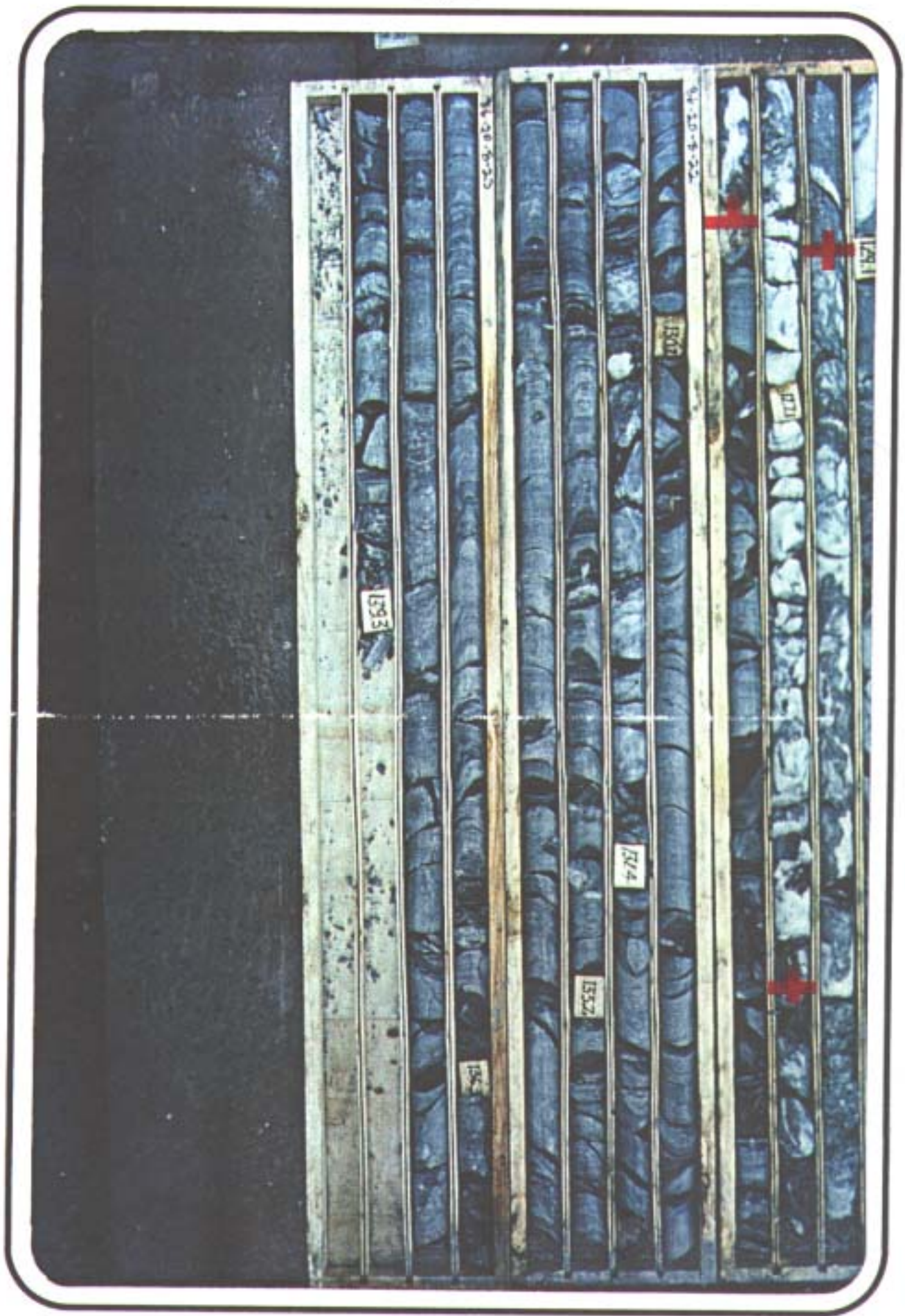


Figure 22 Photo of 605 Intersection, DDH- 86-20 , con't.



2.5 m of 0.8 oz/t Au

Figure 22 Photo of 605 Intersection, DDH-86-20

particularly if one is attempting to test the projection of specific targets such as plunging ore shoots. A single-shot Sperry-Sun survey was taken at the bottom of each hole. Holes flatten an average of 1° per 100 feet. Core recovery was generally good; drill bit consumption was high.

5. GEOCHEMISTRY

Several generations of geochemical soil surveys have been carried out over different grids, using various line spacings and sample interval spacings.

Samples from the initial programs were not analyzed for gold. The 1986 program included fill-in line sampling and extension of some grids. Samples were collected at 10m spacing with lines ranging between 25 and 100 meters apart. Some 939 soil samples were collected and analyzed in 1986.

Samples of the B horizon were taken, where possible, at a depth of approximately 20-30 cm. They were then shipped to Acme Analytical Labs in Vancouver for 30 - element ICP and Au by A.A. analyses. Statistical analyses was carried out on the geochemical results from 1417 soil samples (including the 939 from the 1986 program). The results, by Dr. A. Clarke are presented in Appendix C. Results of the 1984 and 1986 sampling program for the various grids are presented in Figures 23 to 26. In addition to Au, Ag, Pb and Zn values, the location and anomalous values of all rock samples collected in 1986 are plotted. Only gold values (>100ppb) are plotted on the geochem maps. The 1986 assay and geochemical analysis values are included in Appendix B.

Previous sample and line spacing was too large, given the lack of significant lateral dispersion and the width of the target sought (approximately 1m). A minimum sample spacing of 10m and line spacing no greater than 25m is recommended. Although other metals such as lead, zinc and silver can locally be good indicator elements; gold analyses is by far the best indicator for gold mineralization.

Soil geochemistry appears to be a reliable and useful exploration tool in the Cunningham Creek area. Surficial cover is generally less than 2 meters. Soil development is moderate and dispersion restricted. Contamination from previous exploration and mining activities is recognized and is especially a problem in creek valleys that were worked for placer gold.

Results indicate several of the known mineralized veins (i.e. Hudson 605 and Shasta) and other anomalous areas where follow-up trenching/rock sampling is warranted, or where additional soil sampling is required to outline the extent of the anomaly.

6. TONNAGE AND GRADE CALCULATIONS

Tonnage and grade figures for the Shasta Vein above the 200' level, were calculated by S. Quinn following the 1984 drilling program. Reserves of 32,000 tons of 0.37 oz/t gold are slightly less than those calculated from the 1983 drilling results. Drill intersections are approximately 60' apart and are plotted on a longitudinal section (Figure 27). A minimum mining width of 3' was used for the reserve calculations. Additional calculations including known or suspected reserves of all veins within the 200' level workings, indicate a total 60,000 tons grading 0.36 oz/t Au.

Like many other auriferous quartz veins, gold mineralization is erratic with the better values occurring in steeply plunging, locally faulted, ore shoots. Reserve estimations are at best, approximate. Confidence in projecting mineral zones could be improved if the distribution, geometry and character of ore shoots were better understood.

The 1986 drilling indicated continuity of the Shasta Vein to at least the 600' level (Figure 27). Holes are too widely spaced to speculate what additional tonnage might be inferred from the deeper drilling.

7. DISCUSSION

Recent exploration programs have been directed at drill testing the Shasta Vein; only secondary consideration has been given to the adjacent 605 and Hudson Veins. Evaluation of the potential of all gold bearing veins in the immediate area is required before any serious mining developments are considered.

Geological mapping of the property and detail mapping of the showing areas (including underground), is lacking. Without detailed structural measurement and knowledge of the character of the mineralization, projections and correlation of ore intercepts is difficult and uncertain. Some geological data and assay results is available from old reports; this data must be examined, compiled and integrated with recent exploration data.

Discovery of a "replacement" type sulphide body, highlights the potential of this area for further discoveries. The presence of up to 0.4 oz/t gold in the gossanous outcrop and float boulders, and the lack of appreciable gold in the underlying sulphides is difficult to understand.

Pessimistically, one might venture that these "replacement" sulphide deposits are barren and the gold in the oxidized portions is leached from nearby gold veins and "fixed" in the gossanous zones. However, the strong similarity of the host environment and sulphides to the "replacement" deposits at Wells, together with the close spacial and probably genetic relationship with sulphide/quartz veins (i.e.: feeders) support the view that gold bearing replacement sulphide bodies will be found along the favourable limestone.

8. CONCLUSION

The Cunningham Creek property is located along the same belt of rocks hosting the gold deposits at Wells. The immediate geological setting and character of the mineralization is strikingly similar. The overall potential of the Hudson, Shasta and 605 Vein systems is not unlike that of the Cariboo Gold Quartz Mine at Wells, where some 1.5 million tons of 0.4 oz/t gold was mined. The discovery of a "replacement" type sulphides along a favourable limestone unit underlines the potential for "replacement" mineralization similar to that of the Island Mountain and Mosquito Creek deposits where some 1.13 million tons of 0.5 oz/t gold was mined.

9. RECOMMENDATIONS

The property warrants further exploration. Work should include compilation of all data, a survey of old workings, drill holes, etc., geological mapping and sampling of property (1:1000) and mineral showings (1:250), underground rehabilitation and sampling of veins, and a minimum of 5000' of drilling to test the Shasta, Hudson, 605 Vein and "Replacement" targets.

10.

ITEMIZED COST STATEMENT FOR 1986

<u>DATES</u> -	August 12 through September 29, 1986.	
<u>WAGES</u> -	Senior Geologist 47 days at \$225.00/day = \$10,575.00	
	Geologist 49 days at \$110.00/day = \$ 5,390.00	
	Field Assistant 29 days at \$75.00/day = \$ 2,175.00	
	Field Assistant 26 days at \$145.00/day = \$ 3,770.00	
	Field Assistant 6 days at \$100.00/day = \$ 600.00	
		\$22,510.00
<u>MEALS</u> -	157 man days at \$30.00/man day =	\$ 4,710.00
<u>TRANSPORATION</u> -	2 months truck rental at \$1,000.00/month=	\$ 2,000.00
	Airfare =	\$ 1,000.00
		\$ 3,000.00
<u>GEOCHEM AND ASSAY</u> -	188 core samples ICP + Au at \$13.00 = \$2,444.00	
	108 grab samples ICP + Au at \$13.00 = \$1,404.00	
	939 soil samples ICP + Au at \$10.00 = \$9,390.00	
	26 core assays Au at \$12.00 = \$ 312.00	
	7 core assays Au + Ag at \$15.00 = \$ 105.00	
	2 whole rock samples at \$9.00 = \$ 18.00	
		\$13,673.00
<u>DRILLING</u> -	7,632' (2,327m) at \$15.75/foot = \$120,204.00	
	mob/demob = \$ 3,514.00	
	field charges = \$ 31,087.00	
		\$154,805.00
<u>REPORT PREPARATION</u> -	drafting 200 hours at \$15.00/hour = \$3,000.00	
	reports = \$1,500.00	
		\$ 4,500.00
	<u>TOTAL:</u>	\$203,198.00
	=====	

11.

STATEMENT OF QUALIFICATIONS

I, Peter Ross Delancey, of 1748 Dunbar Street, Vancouver, B.C. do hereby certify that:

1. I am a Senior Geologist employed by Imperial Metals Corporation Suite 800 - 601 West Hastings Street, Vancouver, B.C.
2. I have been practising my profession as an exploration geologist since 1967, and have been involved in mining exploration in British Columbia for 17 years.
3. I am a Professional Engineer registered with the Professional Engineering Association of British Columbia.
4. I am a Fellow of The Geological Association of Canada.
5. I obtained my Master of Science Degree from The University of Manitoba, Winnipeg, Manitoba in 1967.


Peter R. Delancey, P. Eng.

Date: July 10/1987

STATEMENT OF QUALIFICATIONS

NAME: Mark Baknes

POSITION: Field Geologist, Imperial Metals Corporation

EDUCATION: B.Sc. - Geology 1986, University of British Columbia

EXPERIENCE: Five summers of varied exploration in British Columbia with mining companies.

12. BIBLIOGRAPHY - List of Reports on Cunningham Property

- MARCH 1987 - Summary Report of the Cunningham Creek Gold Property
by P. Delancey
- OCTOBER 1986 - Cunningham Creek 1986 Activities and Results
by P. Delancey
- JANUARY 1985 - The Geology and Exploration of the Cunningham Creek Property
by S. Quin
- AUGUST 1984 - Drilling Report on the Cunningham Creek Claim
by S. Quin
- AUGUST 1984 - Logistics Report on Induced Polarization Surveys
by J. Hawkins (Geoterrex)
- FEBRUARY 1984 - Drilling Report on the Cunningham Creek
by S. Quin
- DECEMBER 1983 - Geochemical Report on the Cunningham Creek Claim
by S. Quin
- SEPTEMBER 1983 - A Summary and Evaluation of the Cunningham Creek Property
with Proposed Exploration for Fall 1983
by S. Quin
- AUGUST 1980 - Geological Report Black Martin Mineral Claim
by S. Quin
- AUGUST 1980 - Prospecting Report Black Martin Mineral Claim
by S. Quin
- MAY 1979 - Report on the Cunningham Creek Property
by J. Elwell
- OCTOBER 1977 - Report on the Cunningham Creek Drilling Project
by G. Allen
- MAY 1977 - Report on Mineral Lease M32 and the Jim Claim
by G. Allen
- JANUARY 1977 - Report of the 1976 Detailed Exploration Program conducted
on the Cunningham Creek Property
by G. Allen
- MARCH 1974 - Geochemical and Geophysical Report on the Cunningham Creek
Property
by G. Allen

APPENDIX A

DIAMOND DRILL LOGS

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-47° PAGE 1 OF 8
 HOLE NO. : 86 - 1 LOC. : Approx. 3+83E/0+92S ATTITUDE BOTTOM: Az. 240°/-49 LOGGED BY: : P. DeLancey
 COMMENCED: August 10, 1986 ELEV. : 1735m % RECOVERY : +90% DATE : Aug. 20/86
 COMPLETED: August 18, 1986 CORE SIZE: NQ LENGTH : 136.28m CORE STORED : At camp
 OBJECTIVE: Test Shasta Vein UNUSUAL FEAT:

From Metres	To Metres	Syb	Description	Sample No.	From Metres	To Metres	Lgth	Rec. M.	Analysis					
									Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag ppm oz/t*	Au pph	Fe %
0.00	0.30	C	Casing - O.C. at collar showed some narrow quartz veins.											
0.30	5.00	Q	Quartzite - fine grained dense tan coloured quartzite Fe Ox soaked in along fractures, local qtz veining and local carbonate along fract. Ground core - very poor rec.	094801	0.30	5.0	4.70	.30	50	600	35	6.1	525	1.94
5.00	41.27	Ser	Interbanded sericite schist and /SS quartzite (light greenish grey) well banded and foliated - from 45° to 90° to C/A generally about 70° to C/A - local "kink" banding is generally indistinct with wispy bands of sericite inter-mixed with sericitic fine grained sandstone. Local zones at Fe Ox along foliation planes. Quartz grains generally indistinct. Local qtz veins - generally white to blueish white. Some zones of mm greyish white sandstone up to 1m; with very minor disseminated Py & along foliation. - qtz veins & adj. silicification.	802	8.46	9.02	0.56	0.56	19	30	34	0.3	15	1.34

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240⁰/-47⁰ PAGE 3 OF 8
 HOLE NO. : 86 - 1 LOC. : .Approx. 3+83E/0+92S ATTITUDE BOTTOM: Az. 240⁰/-49 LOGGED BY : P. DeLancey
 COMMENCED: August 10, 1986 ELEV. : 1735m % RECOVERY : +90% DATE : Aug. 20/86
 COMPLETED: August 18, 1986 CORE SIZE: NQ LENGTH : 136.28m CORE STORED : At camp
 OBJECTIVE: Test Shasta Vein UNUSUAL FEAT:

From Metres	To Metres	Syb	Description	Sample No.	From Metres	To Metres	Lgth	Rec. M.	Analysis					
									Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag ppm	Au ppb oz/t*	Fe %
53.46	58.91		Grey Sericitic Quartzite - banding of grey to greenish grey in indistinct grading into massive zones.											
58.91	60.50		Light grey interbanded sericite schist and quartzite.											
60.50	62.00		Quartzite - relatively massive, light grey, angular to rounded grains up to 3mm in diameter in quartz-sericite matrix (same as 11.98 - 12.84).											
62.00	66.68		Interbanded Sericite Schist and Quartzite - light grey several relatively narrow quartz veins including - three qtz veins with sections of above.	807	63.91	64.71	0.80	0.80	12	9	27	0.1	2	2.73
66.68	97.55		Interbanded sericite schist and quartzite greenish med. grey as in 41.27-51.50. Several irregular - qtz segregations including: - relatively narrow qtz vein, local Py in set.	809	65.36	65.73	0.37		98	10	11	0.1	1	3.18

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 2400/-47° PAGE 5 OF 8
 HOLE NO. : 86 - 1 LOC. : Approx. 3+83E/0+92S ATTITUDE BOTTOM: Az. 2400/-49 LOGGED BY : P. DeLancey
 COMMENCED: August 10, 1986 ELEV. : 1735m % RECOVERY : +90% DATE : Aug. 20/86
 COMPLETED: August 18, 1986 CORE SIZE: NQ LENGTH : 136.28m CORE STORED : At camp
 OBJECTIVE: Test Shasta Vein UNUSUAL FEAT:

From Metres	To Metres	Syb	Description	Smp No.	From Metres	To Metres	Lgth	Rec. M.	Analysis								
									Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag ppm oz/t*	Au ppb t*	Fe %			
			arsenopyrite are noted, frequently occurring adj. to or within sericitic rocks.														
			- relatively narrow qtz veins and segregations with local dol. in ser. sch and quartzite.	815	100.60	101.26	0.66		72	17	60	.01*	.001*	5.94			
			- white irregular qtz veining with lenses of massive, frequently cubic, Py (20%) & associated sericite schist/quartzite, local dolomite, minor gouge near "approx." contact. Py appears to be replacing ser. schist lenses.	816	101.26	101.82	0.56		17	84	13	.06*	0.426*	6.30			
			- white qtz vein with a few lenses of ser. sch./quartzite. Py (1%) concentrated adj. to ser. sch/quartzite (replacing).	817	101.82	102.20	0.38		8	13	6	.01*	0.139*	1.99			
			- ser. sch/squartzite with local rel. narrow qtz vein/segregation with local crystalline dolomite in quartz.	818	102.20	104.34	2.14		16	41	42	.02*	.009*	3.42			
			- white qtz vein with local coarsely xtaline dolomite, local vugs in qtz, lenses of ser.sch/	819	104.34	105.79	1.45		11	2	28	.01*	.011*	4.19			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-47° PAGE 6 OF 8
 HOLE NO. : 86 - 1 LOC. : Approx. 3+83E/0+92S ATTITUDE BOTTOM: Az. 240°/-49° LOGGED BY : P. DeLancey
 COMMENCED: August 10, 1986 ELEV. : 1735m % RECOVERY : +90% DATE : Aug. 20/86
 COMPLETED: August 18, 1986 CORE SIZE: NQ LENGTH : 136.28m CORE STORED : At camp
 OBJECTIVE: Test Shasta Vein UNUSUAL FEAT.:

From Metres	To Metres	Syb	Description	Smp No.	From Metres	To Metres	Lgth	Rec. M.	Analysis						
									Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag ppm oz/t*	Au ppb	Fe %	
			quartzite, minor local Py conc. adj. ser.sch/quartzite. Quartz vein appears to be at a variable and relative shallow angle to C/A (30° to 0°).												
			- ser. sch/quartzite with local qtz segregations and minor narrow "gash" veins across foliation.	820	105.79	107.20	1.41		21	58	48	.01*	.005*	5.17	
			- white qtz veins and dol. with ser. sch/quartzite, minor Py.	821	107.20	107.42	0.22		8	2	25	.01*	0.003*	3.44	
			- Ser. sch/qtz with a couple of +5cm qtz veins, local qtz seg- regation.	822	107.42	109.24	1.82		31	16	44	.01*	.004*	4.32	
			- White coarsely x line qtz with conc. of coarsely xline dolomite, coarse Py and arseno pyrite (3%) in patches adj. dol. & ser. sch/ quartzite.	823	109.24	109.59	0.35		3	9	33	.01*	.029*	5.84	
			- ser.sch/quartzite with minor local narrow qtz veins, segreg- ation and "gash" vein.	824	109.59	110.89	1.30		22	11	78	.1	12	4.70	
			- white qtz vein with very minor lenses of qtz ser/qtzite, local	825	110.89	111.34	0.95		3	8	10	.1	95	1.58	

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 1 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 231°/-55° LOGGED BY : M.F.B./P.D.
 COMMENCED: August 12/86 ELEV. : 1,740 m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NQ LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis							
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %		
0.00	0.30	C	Casing some quartz veins at collar indurated	194828												
0.30	3.80	Q	Qtzite of quartz vein and ser sch. Oxidized along fractures. Recovery very poor assume loss occurred in this interval		.3	(3.8)	3.5	.40	13	73	50	.3	1	2.98		
0	124.08		Ser/Qtzite Interbedded? sericite schist and qtzite greenish grey (refer to desc. 86-1 5-41.27). Some sections are predom qtzite that may be fine to crse grain (.1-3 mm grains). Core foliation axis angle average 60° 0-10 m													
4.30	4.50		- 20 cm qtz vein that supports lge. frags? of yellow rusty qtzite - white qtz may be more advanced qtz segregation within quartzite													
			- greyish wte segregation of quartz within a more qtzite rich section of ser/quartzite - may be a vein	829	9.78	10.78	1.0	1.00	12	13	17	.1	1	1.78		
			White bull qtz vein minor cubes pyrite 1% and also rusty blebs probably being ox. ankerite or siderite. Very poor recovery	830	15.50	(16.85)	1.35	.43	12	14	14	.1	115	1.78		

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 2 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83F 0+925 ATTITUDE BOTTOM: 231°/-55 LOGGED BY : M.E.B./P.D.
 COMMENCED: August 12/86 ELEV. : 1,740m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NQ LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %
			Similar to 829 but has veins of coarse xtaline dolomite along irregular fractures and as xtals supported by qtz. May be some bxx textures but uncertain	831	18.70	18.90	.20	.20	20	17	17	.1	7	3.60
23.00			- small 5 cm qtz vein with coarse xtals dolomite											
23.40			- small 5 cm qtz vein with coarse xtals dolomite											
25.60			- small 4 cm qtz vein with coarse xtals dolomite											
28.50			- small 4 cm qtz vein with coarse xtals dolomite											
			- white and blueish grey quartz veins 1-5 cm thick in ser/qtz dominated by ser that forms green gouge. Qtz has coarse xtaline dolomite that on ox surfaces is rusty. Pyrite is 1% and occurs along foliation planes in ser adj. to quartz.	832	34.42	36.00	1.58	1.58	20	20	61	.1	1	5.35

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 3 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83F 0+925 ATTITUDE BOTTOM: 231°/-55 LOGGED BY : M.E.B./P.D.
 COMMENCED: August 12/86 ELEV. : 1,740 m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NO LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %			
36.00	37.40		- sec of ser/qtzite that is dominated by blueish grey qtz segregations roughly parallel to foliation. Qtz accounts for 60-70% of rk														
			- similar to above but 1-2% py as fine grain blebs and cubes on foliation planes. Qtz is blueish and also white and occurs as segregations and irregular .5 cm wormy veins that roughly follow the contorted foliations	833	41.95	42.45	.50	.50	22	20	96		1	3.80			
45.48	45.70		- same as above - but no sample														
46.75	47.30		- dark greenish grey ser/qtzite colour may reflect more argillaceous protolith. Only minor atzite component, also more finely foliated and foliation is very planar - grades into ser/quartzite														
48.25	48.73		- same as above														
			- 15 cm quartz vein seperated by 20 cm host then another 6 cm qtz vein. White quartz with lenses of ser. Py is minor and diseminiated as fine grains and .5 mm	834	56.20	56.75	.55	.55	7	10	31		1	2.26			

* avg core axis to foliation 45° at 29 m
 60° at 42 m
 55° at 48 m
 45° at 51 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 4 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 231°/-55 LOGGED BY : M.E.B./P.D.
 COMMENCED: August 12/86 ELEV. : -1,740 m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NQ LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %			
			xtals and blebs														
63.11	63.18		- small wte qtz vein with lenses ser sch/qtzite														
64.33	82.90		- Ser/qtzite but with higher density of discordant small qtz veins and segregated qtz. Host of veins is same greenish grey (possible owing to minor increase in chlorite) sericite sch/qtzite being composed of foliated sometimes chloritic sericite schist of interbanded or at times whole sericitic qtzite of fine to coarse grain size. Most often the quartzite is less greenish and more of a med grey colour. +Veins in qtzite appear to fill brittle open space														
64.33	64.73		- short section of blueish grey quartz vein with lenses of ser/qtzite - no sx .70% qtz														
66.00	66.45		same as above but 1% py as fine cubes mostly as selvages. Also calcite xtles in quartz	835	66.00	66.45	.45	.45	29	28	40	.1	1	8.08			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 6 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 231°/-55 LOGGED BY : M.E.B./P.D.
 COMMENCED: August 12/86 ELEV. : 1,740 m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NO LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %				
98.45	98.85		- blueish grey/white qtz vein only trace Py in lenses of ser/quartzite															
101.02	101.42		- ser sch with 30% quartz veins 1 - 3 cm of white qtz. 1% Py as selvage in ser sch lenses.															
			- 30 - 40% qtz veins 1 - 4 cm with up to 5% py as crse cubes within qtz as coarse selvage and as finely disem grains and blebs in sch and lenses of barite green mariposite in ser sch	839	107.70	108.45			54	16	86	.3	205	5.97				
109.37	110.00		- 40% qtz veins in ser sch 1 - 2.5 cm. Only minor py as xtals on selvage															
110.55	110.95		- 30% qtz veins in ser sch 3 - 5%. Py mostly disseminated and as concordent lenses in ser/quartzite															
			- Qtz veins, wte qtz 1 - 15 cm having very course xtals of tan dolomite. Py is 3% mostly disseminated and as concordent lenses in schist	840	112.99	113.70			98	1214	504	.06*	.005*	9.4				

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 7 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 231°/-55 LOGGED BY : M.E.B./P.D.
 COMMENCED: August 12/86 ELEV. : 1,740 m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NO LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %			
113.70	116.90		Continuous Shasta Qtz Vein Wte crse qtz with minor vugs some thin ser sch lenses but largely continuous. Coarse xtals and xtal aggregates of tan dolomite common but usually adjacent to sxx and ser/qtzite. Dolo 10%. Pyrite is also often within ser sch lenses occurring as crse 2 - 10 mm cubes and agregates. Py usually concordent also as selvage, diseminated in ser sch occasionally as blebs and cubes supported by qtz. Py varies from near nil in sections of qtz to 15% along sections of qtz vein and ser sch * core axis at 110 m 55°														
			- Qtz vein with 5 - 8% py as massive lenses of crse xtals in ser sch as selvage of disem cubes in quartz.	841	113.70	114.37	.67	.60	11	126	42	.02*	.025*	4.03			
			- Wte bull qtz 98% minor dolo and minor py, possible trace of arspy	842	114.37	115.30	.93	.90	101	47	69	.07*	.006*	1.70			
			- Qtz vein with dolo and ser sch/qtzite lenses only minor Py	843	115.30	116.00	.70	.65	7	23	30	.01*	.001*	4.10			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240/-55° PAGE 8 OF 10
 HOLE NO. : 86-2 LOC. : Approx. 3+83F 0+925 ATTITUDE BOTTOM: 231°/-55 LOGGED BY : M.E.B./P.D.
 COMMENCED: August 12/86 ELEV. : 1,740 m % RECOVERY: 90% DATE : August 19/86
 COMPLETED: August 20/86 CORE SIZE: NQ LENGTH: 142.38 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %			
			- [121.62 - 122.80] coars 3 - 10 mm meta pebble conglomerate. Core axis 58-65°														
			- qtz vein with 5 to 8% py minor arsenpy both as crse xtals. lenses of ser/qtzite host most sxx	844	116.00	116.86	.86	.86	23	32	36	.04*	.075*	5.20			
116.86	124.05		- Coarse grey, sericitic qtzite with 1 - 3 mm qtz grains massive/homogeneous similar to 86-2 89.81-91.26. Some segregation and sections with ser sch. Also minor quartz veining usually in areas where ser sch present														
			- 1 cm thick qtz vein at small angle to foliation. Vein fills brittle fracture. 2% galena trace of orange sphalerite in vein occurring as for network surrounding coarse quartz crystals. Trace galena is finely disseminated for 7 cm on either side of sample interval, however, only in trace amounts	845	122.06	122.21	.15	.15	3	1610	237	1.0	3	1.58			
			- blueish grey/wte qtz vein or segregation having lenses of ser sch. Sample taken because of proximity to 845	846	122.43	122.70	.27	.27	1	18	17	.1	1	1.79			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 1 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m % RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %				
0-3.1		C	Casing															
3.1	(3.66)		Med. Grain Light Tan Qtzite well indurated relatively pure qtzite with very little ser. Weak banding visible but generally massive and homogeneous. Frct have fe stain only trace py. Poor recovery = 20%															
3.66	5.25	SS /Q	Interbanded Qt Ser Sch/Qtzite greenish grey well foliated sericite and qtzite that vary in proportions. See 86-1 5.00-41.27. Section is possibly more of a phyllite and is very silvery greenish grey															
5.25	6.05	Q	Med. Grain Light Tan Qtzite same as above															
6.05	18.12	SS /Q	Interbanded Set Sch/Qtzite same as above poor recovery - 7 cm qtz vein w. lenses ser/qtzite and rusty dolomite [7.07-7.17]. Poor recovery. - tan-grey medium grain sericitic qtzite similar to 86.3 0-3.66 [7.17-9.17] mod. recovery															

*core axis 7m = 420
 core axis 21m = 250
 core axis 28m = 420

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 2 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m %RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %				
			- sericitic gouge greenish grey with minor qtz segreg. [12.39-14.23]															
			- grey wte qtz vein 10cm [15.70-15.87]															
18.12	23.79	SS /Q	Interbanded Ser Sch/Qtzite with 15% qtz veining similar to 86-1 5-41.27 but incr qtz veining. Foliation appears to be more highly developed and has small core axis angle in this section.															
			- 5cm qtz vein, sch lenses, crse dolo xtal, minor py [18.12-18.18]															
			- Qtz vein with lenses sch, crse xtals dolomite with 2% py as crse xtals and xtal agg in qtz. Minor arspy - 1 2mm xtal in qtz moderate recovery	94848 one	20.14	21.83				17	6	12	.01	205	2.38			
			- 2 cm qtz vein ll to core axis 2% py as crse xtal aggreg in qtz, minor dolo															
			- 60-70% Qtz veins 5-25cm thick. Local vvg 6-2% py as selvages and blebs and crse xtals yellow and tan dolomite. Relatively continuous	849	22.0	23.80	1.80	1.70		20	14	16	0.1	305	2.57			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 3 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m % RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis						
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %	
23.79	27.12	S/ Q	Interbanded Ser/Qtzite medium to crse grain qtzite with lenses and pervasive ser sch. Similar to 86-3 3.66-5.25												
27.12	29.20	S/ Q	Sericitic Qtzite med to crse grain weakly grey qtzite similar to above but signifi- cantly less seric ite lenses. Qtz segrega- tion common forming bluish grey qtz lenses. Also occasional qtz veins with minor py as selvage and crse dolom.												
			- 15cm qtz vein, 1% py as selvage crse xtals dolomite	850	28.14	28.36	.22		2	12	33	.01*	.031*	4.91	
29.20	51.88	SS /Q	Interbanded Ser.Sch/Qtzite similar to 86-3 3.66-5.25 but qtzite and ser sch section not finely interbanded but interlayered on larger scale of 10'5 of cm rather than fine scale interbanding. Qtzite component is generally crse grained (1.3mm). Alternates from sericitic crse qtzite to interbanded ser/qtzite. Distinctive feature is sections of crse sericitic qtzite.												

*C/A 60⁰ at 27m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 4 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m % RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %					
			- sericitic gouge with qtz segregation [34.15-34.30]																
			- gr. bluish wte 10 cm qtz vein (segreg?) minor py as selvage, crse xtals dolo. [35.16-35.37]																
			- intense segregation of grey blue qtz 25% with more sericitic section [45.40-46.50]																
51.88	57.93	SS /Q	Interbanded Ser Sch/Qtzite similar 86.3 3.66-5.25 greenish grey to med greyish green interbanded ser sch, qtzite and bluish grey segreg qtz. Occasional qtz veins with minor py and crse xtals dolo. - short section of ser/qtzite where ser sch is silvery. Lte green very wispy and contoured. Segregated dark grey qtz is less abundant and fills layers inbetween ser. Contrast of dk segreg qtz and lte silver green sch is distinctive. [56.85-57.93] *core axis 39°																

*C/A 53° at 40m
 C/A 46° at 36m
 C/A 46° at 56m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 5 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m % RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From To Meters		Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %
57.93	64.88	V	Zone Of Intense Qtz Veining Ser/Qtzite	851	57.93	60.93	3.00	3.00	4	5	27	.1	4	4.78
			40% qtz veins 2-4cm. Wte crse qtz wdb	852	60.93	63.93	3.00	3.00	4	6	21	.1	22	3.81
			fragments and lenses of wall rock often	853	63.93	64.88	.95	.95	3	8	12	.1	130	2.49
			angular indicating brittle failure.											
			Crse xtaline dolomite often forms on margins											
			of veins but also on suspended xtals in qtz.											
			Dolomite also forms entire small 1-3 cm											
			veins extending off qtz veins. Vein is at											
			least partly concordent with foliation but											
			difficult to decern. Py is very minor,											
			occasionally occuring as selvage. *Core											
			axis 61.5m at 32°. Some lenses and frags non											
			foliated calcite-xtalmite rich and contain											
			fine grain maraposite											
			- [60.00-61.80] ser/qtzite minor qtz and											
			dolo veins 10-20% qtz											
			- [61.80-63.00] semi continuous qtz vein											
			70% qtz											
			- [63.11-64.88] semi contin qtz vein 70% qtz											
64.88	85.60	SS	Interbanded Ser Sch/Qtzite greenish grey											
		/Q	similar to 86-3. 3.66-5.25 m											

*C/A 53° at 40m
 C/A 46° at 36m
 C/A 46° at 56m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 6 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m % RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %				
			- [67.20-67.80] zone of qtz veins 5-3 cm 30% qtz, minor py, crse xtals dolomite															
			[69.21-69.75] similar to above 5-3 cm qtz veins *core axis 36° at 70 m															
			*core axis 27° at 70.83 m															
			- 4-5 cm qtz vein, 3% crse cubes py and 2% crse xtals arspy. *core axis 27° at 75 m	854	78.35	78.40	.05	.05	7	23	4	.01	0.118	4.06				
			- 80.74 - 83.77 interb. ser/qtzite with greater ser sch component more highly foliated. Section is darker because of dk grey qtz segregations *core axis 57° at 81m. *Core axis 45° at 84.45m															
85.60	90.00	SS /Q	Medium Grey Interbanded Set Sch/Very Crse Grey Qtzite similar to 29.20 - 51.88 distinctly separate thick sections (10'5 cm) of crse grey qtzite and finely foliated greenish grey ser sch. Py minor along foliation also qtz segregations. *Core axis at 60° at 87m															
			- [85.60-87.7] crse grey qtzite															
			- [87.00-87.5] crse grey qtzite															
			- [87.5-90.0] same as above more ser sch.															
90.00	97.50	SS /Q	Interbanded Ser/Qtzite *Greenish Light Grey similar to 3.66-5.25 86-3 but lighter grey possibly greater Py<1% as fine disseminations parallel to foliation.															

*core axis

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 7 OF 13
 HOLE NO. : 86-3 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 234°/-74° LOGGED BY : M.E. Baknes
 COMMENCED: August 20/86 ELEV. : 1,740 m % RECOVERY: 90+% DATE : August 21/86
 COMPLETED: August CORE SIZE: NQ LENGTH: 206.4 CORE STORED : At lower camp
 OBJECTIVE: Intersect Shasta Vein Below 200' level UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis											
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %						
			- [93.35-95.45] intense qtz segregation into bluish grey qtz forms about 30% of section. Py minor along foliation *Core axis 95.45m - 60°																	
97.50	123.00	SS /Q	Interbanded Ser Sch/Qtzite medium greenish grey to greyish green. (Similar to 86.3 3.66-5.25) Interbedded ser sch and Qtzite and bluish grey qtz segregations. Well foliated and often contoured. Qtz veins 1.5-2cm and lenses of wte qtz about 5%. Py is present in greater amounts than in other similar sections approx. 1-2%. Occurs as med to crse cubes and fine grain disen along foliation and as selvage in areas of qtz stringers.																	
			- [98.63-100.43] zone of intense qtz segregation into bluish grey qtz.																	
			[101.40-102.80] light greenish grey pervasive silicification and diffuse qtz stockwork of what appears to be crse grain sericitic Qtzite.																	

* C/A - 45° at 90.55 m
 C/A - 59° at 99.69 m
 C/A - 27° at 104.50 m
 C/A - 45° at 106.00 m
 C/A - 31° at 111.00 m
 C/A - 40° at 115.50 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 209°/-47° PAGE 2 OF 6
 HOLE NO. : 86-4 LOC. : Approx. 3+83E 0+92S ATTITUDE BOTTOM: LOGGED BY : P.R.D.
 COMMENCED: August 24/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 24/86
 COMPLETED: August 26/86 CORE SIZE: NQ LENGTH: 151.52 CORE STORED : Camp
 OBJECTIVE: Test Shasta Vein at Depth UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis						
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %	
			23.00 - 23.70 crushed rock and qtz and fault gouge lower fault contact with adj. rock at 21' to C/A at 24.00 - 10 cm of gouge and crushed rock at 18.48 banding and foliation at 50' C/A - from 24.00 to 24.50 - rock has tiny, dolo antecitic crysts string out parallel foliation												
24.48	26.12		Lt. grey sericitic qtzite - bedding?, foliation at 70' C/A												
26.12	28.87		Ser sch/qtzite - local qtz seg.												
28.87	37.22		Lt. grey sericitic qtzite with sections of interbanded ser. sch and ser qtzite - qtzite zones tend to be more competent while sericitic shows broken ground and minor oxidation, also sample of foliation/bedding to C/A is greater in the qtzite sections. Minor qtz segrega- tions.												
37.22	45.00		Lt. grey interbanded ser sch/qtzite irregu- lar qtz veining at low angle to C/A narrow qtz veining and segregations	861	42.10	42.32	0.22		24	222	147	.5	10	3.16	

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 209°/-47° PAGE 5 OF 6
 HOLE NO. : 86-4 LOC. : Approx. 3+83E 0+92S ATTITUDE BOTTOM: LOGGED BY : P.R.D.
 COMMENCED: August 24/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 24/86
 COMPLETED: August 26/86 CORE SIZE: NQ LENGTH: 151.52 CORE STORED : Camp
 OBJECTIVE: Test Shasta Vein at Depth UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %				
			113.20 and 114.40 at 110.50 foliation 75° to C/A															
115.80	142.10		Lt. to med. grey sericitic qtzite															
			- gradational into above section															
			- narrow qtz vein locally, minor py															
			- at 115.10 .5 cm band of Py, Po & Cpy with narrow qtz segregation (looks like vol. mass. sulphide environment).															
			- minor qtz veins															
			- 125.70 - 126.60 5 cm wide qtz vein roughly parallel to core, dolom andeside adj qtz margins															
			- 127.00 - 127.40 qtz vein at + 45° to C/A															
			129.70 narrow qtz vein															
			- 131.70 - 133.70 as above															
			dol (anderise) "metacrysts" noted at 137.35															
			- 138.30 - 138.40 white qtz, 138.80 - 139.10 qtzite min dol	865	138.30	139.15	0.85		22	14	17	.01*	.001*	2.27				
			- sericitic qtzite with narrow qtz vein	866	139.15	139.90	0.75		14	9	37	.01*	.020*	4.09				
			- white qtz vein and dol with section of sericite	867	139.90	140.40	0.50		3	7	22	.01*	.003*	3.07				

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 1 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %					
0	.6	C	Casing																
.6	14.3	SS/ Q	Light To Med Greyish Green Interbanded Ser Sch/Qtzite Interbanded silvery grey to greyish green sericite and light grey med fine grain (.5-1 mm) sericitic qtzite. Foliation is best developed in the ser sch sections whereas the qtzite is often more massive and only weakly foliated. Banding at sericite is from mm to 1 - 2 cm scale whereas the qtzite does not show distinctive banding. Interbanding is 1 - 2 cm but in some sections 5 - 15 cm bands of qtzite may be sep by equivalent bands ser sch. Segregation at qtz into irregular lensoidal blueish grey qtz are common. Dolom is most visible near surface where shows up as rusty blebs and along foliation. Py is minor disem and along foliation. Foliation and ser sch is wispy, subplanar and st. contorted																
			[0 - 5.2] Poor recovery 50%																
			[8.2-10.1] Mod recovery																
			[4.2 - 5.7] light grey med grey ser qtzite																

* core axis 20° at 15 m
 22° at 23 m
 15° at 90 m?

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 4 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %					
			[40.80 - 48.90] light med grey siltite bands with minor interbands of ser sch and bands of ser siltite. Section distinctive because of lighter colour and massive character																
			[50.30 - 50.60] barren bull qtz vein minor dolo.																
			[51.50 - 54.40] zone of pervasive silification creating light to med grey siltite and qtzite (this zone was probably qtzite and siltite before providing source of silica). In intense sections segregation has occurred. Porr fol.																
			(52.10-52.40) semi continuous barren qtz vein																
			(52.80-53.00) barren qtz vein minor dolo																
			(53.40-53.60) barren qtz vein minor dolo																
			(53.80-53.90) barren qtz vein minor dolo																
			[58.10-59.60] zone of pervasive silification as above																
			(58.50-58.70) barren qtz vein minor dolo																

* core axis 32° at 26 m
 35° at 38 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 5 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
			[61.50 - 66.70] zone of pervasive silicification minor qtz stkwk (1cm) veins having difuse boundaries of blueish grey colour fractures are commonly lines with ser. Protolith probably fine qtz silt (siltite prior silic) Some drusy vugs. Poor fol. (65.50) 2 mm x 15 mm stringer or bleb of cpy. *sample to test silicification*	094871	65.30	66.70	1.40	1.40	26	5	6	.2	4	1.06
			[66.80 - 69.60] highly broken up, sericite clay and fragments of qtz veins. Probably faulted ser sch/siltite	886	66.70	69.20	2.50	2.50	35	10	47	.1	3	3.12
78.60	84.40	SS/ ST	Light to Medium Greenish Grey Interlayered Ser Sch/Siltite. Similar to 14.3-69.60 but lighter grey large scale unterbanding. Some long sections 30 cm of ser siltite (qtzite) seperated by .5 - 5 cm ser sch bands. Foliation is moderately developed and curvy planar.											
			[78.60 - 79.10] massive light grey section of siltite only minor ser sch on frcts.											
			[79.50 - 80.80] massive light grey siltite as above with 3 m stkw of dark grey difuse											

* core axis 15° at 47 m
 44° at 53 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 6 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %				
			qtz (discontinuous stkw)															
84.40	93.90	SS/ ST	Interbanded Argillaceous Ser Sch/Siltite Interbanding of greenish grey ser sch; light to medium grey ser siltite and siltite of distinctive very dk grey to black sericitic argillaceous schist. Ser sch and arg. sch are commonly wispy and contorted. Siltite is also irregular discontinuous and lensoidal but also occurs as distinct cm several cm bands or layers. Py is 1 - 2% and uneven in distribution, largely conc. in the argillic sections. Py occurs as lenses and blebs as well as cubes along foliation. Qtz segregations are not common although siltite does appear to have at times been remobilized. Qtz veins are not prevalent. Carbonate veins few. *Poor recovery 60 cm -75mm 60 - 70%* broken grd.															
			[84.50 - 85.70] Arg. sch rich section with abundant py 5%. Sample to test argillic unit	872	84.50	85.10	.60	.60	86	10	45	.2	6	3.59				

Core axis 24° at 82 m
 very low 86 avg. sec.

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 8 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis						
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %	
			[100.30 - 100.50] qtz vein with lenses wall rock minor dolo xtals												
101.20	110.90		Medium To Dark Greenish Grey. Sericitic Siltite. Similar to 86-5 14.3 - 78.60 but siltite component minor as lenses and likely diseminated. When uninterrupted by qtz veins rock is massive finely foliated. Does not have interbedded and wispy tex- tures. Qtz veins w. dolomite (yellow tan) crse xtals are common. Py is minor but most conc. in qtz veins and adj. to qtz veins along foliation.												
			[101.5 - 101.6] qtz vein lenses wall rock crse xtals dolomite (grab)	873	101.5	101.6	.10	.10	15	11	53	.2	1	5.69	
			[102.8 - 103.3] 5 cm qtz vein w. crse dolo (grab)	874	102.8	103.3	.50	.50	13	7	79	.1	1	7.58	
			Qtz vein and dolom % py as cubes and selvage	875	103.8	104.2	.40	.40	11	15	135	.2	1	6.64	
			Qtz vein with dolo	876	104.7	105	.30	.30	16	9	38	.1	9	4.67	

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 11 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %			
			[117.70 - 123.10] fairly massive medium grey ser qtzite minor siltite with fine laminae rare .5 cm band of arg ser sch														
			[119.2 - 119.50] Qtz vein minor dolo. *Test	881	119.2	119.5	.3	.3	14	3	16	.1	8	1.95			
			[123.0 - 123.2] Qtz vein *barren vein														
			[123.2 - 126.2] More arg. sch rich section, interbanded arg ser sch/qtzite - siltite, dark grey and black														
			[126.2 - 127.5] Similar to 117.70 - 123.1														
			[127.5 - 130.0] More arg. ser sch rich														
			[130.1 - 130.5] Coarse ser qtzite														
			[130.5 - 133.4] Dominantly ser qtzite and siltite with lesser bands and laminae arg ser sch med grey - black														
			20 cm qtz dolomite vein with semi massive coarse crystalline py. Large patches and disem crse xtls. Minor cpy.	882	133.4	133.7	.3	.3	33	107	50	.04*	.655*	19.23			

Core axis 37° at 105m
 25° at 101m
 52° at 111m
 25° at 120
 35° at 136

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 064°/-45° PAGE 14 OF 14
 HOLE NO. : 86-5 LOC. : Approx. 3+83E 0+925 ATTITUDE BOTTOM: 064°/-41° LOGGED BY : M.E. Baknes
 COMMENCED: August 30/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : August 30/86
 COMPLETED: September 1/86 CORE SIZE: NQ LENGTH: 163.70 CORE STORED : At lower camp
 OBJECTIVE: Intersect Southern Extension of 605 Vein UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb oz/t*	Fe %				
			upwards. Possible Marker Unit. Qtz segregations rare.															
152.7	156.0	aSS /Q	Dark Grey Argillaceous Interbanded Ser Sch/ Qtzite Finely interbanded dark grey avg ser sch in mm to cm bands seperating coarse ser qtzite very similakr to 86-5 143.7 to 152.7. Distinctive from other similar units b.c. of very coarse qtzite up to 3mm grains and planar foliation i.e., very little folding and kiuking. Py minor and disem along fol. Qtz segregation minor. Grading indicates upright															
156.0	163.7		Medium Greenish Grey Interbanded Ser Sch/ Qtzite Larger scale interbanding cm - 10's cm of very fine grain silvery ser sch and segregated qtz and crse ser qtzite up to 4 mm grains similar to above planar fol. Colour differs interbanding larger. Qtzite component minimal [156.50 - 156.90] very crse (pebble) qtzite up to 4 mm grains															

core axis 36° at 136 m cong
 24° at 145 m
 23° at 150 m
 32° at 153 m
 24° at 162 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-47° PAGE 2 OF 3
 HOLE NO. : 86-6 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: Az 240°/-47 LOGGED BY : P.R.D.
 COMMENCED: August 29/86 ELEV. : 1,740 m (approx.) % RECOVERY: +90% DATE : August 30/86
 COMPLETED: August 31/86 CORE SIZE: NQ LENGTH: 118.2 CORE STORED : Camp
 OBJECTIVE: Test Shasta Vein at Depth below previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %			
			82.2 - 85.0 - poor recovery (50%) fault gouge and crushed 77.2 - minor Po														
83.0	104.2	SQ	Sericitic Qtzite - qtz grain -v.f.grained to med grained (i.e., 2 mm) in lt grey sericitic matrix, some sections are inter-banded ser sch/qtzite														
			87.3 - 88.2 - coarse qtzite - grain up to .5 cm														
			88.6 - 94.5 - interbanded ser sch/qtzite narrow qtz vein/segregation at 91.0, 92.7 at 89.1 at 65° C/A														
			two relatively narrow qtz veins separated by ser qtzite	890	96.1	96.5	0.4		14	268	18	1.1	1	1.96			
			- 96.5 - 98.3 - v. coarse grained ser qtzite grains up to 1 cm														
			narrow qtz vein at 98.1, 98.2														
			- 99.9 - 100.2 - v. coarse grained to pebble cong. with pebbles up to 1 cm														
			- minor narrow qtz veins at 99.5, 99.6, 100.2, 100.7														
			- 100.2 - 102.00 ser qtzite with "strung out" dol? meta crystals														
			- ser qtzite, v. minor Po/Py along fract and foliation of 3 cm qtz vein	891	102.7	103.0	0.3		47	2	24	.01*	.001*	4.33			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-65° PAGE 2 OF 9
 HOLE NO. : 86-7 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-60° LOGGED BY : M.E. Baknes
 COMMENCED: August 31/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 1, 1986
 COMPLETED: Sept. 3/86 CORE SIZE: NQ LENGTH: 148.5 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %
			- Semi continuous qtz vein (60%) with wall rock lenses do lo xtals. Trace of .1 - .5 mm galena and cpy within qtz vein	94895	17.3	17.6	.3	.3	149	96	62	.7	1	4.35
22.90	28.2	SS/ Q	Light Greenish Grey Massive (Interbanded) Ser Sch/Qtzite Unit is mainly sericitic qtzite with thin mm to 2-5 cm whisps and bands of greenish grey ser sch. Fol is mod developed and planar in massive ser. Py 1% as disem blebs, cubes along fol. - [25.0 - 25.1] 10 cm qtz vein - [26.2 - 28.2] Crse grain lte grey sericitic qtzite, massive very little banding											
			Bleached silic zone with 1 - 3 mm blebs, py 4%. Small qtz veinlet has green min mataposite? and 50% py and 5% po, 10% galena and minor py.	896	26.2	26.5	.3	.3	46	296	15	2.2	1	2.67
28.2	37.8	SS/ Q	Light to Med. Greenish Grey Semi Massive Interbanded Ser Sch/Qtzite Long sections of massive lte greenish grey ser qtzite interrupted by interbanded ser											

Core Axis 62° at 3.7
 70° at 8.0
 55° at 14.3
 58° at 24.5
 65° at 26.0

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-65° PAGE 4 OF 9
 HOLE NO. : 86-7 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-60° LOGGED BY : M.E. Baknes
 COMMENCED: August 31/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 1, 1986
 COMPLETED: Sept. 3/86 CORE SIZE: NQ LENGTH: 148.5 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %					
			- [41.7 - 41.8] Sericitic clay gouge with fragments of qtz.																
			- [43.7 - 43.8] Bull qtz vein with crse xtals dolo.																
			- [46.6 - 47.8] Interbanded ser sch/qtzite with whisps and bands of black argillaceous ser.																
			- [45.8] 2 cm qtz vein with bleb (2%) of po.																
48.8	54.3	aSS /Q	Med to Dark Grey Argillaceous Interlayered ser sch/qtzite Large scale interlayerin 15-20 cm layers very crse qtzite 1 - 3 mm interupted by fine wispy avg ser sch either as fine laminae or 10 - 15 cm interbandgs/avg ser sch/qtzite. Fol med developed																
54.3	63.8	SS/ Q	Med. Greenish Grey Interbanded Ser Sch/Qtzite Similar to 37.5 - 48.8. Some sections have crs ser qtzite with lup to 3 mm grains. Both intimate interlayering and longer sec of ser qtzite sep by ser sch																

Core axis 44° at 37.7
 55° at 43
 56° at 32
 46° at 37

WELL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-65° PAGE 6 OF 9
 HOLE NO. : 86-7 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-60° LOGGED BY : M.E. Baknes
 COMMENCED: August 31/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 1, 1986
 COMPLETED: Sept. 3/86 CORE SIZE: NQ LENGTH: 148.5 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

m	To Meters	Syb c	Description Casing	Acme Smp. #	From To Meters	Lgth.	Rec. m	Analysis											
								Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %						
			but grains diffuse.																
			- [75 - 76.1] Lte grey zone of pervasive silicification.																
			- [78.0 - 78.9] Vuggy qtz and dolo gash type vein with terminating veins cross cutting fol. 1 - 2% py in vugs as xtals																
			- 79.0 3 cm qtz dolom vein																
			- 80.0 3 cm qtz dolom vein																
			- [80.9 - 82.2] Pervasive silicification and minor qtz veining.																
			- [82.90 - 83.70] Weak silicification																
			- [84.50 - 84.90] Intense qtz segregation																
			- [88.50] 5 cm qtz dolo vein																
			- [89.5 - 89.9] Zone of med pervasive silicification with associated difuse. Stkw. and bleaching																

Core axis 53° at 61
 48° at 66

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-65° PAGE 8 OF 9
 HOLE NO. : 86-7 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-60° LOGGED BY : M.E. Baknes
 COMMENCED: August 31/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 1, 1986
 COMPLETED: Sept. 3/86 CORE SIZE: NQ LENGTH: 148.5 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %					
			- [131.1 - 131.3] blueish grey qtz segregation and 2 cm qtz vein																
			- [131.6 - 132.7] Shasta qtz vein Pure white qtz with minor vugs. Sulphides avg disseminated as blebs along poorly developed bands - core axis sx 28°. Sulfides 7% total: 3% py anhedral xtals 2%. 5 mm blebs galena, 1% blebs po. Trace cpy, one isolated 3 mm xta arspy.	001	131.6	132.7	1.1	1.1	25	1291	3	0.94	.002*	.61					
133.2	146.5	SQ	Massive light grey coarse grain ser Qtzite grades from med sm to coarse 3 mm. Grading indicates tops up. Planar spaced cleavage																
			- [134 - 134.3] intense qtz segregation																
			- [137.4 - 137.9] intense qtz segregation																
			- [138.9 - 139.2] Meta pebble conglomerate 2 to 5 mm qtz pebbles in minor ser matrix *marker?*																
			- [139.2 - 139.3] - Qtz vein in host rock lenses																
			- [145.7 - 145.9] bull qtz vein																

Core axis 45° at 119 m
 45° at 124 m
 62° at 131 m
 38° at top surface qtz vein
 30° at bottom
 50° at 133 m
 45° at 141 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek	LOCATION : Southern Grid	ATTITUDE COLLAR: 240°/-65°	PAGE 9 OF 9
HOLE NO. : 86-7	LOC. : Approx. 3+00E 0+755	ATTITUDE BOTTOM: 240°/-60°	LOGGED BY : M.E. Baknes
COMMENCED: August 31/86	ELEV. : 1,740 m	% RECOVERY: +90%	DATE : Sept. 1, 1986
COMPLETED: Sept. 3/86	CORE SIZE: NQ	LENGTH: 148.5	CORE STORED : Lower Camp
OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections			UNUSUAL FEAT.:

From To Meters	Syb c	Description Casing	Acme Smp. #	From To Meters	Lgth.	Rec. m	Analysis						
							Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %	
146.5 to End	SS/	Greyish green interbanded ser sch/qtzite											
End Hole	Q	Qtzite is crse. Qtz segregations common in sericitic rich sections with cubes py along fol 1 - 2 %.											
		Qtz carbonate veins with wall rock lenses. Py 3% as isolated 10 mm bleb in qtz. Minor amt as cubes along foliation	002	147.4	147.7	.3	.3	31	8	115	.1	13	2.54
		- [147.8 - 148.7] Meta qtz pebble conglomerate. Up to 5 mm round qtz grains; minor ser matrix. Frmwk. supported.											

148.5 End Hole C/A 47° at 141 m
 42° at 146 m
 57° at 148 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 3 OF 14
 HOLE NO. : 86-8 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-73° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 3/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 4, 1986
 COMPLETED: Sept. 5/86 CORE SIZE: NQ LENGTH: 206/4 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %				
			- [41.1 - 42.2] section of crse ser qtzite with ser interbands, grading ind. inverted stratic															
			- [41.5] 2 cm qtz dolo [41.8] 10 cm fibrous qtz dolo vein															
			- [42.5 - 44.8] Pervasive ser/clay alt. increasing intensity with proximity to ser clay gouge with qtz frags.															
			- [43.7 - 43.8] ser clay gouge w. qtz frags fault?															
			Zone of fibrous minor vuggy qtz dolom qtz veins 60% qtz remainder wall rock frags. Py minor but trace sphalerite 1 - 2 m xtals in qtz.	006	43.8	44.7	.9	.9	18	8	110	.1	1	4.94				
			[45.6 - 45.8] qtz vein															
48.0	58.0	SS/ Q	Med and light greenish grey interbanded ser sch/qtzite Intimate interbanding of ser sch and med qtzite of blueish grey qtz. Segregations foliated highly contorted in ser sch rich															

C/A 9.5 m - 45°
 14.0 m - 40°
 21.0 m - 40°
 27.0 m - 30°
 43.0 m - 30°

DRILL RECORD

IMPERIAL METALS CORPORATION.

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 7 OF 14
 HOLE NO. : 86-8 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-73° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 3/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 4, 1986
 COMPLETED: Sept. 5/86 CORE SIZE: NQ LENGTH: 206/4 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	
			possibly altered											
			- [90.6 - 97.5] Med crse greyish green ser qtzite with spaced 1 - 3 cm ser sch laminae											
			- [93.5 - 97.0] 10% .5 x 5cm qtz gash fracture											
			- [97.5 - 98.8] Massive med greenish grey ser qtzite, matrix supported											
			- [99.1 - 99.6] Light grey pervasive silicification											
99.7	119.5	SS/ Q	Med Greyish Green Interbanded Ser Sch/ Qtzite Abundant qtz segregation											
			50% vuggy qtz vein with euhedral. Py in vugs and as blk very thin frct coatings. Py 2%	011	101.8	102.2	.4	.4	13	12	29	.1	1	2.
			- [102.3 - 102.6] contorted ser sch and qtz segreg. but 5% disem. 1 mm cubes py.											

C/A 43° at 70.5 m
 28° at 74 m
 38° at 81 m
 61° at 93 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 8 OF 14
 HOLE NO. : 86-8 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-73° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 3/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 4, 1986
 COMPLETED: Sept. 5/86 CORE SIZE: NQ LENGTH: 206/4 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %					
			- [104.2 - 104.5] Greyish qtz vein																
			- [106.4 - 106.7] wte perv. silicification																
			- [107.1 - 107.3] Qtz dolo vein with wall rock lenses, trace py as black very thin fracture coatings																
			- [109.7 - 109.9] greyish green crse .5 - 2 mm ser qtzite *marker?																
			- [110.3] 2 cm qtz dolo vein minor py in vugs																
			- [111.3 - 111.5] very crse greyish green ser qtzite .5 - 3 mm grains																
			- [113.6 - 114.2] light grey crse qtzite pervasive silicification																
			- [116.7 - 116.9] light grey, pervasive silicification																
			- [117.4 - 117.6] light grey, pervasive silicification																

C/A 46° at 96 m
 45° at 103 m
 300 at 110 m crs qtzite
 470 at 115 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Southern Grid ATTITUDE COLLAR: 240°/-75° PAGE 14 OF 14
 HOLE NO. : 86-8 LOC. : Approx. 3+00E 0+755 ATTITUDE BOTTOM: 240°/-73° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 3/86 ELEV. : 1,740 m % RECOVERY: +90% DATE : Sept. 4, 1986
 COMPLETED: Sept. 5/86 CORE SIZE: NQ LENGTH: 206/4 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Shasta Vein below 200' level and previous intersections UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From To Meters		Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
			- 50% Q tz veins with minor dolo. Py 4% as cubes in qtz. Selvage and disseminated along foliation	17	174.2	176.2	2.0	2.0	18	9	21	.1	190	2.9
			- [176 m - fault -											
176	198.9	SS	Very finely foliated light silvery greenish grey ser schist 10% Py occurs as fine grain planar and contorted lenses; syn genetic Some foliation parallel qtz segre and lenses, may represent silitite or qtzite											
			- [182.7 - 183.1] broken ground, ser clay fault?											
			- [183.1 - 183.6] broken ground, ser clay fault?											
			- [192.6 - 192.9] broken ground, ser clay fault?											
198.9	206.4	SS	Med greyish green banded ser sch Fine grain finely foliated green ser schist with moderate qtz segregations. - [205.3] 1 cm pinkish transp. gypsum vein											
	END HOLE													

Core Axis 52° at 161 m
 62° at 166 m
 38° at 172 m
 42° at 181 m
 40° at 205 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ATTITUDE COLLAR: 245°/-45° PAGE 8 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ATTITUDE BOTTOM: 245°/-39° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
			Qtz dolomite vein 40% qtz 40% crse xtaline dolomite 15 - 20% brecciated argillaceous wall rock fragments. Fibrous xtle growth and brecciation suggest brittle intrusion. Sxx total 5%. 3% py as lenses in wall rock and disem xtals. Spal and Galena 2% ass and replacing? py. *Abundant stylolites Graphitic laminae	023	68.3	69.2	.9	.9	5	643	495	1.5	3	9.11
69.2	86.0	SS/ ls	Dark Grey and Black Interbanded Argillaceous Ser Sch/Lst and Massive Medium Grey Ser Sch/Siltite Massive layers similar to 66.9 - 67.2 Argillaceous sections often have bands of lst, however, some sections are not calcareous and have lenses or eyes of recrystalized qtz .5 x 1 cm. Py is 5% and greater in some sections occurring as 3 - 5 mm blebs and cubes, disseminated and in qtz dolomite veinlets. Moderate recovery.											
			1 cm qtz dolomite vein, 20% py minor po in vein as crse xtals and disseminated in wall rock. Complete test of cont in argil horizons	024	75.0	75.2	.2	.2	243	136	122	.6	7	14.25

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ATTITUDE COLLAR: 245°/-45° PAGE 9 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ATTITUDE BOTTOM: 245°/-39° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description <u>Casing</u>	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
			30% qtz dolo veins with 3% py as cubes along fol. and as selvage in veins, highly fractured grd. Minor clay - fault zone	25	84.1	84.8	.7	.5	31	23	36	.1	1	3.24
			70% qtz dolom veins with wall rock frag- ments. Py 3 - 5% as 2 mm cubes in wall rock frags and in qtz veins	26	83.4	84.0	.6	.6	15	24	42	.2	2	4.23
			- [85.7 - 85.90] Arg ser clay gouge fault											
86.0	92.6	SS/ Q	Light Greyish Green Interbanded Ser Sch/ Qtzite cm bands of light greyish green ser sch and med to crse ser qtzite. Also abundant blueish grey qtz sergergations. Minor qtz dolo veining. Py minor as disem cubes											
			- [89.6 - 89.7] 4 cm qtz dolo vein											
92.6	99.7	SS/ Q	Light (greenish) Grey Interlayered Ser Sch/ Crse Qtzite Similar to above but more crse ser qtzite. Ser sch is 20% and forms 1 - 10 cm layers between longer sections of Khaki brown calcareous qtzite and or med light grey											

Core Axis 62° at 56m
 50° at 66m
 53° at 72.5

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ATTITUDE COLLAR: 245°/-45° PAGE 11 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ATTITUDE BOTTOM: 245°/-39° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Sybc	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis						
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %	
			[117.1 - 118.7] 6.5% disseminated imm. euhedral xtals of magnetite. Supposedly metamorphically derived. This unit may be cause of magnetic anomoly noted near base line trenching 150°.												
			[118.7 - 118.9] 50% quartz; Qtz. dolo veins												
119.8	125.5	SS/Q	Light greenish grey interbanded ser sch/qtzite grades into following section												
			- [122.2 - 122.3] Qtz dolo vein												
			- [123.8] 5 cm clay, fault?												
125.5	133.3	aSS/End	Dark Grey to Black Interbanded Argillareous Ser Sch/Siltite												
		/St	Fine black arg ser schist separating lenses and bands of siltite? and med grain qtzite. Py is 5% disem cubes 1 to 4 mm parallel to foliation												

Core Axis 60° at 82 m
 58° at 89 m
 50° at 99 m
 70° at 105 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : N 101° 57' W 1492 N CORRECT DIP: ^{top} 45° ^{bottom} 39° PAGE 1 OF 12
 HOLE NO. : 86-9 LOC. : 101° 57' W 1492 N TRUE BRG : 245° LOGGED BY : W. B. Perkins
 COMMENCED: Sept 6/86 ELEV. : 1850 SURVEY AT : DATE : Sept 9/86
 COMPLETED: Sept 7/86 CORE SIZE: NQ % RECOVERY : 90% CORE STORED : Camp
 OBJECTIVE: Intersect Qtz Vein & Gal. Py & Py LENGTH : 133.3 UNUSUAL FEAT.:

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis									
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %				
0	7.3		<u>Casing</u>															
7.3	127	Vo	<u>Dark Green Semi Massive to Slightly Mafic Volcanic F</u> Dark green massive weakly foliated sections pervasively altered having disseminated residual of Fe carbonate. Rock may also have alt. phenos. of feldspar; possibly protolith was volcanic. Massive sections also weakly magnetic. Some sections interbedded med green ser sch & Qtz; ma. to calcite- Horn in origin. Pale green ser sch with Qtz interbeds is probably an more intensely altered equivalent of the green ser sch. Some clay is present & 2-5% dissemin (5mm) subhedral x'tals of magnetite. Py is 2-5% in shistose sections & occurs as lenses & cubes along fol.															
			<u>- [7.3-7.5] Qtz vein</u>															
			<u>- [7.5-8.5] massive dark green meta volc. very poor recovery 20%.</u>															

9
13

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY :	LOCATION :	CORRECT DIP:	PAGE 7 OF
HOLE NO. : 86-9	LOC. :	TRUE BRG :	LOGGED BY :
COMMENCED:	ELEV. :	SURVEY AT :	DATE :
COMPLETED:	CORE SIZE:	% RECOVERY :	CORE STORED :
OBJECTIVE:		LENGTH :	UNUSUAL FEAT.:

From Feet	To	Syb	Description	No.	From Feet	To	Lgth.	Rec. Feet	Analysis								
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %			
			argillite. Minor of vermicular Argillite in thin concretion by host bands & calcareous lenses are often interbedded & concreted. Py is 1/2% as discs 1-2mm cubes														
			Dolomitized zone with interbedded 1st & argillaceous calcite / act also minor silification. Py & Pb account for about 10-15% & are disseminated as blebs & cubes, interbedded associated Cpy is 2-3% as disseminated cubes in blebs.	020	64.0	64.4	.4	.4	277	41	65	16	25	15.61			
			64.0-65 - Dolomitized zone														
			Dark green to black calcite argillite with massive, 2% Py as disseminated bedded cubes & lenses. Silite 1/2 occurs associated with py. Calcite and argillite associated with py & silite. Gal & Silite appear to be replacing lenses of argillite.	021	66.45	66.75	.30	.30	39	2294	1462	2.7	8	5.88			
			Similar to sample 021 but 30% total silite, including 10% of it as well py	022	66.75	66.90	.15	.15	271	22386	14902	25.5	7	10.93			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY :	LOCATION :	CORRECT DIP:	PAGE 9 OF
HOLE NO. : 86-9	LOC. :	TRUE BRG :	LOGGED BY :
COMMENCED:	ELEV. :	SURVEY AT :	DATE :
COMPLETED:	CORE SIZE:	% RECOVERY :	CORE STORED :
OBJECTIVE:		LENGTH :	UNUSUAL FEAT.:

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis							
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %		
			occurring as 3-5mm blobs & cubes, disseminated in qtz dolomite veinlets. Moderate Recovery													
			1m qtz dolomite vein, 20% py minor pd in vein as cube vials & disseminated in wall rock. complete test Au count in Au analysis	024	75.0	75.2	.2	.2	243	136	172	.6	14.25	19.25		
			30% qtz dol veins with 3% py as cubes above fol. & no collapse in veins highly fractured and vitrified clay - fault zone.	25	84.1	84.8	.7	.5	51	23	36	.1	3.24	1		
			70% qtz dol vein with wall rock fragments, Py 3-5% as 2mm cubes in wall rock frags & in qtz veins.	26	83.4	84.0	.6	.6	15	24	42	.2	4.23	2		
			85.7 - 85.90 Arg ser clay gouge fault													
85.90	92.6	SS/Q	Light greenish brown interbedded Sp. Sch/ Qtzite Cu bands at light greenish brown con sch & mod to fine sandstone Also abundant bluish grey of conglomerates Minor qtz dol veinlets													

CORE AXIS 62° at 56m
50° 66m
53° 72.5
d hi angle

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY :	LOCATION :	CORRECT DIP:	PAGE // OF
HOLE NO. : 86-9	LOC. :	TRUE BRG :	LOGGED BY :
COMMENCED:	ELEV. :	SURVEY AT :	DATE :
COMPLETED:	CORE SIZE:	% RECOVERY :	CORE STORED :
OBJECTIVE:		LENGTH :	UNUSUAL FEAT.:

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis					
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %
99.7	119.8	ss	Main darkish Green chloritic Ser Sch finely banded chloritic Ser Sch with 15% lenses blebs & irregular bands of med granular Qtz. Probably Qtz segregation Py is 1-2% usually as cubes with Qtz scatheations 5cm - 10% fine py as lenses & thin veins with Qtz vein with 3% cpy as isolated 5mm blks & 1mm disem as 5mm blks in Qtz. py is 1-2% along fol in wall wk	027	114.1	114.4	.3	.3	69	21	49	12	15	5.98
				028	112.7	112.8	.10	.10	370	22	37	13	91	3.83
			[117.1 - 117.7] 65% disseminated 1mm cuboidal Qtz at irregular, Supposedly metamorphically derived. This unit may be cause of magnetic anomaly noted near base line preceding 118.0											
			[118.7 - 118.9] 50% Qtz; Qtz db's veins											
119.8	125.5	ss/a	light greenish Grey interbanded Ser Sch / Quartz grades into following section											
			[122.2 - 122.3] Qtz db's vein											
			[123.8] 5cm clay; fault?											

Core Axis 60° at 82m
 58° at 89m
 50° at 99m
 70° at 109m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY :	LOCATION :	CORRECT DIP:	PAGE 12 OF
HOLE NO. : 869	LOC. :	TRUE BRG :	LOGGED BY :
COMMENCED:	ELEV. :	SURVEY AT :	DATE :
COMPLETED:	CORE SIZE:	% RECOVERY :	CORE STORED :
OBJECTIVE:		LENGTH :	UNUSUAL FEAT.:

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis									
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %				
129.5	133		Dark Grey to Black interbedded															
END	HOLE	oss/st	Aluminum Sil. Sch / Sil. Ho.															
			Two dark grey sev sht conoidal															
			lenses & bands of siliceous															
			material in matrix Py is 5% ds															
			dissem. cubes → 4um sds -															
			parallel to foliation															

C/A
 65° at 104
 75° at 116
 65° at 122
 60° at 127
 74° at 133

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ALTITUDE COLLAR: -45°-39° PAGE 3 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ALTITUDE BOTTOM: Az 245° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From To Meters		Lgth.	Rec. %	Analysis						
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %	
			- [14.3 - 14.5] Small qtz vein and lst with bands of argillite												
			- [15.0 - 15.90] rusty clay broken lst. fault												
			- [17.4 - 17.8] rusty clay broken lst fault												
17.8	19.5	SS+	Medium Grey Massive Ser Siltite? Med to fine grain weakly foliated sericitic rock. May have been fine grain sediment. Now into weakly calcareous. Calcareous in rusty altered patches. Calcite blebs and lenses infrequent. Py minor disem 1 mm deformed blebs.												
			- Qtz calcite vein with 3% py as blebs and 1 mm fracture coatings. Po is minor and occurs as py. Cpy is trace.	18	19.0	19.5	.5	.5	10	5	15	.2	1.78	1	
19.5	21.8	SS/ Ls	Medium Greenish Grey Interbanded Ser Sch/ Lst. MM - CM bands at ser sch and lst. Looks very similar to interbanded ser sch/qtzite except lst takes the place of qtzite												

Lst.

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ALTITUDE COLLAR: -450-390 PAGE 5 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ALTITUDE BOTTOM: Az 2450 LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis					
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %
			Qtz dolomite vein 40% qtz 40% crse xtaline dolomite 15 - 20% brecciated argillaceous wall rock fragments. Fibrous xtle growth and brecciation suggest brittle intrusion. Sxx total 5%. 3% py as lenses in wall rock and disem xtals. Spal and Galona 2% ass and replacing? py. *Abundant stylolites Graphitic laminae	023	68.3	69.2	.9	.9	5	643	495	1.5	3	9.11
69.2	86.0	SS/ls	Dark Grey and Black Interbanded Argillaceous Ser Sch/Lst and Massive Medium Grey Ser Sch/Siltite Massive layers similar to 66.9 - 67.2 Argillaceous sections often have bands of lst, however, some sections are not calcareous and have lenses or eyes of recrystallized qtz .5 x 1 cm. Py is 5% and greater in some sections occurring as 3 - 5 mm blebs and cubes, disseminated and in qtz dolomite veinlets. Moderate recovery.											
			1 cm qtz dolomite vein, 20% py minor po in vein as crse xtals and disseminated in wall rock. Complete test, av cont in argil horizons	024	75.0	75.2	.2	.2	243	136	122	.6	14.25	7

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ALTITUDE COLLAR: -45°-39° PAGE 9 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ALTITUDE BOTTOM: Az 245° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From To Meters		Lgth.	Rec. %	Analysis					
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %
			30% qtz dolo veins with 3% py as cubes along fol. and as selvage in veins, highly fractured grd. Minor clay - fault zone	25	84.1	84.8	.7	.5	31	23	36	.1	3.24	1
			70% qtz dolom veins with wall rock fragments. Py 3 - 5% as 2 mm cubes in wall rock frags and in qtz veins	26	83.4	84.0	.6	.6	15	24	42	.2	4.23	2
			- [85.7 - 85.90] Avg ser clay gouge fault											
85.90	92.6	SS/ Q	Light Greyish Green Interbanded Ser Sch/Qtzite											
			cm bands of light greyish green ser sch and med to crse ser qtzite. Also abundant blueish grey qtz sergergations. Minor qtz dolo veining. Py minor as disem cubes											
			- [89.6 - 89.7] 4 cm qtz dolo vein											
92.6	99.7	SS/ Q	Light (greenish) Grey Interlayered Ser Sch/Crse Qtzite											
			Similar to above but more crse ser qtzite. Ser sch is 20% and forms 1 - 10 cm layers between longer sections of Khaki brown calcareous qtzite and or med light grey											

Core Axis 62° at 56m
 50° at 66m
 53° at 72.5

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ALTITUDE COLLAR: -45°-39° PAGE 10 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ALTITUDE BOTTOM: Az 245° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis									
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %				
			relatively pure qtzites. Grading indicates *inverted stratigraphy. *(some eg's of upright stratig)															
			- [95.8 - 95.9] bed? of pure white lst. *marker*?															
			- [97.4 - 97.9] Ser sch section with 10% disem alt derived? 3 mm dolomite xtals *marker*?															
			- [98.9] 2 cm qtz vein with single 2 mm xtle of galena															
99.7	119.8	eSS	Med Darkish Green Chloritic Ser Sch Finely banded chloritic ser sch with 15% lenses blebs and irregular bands of med granular qtz, probably qtz segregations. Py is 1 - 2% usually as cubes near qtz segre- gations															
			5 cm - 10% fine py as lenses dolomized zone wte qtz vein with 3% cpy as isolated 5 mm bleb finely disem as .5 mm blebs in qtz. Py is 1 - 2% along fol in wall rock	027	114.1	114.4	.3	.3	69	21	69	.2	15	5.98				
				028	114.7	114.8	.10	.10	370	22	37	.3	91	3.83				

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Northern Main Grid ALTITUDE COLLAR: -45°-39° PAGE 11 OF 11
 HOLE NO. : 86-9 LOC. : 10+57W 1+92N- ALTITUDE BOTTOM: Az 245° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 6/86 ELEV. : 1,505 m % RECOVERY: +90% DATE : Sept. 9, 1986
 COMPLETED: Sept. 7/86 CORE SIZE: NQ LENGTH: 133.3 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Qtz Vein and Gal. Po and Py Replacement in Limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb c	Description Casing	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis									
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %				
119.8	125.5	SS/Q	Light greenish grey interbanded ser sch/Qtzite grades into following section															
			- [122.2 - 122.3] Qtz dolo vein															
			- [123.8] 5 cm clay, fault?															
125.5	133.3	aSS	Dark Grey to Black Interbanded Argillareous Ser Sch/Siltite															
End	Hole	/St	Fine black arg ser schist separating lenses and bands of siltite? and med grain Qtzite. Py is 5% ds disem cubes 1 to 4 mm parallel to foliation															

Core Axis 60° at 82 m
 58° at 89 m
 50° at 99 m
 70° at 105 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid, North ATTITUDE COLLAR: 282°/-48° PAGE 1 OF 2
 HOLE NO. : 86-11 LOC. : 13+25W 3+92N ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 10/86 ELEV. : % RECOVERY: +80% DATE : Sept. 12/86
 COMPLETED: Sept. 11/86 CORE SIZE: NQ LENGTH: 54.5 CORE STORED : Lower Camp
 OBJECTIVE: Test extension of IP anomaly and Geochem anomalies and also to test below area UNUSUAL FEAT.:
 where anomalous Au found in float

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %					
0	14?	C	Casing																
14.0	14.3	V	Fragments of Qtz Vein and Calcite veined grey lst.																
14.3	15.2	SS	Med Grey Dolo Alt Ser Sch Fine grain grey ser schist with 20% 3 mm disem xtals of dolomite appearing as knots on cleaved surfaces. Qtz segregations common																
15.2	17.4	SSSt	*Very Poor Recovery* 10% Fragments of Medium Grey Ser Sch Siltite with flecs of maraposite - similar to units noted in 86-9. Also 10 cm section of black fine grain volcanic with 5% disem 2 mm round calcite filled vesicules? moderately magnetic																
17.4	25.1	cSS	Med and Light Green Banded Chloritic Ser Schist Moderate amts qtz segregations. Rusty lenses contain ox py. Foliation is generally planar with minor kinking. Poor recovery 60%. Similar 86-9, 8.5 - 9.2 - [22.4 - 23.5] Rusty possibly more altered or faulted																

Core Axis 44° at 52 m
 46° at 54 m
 31° at 45 m
 22° at 47 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid, North ATTITUDE COLLAR: 028°/-50° PAGE 5 OF 5
 HOLE NO. : 86-12 LOC. : 11+00W 1+10N ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 11/86 ELEV. : % RECOVERY: +80% DATE : Sept. 13/86
 COMPLETED: Sept. 13/86 CORE SIZE: NQ LENGTH: 83.8 CORE STORED : Lower Camp
 OBJECTIVE: Intersect Au bearing Qtz vein in "sulphide zone" UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %				
			- [70.2 - 70.4] Qtz dolo vein															
			- [71.0 - 72.0] Qtz dolo vein															
			- [74.1 - 75.8] 50% qtz dolo veins with wall rock lenses															
			- [77.9 - 78.2] Qtz dolo vein															
			- [79.4 - 81.7] Black argillite and graphitic argillite															

Core Axis 25° at 76 m
 25° at 83 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid, North ATTITUDE COLLAR: Az 112°/-51° PAGE 2 OF 2
HOLE NO. : 86-13 LOC. : 11+00W 1+10N ATTITUDE BOTTOM: 112°/-53° LOGGED BY : M.E. Baknes
COMMENCED: Sept. 13/86 ELEV. : % RECOVERY: DATE : Sept. 14/86
COMPLETED: Sept. 14/86 CORE SIZE: NQ LENGTH: 61.2 CORE STORED : Lower Camp
OBJECTIVE: Intersect gold bearing qtz vein in "sulphide zone" UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
		SS/ St	- [45.1 - 57.5] Light Greenish Grey Inter-laminated Ser Sch, fine grain siltite qtz segregations. Py minor as fine grain lenses											
			- [57.5 - 58] 5 cm qtz dolomite vein											

Core Axis 39° at 12 m
39° at 33 m
20° at 36 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 240°/-47° PAGE 2 OF 3
 HOLE NO. : 86-14 LOC. : 0+05W 2+18S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 14/86 ELEV. : % RECOVERY: 90% DATE : Sept. 15/86
 COMPLETED: Sept. 15/86 CORE SIZE: NQ LENGTH: 57 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %			
			- [24.5 - 25.3] same as 13.7 - 14.2 zone of silicification														
31.1	49.1	Ls	Medium Grey and White Mottled Massive Granular Limestone (Marble). Difuse banding and patches of grey Lst within generally wte. granular limestone. Some thin laminae of ser sch often irregular. Moderate amount of calcite veining. Some sections pervasively veined and recrystalized with calcite and possibly dolo and ank. These sections often contain significant po and py as well as chlorite and muscovite. Py is 1-2% as disseminated xtals and in larger blebs and xtals in veined sections. Po is 1-2% but occurs mostly as irregular blebs in veined sections.														
			- [33.3 - 34.3] Calcite dolo ank? veined zone 3% py														
			- 20% finely disseminated blebs and .5 mm veinlets of py and po. Cpy may be present in trace amounts.	032	35.6	36.0	.4	.4	176	24	13	.5	.001*	5.62			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 240°/-47° PAGE 3 OF 3
 HOLE NO. : 86-14 LOC. : 0+05W 2+18S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 14/86 ELEV. : % RECOVERY: 90% DATE : Sept. 15/86
 COMPLETED: Sept. 15/86 CORE SIZE: NQ LENGTH: 57 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
			- similar to above 5-10% py and po	034	36.0	36.3	.3	.3	24	34	8	.3	.001*	2.28
			- [37.0 - 38.6] Calcite dolo ank? veined zone minor py and po. Mottled grey and white Lst with 4% blebs of po.	035	41.5	41.9	.4	.4	53	9	20	.3	.001*	5.18
			*-[42.2 - 44.2] Greenish Grey Interlaminated Ser Sch/Siltite? *marker*											
			Calcite dolo/ank? zone with 5% disem 1-3mm xtals and blebs of py as well as selvage on calcite vein.	036	46.6	47.0	.4	.4	34	12	22	.3	.001*	5.79
49.1	57.0		Interlayered Ser Sch/Siltite/Massive grey and white granular Lst											
End Hole		SS/ Ls	Lst sections up to 1 m long often having occasional bands or laminae of ser sch. Ser Sch/Siltite (Lst) is greenish grey and interbanded with abundant qtz segregations. Appears that interbanded ser sch/siltite becomes predominant towards end of hole. Ser Sch/Siltite light greyish green. Py 1-2% disem cubes											
			- [55.1 - 57.0 end] Interbanded ser Sch/Siltite contorted foliation											

Core axis 60° at 45 m
 58° at 21 m
 62° at 31 m
 52° at 49 m
 67° at 53 m

86-14

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central CORRECT DIP : -47° PAGE 1 OF 3
 HOLE NO. : 86-14 LOC. : O+OSW 2+RGS TRUE BRG : 240 LOGGED BY : MF Baknes
 COMMENCED : Sept 14 ELEV. : SURVEY AT : DATE : Sept 15/86
 COMPLETED : Sept 15 CORE SIZE : NQ % RECOVERY : +90% CORE STORED : Lower Camp
 OBJECTIVE : to intersect Py Pb replacement body in lst, beneath gossan gold trench LENGTH : 57m UNUSUAL FEAT. :

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis								
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %			
0	3.6	C	Casing														
3.6	31.1	Ls/lbs	Mediana → light green & black interbanded Lt / Ataillanous limestone Distinct vein → 1-3cm bands & laminae of arailite limon, arailite & ironstone limestone. Also abundant calcite & less common dolomite & lenses. bands & laminae are often wispy & contorted at times well folded. In most sections bands are well defined whereas in others boundaries are diffuse. Py 1-3% (syngenetic) as cubes & fine grain lenses.														
			- [3.6-3.8] Qtz ank vein trace py.														
			- [12.6-12.8] Qtz vein with trace of py														
			- [13.7-14.2] light greenish gray inter limestone with wisps of ser sch. slight siliceous & siliceous zone														
			- [14.8-14.9] Qtz ser schist? greenish gray														
			- ?														

Core axis

at
31
93

1

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY :	LOCATION :	CORRECT DIP:	PAGE <u>3</u> OF <u>3</u>
HOLE NO. : <u>86-14</u>	LOC. :	TRUE BRG :	LOGGED BY :
COMMENCED:	ELEV. :	SURVEY AT :	DATE :
COMPLETED:	CORE SIZE:	% RECOVERY :	CORE STORED :
OBJECTIVE:		LENGTH :	UNUSUAL FEAT.:

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis					
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %
			Mottled gray + wte lst with 4% blebs of py	035	41.5	41.9	.4	.4	53	9	20	.3	6	5.18
			* [42.2 - 44.2] Greenish Gray interlam- inated ser sch / Siltite? * marker *											
			Calcite dol/Ank? zone with 8% disc 1-3mm xstls + blebs of py as well as selvage on calcite vein	036	46.6	47.0	.4	.4	34	12	22	.3	8	5.79
49.1	57.0	SS/LS	Interlayered ser sch/siltite / Massive area + wte granular lst. lst sections up to 1m long often having occasional bands or laminae of ser sch. ser sch/siltite (lst) is greenish gray + interbedded with abundant qtz segregation. Appears that interbedded ser sch/siltite becomes predominant towards end of hole. Ser sch/siltite light greenish gray. Py 1-2% discm cubes - [55.1 - 57.0 end] interbedded ser sch/siltite conglomeratic foliation											

Core axis
 62° at 31m
 63° at 48m
 52° at 49
 67° at 53

27 32.5

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ALTITUDE COLLAR: -47° PAGE 2 OF 3
 HOLE NO. : 86-14 LOC. : 0+05W 2+18S ALTITUDE BOTTOM: Az 240° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 14/86 ELEV. : % RECOVERY: DATE : Sept. 15/86
 COMPLETED: Sept. 15/86 CORE SIZE: NQ LENGTH: 57 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis								
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %			
			- [24.5 - 25.3] same as 13.7 - 14.2 zone of silicification														
31.1	40.1	Ls	Medium Grey and White Mottled Massive Granular Limestone (Marble). Difuse banding and patches of grey Lst within generally wte. granular limestone. Some thin laminae of ser sch often irregular. Moderate amount of calcite veining. Some sections pervasively veined and recrystalized with calcite and possibly dolo and ank. These sections often contain significant po and py as well as chlorite and muscovite. Py is 1-2% as disseminated xtals and in larger blebs and xtals in veined sections. Po is 1-2% but occurs mostly as irregular blebs in veined sections.														
			- [33.3 - 34.3] Calcite dolo ank? veined zone 3% py														
			- 20% finely disseminated blebs and .5 mm veinlets of py and po. Cpy may be present in trace amounts.	32	35.6	36.0	.4	.4	176	24	13	.5	33	5.62			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ALTITUDE COLLAR: -47° PAGE 3 OF 3
 HOLE NO. : 86-14 LOC. : 0+05W 2+18S ALTITUDE BOTTOM: Az 240° LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 14/86 ELEV. : % RECOVERY: DATE : Sept. 15/86
 COMPLETED: Sept. 15/86 CORE SIZE: NQ LENGTH: 57 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis					
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %
			- similar to above 5-10% py and po	034	36.0	36.3	.3	.3	24	34	8	.3	5	2.28
			- [37.0 - 38.6] Calcite dolo ank? veined zone minor py and po. Mottled grey and white Lst with 4% blebs of po.	035	41.5	41.9	.4	.4	53	9	20	.3	6	5.18
			*-[42.2 - 44.2] Greenish Grey Interlaminated Ser Sch/Siltite? *marker*											
			Calcite dolo/ank? zone with 5% disem 1-3mm xtals and blebs of py as well as selvage on calcite vein.	036	46.6	47.0	.4	.4	34	12	22	.3	8	5.79
49.1	57.0		Interlayered Ser Sch/Siltite/Massive grey and white granular Lst											
End Hole		SS/ Ls	Lst sections up to 1 m long often having occasional bands or laminae of ser sch. Ser Sch/Siltite (Lst) is greenish grey and interbanded with abundant qtz segregations. Appears that interbanded ser sch/siltite becomes predominant towards end of hole. Ser Sch/Siltite light greyish green. Py 1-2% disem cubes											
			- [55.1 - 57.0 end] Interbanded ser Sch/Siltite contorted foliation											

Core axis 60° at 45 m
 58° at 21 m
 62° at 31 m
 52° at 49 m
 67° at 53 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 225°/-46° PAGE 2 OF 3
 HOLE NO. : 86-15 LOC. : 0+04W 2+37S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 15/86 ELEV. : % RECOVERY: +95% DATE : Sept. 16/86
 COMPLETED: Sept. 16/86 CORE SIZE: NQ LENGTH: 35.7 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis							
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %		
			CPY is possibly present but only as trace. Magnetite is 3.5% occurring in short sections as disem blebs and 1 - 2 mm individual crystals. The host rock is the massive grey Lst (16.0 to)But in the mineralized zone the host is a dark grey fine grain silicified lst? supporting crse crystalline pale yellow ankerite (dolo?) Difuse qtz veins with ank selvage cross cut the ank and dark grey silic lst? These qtz veins also pervasively silicify adjacent rock and possibly the entire zone qtz veins also contain sulphides in the same habit to that found in the host. Muscovite and chlorite occurs throughout but often concentrated within carbonate veins.													
			20% qtz 10% carbonate silic host. 70% Sx, 50% py as 2 mm to 20 mm blebs and cubes in a matrix of po possibly as replacement, abundant musc and chlorite. Trace cpy	037	19.9	20.05	.15	.15	365	25	40	.6	.005*	23.02		
			40 - 50% Py and Po in ank silic hst? host 30% po as blebs and network. Py 10-20% as cubes and selvage in qtz veins, minor cpy. Qtz veins 20% with ank selvage.	038	20.05	21.4	1.35	1.35	462	23	52	.7	.001*	20.82		

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 225°/-46° PAGE 3 OF 3
 HOLE NO. : 86-15 LOC. : 0+04W 2+37S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 15/86 ELEV. : % RECOVERY: +95% DATE : Sept. 16/86
 COMPLETED: Sept. 16/86 CORE SIZE: NQ LENGTH: 35.7 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %
			Dark Grey host (possibly finely disem magnetite) 30% fine grain disem. Py and Po. Magnetite at least 5% as xtals and blebs, also finely disseminated grains	039	21.4	22.4	1.0	1.0	176	28	85	.6	.001*	31.6
			40% magnetite as 1 to 10 mm disem blebs 2% po. Abundant micaceous minerals musc and chlorite	040	22.4	22.7	.3	.3	77	24	162	.5	.001*	25.9
26.3	30.9	SS/ Ls	Interlayered Ser Sch/Siltite/Massive Grey and White Granular Lst (Marble) Same as 86-14 49.1 - 57.0 - 29.5 1 cm band of Po as 3 mm x 10 mm lenses											
30.9	35.7	SS/ St	Greenish Grey Interbanded Ser Sch/Siltite (+ qtz segregations) as above but continuous to end of hole											
			- 3mm x 10mm lenses of Py and Po 5 - 10%	041	35.10	35.35	.25		29	5	49	.2	.001*	4.29

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 255°/-46° PAGE 1 OF 1
 HOLE NO. : 86-16 LOC. : 0+05W 2+37S ATTITUDE BOTTOM: LOGGED BY : P.R.D.
 COMMENCED: Aug. 16/86 ELEV. : % RECOVERY: +90% DATE : Sept. 17/86
 COMPLETED: Aug. 17/86 CORE SIZE: NQ LENGTH: 25.6 CORE STORED : Lower Camp
 OBJECTIVE: To intersect gold bearing gossan replacement body in limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis										
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %					
0	3.7	C	Casing																
3.7	17.1	Ls/ aLs	Med to Light Grey and Black Interbanded Limestone and Argillaceous Limestone - minor pyrite throughout - at 13.4 banding to C/A - 45° - several oxidation zones particularly at 7.5																
17.1	21.55	Ls	Med Grey and White Mottled. Massive Granu- lar Limestone (Marble) - at 19.0 - 19.2 interbanded as above - minor qtz - dol veins - host rock	0042	21.35	21.55	0.20	.2	3	39	32	.4	.001*	5.69					
21.55	23.85	Sx	Semi Massive Sulphide and Dolomite - 20 - 30% sulphides - mostly fine cubic pyrite, minor po and cpy - in crystal- lice dolomite (siderite?) - core is generally non conductive	0043	21.55	23.85	2.30	2.3	834	29	53	.8	.011*	29.01					
23.85	24.6	Db xx	Dolomite Breccia - oxidized - py veinlet Some fragments are dark grey	0044	23.85	24.60	0.75	0.75	44	27	74	.5	.021*	32.89					
24.6	25.0		Ser Sch and Dol																
25.0	25.6	Ls	Wte&dark grey limestone w. qtz dolo vein																

END HOLE

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ALTITUDE COLLAR: 244°/-46° PAGE 1 OF 1
 HOLE NO. : 86-17 LOC. : 0+25E 2+50S ALTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Aug. 17/86 ELEV. : % RECOVERY: +70% DATE : August 17/86
 COMPLETED: Aug. 17/86 CORE SIZE: NQ LENGTH: 20.4 CORE STORED : Lower Camp
 OBJECTIVE: To intersect gold bearing replacement body in limestone UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis								
									Cu %	Pb %	Zn %	Ag ppm	Au ppb	Fe %			
0	4.9	C	Casing														
4.9	10.5	Ls	Semi Massive White and Grey Lst With Argillaceous bands and layers Some whisps and 10 - 20 cm sections of argillaceous lst, within the relatively massive lst. Orange rusty weatherin on fracture surfaces. *Recovery Poor 50%														
			- [7.6 - 7.8] Qtz vein, rusty weathering	046	7.6	7.8	(.2)	(.2)	4	18	4	.1	.001*	.67			
10.5	20.4	SS/s	Med to Light Greenish Grey Interbanded Ser Sch/Siltite (qtz segregations) Banded to laminated ser sch and qtz which may be siltite or segregations of qtz. Similar to last unit in 86-14 and 15														

Core Axis 460 at 10m
 580 at 19m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid South ATTITUDE COLLAR: 244°/-65° PAGE 1 OF 2
 HOLE NO. : 86-18 LOC. : 0+25E 2+25S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 17/86 ELEV. : % RECOVERY: +75% DATE : Sept. 18/86
 COMPLETED: Sept. 17/86 CORE SIZE: NQ LENGTH: 17.4 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis						
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %	
0	4.1(3.1)	C	Casing												
4.1	5.5	Ls/ aLs	Medium to Light Grey and Black Interbanded Lst/Argillaceous Limestone Similar to 86-14 3.6 - 31.1. This section primarily rusty brown from surface oxidation. Poor Recovery												
5.5	13.5	Ls	Med Grey and White Mottled Massive Lst Similar to 86-14 31.1 - 49.1 Poor recovery 66%												
			- Limestone unmineralized section prior to min. zone	047	7.1	7.5	.4	.4	5	14	11	.2	.001*	1.37	
7.5	11.9	G	*Qtz vein and Limonite (po py gossan) Represents oxidised massive to semi massive sulphides. Very poor recovery 40-50%. Porous orange and brownish black gossan with moderate amounts of micaceous minerals (musc) qtz veins and qtz vein fragments also found within gossan.												
			Porous brown and brownish black gossan with disem musc. Poor recovery 60%	048	7.5	(8.8)	1.3	90	526	26	55	.6	.006*	25.37	

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid South ATTITUDE COLLAR: 244°/-65° PAGE 2 OF 2
 HOLE NO. : 86-18 LOC. : 0+25E 2+25S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 17/86 ELEV. : % RECOVERY: +75% DATE : Sept. 18/86
 COMPLETED: Sept. 17/86 CORE SIZE: NQ LENGTH: 17.4 CORE STORED : Lower Camp
 OBJECTIVE: To intersect Py Po replacement body in Lst. UNUSUAL FEAT.:
 beneath gossan gold trench

From Meters	To Meters	Syb	Description	Acme Smp. #	From To Meters		Lgth.	Rec. m	Analysis					
					Cu ppm	Pb ppm			Zn ppm	Ag ppm oz/t*	Au ppb	Fe %		
			Rusty qtz vein and qtz fragments. Some py boxwork? and micaceous surfaces. Poor Recovery 20 - 30%	049	(8.8)	11.3	2.5	.70	256	12	26	.2	.002	*10.87
			70% qtz calcite veins with crse xtals in massive lst. Py is 10-15% as 2-5 m cubes and also as fine disseminated grains. Most py in host not in veins.	050	11.3	11.9	.6	.6	156	19	42	.5	.018	*11.82
			Massive Limestone host	051	11.9	12.3	.4	.4	15	14	32	.3	.001	*6.62
13.5	14.3	SS/	Med to Light Grey Fine Grain Ser Siltite? very massive; minor disem cubes py											
14.3	15.7	Ls	Light Grey Massive Granular Lst											
15.7	17.4	SS/ s	Greenish Grey Interbanded Ser Sch/Siltite? (qtz segregations) same as last section of 86-14											
END HOLE														

C/A 280 at 7m
 480 at 17m
 500 at 14 m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 230°/-45° PAGE 1 OF 4
 HOLE NO. : 86-19 LOC. : 1+25W 2+12S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 17/86 ELEV. : % RECOVERY: +90% DATE : Sept. 20/86
 COMPLETED: Sept. 18/86 CORE SIZE: NQ LENGTH: 42.4 CORE STORED : Lower Camp
 OBJECTIVE: To intersect sulphide replacement body in limestone beneath mineralized trench UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis							
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %		
0	3.6	C	Casing													
3.6	10.1	Ls/ aLs	Med to Light Grey and Black Interbanded Lst/Limey Argillite Similar to 86- 3.6 - 31.1 - [8.2 - 10.1] Light greenish grey interbanded ser sch/lst. Rusty weathering													
10.1	11.1	Ls	Mottled Grey Lst Irregular whisps of ser sch and argillaceous ser sch													
11.1	12.5	SS/ St	Med Grey and Greenish Grey Interlaminated To Massive Ser Sch/Limey Siltite? Looks similar to ser siltite and interlaminated ser sch/lst but section is only weakly calcareous. May be dolotomized ser sch/lst													
			Massive grey section possibly dolotomized having 5 - 10% py and 2 - 3% cpy. Py is disseminated in fine grain irregular blebs and whisps. Cpy is within py blebs and may be replacement phase.	052	11.8	12.0	.2	.2	361	9	53	.3	.001*	7.57		

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Central ATTITUDE COLLAR: 230°/-45° PAGE 3 OF 4
 HOLE NO. : 86-19 LOC. : 1+25W 2+12S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 17/86 ELEV. : % RECOVERY: +90% DATE : Sept. 20/86
 COMPLETED: Sept. 18/86 CORE SIZE: NQ LENGTH: 42.4 CORE STORED : Lower Camp
 OBJECTIVE: To intersect sulphide replacement body in limestone beneath mineralized trench UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %			
			- [18.8 - 19.2] section with ser sch laminae interlaminated ser sch/lst														
			- [21 - 22.4] light grey and black interlaminated limey arg/lst														
			2 cm lense within massive grey lst of 30% disem cubes py	053	23.5	23.6	.1	.1	56	17	18	.4	.001*3.30				
			- [25.1 - 25.5] Qtz ank vein - gash fracture 3 cm wide, i.e., at high angle to foliation														
26.5	42.4	aLs	Dark Grey Argillaceous Lst														
	End Hole		5 - 10% calcite lenses and veinlets in dark grey fine grain argillaceous lst. (very calcareous) some ser sch laminae														
			- [28.5 - 28.7] calcite vein														
			- [36.8 - 37.6] light grey more massive lst with calcite veining and recrystalization														
			Section with 20% coarse crystal aggregates of py	054	37.3	37.5	.2	.2	37	32	52	.8	.009*10.41				

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ATTITUDE COLLAR: 190°/-51.5° PAGE 1 OF 5
 HOLE NO. : 86-20 LOC. : 4+00E 0+38N ATTITUDE BOTTOM: 196°/-49° LOGGED BY : P.R.D.
 COMMENCED: Sept. 18/86 ELEV. : 1,745 m (assumed) % RECOVERY: DATE : Sept. 19/86
 COMPLETED: Sept. 19/86 CORE SIZE: NQ LENGTH: 139.3 CORE STORED : Lower Camp
 OBJECTIVE: To test 605 vein extension UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					Fr %			
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb				
0	4.0		Casing														
4.0	28.7	SQ/ SS	Lt Grey Sericitic Quartzite/Interbanded Ser Schist and Ser Qtzite - banding is not distinct and is "whispy" - ground is blocky and core recovery poor particularly from 21.6 - 26.0 - qtz segregation noted locally minor qtz veins at 21.5, 25.5, 27.8, 28.5														
28.7	78.4	SS/ SQ	Interbedded Ser Sch and Ser Qtzite - sections of predominantly ser sch and sections of ser qtzite - narrow qtz vein/ankerite at 30.0 - 30.8 plus heavy core loss 28.7 - 30.8 (about .3 m actual recovery), cont'd qtz veins at 32.5, 33.9, 35.4 white qtz vein with 15% ankerite, local conc of py near lower contact. .4 m grey (qtz segregation after) - at 33.6 - 2 cm crushed rock and gouge also at 38.7 cont'd qtz veins at 38.0, 38.6, 43.0, 43.3, 45.3, 47.4 - darker more argillaceous zone from 42.3 - 44.1 at 42.0 fol at 60° to C/A	0056	35.9	36.6	.7		81	5	23	.1	2	1.9			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ATTITUDE COLLAR: 190°/-51.5° PAGE 4 OF 5
 HOLE NO. : 86-20 LOC. : 4+00E 0+38N ATTITUDE BOTTOM: 196°/-49° LOGGED BY : P.R.D.
 COMMENCED: Sept. 18/86 ELEV. : 1,745 m (assumed) % RECOVERY: DATE : Sept. 19/86
 COMPLETED: Sept. 19/86 CORE SIZE: NQ LENGTH: 139.3 CORE STORED : Lower Camp
 OBJECTIVE: To test 605 vein extension UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis					
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %
104.3	117.7	SQ	Lt Greenish Grey Sericitic Qtzite good section of qtzite - fine sand grains generally visible - some bands of ser, sch - particularly grading into above section - at 109.6 foliation in ser qtzite at 65° to C/A - at 105.7 2 cm crushed rock in contact with .25 m qtz/ank vein, no sulphide - at 119.4 narrow qtz vein and weak fault gouge qtz vein with ankerite and wall rock section and minor py conc. - section becomes more sericitic towards bottom of section with some more argillaceous rocks, visible qtz grains "disappear" and ankeritic meta crystals appear. - narrow qtz/ankerite vein with conc. of py (10%) badly broken ground and gouge at 113.7 and 115.0, 115.3. sericitic ankerite qtzite with narrow 3 cm qtz and py (60%)	0062	112.2	112.7	.5		27	6	35	.1	1	4.69
				0064	113.9	114.0	.1		29	771	21	1.2	220	3.40
				0063	117.55	117.70	.15		272	179	29	2.4	13	13.78

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ATTITUDE COLLAR: 190°/-51.5° PAGE 5 OF 5
 HOLE NO. : 86-20 LOC. : 4+00E 0+38N ATTITUDE BOTTOM: 196°/-49° LOGGED BY : P.R.D.
 COMMENCED: Sept. 18/86 ELEV. : 1,745 m (assumed) % RECOVERY: DATE : Sept. 19/86
 COMPLETED: Sept. 19/86 CORE SIZE: NQ LENGTH: 139.3 CORE STORED : Lower Camp
 OBJECTIVE: To test 605 vein extension UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. m	Analysis						
									Cu ppm	Pb ppm	Zn ppm	Ag ppm oz/t*	Au ppb	Fe %	
117.7	128.2	V	"605? Qtz Vein with sections of ankerite and sericitic wall rock												
			- white qtz with 20% ankerite and minor inclusion ser sch local conc. of po and py and minor cpy at 118.3	0065	117.7	119.1	1.4		86	155	37	2.3	42	3.51	
			- white qtz with sections of ankerite ser quartzite - about 60% qtz - 40% wall rock, local py at 119.5	0066	119.1	121.0	1.9		44	26	16	.2	250	2.54	
			- massive white qtz vein with local inclusion of sch approx 15% py as coarse local concentration	0067	121.0	121.6	.6		28	10	6	.2	590	6.53	
			- white qtz veins and greenish ser sch - about 65% slch and 35% qtz vein, local sulphide	0068	121.6	125.5	3.9		18	861	289	1.4	380	4.86	
			- white qtz vein with 15% sch, local high conc of sulphides - py, sph, gal - total sulph 10 - 15%	0069	125.5	127.8	2.5		19	18195	15733	0.99	802	4.47	
			- qtz vein and wall rock no vis. sulphides	0070	127.8	128.2	.4		6	36	16	.1	59	1.93	
128.2	139.3	SQ	Med Grey Ser Qtzite local blueish grey qtz grain up to 2 mm, other areas with higher ser content												
			- at 131.0 foliation at 60° to C/A												
			END OF HOLE.												

* Note - problem with drillers numbering of blocks. I believe I have properly resolved it given the drillers and addition of 10'.

84, 10, 000

25, 21, 000
79, 6000

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : <i>Cunningham Cr</i>	LOCATION : <i>Main Grid Southern area</i>	CORRECT DIP: <i>-54.5°</i>	PAGE <i>1</i> OF <i>4</i>
WELL NO. : <i>86-20</i>	LOC. :	TRUE BRG : <i>Az 150</i>	LOGGED BY : <i>P.R.D.</i>
COMMENCED: <i>Sept 18, 1986</i>	ELEV. : <i>1745m (assumed)</i>	SURVEY AT : <i>139.3 ⁴⁹ 26.45</i>	DATE : <i>Sept. 13</i>
COMPLETED:	CORE SIZE: <i>NQ</i>	% RECOVERY :	CORE STORED : <i>Comp</i>
OBJECTIVE: <i>To Test 605 vein extension</i>		LENGTH : <i>139.3</i>	UNUSUAL FEAT.:

From Feet	To Feet	Syb	Description	No.	From Feet	To Feet	Lgth.	Rec. Feet	Analysis								
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %			
0	4.0		<u>CASINE</u>														
4.0	28.7	50/55	<u>Lt. Grey Sericitic Quartzite / Interbedded Ser Schist and Ser Qtzite</u> <i>- banding is not distinct and is "blispy"</i> <i>- ground is blocky and core recovery poor - particularly Ser 31.6 - 26.0</i> <i>- gk segregation noted locally</i> <i>minor gk veins at 21.5, 25.5, 27.8, 28.9</i>														
28.7	78.4	55/50	<u>Interbedded Ser Sch and Ser Qtzite</u> <i>- sections of predominantly ser sch and sections of ser qtzite.</i> <i>- narrow gk vein / bandlets at 30.0 - 30.8</i> <i>Plus heavy core loss 28.7 - 30.8 (about 3m actual recovery), cont gk veins at 32.5, 33.3, 35.4</i> <i>white gk vein with 48% magnetite, local conc. of Py near lower contact. 19m grey gk segregation also</i> <i>- at 33.6 - 36m crushed rock and gouge also at 38.7</i> <i>cont gk vein at 38.8, 38.6, 43.0, 43.3, 45.3</i> <i>47.4</i> <i>- darker, more argillaceous zone between 42.3 - 44.1</i> <i>at 42.6 ft. at 60' to c/a</i> <i>gk vein, 10% magnetite, local Py conc. (±6%) minor gk.</i>	0056	35.9	36.6	0.7		81	5	23	1	2	196			
				0057	57.5	57.9	0.4		18	932	598	9	1	237			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY :	LOCATION :	CORRECT DIP:	PAGE 3 OF 7
HOLE NO. :	LOC. :	TRUE BRG :	LOGGED BY :
COMMENCED:	ELEV. :	SURVEY AT :	DATE :
COMPLETED:	CORE SIZE:	% RECOVERY :	CORE STORED :
OBJECTIVE:		LENGTH :	UNUSUAL FEAT.:

From Feet	To	Syb	Description	No.	From Feet	To	Lgth.	Rec. Feet	Analysis								
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %			
87.5	102.0	SQ	SERICITIC Qtzite - with section of ser. schist and argillaceous ser. sch. - at 102.0 - 12m qb vein - no vis. sulphides														
102.0	104.3	SS	Argillaceous ser. schist with ser. qtzite stringer beds														
104.3	117.7	SQ	lt. greenish gray sericitic Qtzite - good section of qtzite - fine sand grains generally visible - some bands of ser. sch - particularly grading into above section - at 109.6 bedding in ser qtzite at 65° to 90° - at 105.7 2cm crushed rock interbed with .25m qb/bnk vein, no sulphides - at 113.9 ^{narrow} qb vein + weed fault gouge qb vein with antileite + wall rock bedding + minor Py conc. - section becomes more sericitic towards bottom of section with some more argillaceous rock, visible qb grains "disappear" and chlorite mica crystals appear. narrow qb/bankerite vein with conc. of Py. L (10%) badly broken ground + gouge at 113.7 and 115.0 sectioning antileite qtzite with narrow 3cm qb/b Py (6%)	0062	112.2	112.7	0.5		27	6	35	.1	1	4.69			
				0064	113.9	114.0	0.1		29	771	21	1.2	220	3.40			
				0063	117.55	117.70	.15		272	179	29	2.4	13	13.78			

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ALTITUDE COLLAR: -51.5° PAGE 1 OF 5
 HOLE NO. : 86-20 LOC. : ALTITUDE BOTTOM: Az 150° LOGGED BY : P.R.D.
 COMMENCED: Sept. 18/86 ELEV. : 1,745 m (assumed) % RECOVERY: DATE : Sept. 19/86
 COMPLETED: Sept. 19/86 CORE SIZE: NQ LENGTH: 139.3 CORE STORED : Lower Camp
 OBJECTIVE: To test 605 vein extension UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis							
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %		
0	4.0		Casing													
4.0	28.7	SQ/SS	Lt Grey Sericitic Quartzite/Interbanded Ser Schist and Ser Qtzite													
			<i>schist</i> - banding is not distinct and is "whispy" - ground is blocky and core recovery poor particularly from 21.6 - 26.0 - qtz segregation noted locally minor qtz veins at 21.5, 25.5, 27.8, 28.5													
28.7	78.4	SS/SQ	Interbedded Ser Sch and Ser Qtzite													
			- sections of predominantly ser sch and sections of ser qtzite <i>ankerite</i> - narrow qtz vein/ankerite at 30.0 - 30.8 plus heavy core loss 28.7 - 30.8 (about .3 m actual recovery), <i>cont'd</i> qtz veins at 32.5, 33.9, 35.4 white qtz vein with 15% ankerite, local <i>cont'd</i> of py near lower contact. .4 m grey (qtz segregation after) - at 33.6 - <i>2 cm</i> crushed rock <i>hand</i> gouge also at 38.7 <i>cont'd</i> qtz veins at 38.0, 38.6, 43.0, 43.3, 45.3, 47.4 - darker more argillaceous zone from 42.3 - 44.1 at 42 <i>fol</i> at 60° to C/A	0056	35.9	36.6	.7		81	5	23	.1	2	1.96		

10

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ALTITUDE COLLAR: -51.5° PAGE 4 OF 5
 HOLE NO. : 86-20 LOC. : ALTITUDE BOTTOM: Az 150° LOGGED BY : P.R.D.
 COMMENCED: Sept. 18/86 ELEV. : 1,745 m (assumed) % RECOVERY: DATE : Sept. 19/86
 COMPLETED: Sept. 19/86 CORE SIZE: NQ LENGTH: 139.3 CORE STORED : Lower Camp
 OBJECTIVE: To test 605 vein extension UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis									
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %				
104.3	117.7	SQ	Lt Greenish Grey Sericitic Qtzite good section of qtzite - fine sand grains generally visible - some bands of ser, set sch - particularly grading into above section - at 105.6 foliation in ser qtzite at 65° to C/A - at 105.7 2 cm crushed rock in contact with .25 m qtz/anK vein, no sulphide - at 119.4 narrow qtz vein and weak fault gouge qtz vein with ankerite and wall rock section and minor py core conc. - section becomes more sericitic towards bottom of section with some more argilla- ceous rocks, visible qtz grains "disappear" and ankeritic meta crystals appear. - narrow qtz/ankerite vein with conc. of py (10%) badly broken ground and gouge at 113.7 and 115.0, 115.3 X sericitic ankerite qtzite with narrow 3 cm qtz and py (60%)															
				0062	112.2	112.7	.5		27	6	35	.1	1	4.69				
				0064	113.9	114.0	.1		29	771	21	1.2	220	3.40				
				0063	117.55	117.70	.15		272	179	29	2.4	13	13.78				

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ALTITUDE COLLAR: -51.5° PAGE 5 OF 5
 HOLE NO. : 86-20 LOC. : ALTITUDE BOTTOM: Az 150° LOGGED BY : P.R.D.
 COMMENCED: Sept. 18/86 ELEV. : 1,745 m (assumed) % RECOVERY: DATE : Sept. 19/86
 COMPLETED: Sept. 19/86 CORE SIZE: NQ LENGTH: 139.3 CORE STORED : Lower Camp
 OBJECTIVE: To test 605 vein extension UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis								
									Cu %	Pb %	Zn %	Ag g/t	Au g/t	Fe %			
117.7	128.2	V	"605? Qtz Vein with sections of ankerite and sericitic wall rock														
			- white qtz with 20% ankerite and minor inclusion ser sch local sore of po and py and minor cpy at 118.3	0065	117.7	119.1	1.4		86	155	37	2.3	42	3.51			
			- white qtz with sections of ankerite ser qtzite - about 60% qtz - 40% wall rock, local py at 119.5	0066	119.1	121.0	1.9		44	26	16	.2	250	2.54			
			- narrow white qtz vein with local inclusion of sch approx 15% py as coarse local concentration	0067	121.0	121.6	.6		28	10	6	.2	590	6.53			
			- white qtz veins and greenish ser sch - about 65% slch and 35% qtz vein, local sulphide	0068	121.6	125.5	3.9		18	861	289	1.4	380	4.86			
			- white qtz vein with 15% sch, local high conc. core of sulphides - py, sph, gal - total sulph 10 - 15% (qtz vein and wall rock) no vis. sulphides	0070 0069 0070	125.5 127.8 127.8	127.8 128.2	2.5 .4		19 6	18195 36	15733 16	31.7 .1	22100 59	4.47 1.93			
128.2	139.3	SQ	Med Grey Ser Qtzite local blueish grey qtz grain up to 2 mm, other areas with higher ser content - at 131.0 foliation at 60° to C/A and of dolo END of HOLE.														

* Note - problem with drillers numbering of blocks. I believe I have properly resolved it given the drillers and addition of 10'.

27
1987

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ATTITUDE COLLAR: 230°/-45° PAGE 2 OF 5
 HOLE NO. : 86-21 LOC. : 3+23E 0+98S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 21/86 ELEV. : % RECOVERY: +80° DATE : Sept. 22/86
 COMPLETED: Sept. 23/86 CORE SIZE: NQ LENGTH: 103 CORE STORED : Lower Camp
 OBJECTIVE: To intersect oreshoot within the shasta vein UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis									
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %				
			Py is minor as disem grains. Section is semi massive and homogeneous. Minor mgn on cl surfaces															
25.0	37.6	SS/ Q	Light Greenish Grey Interbanded Ser Sch/ Crse Qtzite Bands and laminae of pale green wispy ser sch separating coarse grain ser qtzite bands and layers qtz segregations frequent Section is rusty along fractures? Py very minor															
			- [32.1] rusty sericitic clay gouge -fault?															
			- [33.0 - 33.1] qtz vein															
			- [34.2 - 34.3] Sericite clay - fault?															
37.6	92.1	SS/ Q	Med Greyish Green Interbanded Ser Sch/ Qtzite Fine grain ser sch bands and laminae wispy and contorted separate longer sections of greyish green and grey, ser qtzite. Ser Qtzite grades from fine to coarse grain. Some sections massive and homogeneous. Qtz segregations common. Py minor															

C/A 570 at 7m
 590 at 17m
 570 at 29m

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY : Cunningham Creek LOCATION : Main Grid Southern ATTITUDE COLLAR: 230°/-45° PAGE 3 OF 5
 HOLE NO. : 86-21 LOC. : 3+23E 0+98S ATTITUDE BOTTOM: LOGGED BY : M.E. Baknes
 COMMENCED: Sept. 21/86 ELEV. : % RECOVERY: +80° DATE : Sept. 22/86
 COMPLETED: Sept. 23/86 CORE SIZE: NQ LENGTH: 103 CORE STORED : Lower Camp
 OBJECTIVE: To intersect oreshoot within the shasta vein UNUSUAL FEAT.:

From Meters	To Meters	Syb	Description	Acme Smp. #	From Meters	To Meters	Lgth.	Rec. %	Analysis								
									Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb	Fe %			
			- [44.4 - 44.6] blueish grey qtz vein														
			- [49.8 - 49.9] qtz carbonate vein														
			- [53.4 - 54.4] greyish green, very massive and homogeneous ser med fine grain ser qtzite														
			- [56.2 - 57.2] med greyish green very coarse grain ser qtzite with grains up to 2 mm, *marker*														
			- [59 - 60.1] intense qtz segregation														
			- [61.5 - 64.1] pale greenish grey intense qtz segregations														
			- [62.4 - 62.7] very coarse grain ser qtzite 3 mm grains														
			- [73.0 - 73.5] med grey very coarse grain sericitic qtzite 2 mm grains														
			- [75.3 - 75.8] greenish grey coarse grain ser qtzite														
			- [76.9 - 77.0] coarse grain ser qtzite														

C/A 67° at 58m
 67° at 70m
 58° at 76m

APPENDIX B

GEOCHEMICAL ANALYSES AND ASSAYS

DRILL CORE 094801-900, 0001-0088, + GRAB SAMPLES - PD + MB

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

86-1

DATE RECEIVED: AUG 22 1986 DATE REPORT MAILED: *Aug 25/86* ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2203 PAGE 1

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	W	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB
094801	1	50	600	35	6.1	9	3	1140	1.94	4	5	ND	4	54	1	2	2	3	2.71	.028	6	3	.58	25	.01	2	.07	.05	.02	1	525
094802	1	19	30	34	.3	14	4	594	1.34	5	5	ND	5	56	1	2	2	2	2.00	.025	8	3	.67	28	.01	2	.13	.04	.08	1	15
094803	1	10	18	17	.1	8	3	1000	2.26	2	5	ND	4	80	1	2	2	1	3.38	.010	6	2	.98	11	.01	2	.07	.06	.03	1	7
094804	1	38	19	61	.2	28	7	495	2.91	13	5	ND	4	30	1	2	2	3	.88	.027	9	3	.81	17	.01	2	.15	.05	.07	1	9
094805	1	59	14	79	.2	27	9	836	4.47	7	5	ND	4	95	1	2	2	3	2.75	.022	10	3	1.62	23	.01	5	.18	.06	.09	1	2
094806	1	21	33	170	.1	31	11	345	3.83	8	5	ND	12	47	1	2	2	8	.66	.034	21	5	.82	37	.01	6	.62	.04	.13	1	8
094807	1	12	9	27	.1	47	12	802	2.73	15	10	ND	5	174	1	2	2	6	4.90	.048	7	9	1.40	27	.01	4	.19	.06	.12	1	2
094808	1	10	8	25	.1	13	5	633	1.92	4	5	ND	5	32	1	2	2	3	1.20	.007	11	5	.65	13	.01	3	.18	.04	.05	1	3
094809	1	99	10	11	.1	59	36	436	3.18	6	5	ND	6	91	1	2	2	3	2.40	.021	5	4	.74	29	.01	5	.21	.05	.13	1	1
094810	1	35	38	80	.1	51	15	580	4.29	6	5	ND	7	43	1	2	2	13	.74	.041	15	26	1.18	26	.01	2	1.45	.04	.12	1	1
094811	3	47	39	84	.2	48	15	548	4.14	3	5	ND	7	46	1	3	2	12	.78	.029	17	29	1.23	28	.01	5	1.54	.04	.11	1	1
094812	1	31	86	66	.2	36	10	814	3.53	4	5	ND	5	81	1	2	2	9	1.43	.025	9	18	1.21	24	.01	2	1.17	.04	.11	1	1
094813	1	26	10	80	.1	47	14	517	4.67	10	5	ND	7	41	1	3	2	15	.55	.015	15	35	1.48	25	.01	3	1.82	.04	.10	1	1
094814	1	63	13	101	.2	43	13	450	4.06	42	5	ND	8	38	1	2	2	4	.65	.017	19	8	1.32	24	.01	3	.43	.04	.12	1	2
094824	1	22	11	78	.1	53	20	615	4.70	81	5	ND	6	37	1	2	2	3	1.57	.014	13	3	1.09	20	.01	4	.18	.05	.12	1	12
094825	1	3	8	10	.1	5	1	682	1.58	27	5	ND	2	44	1	2	2	1	1.73	.005	4	3	.55	7	.01	2	.06	.03	.03	1	95
094826	1	4	11	17	.1	4	1	861	1.77	4	5	ND	1	44	1	2	2	1	1.21	.003	2	3	.50	5	.01	2	.04	.03	.01	1	135
094827	2	26	17	97	.1	43	17	638	5.80	8	5	ND	9	41	1	3	2	25	.86	.038	19	27	1.70	22	.01	4	2.28	.05	.09	1	20
STD C/AU 0.5	19	59	36	137	7.1	71	29	1105	3.96	39	18	7	35	49	18	16	21	68	.48	.106	38	60	.88	183	.09	33	1.72	.09	.14	13	500

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL/ASSAY CERTIFICATE

.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, CR, P, CO, MS, BA, TI, E, AL, NA, F, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE AG** & AU** BY FIRE ASSAY

86-1

DATE RECEIVED: AUG 22 1986

DATE REPORT MAILED: *Aug 25/86*

ASSAYER: *D. Toye* ... DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2201A

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SAMPLE#	Mb	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	F	W	Ag**	Au**
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	OZ/T	OZ/T
094815	1	72	17	60	.1	28	25	993	5.94	65	5	ND	3	104	1	2	2	8	2.85	.072	9	3	1.71	38	.01	5	.34	.01	.11	1	.01	.001
094816	1	17	84	13	2.0	42	25	613	6.30	363	5	14	2	79	1	2	2	3	2.39	.048	5	4	.79	19	.01	2	.20	.01	.11	1	.06	.426
094817	1	8	13	6	.6	14	12	406	1.99	87	5	5	3	46	1	2	2	1	1.41	.014	7	5	.49	14	.01	2	.13	.01	.08	1	.01	.139
094818	1	16	41	42	.2	30	12	825	3.42	69	6	ND	5	89	1	2	2	1	3.38	.030	10	6	1.10	20	.01	2	.19	.01	.11	1	.02	.009
094819	1	11	2	28	.1	21	10	1006	4.19	90	5	ND	4	67	1	2	2	1	1.91	.016	9	4	1.11	15	.01	2	.14	.01	.09	1	.01	.011
094820	1	21	98	48	.4	39	13	1276	5.17	89	5	ND	5	61	1	2	2	1	2.48	.019	13	4	1.43	21	.01	2	.18	.01	.11	226	.01	.005
094821	1	8	2	25	.1	21	7	991	3.44	118	5	ND	5	107	1	2	2	1	4.00	.009	9	4	1.39	16	.01	2	.14	.01	.09	1	.01	.003
094822	1	31	16	44	.1	47	18	939	4.32	73	5	ND	7	53	1	2	2	2	2.54	.032	11	4	1.15	22	.01	3	.20	.01	.12	1	.01	.004
094823	1	3	9	33	.1	11	6	2145	5.84	1889	5	ND	1	15	1	2	2	1	.47	.003	8	4	1.33	4	.01	2	.04	.01	.02	1	.01	.029
STD C	20	56	39	131	6.7	64	29	1052	3.91	40	21	7	30	44	16	16	19	59	.48	.104	36	58	.88	165	.08	34	1.72	.06	.13	13	-	-

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH JML 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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORES AND ROCKS AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 27 1986 DATE REPORT MAILED: *Aug 29/86* ASSAYER: *D. J. J.* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2300

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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	W	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	
94828	1	13	73	50	.3	24	7	899	2.98	9	5	ND	5	49	1	2	2	7	2.25	.038	11	15	.92	22	.01	2	.68	.02	.07	2	1
94829	1	12	13	17	.1	13	5	768	1.78	7	5	ND	4	79	1	2	4	1	2.68	.026	8	4	.99	25	.01	3	.14	.01	.07	1	1
94830	1	12	14	14	.1	19	4	424	1.78	137	5	ND	2	29	1	2	2	1	1.11	.011	3	4	.55	7	.01	3	.10	.01	.04	1	115
94831	1	20	17	27	.1	31	12	1164	3.60	21	5	ND	6	82	1	2	2	2	2.53	.015	9	6	1.36	20	.01	4	.19	.02	.09	1	7
94832	1	20	20	66	.1	55	20	731	5.35	40	5	ND	6	63	1	2	2	7	1.83	.031	11	14	1.87	41	.01	2	.24	.01	.08	1	1
94833	1	22	20	96	.1	34	13	656	3.80	17	5	ND	6	95	1	2	2	4	2.00	.040	10	8	1.18	32	.01	7	.31	.01	.11	1	1
94834	1	7	10	31	.1	22	5	434	2.26	4	5	ND	5	63	1	2	2	14	1.20	.028	14	31	1.01	17	.01	3	.82	.03	.03	1	1
94835	1	29	28	40	.1	28	10	477	3.08	3	5	ND	7	61	1	2	2	9	1.36	.022	11	22	1.14	28	.01	2	.93	.02	.09	1	1
94836	17	48	29	75	.6	52	19	379	4.01	8	5	ND	7	46	1	2	2	21	.78	.028	11	40	1.41	33	.01	4	1.59	.02	.11	1	2
94837	1	45	32	84	.1	61	20	585	4.80	8	5	ND	6	44	1	2	2	14	.84	.042	10	33	1.36	28	.01	2	1.89	.01	.12	1	1
94838	1	50	24	113	.1	61	20	581	5.28	14	5	ND	9	42	1	2	2	15	.72	.048	12	36	1.56	26	.01	2	2.18	.01	.13	1	1
94839	1	54	16	86	.3	13	16	891	5.97	42	5	ND	2	99	1	2	4	19	3.05	.073	2	4	1.52	20	.01	2	.66	.01	.10	1	205
94845	1	3	1610	237	1.0	8	3	553	1.58	7	5	ND	4	42	2	6	3	1	2.01	.013	7	3	.50	16	.01	5	.13	.02	.06	664	3
94846	1	1	18	17	.1	8	4	806	1.79	14	5	ND	5	67	1	2	2	1	3.04	.053	10	4	.92	22	.01	2	.18	.01	.09	3	1
94847	1	18	12	34	.1	39	14	1078	4.07	19	5	ND	8	49	1	2	2	2	1.80	.038	8	6	1.33	28	.01	3	.29	.01	.16	6	1
94848	1	17	6	12	.1	33	13	527	2.38	106	5	ND	6	43	1	2	2	1	1.57	.008	6	5	.70	15	.01	7	.18	.01	.08	1	285
94849	1	20	14	16	.1	28	7	663	2.57	287	5	ND	5	58	1	2	2	2	1.70	.032	8	5	.85	22	.01	6	.22	.01	.11	1	305
94850	1	2	12	33	.1	14	6	1029	4.91	18	5	ND	3	31	1	2	2	1	1.05	.022	7	3	1.28	16	.01	3	.15	.01	.07	1	1450
94851	2	4	5	27	.1	42	15	1265	4.72	88	5	ND	2	119	1	2	2	3	4.11	.038	4	9	2.12	17	.01	3	.16	.01	.09	2	4
94852	2	4	6	21	.1	26	11	1193	3.81	67	5	ND	2	132	1	2	2	2	4.97	.038	2	9	1.94	19	.01	4	.14	.01	.08	1	22
94853	1	3	8	12	.1	46	31	632	2.49	143	5	ND	7	79	1	2	2	4	2.42	.067	11	10	.92	29	.01	4	.29	.02	.15	1	130
94854	1	7	23	4	.5	83	16	547	4.06	7903	5	3	1	54	1	2	2	1	1.48	.007	2	6	.65	9	.01	5	.09	.01	.05	1	3650
4203-86-MB-1	2	71	248	31	15.3	79	37	66	10.58	3296	5	84	1	3	1	3	3	1	.02	.003	2	3	.02	7	.01	2	.02	.01	.01	23	89500
4203-86-PD-1	1	19	11	10	.1	16	4	341	1.36	20	5	ND	2	17	1	2	2	1	.53	.022	4	4	.15	11	.01	4	.08	.01	.03	1	22
4203-86-PD-2	46	177	22283	95841	268.7	46	62	58	12.54	281	5	20	1	1	924	271	31	2	.02	.001	2	2	.02	1	.01	2	.01	.01	.01	267	82000
4203-86-PD-3	69	25113	23638	213523	327.3	2	1	73	.96	3355	5	ND	1	2	1538	15937	2	1	.01	.007	2	1	.01	4	.01	3	.01	.01	.01	80	2200
4210-86-5520	269	43675	228	3201	127.9	30	1	466	14.58	2	5	ND	1	1	27	111	2	69	.05	.020	3	11	1.12	1	.07	2	1.66	.01	.01	1	250
STD C/AU-0.5	20	59	35	136	6.9	65	29	1080	3.92	39	22	7	31	46	17	16	18	61	.48	.106	34	58	.88	172	.08	36	1.73	.06	.13	12	520

Assay required for correct result

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL / ASSAY CERTIFICATE

.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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE AG# ANALYSIS BY AA BACKGROUND CORRECTED. AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 27 1986

DATE REPORT MAILED:

*Aug 30/86*ASSAYER: *D. Jupp* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS CORPORATION PROJECT - 4203 FILE # 86-2300A

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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	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Ag OZ/T	Au OZ/T
94840	2	98	1214	504	2.1	26	16	3451	9.46	113	5	ND	3	30	4	2	2	3	1.03	.008	5	5	2.05	13	.01	2	.11	.01	.08	1	.06	.009
94841	1	11	126	42	.3	125	27	892	4.03	461	5	ND	1	12	1	2	2	1	.32	.002	3	4	.51	8	.01	2	.07	.01	.04	2	.02	.025
94842	2	101	47	89	2.1	3	6	706	1.70	77	5	ND	1	9	1	13	2	1	.22	.004	2	4	.31	4	.01	3	.04	.01	.02	1	.07	.006
94843	1	7	23	30	.1	3	6	2013	4.10	115	5	ND	1	15	1	2	2	1	.42	.014	4	4	.90	8	.01	5	.09	.01	.04	1	.01	.001
94844	1	23	32	36	.7	37	15	1518	5.20	401	5	2	3	67	1	2	2	1	2.85	.006	2	5	1.18	11	.01	7	.11	.01	.07	1	.04	.075

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCK CHIPS AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 30 1986 DATE REPORT MAILED: *Sept 4/86* ASSAYER: *D. J. ...* DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2376

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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	W	Au1
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPM
4203-86-MB-2	1	5	9	38	.1	25	8	1008	5.58	12	5	ND	2	4	1	2	2	3	.04	.022	9	5	.13	12	.01	7	.14	.02	.04	1	16
4203-86-MB-3	1	10	3	67	.2	39	11	654	3.72	2	5	ND	8	12	1	2	2	21	.12	.037	24	26	.80	14	.01	3	1.56	.03	.09	1	2
4203-86-MB-4	1	11	2	12	.2	19	6	156	.78	3	6	ND	2	3	1	2	2	1	.01	.007	3	8	.01	6	.01	2	.04	.01	.02	1	2
4203-86-MB-5	1	4	2	26	.1	7	2	1508	4.03	2	6	ND	2	2	1	2	2	1	.01	.004	6	3	.07	13	.01	7	.04	.01	.04	1	16
4203-86-MB-6	1	8	4	18	.1	11	3	726	1.38	2	5	ND	2	3	1	2	2	1	.03	.018	4	4	.02	10	.01	3	.08	.01	.04	1	2
4203-86-MB-7	1	5	2	7	.1	7	1	212	.73	5	5	ND	1	2	1	4	2	1	.02	.004	2	5	.01	6	.01	3	.03	.01	.01	1	2
4203-86-MB-8	1	10	9	57	.1	14	8	2554	10.58	2	6	ND	4	8	1	2	2	4	.07	.034	9	3	.06	20	.01	5	.10	.03	.05	1	5
4203-86-MB-9	1	6	8	23	.1	23	8	996	3.27	.59	5	ND	1	4	1	2	2	2	.02	.020	3	2	.02	25	.01	5	.06	.01	.02	1	5
4203-86-MB-10	1	12	56	41	.1	23	5	2127	3.27	13	5	ND	2	13	1	2	2	4	.35	.039	5	2	.13	28	.01	5	.24	.02	.06	1	8
4203-86-MB-11	1	5	2608	111	3.8	10	2	277	1.32	28	5	2	1	1	1	5	7	1	.01	.002	2	3	.01	7	.01	2	.03	.01	.01	1	(1350) 2x25cm 1/2 bleed along linear Au anomaly
4203-86-MB-12	1	7	46	46	.3	15	7	526	3.73	(39)	5	2	2	2	1	2	2	2	.01	.013	6	2	.03	18	.01	4	.11	.01	.05	1	(1340) 15cm x 10cm plot at down linear Au linear Au anomaly
4203-86-MB-13	1	31	76	41	1.3	16	5	533	2.43	5	5	ND	2	10	1	4	4	2	.17	.079	5	3	.06	25	.01	3	.16	.02	.05	1	3
4203-86-MB-14	1	2	3	12	.1	6	2	1372	2.10	2	11	ND	6	(140)	1	2	2	3	1.95	.060	11	3	.49	14	.01	4	.10	.09	.02	1	1
4203-86-MB-15	1	4	3	18	.1	22	7	1567	2.07	27	5	ND	4	3	1	2	2	2	.16	.010	11	1	.03	26	.01	3	.10	.02	.07	1	104
4203-86-MB-16	1	3	2	1	.1	3	1	89	.28	2	5	ND	1	1	1	2	2	1	.02	.001	2	3	.01	3	.01	2	.01	.01	.01	1	1
4203-86-MB-17	1	(174)	18	39	3.6	(376)	7	1565	2.99	(856)	5	ND	1	1	1	2	2	1	.06	.002	3	1	.03	20	.01	3	.03	.01	.01	1	700
4203-86-MB-18	1	23	2	31	.3	46	7	4866	7.50	51	5	ND	2	3	1	2	2	4	.09	.004	6	1	.09	56	.01	4	.07	.02	.03	1	(2070) 15cm x 12cm ank + hematite along linear Au anomaly
4203-86-MB-19	1	22	62	5668	.5	5	2	1797	1.95	7	5	ND	1	(746)	(65)	2	5	1	26.96	.029	3	1	.27	21	.01	4	.04	.08	.01	1	79
4203-86-MB-20	1	18	6729	2960	35.0	8	3	521	.87	36	5	ND	1	9	(27)	5	(76)	1	.27	.004	2	4	.01	8	.01	3	.02	.01	.01	1	64
4203-86-MB-21	1	(1170)	772	377	6.2	98	2	226	43.47	2	5	ND	4	8	4	2	(18)	2	.22	.003	(17)	1	.04	4	.01	(36)	.03	.05	.01	7	(2150)
4203-86-MB-22	1	39	26989	28	305.9	4	1	433	.87	5	5	ND	1	18	(18)	(24)	(3059)	1	.01	.003	2	5	.01	5	.01	2	.01	.01	.01	2	90
4203-86-MB-23	1	2	2081	13	20.2	1	1	2798	1.71	4	5	ND	1	(500)	1	2	(45)	1	32.78	.035	4	1	.15	26	.01	2	.01	.08	.01	7	28
4203-86-MB-24	1	(3044)	545	78	4.6	43	(156)	281	27.26	26	11	ND	3	7	2	2	8	2	.32	.001	10	1	.04	8	.01	(14)	.01	.04	.02	1	190
4203-86-MB-25	1	7	142	18	1.9	7	2	367	1.06	2	5	ND	2	12	1	3	3	1	.47	.018	2	3	.03	8	.01	4	.05	.02	.02	1	4
STD C/AU-0.5	22	59	42	136	7.1	71	29	1107	3.94	38	17	7	36	(49)	18	16	19	69	1.48	.104	41	63	.88	184	.09	34	1.73	.09	.14	12	500

✓ Assay required for correct result

GEOCHEMICAL/ASSAY CERTIFICATE

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: ROCK/CORE AU ANALYSIS BY AA FROM 10 GRAM SAMPLE. AG ANALYSIS BY AA BACKGROUND CORRECTED. AUT ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 2 1986 DATE REPORT MAILED: *Sept 10/86* ASSAYER... *D. Toyer* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2409A

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Table with columns: 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, Cd PPM, Sb PPM, Bi PPM, V PPM, Ca %, P %, La PPM, Cr PPM, Mg %, Ba PPM, Ti %, B PPM, Al %, Na %, K %, W PPM, Aut PPB, Ag OZ/T, Au OZ/T. Rows include samples 4203-86-MB-27 through 094888 and STD C/AU-0.5.

Handwritten notes on the right margin: '2385, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000.

GEOCHEMICAL/ASSAY CERTIFICATE

.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, CA, P, CR, MG, BA, TI, B, AL, NA, Y, W, SI, ZR, CE, SN, V, Ni AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE/ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE. AG* ANALYSIS BY AA BACKGROUND CORRECTED. AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 4 1986

DATE REPORT MAILED: *Sept 9/86*

ASSAYER: *D. Toye*

DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2458

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SAMPLE#	Md	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Fa	Ti	B	Al	Na	K	W	Au*	Ag	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	OZ/T	OZ/T	
<i>16</i> S-2-68.8 094889 Core	1	13	4	19	.1	35	10	548	2.09	13	5	ND	5	90	1	2	2	6	1.81	.011	5	17	.85	10	.01	3	.40	.04	.03	1	1	-	-
76.1-96.Y 094890	1	14	268	18	1.1	18	5	586	1.96	8	5	ND	8	64	1	2	2	2	1.70	.032	10	4	.66	23	.01	7	.31	.02	.07	2	1	-	-
02.7-103.0 094891	1	47	2	24	.1	49	13	881	4.33	16	8	ND	8	45	1	2	5	2	1.53	.045	4	5	.92	23	.01	6	.27	.01	.12	1	-	.01	.001
-103.1 094892	1	101	56	12	1.5	48	143	1252	5.45	10	5	5	2	37	2	3	6	1	1.82	.009	2	5	.67	14	.01	5	.14	.01	.07	1	-	.05	.055
-103.20 094893	1	12	9	18	.2	20	11	1226	2.95	28	5	ND	5	72	1	2	2	1	2.84	.004	2	2	1.01	12	.01	2	.12	.01	.07	1	-	.01	.001
-104.0 094894	1	14	5	51	.2	36	11	427	3.29	27	5	ND	7	35	1	2	3	2	1.10	.013	9	6	.80	18	.01	7	.27	.01	.10	1	-	.01	.001
17.3-17.6 094895	1	149	96	62	.7	6	17	1141	4.35	12	5	ND	3	164	1	2	6	25	3.19	.065	5	3	1.30	20	.01	2	.88	.03	.07	1	1	-	-
26.2-26.5 094896	1	46	286	15	2.2	29	11	693	2.67	7	5	ND	5	102	1	2	5	2	2.43	.004	3	6	.99	8	.01	2	.10	.05	.03	1	1	-	-
- 4203-86-MB-32	1	4	2	1	.3	8	1	134	.27	2	5	ND	1	5	1	2	2	1	.08	.005	2	3	.02	4	.01	3	.02	.01	.01	1	1	-	-
- 4203-86-MB-33	1	6	27	141	.1	66	37	1911	7.21	5	5	ND	1	50	1	3	5	149	1.29	.113	6	51	4.15	46	.02	2	4.06	.01	.01	1	1	-	-
- 4203-86-MB-34	1	116	16	94	.1	14	25	1402	6.68	2	5	ND	5	144	1	2	3	86	3.56	.138	13	11	1.69	114	.01	2	2.27	.02	.05	1	1	-	-
- 4203-86-MB-35	2	10	32	4	.3	9	2	431	.73	2	5	ND	1	6	1	2	2	3	.07	.024	2	4	.03	26	.01	4	.07	.01	.01	1	1	-	-
- 4203-86-MB-36	1	139	21	53	.3	40	19	2087	3.79	6	5	ND	2	209	1	2	4	45	5.74	.085	9	30	.69	181	.01	5	1.06	.03	.03	1	1	-	-
STD CIAU-0.5	20	58	42	135	7.0	76	31	1093	3.96	42	21	8	33	47	18	16	21	62	.48	.105	34	58	.88	175	.08	36	1.73	.06	.13	14	480	-	-

GEOCHEMICAL/ASSAY CERTIFICATE

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE/ROCK AG# ANALYSIS BY AA BACKGROUND CORRECTED. AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 28 1986 DATE REPORT MAILED: *Sept 5/86* ASSAYER: *D. Jeps.* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2336A

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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	W	Ag	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	OZ/T	OZ/T
094858	2	21	27	14	.3	37	8	313	1.65	15	5	ND	5	33	1	2	3	2	.93	.020	12	9	.46	30	.01	3	.22	.02	.11	6	.01	.001
094859	1	123	25	43	.1	83	32	823	4.35	52	5	ND	5	53	1	2	3	1	1.80	.012	7	6	.93	37	.01	4	.18	.01	.12	2	.01	.007
4203-86-PD-4	13	9	22055	17259	42.4	13	5	70	7.55	376	5	35	1	2	197	27	2	1	.02	.002	2	9	.02	4	.01	2	.03	.01	.02	1	1.37	1.330
4203-86-PD-5	6	7	1854	7926	3.0	3	1	56	.85	61	5	2	1	1	95	3	2	1	.01	.001	2	9	.01	1	.01	2	.01	.01	.01	1	.07	.056
4203-86-PD-6	2	4	7395	572	11.3	7	1	50	3.32	145	5	5	1	1	6	6	2	1	.01	.003	2	12	.01	1	.01	2	.01	.01	.01	9	.31	.149
4203-86-PD-7	4	34	21239	555	114.3	63	24	312	10.20	2779	5	113	1	15	11	53	5	1	.08	.042	2	6	.08	6	.01	3	.01	.01	.02	69	3.18	2.940
4203-86-PD-8	1	8	257	11	4.3	240	64	74	11.96	15468	5	22	2	3	1	2	2	1	.03	.001	2	7	.01	4	.01	3	.02	.01	.03	6	.13	.760
4203-86-PD-9	1	4	427	14	3.1	126	31	58	5.33	1130	5	15	1	1	1	2	2	1	.01	.002	2	11	.01	4	.01	4	.03	.01	.02	12	.09	.460
4203-86-PD-10	4	39	16466	2507	56.0	196	68	1187	17.01	6029	5	40	1	32	29	24	10	4	.76	.113	2	5	.50	1	.01	4	.05	.01	.05	103	1.60	4.460
4203-86-PD-11	1	-4	149	7	4.0	113	29	252	6.75	1036	5	21	1	13	1	2	2	1	.19	.005	2	9	.15	9	.01	2	.05	.01	.03	8	.13	.620
4203-86-PD-12	1	4	229	9	4.4	149	42	239	6.83	744	5	20	1	34	1	2	2	1	.48	.005	2	10	.21	8	.01	6	.06	.01	.04	9	.16	.680
4203-86-PD-13	2	2	105	80	1.5	372	146	3922	24.08	2269	5	8	2	2	1	2	6	5	.06	.001	2	8	1.64	4	.01	2	.02	.01	.04	5	.03	.281
4203-86-PD-14	2	6	60	26	2.5	192	32	1524	11.15	1007	5	14	1	45	1	2	2	3	.72	.001	2	7	.96	7	.01	2	.04	.01	.03	8	.09	.460
4203-86-PD-15	2	2	40	1	1.5	80	31	83	15.59	1588	5	9	2	3	1	2	4	3	.01	.001	4	9	.03	4	.01	4	.15	.01	.12	7	.05	.196
4203-86-PD-16	36	17	17944	63806	119.1	78	54	65	16.34	937	5	63	1	1	539	31	24	3	.01	.001	2	4	.02	1	.01	2	.01	.01	.01	1	3.68	8.040
STD C	21	59	40	131	7.2	70	30	1091	3.94	43	22	8	32	47	17	16	19	62	.48	.107	35	58	.88	174	.08	35	1.73	.06	.13	12	-	-

Assay required for correct result

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 28 1986 DATE REPORT MAILED: *Sept 5/86* ASSAYER: *D. J. ...* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2336

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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	W	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
871 094855	2	44	116	70	.6	50	14	597	3.94	4	5	ND	7	67	1	2	2	8	1.04	.057	8	15	1.08	30	.01	5	1.04	.05	.13	1	4
094856	2	32	45	86	.2	36	12	948	4.80	6	5	ND	6	143	1	2	2	11	1.97	.029	4	13	1.39	23	.01	5	.86	.06	.09	1	2
094857	1	29	13	83	.1	48	14	592	4.43	16	5	ND	8	69	1	2	2	9	.89	.035	14	15	1.35	26	.01	6	1.37	.04	.11	1	2
STD C/AU-0.5	21	56	35	130	6.8	67	28	1056	3.94	38	17	7	34	46	17	16	20	66	.48	.101	33	57	.88	173	.08	35	1.72	.09	.12	14	510

IMPERIAL METALS PROJECT-4203 FILE # 86-2608

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	W	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
094897	1	38	122	37	.7	33	10	499	2.43	13	5	ND	6	33	1	3	5	5	.93	.029	10	11	.70	17	.01	12	.55	.04	.08	2	9
094898	1	18	102	18	.6	16	7	1128	2.52	8	5	ND	4	73	1	2	3	3	2.50	.009	6	8	.93	13	.01	2	.24	.06	.06	1	11
094899	1	15	8	52	.1	28	9	654	3.07	10	5	ND	5	98	1	2	2	6	1.63	.035	12	8	.99	18	.01	5	.49	.05	.08	1	2
094900	1	31	42	88	.1	52	16	819	5.18	10	5	ND	5	65	1	2	5	10	1.02	.038	11	10	1.45	18	.01	4	.99	.05	.09	1	2
02001	1	25	128	3	60.3	19	2	94	.61	99	5	ND	1	2	1	2	97	1	.09	.001	2	5	.04	2	.01	2	.03	.01	.01	1	48
0002	1	31	8	115	.1	34	10	670	2.54	48	5	ND	7	89	1	2	2	2	2.70	.024	6	3	.92	19	.01	2	.13	.05	.08	1	13
0003	1	22	9	9	.1	28	10	839	1.98	7	5	ND	2	16	1	2	2	1	.91	.010	4	5	.33	7	.01	3	.05	.03	.03	1	3
0004	1	33	6	88	.1	22	10	520	3.40	16	5	ND	9	52	1	2	3	3	1.42	.027	15	2	.96	21	.01	3	.16	.05	.10	1	2
0005	1	119	29	34	.4	123	47	938	5.73	8	5	ND	1	31	1	2	3	2	1.32	.006	2	2	1.12	6	.01	2	.05	.05	.01	1	131
0006	1	18	8	110	.1	39	16	633	4.94	20	5	ND	8	35	1	2	3	4	.76	.026	14	8	1.31	19	.01	2	.27	.04	.09	1	1
0007	1	13	12	40	.1	14	9	764	4.34	8	5	ND	6	154	1	2	3	5	3.39	.028	3	3	1.41	19	.01	2	.31	.07	.06	1	4
0008	1	29	8	29	.1	7	13	1341	6.13	6	16	ND	1	331	1	2	4	18	7.02	.089	2	1	2.30	20	.01	2	.38	.08	.04	2	1
0009	2	149	745	17	9.8	39	32	652	4.51	22	7	ND	4	139	1	2	21	4	3.56	.048	4	3	1.19	20	.01	4	.16	.06	.08	1	9
0010	1	9	12	80	.1	22	6	522	2.93	3	5	ND	6	141	1	2	3	5	2.64	.015	5	11	1.31	10	.01	3	.51	.05	.04	1	3
0011	1	13	12	29	.1	20	5	799	2.67	2	5	ND	3	95	1	2	2	4	2.03	.027	7	13	.97	10	.01	2	.57	.05	.04	1	1
0012	1	81	19	113	.1	19	26	964	7.05	21	5	ND	3	120	1	2	3	68	2.52	.105	2	6	1.74	17	.01	2	1.94	.06	.06	1	1
0013	1	83	14	79	.1	20	23	1642	9.07	26	6	ND	2	160	1	2	4	31	3.20	.067	6	6	2.04	14	.01	2	.86	.07	.05	1	1
0014	1	34	9	40	.2	39	12	625	3.28	66	5	ND	7	56	1	2	2	3	1.31	.031	6	4	.84	21	.01	2	.18	.04	.07	2	320
0015	1	15	5	17	.1	30	12	595	2.90	48	5	ND	6	53	1	2	2	3	1.50	.011	7	5	.82	19	.01	3	.13	.04	.08	2	132
0016	1	22	4	33	.1	29	10	333	2.99	33	5	ND	7	27	1	7	2	2	.57	.048	12	4	.77	16	.01	2	.25	.03	.06	1	2
0017	1	18	9	21	.1	26	9	607	2.94	45	5	ND	6	69	1	2	2	2	1.61	.023	9	2	.85	23	.01	3	.20	.05	.08	1	190
0018	1	10	8	15	.2	2	3	1711	1.78	2	5	ND	2	731	1	2	2	24	12.57	.002	2	3	.43	6	.01	2	.52	.07	.01	2	1
0019	1	3	10	6	.1	2	1	513	.38	2	5	ND	1	567	1	2	2	1	11.36	.001	2	3	.07	6	.01	2	.01	.06	.01	1	1
STD C/AU-R	22	58	42	134	6.9	68	28	1082	3.98	37	16	7	35	47	17	17	20	67	.47	.103	35	55	.88	179	.08	35	1.73	.09	.13	13	485

GEOCHEMICAL ICP ANALYSIS

.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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCKS/CORES AU: ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 11 1986 DATE REPORT MAILED: *Sept 16/86* ASSAYER: *D. Toye*... DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS CORPORATION PROJECT - 4203 FILE # 86-2602

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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	W	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	
- 4203-86-MB-37	1	61	4	11	.1	7	2	192	.74	3	5	ND	3	2	1	2	2	2	.04	.006	5	7	.02	12	.01	2	.12	.01	.02	1	1
- 4203-86-MB-38	1	9	5	24	.1	11	2	642	3.20	3	5	ND	2	4	1	2	3	1	.04	.018	2	5	.03	12	.01	5	.04	.01	.02	1	4
- 4203-86-MB-39	1	9	90	3	1.0	12	3	28	2.64	137	5	2	1	1	1	2	3	1	.01	.001	2	10	.01	4	.01	4	.01	.01	.01	1	1210
- 4203-86-MB-40	1	5	4	1	.1	3	1	28	.30	4	5	ND	1	1	1	2	2	1	.01	.001	2	7	.01	2	.01	2	.01	.01	.01	1	1
- 4203-86-MB-41	1	22	4	3	.1	5	1	67	.60	9	5	ND	1	1	1	2	2	1	.01	.001	2	7	.01	3	.01	2	.01	.01	.01	1	3
- 4203-86-MB-42	1	30	11	8	.2	32	4	82	1.46	246	5	ND	4	2	1	2	2	1	.01	.011	7	8	.01	8	.01	5	.06	.02	.03	1	10
- 4203-86-MB-43	1	4	7	2	.1	5	2	36	.62	24	5	ND	1	1	1	2	17	1	.01	.001	2	13	.01	2	.01	2	.02	.01	.01	1	220
- 4203-86-MB-44	2	5	1367	4	21.3	13	89	61	12.31	306	5	21	1	3	1	3	38	1	.05	.001	2	5	.01	6	.01	2	.01	.02	.01	1	23900
- 4203-86-MB-45	1	38	29965	31156	60.4	8	5	1266	3.99	14	5	ND	1	5	336	53	11	2	.32	.001	2	1	.05	23	.01	5	.03	.02	.01	2	630
- 4203-86-MB-46	1	6	31355	64	71.7	5	1	1135	.94	8	5	ND	1	7	6	22	98	1	.13	.003	3	6	.01	15	.01	2	.01	.01	.01	10	78
- 4203-86-MB-47	2	5	21589	613	76.7	4	1	3489	4.18	8	5	ND	1	41	8	3	146	3	3.33	.009	2	1	.41	12	.01	7	.01	.05	.01	1	16
- 4203-86-MB-48	4	8	1226	78	13.4	21	18	235	20.21	246	5	10	2	1	1	7	44	1	.04	.001	2	1	.02	5	.01	2	.01	.03	.01	1	13900
- 4203-86-MB-49	1	4	1333	46	35.0	6	13	120	4.55	90	5	16	1	1	1	3	78	1	.02	.001	2	1	.01	3	.01	7	.01	.01	.01	1	4650
0020 <i>core</i>	5	277	41	65	.6	59	32	3726	15.61	20	7	ND	2	308	1	2	2	3	9.51	.015	12	1	1.91	16	.01	2	.10	.09	.05	1	25
0021	1	39	2294	1462	2.7	13	15	1709	5.88	27	5	ND	1	246	11	2	4	7	8.78	.060	4	1	1.84	20	.01	7	.17	.08	.10	1	8
0022	3	271	22386	14902	25.5	17	22	3353	10.93	24	5	ND	1	192	130	19	2	5	7.40	.053	6	1	1.84	15	.01	2	.11	.08	.07	1	7
0023	3	52	643	495	1.5	3	9	5049	9.11	12	5	ND	1	254	5	2	4	8	11.17	.068	8	1	2.35	11	.01	2	.08	.09	.05	398	3
0024	5	243	136	122	.6	18	24	2689	14.25	14	8	ND	1	290	2	2	2	3	10.77	.031	10	1	1.68	15	.01	2	.06	.09	.03	1	7
0025	2	51	23	36	.1	27	9	1042	3.24	30	5	ND	4	150	1	2	2	4	4.03	.042	6	3	1.16	27	.01	6	.22	.07	.12	4	1
0026	1	15	24	42	.2	17	4	784	4.23	11	7	ND	5	210	1	2	2	5	4.76	.041	5	4	1.74	20	.01	7	.15	.07	.07	1	2
0027	1	69	21	69	.2	18	24	1970	5.98	26	9	ND	2	308	1	2	4	30	5.45	.079	6	5	2.32	38	.01	9	1.21	.09	.15	1	15
0028	3	370	22	37	.3	7	22	1584	3.83	21	8	ND	1	262	1	2	3	14	4.21	.067	3	4	1.56	19	.01	6	.47	.07	.08	1	91
STD C/AU-R	21	59	37	138	7.2	70	29	1120	3.95	36	18	7	36	49	18	17	20	69	.48	.105	38	60	.88	184	.08	39	1.73	.09	.14	14	505

Assay required for correct result

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 18 1986

DATE REPORT MAILED: *Sept 19/86*

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT-4203 FILE # 86-2721

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe I	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca I	P I	La PPM	Cr PPM	Mg I	Ba PPM	Ti I	B PPM	Al I	Na I	K I	W PPM	Au1 PPB
0029	1	11	4	148	.1	39	8	785	2.59	74	7	ND	6	80	1	2	2	3	2.70	.035	10	8	.89	21	.01	8	.19	.06	.10	1	47
0030	1	10	14	10	.3	150	73	743	8.53	455	5	ND	1	29	1	7	7	1	1.32	.003	15	3	.42	13	.01	2	.03	.05	.01	1	1740
0031	2	27	12	15	.1	23	10	579	2.37	17	5	ND	6	63	1	3	2	2	1.65	.029	9	6	.74	21	.01	14	.17	.05	.09	1	5
0032	4	176	24	13	.5	9	4	1897	5.62	4	22	ND	1	744	1	2	5	1	31.74	.018	35	1	.61	10	.01	2	.02	.10	.01	1	33
STD C/AU-R	21	58	40	136	7.2	70	28	1028	3.97	35	16	7	34	49	18	17	21	68	.46	.101	40	59	.88	182	.08	37	1.73	.09	.13	12	500

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SM.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCKS/CORES AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 19 1986 DATE REPORT MAILED: *Sept 22/86* ASSAYER: *D. J. J.* DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2761

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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	W	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
4203-86-MB-26	1	3	7	40	.1	11	5	1596	4.97	4	5	ND	1	2	1	2	2	3	.01	.020	2	4	.04	38	.01	9	.07	.02	.03	1	1
4203-86-MB-56	10	719	48	102	.7	11	8	1614	50.43	2	5	ND	5	2	1	2	2	12	.01	.016	2	1	.05	13	.01	2	.35	.07	.03	1	9
4203-86-MB-57	1	23	348	29	2.7	15	2	1428	3.07	5	5	ND	2	5	1	2	9	1	.08	.020	2	4	.02	19	.01	7	.06	.01	.02	1	1
4203-86-MB-58	1	69	602	23	.8	10	13	568	3.55	3	5	ND	1	1	1	3	3	1	.02	.004	2	2	.02	14	.01	8	.03	.01	.02	1	1
4203-86-MB-59	14	851	34	110	6.4	2	20	749	48.33	2	5	ND	4	4	1	2	2	8	.02	.045	2	1	.05	7	.01	2	.10	.07	.02	1	1
4203-86-MB-60	1	14	7	24	.1	7	3	236	2.06	2	5	ND	1	1	1	4	2	1	.01	.007	2	4	.01	10	.01	10	.02	.01	.01	2	1
4203-86-MB-61	1	5	4	14	.1	9	2	269	1.80	18	5	ND	2	2	1	4	2	1	.02	.009	6	4	.02	12	.01	6	.08	.01	.04	2	1
4203-86-MB-62	1	13	2	5	.1	4	1	153	1.00	2	5	ND	1	1	1	4	2	1	.01	.007	2	5	.01	4	.01	4	.02	.01	.01	1	1
4203-86-MB-63	1	6	13	18	.6	13	3	226	1.57	70	5	ND	1	2	1	5	2	1	.01	.009	2	2	.01	13	.01	5	.06	.01	.03	3	950
4203-86-MB-64	1	18	11	3	.1	5	1	113	1.60	76	5	ND	3	3	1	5	2	1	.01	.011	8	5	.01	5	.01	5	.06	.05	.02	1	45
4203-86-PD-18	1	347	15	14	.2	764	41	241	7.11	2	5	ND	1	2	1	3	3	1	.03	.003	2	3	.08	17	.01	9	.04	.02	.03	1	29
4203-86-PD-19	1	49	98	37	.1	32	8	634	2.63	2	5	ND	3	7	1	5	2	1	.07	.028	2	3	.02	13	.01	7	.16	.05	.03	1	1
0034 <i>Core</i>	1	24	34	8	.3	6	2	1612	2.28	5	6	ND	1	822	1	3	6	1	33.51	.017	3	1	.39	9	.01	7	.01	.10	.01	2	5
0035	2	53	9	20	.3	11	5	2007	5.18	4	13	ND	3	575	1	2	5	2	23.71	.019	7	1	.75	15	.01	6	.09	.10	.04	1	6
0036	3	34	12	22	.3	9	4	1794	5.79	3	13	ND	4	759	1	2	7	3	24.52	.019	10	1	1.17	16	.01	6	.06	.11	.02	1	8
0037	6	365	25	40	.6	22	177	3114	23.04	3	5	ND	3	100	1	2	2	5	4.01	.012	6	1	1.55	13	.01	2	.20	.10	.06	3	1
0038	6	462	23	52	.7	18	7	10439	20.88	3	12	ND	3	222	1	2	2	9	5.66	.003	9	1	1.62	5	.01	2	.10	.10	.02	1	5
0039	9	176	28	85	.6	13	12	9981	31.61	23	5	ND	4	116	1	2	2	5	3.19	.010	13	1	1.60	5	.01	2	.13	.10	.03	1	18
0040	20	77	24	162	.5	17	6	7664	25.90	2	6	ND	9	241	1	2	2	12	5.28	.018	22	5	1.68	14	.01	2	.93	.10	.04	1	1
0041	1	29	5	49	.2	46	21	1012	4.29	2	5	ND	5	126	1	2	2	5	4.31	.031	8	3	1.20	49	.01	8	.30	.08	.15	1	1
0042	4	3	39	32	.4	5	3	3952	5.69	7	16	ND	4	807	1	2	6	3	25.04	.031	9	1	1.04	20	.01	7	.14	.11	.05	2	1
0043	7	834	29	53	.8	28	7	8471	29.01	137	5	ND	3	168	1	3	2	10	3.87	.005	5	1	1.24	8	.01	2	.42	.10	.03	1	390
0044	14	44	27	74	.5	17	6	11680	32.89	197	5	ND	5	120	1	5	2	8	3.30	.025	7	1	1.24	7	.01	2	.20	.10	.03	1	710
0045	1	4	4	5	.1	2	1	506	1.06	4	5	ND	1	13	1	6	2	1	.40	.001	2	1	.08	3	.01	4	.03	.02	.01	1	9
STD C/AU-R	22	59	40	138	7.1	71	29	1037	3.98	38	17	7	36	49	18	15	21	69	.48	.104	37	59	.88	184	.08	40	1.73	.09	.14	13	490

*738 ← 13 500 mg of sample - Au
 37 14 - assay all large things
 in 240 mg of sample*

*analysis of this set of
 " " "*

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-CORE P2-ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 24 1986

DATE REPORT MAILED: *Sept 26/86*ASSAYER: *D. Jeps* DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT - 4203 FILE # 86-2839

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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	W	Au†
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB
0046	1	4	18	4	.1	1	1	733	.67	27	5	ND	1	151	1	2	2	1	12.23	.005	3	2	.04	16	.01	2	.01	.06	.01	1	4
0047	1	5	14	11	.2	6	3	444	1.37	2	5	ND	3	425	1	2	2	1	29.38	.022	7	3	.09	31	.01	5	.12	.09	.06	1	3
0048	3	526	26	55	.6	17	12	3871	25.37	42	5	ND	2	50	1	2	2	4	3.05	.008	24	1	.09	21	.01	2	.17	.08	.04	1	190
0049	1	256	12	26	.2	8	4	1107	10.87	34	5	ND	1	8	1	4	2	1	.26	.002	6	1	.03	11	.01	6	.06	.03	.04	1	86
0050	6	156	19	42	.5	14	13	4167	11.82	77	8	ND	4	459	2	2	3	3	16.31	.018	27	1	.90	14	.01	2	.06	.10	.02	1	510
0051	7	15	14	32	.3	4	2	3755	6.62	14	8	ND	4	652	1	2	2	2	21.95	.018	14	2	.99	19	.01	8	.09	.10	.04	1	32
0052	3	361	9	53	.3	19	18	1304	7.57	5	5	ND	7	421	1	2	5	3	13.31	.039	24	1	1.85	19	.01	7	.16	.11	.06	1	8
0053	3	56	17	18	.4	5	3	1336	3.30	6	5	ND	1	998	1	2	2	1	32.98	.022	8	1	.38	12	.01	4	.05	.10	.02	1	1
0054	7	37	32	52	.8	19	8	3503	10.41	242	6	ND	2	694	1	6	5	5	21.88	.109	18	1	1.69	20	.01	2	.04	.11	.01	39	290
0055	2	67	585	469	1.0	20	13	3481	6.04	36	5	ND	1	154	4	2	2	2	7.20	.046	10	1	1.66	13	.01	6	.08	.08	.04	1	1640
0056	1	81	5	23	.1	27	5	431	1.96	14	5	ND	2	112	1	2	2	4	2.03	.021	3	4	.82	28	.01	4	.11	.05	.05	1	2
0057	1	18	932	598	.9	9	2	886	2.37	6	5	ND	2	141	4	2	2	2	3.46	.024	4	3	1.13	13	.01	4	.07	.06	.04	1	1
0058	1	11	5	6	.1	6	3	198	.86	2	5	ND	1	24	1	2	2	1	.49	.001	2	2	.20	2	.01	2	.02	.02	.02	1	2
0059	1	125	336	28	1.7	23	8	873	4.26	2	5	ND	2	101	1	2	4	1	2.45	.049	4	1	1.18	21	.01	7	.15	.06	.08	1	26
0060	2	85	43	34	.4	54	13	1294	4.84	5	5	ND	3	164	1	2	2	4	4.01	.024	4	4	1.79	35	.01	4	.19	.07	.11	1	4
0061	1	144	20	40	.3	75	27	741	5.73	2	5	ND	4	15	1	2	2	1	.33	.022	8	1	.89	26	.01	7	.15	.04	.08	1	3
0062	1	27	6	35	.1	73	16	1071	4.69	40	5	ND	3	44	1	2	2	2	1.20	.024	7	1	1.40	25	.01	8	.13	.05	.08	1	1
0063	4	272	179	29	2.4	105	264	806	13.78	23	5	ND	3	6	1	2	7	2	.18	.024	12	2	1.00	18	.01	2	.14	.04	.09	4	13
0064	1	29	771	21	1.2	110	12	993	3.40	89	5	ND	1	68	1	2	2	1	2.54	.004	5	2	.93	10	.01	6	.06	.05	.03	1	220
0065	1	86	155	37	2.3	32	12	1230	3.51	13	5	ND	1	19	1	2	5	1	.55	.010	6	1	.68	9	.01	6	.06	.03	.03	1	42
0066	1	44	26	16	.2	25	13	524	2.54	36	5	ND	3	16	1	2	2	1	.38	.032	8	4	.50	16	.01	9	.12	.02	.08	1	250
0067	1	28	10	6	.2	114	15	302	6.53	248	5	ND	1	8	1	2	2	1	.20	.003	2	1	.20	5	.01	7	.03	.02	.03	1	590
0068	2	18	861	289	1.4	41	9	1347	4.86	68	5	ND	5	25	2	2	5	2	.46	.040	6	4	1.08	20	.01	7	.17	.03	.10	1	380
0069	1	19	18195	15733	31.7	46	13	257	4.47	221	5	26	2	25	131	17	7	1	.30	.022	5	3	.28	17	.01	7	.13	.03	.08	1	28600
0070	1	6	36	15	.1	12	4	450	1.93	19	5	ND	4	62	1	2	2	2	1.18	.014	6	4	.69	14	.01	4	.16	.05	.05	1	59
STD C/AU-R	21	57	39	133	7.1	66	27	1008	3.97	39	17	7	34	48	17	15	21	67	.48	.102	37	61	.88	181	.08	38	1.73	.09	.13	12	480

✓ Assay required for correct result

IMPERIAL METALS PROJECT - 4203 FILE # 86-2839

PAGE 2

SAMPLE#	Hg	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ka	Ti	P	Al	Na	I	W	Au1
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
4203-86-PD-20	3	3	214	1425	.6	21	11	1613	4.77	27	11	ND	3	39	19	2	2	3	7.40	.010	5	1	.21	9	.01	15	.04	.07	.01	1	210
4203-86-PD-21	1	111	18997	12868	214.4	3	1	78	.96	16	5	4	1	7	355	1506	230	1	.05	.001	2	1	.02	1	.01	5	.01	.01	.01	1	390
4203-86-PD-22	3	71	17027	99235	367.9	4	3	5127	10.38	93	5	ND	1	48	847	224	23	4	.86	.067	8	1	.07	5	.01	2	.03	.04	.02	2	590
4203-86-PD-23	1	38	19014	2495	182.5	1	1	21	1.32	186	5	ND	1	8	154	1608	13	1	.01	.006	2	1	.01	2	.01	7	.02	.01	.01	1	250
4203-86-PD-24	18	860	20429	1927	50.8	36	10	1153	33.44	27	5	ND	1	12	16	51	2	5	.09	.014	2	1	.09	24	.01	2	1.24	.07	.02	1	84
4203-86-PD-25	2	34	7037	163	17.2	6	3	43	2.13	122	5	12	1	2	2	16	3	1	.01	.028	2	3	.01	11	.01	10	.04	.01	.01	1	24100
4203-86-PD-26	7	22	875	373	6.0	16	6	1321	17.20	1296	5	18	2	17	2	2	8	1	1.05	.001	7	1	.29	6	.01	2	.06	.05	.07	1	20500
4203-86-MB-65	16	610	668	148	8.0	30	44	2597	47.84	224	5	3	6	5	1	7	12	6	.04	.056	2	1	.09	24	.01	32	.20	.06	.02	7	7150
4203-86-MB-66	2	217	246	38	.6	11	4	768	7.59	114	5	ND	1	1	1	4	2	2	.01	.007	2	2	.02	16	.01	18	.07	.02	.04	1	98
4203-86-MB-67	1	27	99	1168	.8	17	10	394	3.03	333	5	ND	3	187	6	12	2	2	1.01	.028	5	2	.50	34	.01	17	.20	.03	.13	1	180
4203-86-MB-68	1	19844	19162	62736	233.3	4	1	79	.93	4175	5	ND	1	25	627	7255	52	1	.03	.001	2	2	.01	13	.01	5	.02	.01	.01	1	600
4203-86-MB-69	1	389	3729	1439	19.2	3	1	131	.34	54	5	ND	1	65	13	276	2	1	.29	.001	2	4	.01	160	.01	3	.02	.01	.01	327	30
4203-86-MB-70	1	179	302	301	12.4	47	24	302	4.50	426	5	ND	8	110	3	87	2	2	.50	.046	9	2	.24	21	.01	20	.17	.03	.14	4	70
4203-86-MB-71	1	2787	2346	929	107.2	5	3	338	.70	245	5	ND	2	53	21	1241	5	2	.10	.010	2	4	.01	689	.01	7	.05	.01	.03	1499	2
4203-86-MB-72	1	570	547	307	24.9	7	2	351	.44	80	5	ND	1	23	4	247	2	2	.09	.003	2	6	.01	1286	.01	4	.05	.01	.03	258	3
4203-86-MB-73	1	1079	7033	1871	89.0	4	1	392	.54	102	5	ND	1	312	25	661	4	2	1.50	.002	2	5	.04	474	.01	5	.03	.03	.02	415	9
4203-86-MB-74	1	1076	1611	2225	62.7	8	3	234	.95	186	5	ND	1	123	17	1059	2	2	1.32	.033	2	4	.28	61	.01	7	.06	.03	.04	379	2
4203-86-MB-75	2	43	122	126	2.8	8	1	162	.44	24	5	ND	1	136	1	33	2	5	.55	.025	2	5	.02	108	.01	6	.04	.02	.01	832	1
4203-86-MB-76	5	1125	3308	251	2.6	33	4	608	1.08	190	5	ND	2	702	2	1038	2	17	3.12	.045	3	10	.93	78	.01	8	.09	.05	.04	791	57
4203-86-MB-77	5	483	1668	405	2.0	59	13	209	3.40	294	5	ND	5	136	3	396	2	5	.65	.013	6	10	.89	30	.01	16	.15	.03	.10	48	63
4203-86-MB-78	3	33	402	2706	1.9	127	16	1272	3.37	161	8	ND	3	916	17	58	2	6	6.14	.054	8	16	2.60	30	.01	13	.09	.07	.05	1	7
4203-86-MB-79	2	7	17700	63	65.0	41	15	63	13.38	35330	5	8	1	6	11	46	52	1	.03	.005	2	1	.01	9	.01	2	.03	.03	.03	1	5990
4203-86-MB-80	2	6	2398	27	4.5	33	10	167	10.61	45384	5	6	3	9	1	10	2	1	.12	.015	5	1	.09	10	.01	2	.11	.03	.08	2	4980
4203-86-MB-81	1	182	845	88	36.8	4	1	184	.54	419	5	ND	1	13	1	205	2	1	.05	.005	2	5	.01	77	.01	4	.02	.01	.02	442	27
4203-86-MB-82	1	10	68	53	.4	7	2	153	.92	300	5	ND	1	3	1	3	2	1	.02	.009	2	4	.01	11	.01	6	.03	.01	.01	6	37
4203-86-MB-83	3	411	14469	588	199.4	184	39	12	17.54	8830	5	246	2	48	10	38	2	1	.49	.005	6	1	.01	2	.01	2	.01	.04	.01	1669	735000
4203-86-MB-84	1	14	4454	2050	8.9	11	4	82	3.77	1533	5	14	2	31	23	6	2	1	.27	.008	2	2	.09	10	.01	18	.03	.02	.03	1357	10900
4203-86-MB-85	1	22	322	30	.7	6	2	58	1.20	151	5	ND	2	13	1	4	2	1	.01	.017	3	4	.01	232	.01	6	.09	.01	.04	139	1240
STD C/AU-R	22	59	39	135	7.2	69	28	1022	3.99	42	16	8	35	49	17	16	18	68	.48	.104	40	57	.88	185	.08	40	1.73	.09	.13	12	495

Assay required for correct result for Cu Pb As > 10,000 PPM
 Sb > 1000 PPM
 Ag > 34 PPM

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: OCT 1 1986

DATE REPORT MAILED:

Oct 6/86...

ASSAY CERTIFICATE

SAMPLE TYPE: CORE

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT-4203 FILE# 86-2969

PAGE 1

SAMPLE#	Pb %	Zn %
0078	.14	.42
0079	.21	3.74
0080	.16	.27
0081	6.69	25.48
0082	6.32	9.61
0083	.12	.36
0084	1.83	6.56
0085	.04	.67
0086	.05	.37
0087	.04	14.49
0088	.08	.75

IMPERIAL METALS PROJECT - 4203 FILE # R6-2409

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	V	Au	Tn	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	Au1	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	PPM	PPM	PPB	
C 11+00W 0+90A	1	54	32	96	.1	36	17	858	5.00	12	5	ND	7	5	1	4	2	24	.04	.073	47	12	.77	44	.01	8	1.15	.02	.04	1	9
C 11+00W 0+80N	1	21	18	75	.5	17	9	731	4.25	8	5	ND	2	6	1	4	2	25	.06	.113	32	12	.24	39	.01	5	.78	.02	.02	18	4
C 11+00W 0+70N	1	22	16	60	.4	11	9	1037	4.33	8	5	ND	3	5	1	2	2	21	.03	.098	26	12	.14	55	.01	7	.85	.02	.05	1	1
C 11+00W 0+60N	1	40	39	61	.1	20	11	657	5.21	10	5	ND	3	3	1	2	2	20	.02	.093	27	10	.19	24	.01	7	.71	.02	.02	1	2
C 11+00W 0+50N	1	24	15	59	.4	14	7	622	5.92	13	5	ND	2	5	1	2	2	25	.03	.111	34	12	.14	35	.01	8	.59	.02	.04	1	1
C 11+00W 0+40N	1	21	13	60	.3	16	7	583	3.92	8	5	ND	2	5	1	2	2	37	.05	.136	34	18	.22	36	.01	7	.72	.02	.04	1	1
C 11+00W 0+30N	1	29	19	76	.2	25	10	342	4.86	4	5	ND	5	7	1	2	2	34	.16	.147	34	28	.46	38	.01	6	1.23	.02	.05	1	12
C 11+00W 0+20A	1	26	20	63	.1	18	9	420	4.03	5	5	ND	4	4	1	2	2	28	.02	.083	35	20	.33	33	.01	5	.93	.02	.04	1	1
C 11+00W 0+10A	1	22	16	70	.1	19	9	243	4.77	4	5	ND	6	4	1	2	2	35	.03	.126	37	27	.45	28	.01	6	1.19	.02	.04	1	1
C 11+00W 0+00N	1	25	13	66	.1	22	11	976	5.69	7	5	ND	2	4	1	2	2	47	.02	.121	32	25	.39	33	.01	7	1.07	.02	.03	1	1
C 11+00W 0+10E	1	54	20	94	.3	37	15	786	7.66	10	5	ND	5	4	1	2	2	48	.03	.140	34	37	.55	41	.01	4	1.61	.02	.03	1	23
C 11+00W 0+20E	1	28	22	65	.2	36	11	863	4.53	4	5	ND	2	6	1	2	2	54	.03	.150	35	65	.60	50	.01	6	1.09	.02	.05	1	1
C 11+00W 0+30E	1	20	20	48	.3	24	8	328	4.14	5	5	ND	3	6	1	2	2	50	.03	.101	34	42	.44	33	.02	5	1.04	.02	.04	1	1
C 11+00W 0+40E	1	55	29	106	.1	46	17	712	5.62	9	5	ND	5	7	1	2	2	49	.08	.092	43	53	.92	63	.02	8	1.81	.03	.08	1	1
C 11+00W 0+50E	1	20	26	51	.5	23	8	249	4.63	2	5	ND	3	5	1	2	2	53	.02	.066	36	40	.50	48	.02	6	1.19	.02	.05	1	1
C 11+00W 0+60E	1	18	21	46	.2	13	5	172	3.34	4	5	ND	6	4	1	3	3	25	.02	.064	42	12	.15	19	.01	4	.77	.01	.03	1	1
C 11+00W 0+70E	1	43	33	83	.1	26	10	265	5.39	11	5	ND	10	5	1	3	2	23	.03	.061	47	14	.30	25	.01	7	1.01	.02	.03	1	1
C 11+00W 0+80E	1	39	152	43	.1	50	8	287	5.33	9	5	ND	7	11	1	3	3	7	.01	.074	46	3	.03	28	.01	5	.31	.02	.04	1	2
C 11+00W 0+90E	1	16	12	39	.6	9	4	151	2.55	5	5	ND	8	4	1	2	2	30	.02	.038	51	8	.11	22	.01	5	.70	.01	.03	1	1
C 11+00W 1+00E	1	151	45	61	.1	53	20	1025	11.29	20	5	ND	5	3	1	2	2	26	.02	.139	43	4	.07	25	.01	2	.40	.03	.03	1	1
C 2+00W 2+20N	1	50	34	96	.1	25	24	2174	6.35	6	5	ND	2	18	1	2	2	39	.22	.144	25	14	.19	60	.01	6	.90	.03	.05	1	1
C 2+00W 2+10N	1	34	173	194	.2	29	21	2131	5.73	6	5	ND	2	13	1	2	2	23	.14	.107	31	9	.10	58	.01	5	.60	.02	.05	1	1
C 2+00W 2+00N	1	35	375	314	.2	32	16	1337	5.79	16	5	ND	2	10	2	3	2	29	.09	.083	30	13	.09	49	.01	5	.66	.02	.04	2	3
C 2+00W 1+90N	1	37	39	109	.1	24	12	242	5.72	8	5	ND	4	5	1	2	2	28	.03	.061	31	8	.06	24	.01	4	.45	.02	.03	3	1
C 2+00W 1+80N	1	43	24	174	.1	46	13	567	7.51	31	5	ND	5	4	1	2	2	12	.02	.045	39	5	.06	21	.01	2	.28	.02	.04	78	74
C 2+00W 1+70N	1	82	146	562	2.3	72	23	1761	4.64	110	5	ND	4	38	4	5	2	15	.56	.092	37	15	.15	52	.01	5	.97	.03	.07	37	660
C 2+00W 1+60N	1	100	80	541	2.9	66	26	2291	4.95	33	5	ND	4	41	5	2	2	21	.81	.210	34	22	.29	53	.01	7	1.51	.04	.08	13	39
C 2+00W 1+50N	1	61	62	473	3.3	66	27	2733	5.05	29	5	ND	3	38	5	2	2	22	.75	.168	35	21	.26	55	.01	7	1.48	.03	.06	1	12
C 2+00W 1+40N	1	43	40	217	1.0	41	22	1544	4.85	26	5	ND	4	30	3	3	3	26	.39	.125	34	25	.22	60	.01	5	1.47	.03	.07	1	13
C 2+00W 1+30N	1	34	38	158	.3	37	12	510	4.11	19	5	ND	4	13	1	2	3	21	.13	.078	37	16	.15	50	.01	6	.82	.02	.06	1	30
C 2+00W 1+20N	1	44	54	205	.8	49	26	2083	4.70	21	5	ND	3	33	2	2	3	20	.68	.166	36	22	.24	56	.01	3	1.16	.03	.07	1	5
C 2+00W 1+10N	1	50	72	213	.5	50	25	3970	4.73	20	5	ND	4	34	2	2	2	23	.65	.210	29	21	.27	86	.01	5	1.42	.03	.07	1	6
C 2+00W 1+00N	1	34	52	153	.3	40	19	1386	4.94	16	5	ND	5	18	1	5	2	29	.24	.120	42	23	.26	83	.01	4	1.26	.02	.08	1	7
C 2+00W 0+90N	1	33	42	111	.4	41	17	720	4.76	14	5	ND	4	12	1	5	3	33	.11	.076	41	21	.18	53	.01	4	1.00	.02	.07	1	28
C 2+00W 0+80N	1	33	40	113	.3	37	20	1108	4.76	16	5	ND	3	13	1	2	2	30	.16	.111	34	25	.25	60	.01	3	1.15	.02	.08	1	3
C 2+00W 0+70N	1	26	35	98	.2	30	13	1068	4.34	12	5	ND	3	9	1	3	3	35	.09	.090	32	24	.25	79	.01	3	1.03	.02	.08	1	1
STD C/AU-0.5	21	66	39	138	7.3	72	29	1115	3.99	42	16	8	36	49	18	17	20	69	.48	.106	41	58	.86	185	.09	35	1.73	.09	.14	13	480

IMPERIAL METALS

PROJECT - 4217

FILE # 06-2409

PAGE 4

SAMPLE#	Mo PPM	Cd PPM	Pb PPM	Zn PPM	As PPM	Ni PPM	Co PPM	Mn PPM	Fe %	Al PPM	C PPM	Pb PPM	Th PPM	Sr PPM	Ca PPM	Sb PPM	Bi PPM	V PPM	Ca %	F %	La PPM	Er PPM	Mg %	Ba PPM	Ti %	F PPM	Al %	Na %	K %	W PPM	Au PPB
C 2+00W 0+60N	1	28	31	93	.1	32	12	667	4.41	11	5	ND	2	11	1	2	2	37	.14	.088	34	21	.18	80	.01	6	.85	.02	.06	1	4
C 2+00W 0+50N	3	46	57	107	.5	47	29	2921	4.79	15	5	ND	2	18	1	5	2	27	.32	.136	29	20	.28	57	.01	5	1.38	.02	.07	1	28
C 2+00W 0+40N	2	60	68	126	2.0	60	22	2154	4.75	18	5	ND	4	30	1	2	3	21	.61	.241	26	24	.32	62	.01	8	1.66	.02	.09	1	8
C 2+00W 0+30N	1	47	55	124	.6	49	23	1611	5.01	13	5	ND	3	26	1	2	3	30	.45	.159	26	23	.33	73	.01	7	1.59	.03	.09	1	1
C 2+00W 0+20N	1	37	77	149	.5	52	21	1292	6.80	42	5	ND	5	16	1	2	2	16	.18	.058	19	9	.14	44	.01	5	.60	.02	.04	9	1
C 2+00W 0+10N	2	25	60	90	.2	30	10	793	4.24	15	5	ND	3	14	1	3	2	32	.19	.067	32	19	.15	39	.01	5	.78	.02	.06	1	1
C 2+00W 0+00N	1	35	274	136	1.1	34	17	1355	4.40	16	5	ND	3	27	1	2	2	26	.49	.123	29	21	.23	64	.01	8	1.16	.02	.06	1	1
C 2+00W 0+10S	2	45	692	193	2.6	42	19	2143	4.48	17	5	ND	3	39	1	2	2	22	.83	.182	22	21	.29	56	.01	6	1.31	.03	.07	1	1
C 2+00W 0+20S	1	48	327	134	2.9	45	18	1596	4.09	22	5	ND	4	39	1	5	2	18	.85	.193	19	20	.32	57	.01	5	1.27	.03	.07	1	12
C 2+00W 0+30S	2	52	317	153	2.7	47	18	1478	4.79	27	5	ND	3	44	1	5	2	21	.87	.206	23	21	.31	66	.01	6	1.39	.03	.09	6	7
C 2+00W 0+40S	2	34	107	116	1.6	33	16	1641	4.01	23	5	ND	2	34	1	2	2	20	.68	.212	18	19	.28	67	.01	6	1.22	.03	.08	1	2
C 2+00W 0+50S	2	17	34	74	.5	20	10	535	3.71	21	5	ND	2	22	1	3	2	26	.34	.099	25	20	.21	57	.01	6	.88	.02	.07	1	1
C 2+00W 0+60S	1	26	34	83	1.0	25	12	990	3.61	27	5	ND	2	48	1	2	2	21	.61	.141	32	18	.24	73	.01	5	1.05	.02	.07	1	1
C 2+00W 0+70S	1	40	37	126	1.3	36	17	2165	4.36	36	5	ND	4	67	1	4	2	21	.75	.210	52	23	.33	77	.01	5	1.50	.03	.07	1	8
C 2+00W 0+90S	2	43	48	128	.3	49	18	796	4.77	41	5	ND	6	14	1	2	2	21	.15	.066	43	25	.45	65	.01	4	1.12	.02	.07	2	38
C 2+00W 1+00S	1	21	33	72	.5	26	8	257	3.51	25	5	ND	3	8	1	6	2	26	.06	.068	32	21	.32	73	.01	4	1.14	.01	.06	1	12
C 2+00W 1+10S	2	26	37	82	.4	26	11	471	4.12	17	5	ND	4	11	1	6	2	26	.68	.089	27	24	.31	72	.01	4	1.20	.02	.07	2	29
C 2+00W 1+30S	2	30	56	71	.1	27	10	489	5.51	17	5	ND	3	6	1	7	2	31	.03	.072	27	29	.32	39	.01	5	1.19	.02	.04	1	6
C 2+00W 1+40S	1	42	38	89	.2	23	12	997	4.58	16	5	ND	3	8	1	2	2	24	.03	.066	29	20	.26	67	.01	5	1.16	.02	.05	1	26
C 2+00W 1+50S	2	169	34	143	.3	21	18	1495	6.18	20	5	ND	2	52	1	2	2	41	.90	.149	17	25	.40	61	.01	3	1.44	.03	.05	1	660
C 2+00W 1+60S	1	30	50	141	.4	28	12	956	4.17	24	5	ND	3	60	1	5	3	23	1.16	.171	15	24	.34	60	.01	6	1.26	.03	.07	1	65
C 2+00W 1+70S	1	39	22	75	.9	20	10	570	4.54	12	5	ND	3	38	1	2	2	30	.58	.095	23	21	.21	48	.01	5	1.39	.03	.04	1	11
C 2+00W 1+80S	1	61	43	139	2.4	48	21	1982	6.20	22	5	ND	7	24	1	3	2	36	.33	.086	43	25	.53	61	.02	5	1.22	.03	.05	1	12
C 2+00W 1+90S	1	43	42	92	.3	29	14	971	5.52	16	5	ND	3	8	1	2	2	32	.07	.078	33	21	.32	40	.01	3	1.22	.02	.04	2	21
C 2+00W 2+00S	1	35	49	92	.3	28	12	1010	4.79	17	5	ND	4	8	1	5	2	25	.07	.074	35	17	.21	32	.01	4	1.02	.02	.04	1	23
C 2+00W 2+10S	2	56	60	107	.2	40	21	1953	7.05	17	5	ND	5	7	1	6	2	20	.04	.087	37	12	.20	36	.01	3	.96	.02	.03	1	4
C 2+00W 2+20S	2	137	50	136	.4	21	34	2237	8.36	25	5	ND	8	9	1	6	3	80	.08	.140	27	12	.61	51	.01	2	2.31	.03	.03	2	10
C 2+00W 2+30S	1	38	47	103	.2	18	13	1935	5.57	12	5	ND	3	7	1	2	2	36	.05	.125	23	22	.25	56	.01	3	1.37	.02	.05	3	10
C 2+00W 2+40S	1	79	61	127	.3	36	23	1862	7.08	25	5	ND	4	17	1	7	2	25	.21	.102	28	15	.25	55	.01	2	.97	.02	.04	3	4
C 2+00W 2+50S	1	59	61	104	.1	42	22	1537	5.95	39	5	ND	8	9	1	2	2	11	.12	.110	38	9	.10	29	.01	3	.72	.02	.03	3	3
C 2+00W 2+60S	2	27	31	96	.2	15	7	445	4.50	11	5	ND	2	7	1	4	2	35	.02	.096	19	23	.23	49	.01	5	1.26	.02	.05	2	8
C 2+00W 2+70S	2	40	58	155	.3	21	16	1898	7.52	21	5	ND	3	11	1	11	2	40	.09	.131	23	24	.30	71	.01	2	1.60	.02	.06	4	18
C 2+00W 2+80S	2	85	79	197	.9	32	19	4662	6.64	19	8	ND	3	67	1	2	2	32	1.04	.240	20	21	.34	128	.02	3	1.82	.04	.07	3	11
C 2+00W 2+90S	2	39	146	156	.3	23	14	643	6.54	18	5	ND	3	11	1	6	2	39	.07	.105	24	25	.28	54	.01	5	1.56	.02	.06	1	20
C 2+00W 3+00S	2	28	41	116	.2	27	13	723	7.04	15	5	ND	4	11	1	7	2	39	.09	.063	22	24	.33	56	.01	2	1.39	.02	.06	1	1
STD C/AU-0.5	22	58	35	136	7.1	71	29	1110	3.97	42	16	7	35	49	18	16	20	68	.48	.104	37	56	.88	183	.08	35	1.73	.09	.13	12	490

IMPERIAL METALS PROJECT - 4205 FILE # 06-2409

SAMPLE#	Mg	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tn	Sr	Cd	Sb	Rt	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPM
C 1+00W 2+20N	1	24	43	74	.4	24	16	1679	3.51	17	7	ND	4	18	1	1	1	24	.21	.149	27	24	.36	50	.01	5	1.40	.02	.07	8	2
C 1+00W 2+10N	1	24	26	77	.1	24	13	930	3.65	15	5	ND	3	13	1	2	2	29	.11	.081	35	21	.26	67	.01	6	1.03	.02	.07	1	1
C 1+00W 2+00N	1	48	39	101	.3	29	30	3546	5.85	6	5	ND	2	20	1	2	2	39	.25	.241	14	22	.42	72	.01	4	1.47	.03	.07	1	1
C 1+00W 1+90N	2	65	60	117	.2	33	33	3077	7.17	7	6	ND	3	17	1	2	2	40	.19	.231	14	23	.38	53	.01	2	1.47	.03	.07	1	1
C 1+00W 1+80N	1	49	31	102	.1	25	20	851	6.83	14	5	ND	2	7	1	2	2	27	.05	.128	20	12	.11	46	.01	5	.66	.02	.05	3	1
C 1+00W 1+70N	1	36	58	87	.1	23	19	1062	5.21	11	5	ND	2	9	1	2	2	25	.04	.152	18	14	.12	52	.01	6	.82	.02	.05	1	8
C 1+00W 1+60N	1	38	89	123	.2	33	22	1480	6.17	11	5	ND	2	18	1	2	2	29	.22	.165	28	19	.19	55	.01	4	1.21	.02	.07	1	1
C 1+00W 1+50N	1	36	149	158	.1	55	21	828	7.47	21	5	ND	3	8	1	2	2	21	.10	.100	21	19	.11	76	.01	2	.79	.02	.04	1	1
C 1+00W 1+40N	1	29	41	115	.1	47	16	396	5.88	17	5	ND	6	9	1	2	2	30	.07	.067	33	21	.17	44	.02	6	.96	.02	.06	1	4
C 1+00W 1+30N	1	23	25	88	.1	33	10	263	3.81	14	5	ND	4	10	1	3	3	31	.06	.057	41	15	.09	69	.01	7	.63	.02	.06	1	27
C 1+00W 1+20N	1	33	51	116	.1	45	14	669	6.23	32	5	ND	5	6	1	2	2	28	.04	.076	44	15	.11	49	.01	7	.73	.02	.06	1	7
C 1+00W 1+10N	1	25	49	101	.1	32	13	1052	4.53	18	5	ND	4	6	1	2	3	33	.04	.070	39	19	.13	63	.01	5	.87	.02	.07	1	1
C 1+00W 1+00N	1	26	61	90	.3	32	13	660	4.23	8	5	ND	3	11	1	2	2	31	.12	.089	32	22	.18	50	.01	6	1.03	.02	.07	1	1
C 1+00W 0+90N	1	29	32	111	.4	32	17	1792	4.55	11	5	ND	3	14	1	2	2	37	.18	.113	30	27	.25	65	.01	8	1.43	.02	.07	1	1
C 1+00W 0+80N	1	33	39	99	.1	32	12	468	4.94	16	5	ND	4	7	1	3	2	36	.07	.075	30	20	.12	61	.01	9	.83	.02	.07	1	1
C 1+00W 0+70N	1	31	32	109	.2	34	20	2400	4.90	16	5	ND	3	19	1	2	2	36	.32	.118	26	27	.31	83	.01	5	1.40	.02	.09	1	1
C 1+00W 0+60N	1	31	34	94	.3	34	20	2007	4.40	13	5	ND	3	17	1	2	2	34	.27	.098	26	26	.30	78	.01	4	1.27	.02	.08	1	4
C 1+00W 0+50N	1	30	31	87	.2	31	18	696	4.86	9	5	ND	3	11	1	2	2	33	.10	.098	25	25	.18	59	.01	5	1.02	.02	.07	1	2
C 1+00W 0+40N	2	33	53	91	.3	35	18	1405	4.74	19	5	ND	3	14	1	2	2	32	.17	.125	26	19	.15	64	.01	4	.90	.02	.08	6	34
C 1+00W 0+30N	3	29	58	96	.3	30	11	477	4.86	18	5	ND	3	12	1	2	2	34	.15	.092	34	22	.15	69	.01	7	.84	.02	.08	14	5
C 1+00W 0+20N	1	44	183	137	.5	34	20	1551	6.44	19	5	ND	4	11	1	2	8	29	.12	.135	27	20	.18	49	.01	6	1.06	.02	.07	122	2
C 1+00W 0+10N	1	29	82	112	.2	35	17	1292	4.99	23	5	ND	3	14	1	2	2	31	.17	.111	31	27	.27	61	.01	5	1.07	.02	.09	11	8
C 1+00W 0+00N	1	36	67	112	.6	37	23	1773	4.50	15	5	ND	4	16	1	2	2	28	.23	.139	22	27	.31	75	.01	5	1.33	.02	.10	10	16
C 1+00W 0+10S	3	49	52	143	.1	54	20	679	5.23	26	5	ND	8	10	1	2	3	23	.08	.056	44	29	.48	49	.01	6	1.15	.02	.07	1	36
C 1+00W 0+20S	2	27	43	110	.2	31	15	1013	4.28	11	5	ND	3	18	1	2	2	31	.35	.138	31	28	.27	99	.01	6	1.06	.02	.09	1	20
C 1+00W 0+30S	1	45	42	119	.2	52	19	696	4.92	32	5	ND	6	10	1	2	2	22	.07	.068	37	28	.47	62	.01	7	1.19	.02	.08	1	17
C 1+00W 0+40S	1	45	41	124	.1	52	18	682	4.86	32	6	ND	7	10	1	2	2	20	.08	.066	36	24	.46	54	.01	6	1.08	.02	.08	1	18
C 1+00W 0+60S	2	41	50	183	1.9	50	17	1576	4.24	17	5	ND	5	45	1	2	2	21	.90	.319	21	29	.40	119	.01	6	1.01	.03	.10	1	6
C 1+00W 0+70S	1	34	42	131	.3	45	17	651	4.60	12	5	ND	7	14	1	3	2	25	.17	.075	27	33	.54	63	.01	3	1.25	.02	.08	1	20
C 1+00W 0+80S	2	41	53	136	.1	48	17	530	4.74	25	5	ND	8	13	1	4	2	20	.13	.068	38	29	.45	58	.01	6	1.07	.02	.08	1	23
C 1+00W 1+20S	1	25	12	67	.1	20	12	492	5.50	2	5	ND	5	6	1	2	2	30	.05	.076	32	21	.24	65	.01	2	1.24	.02	.06	1	15
C 1+00W 1+30S	1	8	11	40	.1	9	4	150	3.20	2	5	ND	3	7	1	6	2	31	.05	.053	31	15	.13	54	.01	3	.88	.01	.04	1	17
C 1+00W 1+40S	1	7	7	30	.1	6	2	44	3.53	2	5	ND	5	6	1	2	3	30	.02	.056	32	13	.09	34	.01	3	.90	.01	.03	1	65
C 1+00W 1+50S	1	13	12	32	.1	10	3	107	4.13	5	5	ND	3	6	1	2	3	32	.02	.053	29	17	.09	30	.01	4	1.07	.01	.03	1	5
C 1+00W 1+60S	1	28	19	51	.1	13	8	493	3.53	3	5	ND	4	7	1	2	2	51	.06	.127	22	21	.36	52	.01	6	1.22	.02	.04	1	11
C 1+00W 1+70S	1	10	13	29	.1	7	3	130	2.34	5	5	ND	4	5	1	2	2	24	.01	.061	33	12	.07	29	.01	3	.75	.01	.03	1	9
STD C/AU-0.5	21	59	42	135	7.1	70	29	1103	3.96	35	15	7	35	49	18	17	18	68	.48	.105	35	61	.89	182	.08	34	1.73	.09	.14	11	505

IMPERIAL METALS PROJECT - 4202 MILL # 40-2409

PAGE 6

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Se	Ti	F	Al	Na	K	AuF	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	
C 1+00W 1+80S	1	10	15	27	.7	6	2	76	1.77	4	5	ND	2	5	1	2	2	21	.02	.051	28	14	.07	25	.01	3	.72	.01	.02	1	1
C 1+00W 1+90S	1	15	27	37	.5	7	3	303	3.37	6	5	ND	2	6	1	3	2	26	.02	.069	23	15	.13	29	.01	6	.77	.01	.02	1	8
C 1+00W 2+09S	1	11	21	30	.2	8	2	157	2.25	5	5	ND	2	6	1	4	2	22	.02	.055	22	16	.18	21	.01	3	.86	.01	.02	2	7
C 1+00W 2+10S	1	27	33	63	.5	16	9	791	3.62	10	5	ND	3	13	1	3	2	17	.03	.061	21	13	.09	49	.01	3	.84	.01	.03	1	17
C 1+00W 2+20S	1	46	48	74	.3	29	11	705	6.17	31	6	ND	4	9	1	2	2	32	.08	.067	22	20	.25	37	.02	5	1.05	.02	.01	1	21
C 1+00W 2+30S	1	27	41	55	.1	14	5	286	4.84	28	5	ND	2	6	1	2	2	30	.03	.057	21	20	.14	34	.01	3	1.06	.02	.02	2	26
C 1+00W 2+40S	1	13	39	80	.2	13	9	1856	7.05	18	5	ND	2	6	1	3	2	26	.05	.087	16	17	.08	38	.01	2	.79	.02	.02	1	70
C 1+00W 2+50S	1	142	46	88	.2	17	8	1291	5.27	11	5	ND	2	6	1	6	2	25	.03	.089	18	17	.16	41	.01	5	1.02	.02	.02	1	5
C 1+00W 2+60S	1	34	57	74	.6	14	9	1847	5.84	17	6	ND	2	5	1	2	2	27	.02	.052	17	12	.09	37	.01	3	.88	.02	.02	2	1
C 1+00W 2+70S	1	18	41	50	.1	15	5	503	4.91	12	5	ND	3	5	1	2	2	24	.01	.076	25	21	.08	25	.01	4	.79	.01	.02	1	1
C 1+00W 2+80S	1	13	21	35	.3	10	3	273	3.49	6	5	ND	2	5	1	3	2	24	.01	.169	29	11	.06	19	.01	4	.62	.01	.02	1	11
C 1+00W 2+90S	1	17	22	40	.1	9	4	358	4.68	5	5	ND	3	5	1	2	2	21	.01	.072	27	8	.05	23	.01	6	.64	.01	.01	1	1
C 1+00W 3+00S	1	22	18	44	.1	13	5	339	5.31	8	5	ND	2	5	1	3	2	25	.01	.077	15	13	.05	33	.01	2	.72	.01	.02	1	1
STD C/AU-0.5	22	61	40	142	7.1	72	30	1142	3.98	35	19	8	36	50	18	18	20	71	.48	.109	37	59	.88	189	.09	35	1.73	.10	.14	15	500

IMPERIAL METALS PROJECT - 4203 FILE # 06-2453

TABLE 2

SAMPLE#	Hg	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Et	V	Ca	P	La	Cr	Mg	Ba	Ti	F	Al	Na	K	Au	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	
C 15+00N 1+60N	1	34	22	73	.2	26	11	626	5.94	7	5	ND	5	6	1	4	2	42	.03	.090	32	28	.29	46	.02	2	1.40	.03	.05	1	2
C 15+00N 1+50N	1	26	18	65	.2	34	12	498	6.60	6	5	ND	4	6	1	6	3	86	.03	.126	26	52	.52	47	.02	2	1.41	.03	.05	1	3
C 15+00N 1+40N	1	16	15	65	.1	25	11	425	4.71	2	5	ND	7	6	1	5	2	99	.07	.092	28	36	.67	40	.03	2	1.57	.02	.05	1	1
C 15+00N 1+30N	1	47	21	103	.1	57	20	908	7.63	9	5	ND	3	7	1	2	2	116	.05	.130	19	100	1.29	56	.03	2	2.54	.03	.05	1	2
C 15+00N 1+20N	1	54	37	122	.1	56	27	1576	9.23	6	5	ND	3	9	1	2	2	152	.09	.135	12	67	1.63	57	.03	2	3.12	.04	.04	1	1
C 15+00N 1+10N	2	39	33	107	.2	42	21	1483	7.70	4	5	ND	3	7	1	2	2	143	.05	.098	16	58	1.23	54	.03	2	2.47	.03	.05	1	6
E 15+00N 1+00N	1	31	33	102	.2	47	22	1154	6.67	3	5	ND	4	9	1	2	2	169	.07	.094	17	48	1.52	60	.02	2	2.25	.03	.06	1	2
E 15+00N 0+90N	1	39	26	94	.2	30	13	574	6.28	10	5	ND	4	12	1	2	3	84	.04	.081	22	34	.49	50	.02	2	1.52	.03	.05	1	1
E 15+00N 0+80N	1	46	43	107	.2	27	15	1205	7.05	8	5	ND	4	7	1	2	2	91	.04	.127	19	39	.70	76	.02	3	1.92	.03	.07	1	2
C 15+00N 0+70N	1	26	22	89	.1	27	13	953	5.90	5	5	ND	4	11	1	2	2	131	.07	.081	24	39	.66	61	.04	2	1.61	.03	.06	1	3
C 15+00N 0+60N	1	26	22	93	.1	31	16	1349	6.31	9	5	ND	3	9	1	2	2	136	.06	.104	26	42	.95	69	.03	3	1.90	.03	.05	1	1
C 15+00N 0+50N	1	78	20	105	.1	20	19	694	9.23	9	5	ND	2	5	1	2	2	69	.02	.181	18	17	.22	40	.01	2	1.06	.03	.04	1	5
C 15+00N 0+40N	1	86	22	115	.3	24	14	747	10.43	13	5	ND	2	6	1	2	3	79	.04	.173	13	27	.19	42	.01	2	.99	.03	.04	1	2
C 15+00N 0+30N	1	43	29	93	.1	34	10	794	6.99	15	5	ND	3	7	1	2	6	77	.04	.126	25	30	.14	42	.02	2	.78	.03	.05	1	2
C 15+00N 0+20N	2	63	33	123	.4	31	25	5648	5.96	20	5	ND	4	47	1	3	3	39	.56	.169	20	24	.42	73	.01	3	1.98	.04	.06	1	3
C 15+00N 0+10N	1	73	17	122	.3	18	25	892	8.76	43	5	ND	3	42	1	2	3	69	.49	.136	12	18	.23	41	.01	2	1.50	.04	.05	1	1
C 15+00N 0+00N	1	21	21	72	.3	15	5	431	5.99	10	5	ND	4	6	1	2	3	41	.03	.115	36	18	.12	31	.02	2	.94	.02	.07	1	2
C 15+00N 0+10S	1	8	11	36	.1	7	2	133	1.42	4	5	ND	6	6	1	3	3	29	.02	.047	57	11	.07	18	.01	4	.78	.01	.05	1	3
C 15+00N 0+20S	1	18	20	46	.4	12	3	284	2.53	2	5	ND	7	6	1	5	5	27	.01	.065	54	10	.06	27	.01	4	.69	.01	.05	1	2
C 15+00N 0+30S	1	15	14	49	.5	7	3	278	2.65	5	5	ND	4	11	1	6	4	44	.02	.083	40	10	.09	31	.01	3	.89	.01	.05	1	1
C 15+00N 0+40S	1	55	16	66	.3	11	11	789	7.76	20	5	ND	3	7	1	2	2	63	.03	.129	20	18	.15	36	.02	2	1.02	.02	.04	1	5
C 15+00N 0+50S	1	24	25	62	.5	15	6	378	3.95	9	5	ND	5	8	1	2	4	67	.03	.059	37	16	.11	37	.02	2	1.12	.02	.06	1	5
C 15+00N 0+60S	1	8	14	34	.2	6	1	79	1.12	2	5	ND	4	6	1	2	4	18	.01	.055	42	10	.04	38	.01	2	.66	.01	.06	1	4
C 15+00N 0+70S	1	7	9	38	.1	6	1	40	.70	2	5	ND	6	6	1	2	3	14	.01	.054	49	11	.04	27	.01	2	.72	.01	.05	1	3
C 15+00N 0+80S	1	13	11	66	.2	12	3	252	2.76	8	5	ND	5	5	1	2	4	35	.01	.056	47	11	.06	23	.01	2	.69	.01	.06	1	3
C 15+00N 0+90S	1	20	24	97	.1	24	6	356	4.67	13	5	ND	5	5	1	4	2	23	.02	.088	39	15	.19	27	.01	4	1.02	.02	.06	1	4
C 15+00N 1+00S	1	5	10	31	.4	4	1	34	.76	2	5	ND	9	5	1	2	4	17	.02	.047	56	14	.08	32	.01	2	1.32	.01	.06	1	6
C 14+50N 5+50N	1	30	35	252	.1	35	13	854	4.41	27	5	ND	6	17	1	2	2	23	.19	.104	45	22	.33	50	.01	3	1.00	.03	.05	5	28
C 14+50N 5+40N	1	24	30	85	.3	25	11	674	3.87	24	5	ND	6	10	1	2	3	22	.04	.090	44	20	.27	58	.01	3	1.02	.02	.07	2	38
C 14+50N 5+30N	1	14	25	54	.2	15	4	197	3.68	16	5	ND	5	10	1	2	4	26	.06	.088	40	23	.20	42	.01	3	.84	.02	.06	1	13
C 14+50N 5+20N	1	18	19	59	.9	20	6	458	2.84	22	5	ND	4	9	1	2	4	28	.07	.074	39	18	.18	51	.01	4	.72	.02	.07	1	49
C 14+50N 5+10N	1	32	32	84	.5	30	12	767	4.91	32	5	ND	5	22	1	2	3	23	.35	.076	39	23	.30	71	.01	5	.99	.03	.07	12	26
C 14+50N 5+00N	1	33	60	115	.7	36	13	1106	4.58	34	7	ND	6	33	1	2	3	24	.51	.168	34	24	.41	82	.01	4	1.29	.04	.09	8	42
C 14+50N 4+90N	1	45	69	99	.3	31	16	1492	7.75	21	5	ND	4	7	1	2	3	36	.09	.091	22	22	.47	46	.01	4	1.14	.03	.05	8	5
C 14+50N 4+70N	1	37	113	92	.3	21	9	378	4.80	19	5	ND	4	9	1	2	3	29	.06	.091	32	22	.24	57	.01	6	.90	.02	.07	9	44
C 14+50N 4+60N	1	53	122	94	.5	25	11	348	5.67	47	5	ND	6	8	1	6	3	27	.05	.115	34	17	.21	43	.01	5	.94	.02	.08	12	190
STD C/AU-0.5	22	57	40	134	7.0	69	28	1083	3.96	36	19	7	34	48	18	17	19	67	.48	.102	37	55	.88	179	.08	34	1.72	.09	.12	13	490

IMPERIAL METALS PROJECT - 4203 FILE # 86-2453

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	I	K	Aut
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
C 14+50W 4+50N	1	40	123	113	.8	21	12	925	6.61	23	5	ND	2	5	1	2	2	32	.03	.126	18	22	.17	40	.01	2	.72	.02	.04	11	102
C 14+50W 4+40N	1	50	98	103	.6	25	13	762	5.97	25	5	ND	2	4	1	2	2	28	.02	.084	24	20	.12	47	.01	2	.63	.02	.03	10	125
C 14+50W 4+30N	1	34	98	82	1.1	18	9	585	5.12	12	5	ND	2	5	1	2	2	27	.02	.090	18	23	.13	36	.01	2	.77	.02	.03	11	40
C 14+50W 4+20N	1	44	95	110	.7	16	10	999	6.54	25	5	ND	2	6	1	2	2	34	.04	.101	19	13	.15	60	.01	2	.65	.02	.04	11	71
C 14+50W 4+10N	1	33	88	92	.4	15	8	430	4.78	13	5	ND	2	4	1	2	2	30	.03	.090	22	16	.16	31	.01	2	.72	.02	.04	25	10
C 14+50W 4+00N	1	27	55	68	.4	12	7	648	4.19	10	5	ND	3	6	1	2	2	29	.04	.096	19	12	.14	47	.01	2	.60	.02	.04	7	102
C 14+50W 3+90N	1	39	140	105	.8	16	14	1582	7.62	18	5	ND	4	7	1	2	2	26	.08	.156	20	16	.17	48	.01	2	1.09	.02	.06	11	35
C 14+50W 3+80N	1	26	33	59	.9	11	7	609	3.70	14	5	ND	2	6	1	2	2	32	.03	.078	23	12	.11	56	.01	2	.60	.02	.04	6	37
C 14+50W 3+60N	1	23	51	71	.9	13	9	1345	4.16	10	5	ND	2	8	1	2	2	26	.04	.118	21	15	.17	53	.01	2	.74	.02	.05	3	
C 14+50W 3+50N	2	38	48	82	1.0	18	10	899	5.36	12	5	ND	3	7	1	3	2	28	.03	.112	24	21	.21	48	.01	2	.91	.02	.05	2	30
C 14+50W 3+40N	2	23	34	81	.4	14	8	1096	6.91	15	5	ND	2	5	1	2	2	34	.03	.167	24	14	.13	41	.01	2	.56	.02	.03	8	2
C 14+50W 3+30N	1	17	34	44	.4	10	5	377	3.38	11	5	ND	2	5	1	2	2	19	.02	.063	25	9	.08	34	.01	2	.40	.01	.02	2	1
C 14+50W 3+20N	1	58	84	100	.6	27	15	1289	6.66	17	5	ND	4	6	1	2	2	22	.05	.105	26	17	.18	42	.01	2	.81	.02	.03	2	3
C 14+50W 3+10N	1	60	65	81	.7	27	12	944	5.64	19	5	ND	4	4	1	2	2	15	.03	.085	26	12	.20	51	.01	2	.74	.02	.03	1	6
C 14+50W 3+00N	1	34	115	110	.7	20	10	1813	6.10	15	5	ND	2	7	1	2	2	41	.08	.140	23	26	.26	74	.01	2	.77	.02	.03	1	4
C 14+50W 2+90N	1	19	47	61	.5	15	8	1075	5.03	9	5	ND	2	6	1	2	2	57	.05	.164	25	28	.35	43	.03	2	.83	.02	.04	1	2
C 14+50W 2+80N	1	23	30	59	.9	17	9	1466	4.81	11	5	ND	2	7	1	2	2	53	.06	.158	26	27	.27	46	.02	2	.74	.02	.05	1	1
C 14+50W 2+70N	1	25	28	59	1.6	16	8	465	5.35	8	5	ND	2	7	1	2	2	53	.03	.116	23	32	.28	31	.03	2	.85	.02	.04	1	1
C 14+50W 2+60N	1	27	28	58	.5	18	8	492	5.36	10	5	ND	3	6	1	2	2	50	.04	.120	27	28	.29	32	.02	2	.78	.02	.03	1	2
C 14+50W 2+50N	1	39	37	84	.6	25	13	891	6.96	16	5	ND	4	6	1	2	2	44	.03	.105	24	33	.40	36	.02	2	1.23	.02	.05	1	4
C 14+50W 2+40N	1	15	22	36	.3	10	4	202	3.05	5	5	ND	2	7	1	4	2	46	.05	.098	24	20	.20	35	.03	2	.64	.01	.03	1	3
C 14+50W 2+30N	1	28	22	73	.3	23	11	1084	5.30	11	5	ND	3	8	1	2	2	44	.08	.116	25	29	.32	72	.02	2	.79	.02	.04	1	1
C 14+50W 2+20N	1	57	50	130	.4	21	13	2514	12.12	17	5	ND	4	7	1	2	2	47	.04	.186	24	30	.31	51	.03	3	1.19	.03	.03	1	20
C 14+50W 2+10N	1	29	38	76	.4	22	11	760	7.46	17	5	ND	3	6	1	2	2	43	.03	.120	34	32	.35	32	.02	4	1.01	.02	.02	8	3
C 14+50W 2+00N	1	32	38	73	.5	19	10	1079	5.94	11	5	ND	2	6	1	2	2	38	.03	.088	22	25	.24	57	.01	2	.87	.02	.04	1	2
C 14+50W 1+90N	3	71	113	217	.8	34	14	9700	11.87	21	5	ND	2	32	1	2	2	29	1.05	.171	10	17	.41	228	.01	2	1.00	.05	.05	1	3
C 14+50W 1+80N	1	52	55	119	.6	29	16	1798	9.05	16	5	ND	3	9	1	2	2	50	.09	.097	24	37	.44	86	.02	4	1.41	.03	.05	1	3
C 14+50W 1+70N	1	27	34	74	.1	21	12	1386	6.55	17	5	ND	3	7	1	2	3	44	.03	.070	22	29	.29	47	.01	2	1.02	.02	.05	1	2
C 14+50W 1+60N	1	40	45	109	.3	22	13	1642	11.47	19	8	ND	3	6	1	2	3	46	.03	.095	19	30	.33	44	.01	4	1.14	.03	.04	1	1
C 14+50W 1+50N	2	30	19	76	.3	20	11	3901	5.09	11	5	ND	2	7	1	2	2	56	.04	.085	26	25	.29	128	.02	2	.98	.02	.03	1	1
C 14+50W 1+40N	1	23	20	63	.4	25	10	524	6.68	10	5	ND	3	7	1	2	2	61	.05	.096	22	35	.49	44	.03	2	1.41	.02	.03	1	2
C 14+50W 1+30N	1	17	17	72	.1	29	12	344	5.87	4	5	ND	3	6	1	2	2	113	.04	.063	22	50	.77	36	.03	2	1.70	.02	.03	1	1
C 14+50W 1+20N	1	24	17	75	.2	43	15	858	5.98	3	5	ND	3	6	1	2	2	93	.04	.070	24	72	.97	49	.03	2	1.86	.02	.03	1	2
C 14+50W 1+10N	1	29	37	72	.1	32	13	478	5.99	5	5	ND	3	7	1	2	2	105	.06	.073	23	51	.70	69	.02	2	1.53	.02	.04	1	2
C 14+50W 1+00N	1	30	18	66	.2	46	16	517	8.33	7	5	ND	3	6	1	2	3	123	.05	.109	19	72	1.03	34	.03	3	2.05	.03	.03	1	1
C 14+50W 0+90N	1	58	20	65	.3	37	15	773	7.63	7	5	ND	2	6	1	2	2	87	.04	.079	20	49	.71	41	.02	3	1.80	.03	.03	1	1
STD C/AU-0.5	21	57	38	131	7.0	67	27	1055	3.96	35	15	7	34	47	17	15	19	65	.48	.099	35	56	.88	176	.08	35	1.73	.09	.14	15	485

IMPERIAL METALS PROJECT - 4207 FILE # 86-2450

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	F	La	Cr	Mg	Ba	Ti	P	Al	Na	K	W	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	PPM	
C 14+50W 0+80N	2	37	47	89	.2	30	17	786	6.60	2	5	ND	3	6	1	2	2	126	.06	.058	11	44	1.16	61	.12	4	2.30	.03	.04	1	1
C 14+50W 0+70N	1	26	19	69	.1	19	13	463	4.81	2	5	ND	2	6	1	2	2	132	.05	.066	14	26	.81	69	.02	2	1.73	.02	.04	1	1
C 14+50W 0+60N	1	27	17	80	.2	19	13	620	6.27	2	5	ND	2	5	1	2	2	113	.03	.067	11	27	.90	52	.01	2	2.49	.02	.03	1	1
C 14+50W 0+50N	1	31	24	82	.4	41	17	801	6.45	2	5	ND	2	6	1	2	2	132	.03	.096	14	49	1.28	43	.02	3	2.11	.03	.04	1	1
C 14+50W 0+40N	1	27	21	81	.2	33	14	394	6.47	2	5	ND	2	5	1	2	2	121	.02	.084	13	57	.93	33	.02	2	1.68	.03	.02	1	1
C 14+50W 0+30N	1	57	10	72	.3	38	10	367	6.32	2	5	ND	2	4	1	2	3	63	.03	.131	10	85	.17	34	.01	2	.76	.02	.03	1	35
C 14+50W 0+20N	1	63	9	100	.4	16	9	950	7.24	3	5	ND	2	5	1	2	2	54	.10	.225	6	14	.21	31	.01	3	.78	.02	.04	1	1
C 14+50W 0+10N	1	31	34	50	.5	19	6	236	3.41	12	5	ND	3	4	1	3	2	23	.02	.097	22	14	.07	21	.01	3	.55	.01	.03	1	1
C 14+50W 0+10S	1	60	11	89	.4	14	16	961	9.11	40	5	ND	3	4	1	2	2	102	.04	.197	10	23	.55	30	.01	2	1.48	.03	.03	1	1
C 14+50W 0+20S	1	23	32	74	.4	16	5	878	7.26	2	5	ND	3	6	1	2	2	43	.03	.105	26	29	.26	31	.02	2	1.48	.02	.04	1	1
C 14+50W 0+30S	1	21	23	62	.9	12	4	315	5.55	13	5	ND	5	5	1	2	3	40	.02	.142	41	15	.13	20	.01	4	.93	.02	.03	1	1
C 14+50W 0+40S	1	9	8	23	.2	10	2	129	.82	2	5	ND	7	4	1	2	2	7	.02	.025	60	5	.01	16	.01	2	.23	.01	.02	1	1
C 14+50W 0+50S	1	49	17	62	.3	11	10	436	5.85	18	5	ND	3	5	1	3	2	71	.02	.105	22	11	.11	18	.01	4	.79	.02	.04	1	1
C 14+50W 0+60S	1	68	13	75	.9	11	11	750	8.78	15	7	ND	2	6	1	3	2	59	.03	.188	11	15	.21	30	.01	2	1.09	.02	.04	1	1
C 14+50W 0+70S	1	11	11	37	.1	6	2	219	2.49	5	5	ND	3	6	1	3	2	35	.02	.071	28	15	.10	30	.01	3	1.19	.01	.02	1	1
C 14+50W 0+80S	1	37	19	91	.7	31	9	392	5.40	20	5	ND	7	6	1	2	2	14	.01	.076	46	16	.21	42	.01	2	1.05	.02	.03	1	1
C 14+50W 0+90S	1	10	13	33	.2	8	2	111	1.08	2	5	ND	4	5	1	2	2	18	.01	.050	41	14	.05	25	.01	2	.78	.01	.04	1	1
C 14+50W 1+00S	1	26	57	104	.3	29	7	392	4.56	18	5	ND	4	4	1	2	2	21	.02	.117	40	13	.14	26	.01	3	.97	.01	.05	1	1
C 14+00W 4+00N	1	27	82	225	1.1	39	13	815	4.87	105	5	ND	4	33	1	2	2	20	.51	.110	19	24	.39	69	.01	3	1.28	.03	.05	1	141
C 14+00W 3+90N	1	15	59	123	.2	19	8	451	4.78	84	5	ND	3	14	1	2	3	29	.11	.053	23	21	.24	47	.01	3	1.02	.02	.05	2	52
C 14+00W 3+70N	1	41	171	187	.8	22	15	2387	6.76	13	5	ND	3	9	1	4	2	33	.08	.125	17	21	.23	118	.01	2	1.05	.03	.07	16	70
C 14+00W 3+60N	1	33	116	97	.5	16	10	813	4.49	14	5	ND	2	6	1	2	3	24	.06	.081	17	13	.16	37	.01	3	.61	.02	.04	12	59
C 14+00W 3+50N	1	33	130	95	.4	15	9	1118	5.20	16	5	ND	2	7	1	2	3	29	.05	.104	20	13	.15	41	.01	3	.57	.02	.06	12	60
C 14+00W 3+40N	1	31	102	80	.9	14	8	521	4.11	12	5	ND	2	5	1	2	3	23	.02	.076	20	12	.12	36	.01	3	.61	.02	.05	14	62
C 14+00W 3+30N	1	33	108	86	.8	15	8	531	4.30	12	5	ND	2	5	1	2	3	24	.02	.082	20	15	.14	39	.01	4	.65	.02	.06	15	104
C 14+00W 3+20N	1	30	45	67	.8	15	10	679	4.58	18	5	ND	2	6	1	3	3	23	.03	.089	16	16	.08	36	.01	3	.49	.02	.04	6	20
C 14+00W 3+10N	1	23	59	65	.3	21	10	642	3.39	11	5	ND	3	6	1	2	3	17	.03	.075	19	15	.10	44	.01	4	.61	.02	.04	5	88
C 14+00W 3+00N	1	29	37	70	.4	16	10	757	4.28	9	5	ND	2	6	1	2	3	24	.05	.085	20	14	.13	39	.01	4	.61	.02	.04	5	7
C 14+00W 2+90N	1	21	16	53	.7	10	6	468	3.15	9	5	ND	2	5	1	2	4	26	.02	.064	22	11	.10	32	.01	3	.64	.01	.04	2	1
C 14+00W 2+80N	1	17	34	49	.6	12	7	864	3.02	5	5	ND	2	7	1	2	3	32	.05	.083	24	16	.18	38	.01	5	.58	.02	.05	2	1
C 14+00W 2+70N	1	31	77	117	.3	20	11	868	5.74	6	5	ND	3	6	1	2	2	31	.04	.127	20	25	.31	51	.01	3	1.01	.02	.05	7	9
C 14+00W 2+60N	1	27	26	75	.3	19	9	1256	4.03	7	5	ND	3	8	1	2	2	29	.06	.116	23	21	.34	66	.01	5	.86	.02	.06	1	20
C 14+00W 2+50N	1	32	24	67	.4	18	11	1219	5.01	6	6	ND	2	6	1	3	3	37	.04	.108	20	25	.32	40	.01	3	.85	.02	.05	1	4
C 14+00W 2+40N	1	45	41	75	.1	25	13	1389	5.57	9	5	ND	3	6	1	2	2	31	.04	.091	27	22	.32	41	.01	4	.92	.02	.04	1	1
C 14+00W 2+30N	1	28	33	68	.5	16	8	671	6.35	12	9	ND	3	5	1	3	5	47	.03	.181	25	25	.19	52	.02	3	.66	.02	.05	1	1
C 14+00W 2+20N	1	30	26	71	.1	21	9	708	4.50	4	7	ND	3	7	1	2	3	41	.05	.122	26	26	.32	41	.01	4	.79	.02	.05	1	2
STD CIAU-0.5	21	57	40	133	7.0	70	28	1076	3.96	35	15	7	34	47	17	17	19	66	.48	.101	34	58	.88	176	.08	33	1.73	.09	.14	13	490

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SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Co	Eb	Ei	V	Ca	P	La	Cr	Mg	Ba	Ti	E	Al	Na	K	K	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	PPM	PPM	
C 14+00W 2+10N	2	21	20	62	.4	17	6	278	4.25	4	5	ND	2	4	1	2	2	39	.01	.069	21	23	.28	24	.01	3	.79	.02	.04	1	1
C 14+00W 2+00N	1	18	16	55	.3	14	6	293	3.21	2	5	ND	2	4	1	2	2	36	.02	.069	23	23	.27	22	.02	4	.69	.01	.03	1	2
C 14+00W 1+90N	2	27	19	67	.3	17	8	400	4.73	5	5	ND	2	4	1	5	2	36	.02	.083	20	22	.33	34	.01	3	.82	.02	.04	1	1
C 14+00W 1+80N	2	44	35	81	.6	23	13	1339	6.57	14	5	ND	3	8	1	2	2	32	.05	.091	22	23	.31	46	.01	2	1.02	.02	.05	1	3
C 14+00W 1+70N	2	27	22	89	.4	21	9	549	5.79	4	5	ND	2	6	1	3	2	44	.07	.077	22	27	.37	49	.02	4	1.00	.02	.04	1	5
C 14+00W 1+60N	2	41	27	114	.4	30	14	1150	6.15	5	5	ND	3	9	1	6	2	27	.08	.085	19	25	.37	75	.01	4	1.08	.02	.04	1	1
C 14+00W 1+50N	2	37	24	112	.3	29	16	1461	5.00	3	5	ND	4	25	1	2	2	34	.38	.098	20	27	.44	79	.01	3	1.32	.07	.05	1	15
C 14+00W 1+40N	1	57	22	116	.3	42	17	725	4.74	9	5	ND	6	20	1	3	2	33	.31	.095	26	29	.63	64	.01	4	1.50	.03	.05	1	2
C 14+00W 1+30N	1	18	12	67	.2	16	6	332	3.81	2	5	ND	2	6	1	2	2	32	.10	.130	24	22	.34	29	.01	3	.94	.02	.06	1	2
C 14+00W 1+20N	1	12	16	41	.3	13	5	329	3.09	4	5	ND	3	5	1	2	2	40	.04	.076	33	26	.27	45	.02	3	.84	.01	.04	1	2
C 14+00W 1+10N	1	13	12	42	.3	10	5	285	2.34	3	5	ND	2	4	1	2	2	33	.02	.051	24	15	.25	34	.01	3	.74	.01	.04	1	8
C 14+00W 1+00N	1	18	15	58	.1	15	7	347	3.97	2	5	ND	3	5	1	6	2	62	.03	.134	25	21	.32	39	.01	2	.86	.02	.05	1	1
C 14+00W 0+90N	2	20	15	58	.5	14	7	390	3.91	2	5	ND	2	5	1	7	2	39	.03	.087	24	23	.33	42	.01	4	1.11	.02	.04	1	1
C 14+00W 0+80N	1	17	15	58	.3	19	8	180	4.21	3	5	ND	2	4	1	2	2	61	.02	.072	21	30	.57	26	.01	3	1.28	.02	.04	1	12
C 14+00W 0+70N	1	34	18	85	.3	28	14	772	6.55	4	5	ND	2	5	1	2	2	78	.05	.140	15	39	.73	37	.01	3	1.60	.02	.05	1	1
C 14+00W 0+60N	2	27	27	69	.2	25	11	553	5.00	4	5	ND	2	4	1	3	2	88	.03	.120	15	40	.79	27	.02	5	1.47	.02	.04	1	1
C 14+00W 0+50N	2	29	23	72	.5	30	12	309	5.46	8	5	ND	2	5	1	2	2	94	.04	.056	16	53	1.04	29	.03	2	1.90	.02	.04	1	2
C 14+00W 0+40N	1	33	29	68	.3	21	10	375	5.50	5	5	ND	2	6	1	2	2	63	.05	.074	14	34	.55	43	.02	4	1.40	.02	.05	1	1
C 14+00W 0+30N	1	34	36	92	.2	23	12	1014	6.50	10	5	ND	2	7	1	2	3	69	.08	.142	16	35	.66	81	.02	4	1.56	.03	.05	1	1
C 14+00W 0+20N	1	69	78	253	.5	24	16	2170	11.59	15	5	ND	2	5	1	2	2	77	.05	.174	8	26	.32	81	.01	2	1.09	.03	.03	1	1
C 14+00W 0+10N	2	26	12	47	.2	16	6	314	3.74	12	5	ND	2	3	1	2	2	34	.03	.092	18	12	.08	21	.01	3	.54	.01	.04	1	1
C 14+00W 0+00N	2	24	18	65	.7	13	6	480	6.35	12	5	ND	3	4	1	3	2	46	.03	.100	18	20	.22	27	.01	4	1.27	.02	.04	1	11
C 14+00W 0+10S	1	19	19	68	.6	15	8	2457	4.15	6	5	ND	2	5	1	2	2	55	.03	.085	21	26	.30	74	.02	4	.98	.02	.04	1	1
C 14+00W 0+20S	2	19	8	49	.1	15	7	412	3.36	5	5	ND	3	5	1	4	2	56	.04	.052	25	26	.46	29	.03	4	1.16	.02	.04	1	1
C 14+00W 0+30S	2	19	30	65	.4	11	6	880	5.79	11	5	ND	3	5	1	3	2	45	.02	.087	29	21	.16	27	.02	6	1.13	.02	.05	1	1
C 14+00W 0+40S	1	16	15	48	.1	10	4	315	2.30	9	5	ND	5	4	1	2	2	39	.01	.043	39	10	.04	16	.03	3	.45	.01	.04	1	1
C 14+00W 0+50S	2	30	15	64	.4	15	5	741	5.49	11	5	ND	2	4	1	3	2	35	.04	.219	19	15	.12	26	.01	4	.65	.02	.04	1	1
C 14+00W 0+60S	1	16	13	45	.7	10	4	456	3.45	8	5	ND	2	4	1	2	2	41	.02	.101	15	12	.12	18	.01	2	.72	.01	.04	1	1
C 14+00W 0+70S	1	26	8	40	.1	7	4	299	3.24	14	5	ND	2	3	1	2	2	38	.01	.068	19	12	.11	22	.01	3	.73	.01	.04	1	1
C 14+00W 0+80S	1	50	11	77	.1	12	10	785	9.20	14	7	ND	2	4	1	2	2	57	.02	.136	12	10	.14	20	.01	2	.70	.02	.03	1	1
C 14+00W 0+90S	1	104	12	98	.3	20	31	1087	12.14	34	6	ND	3	3	1	3	2	52	.02	.164	9	10	.30	29	.01	2	1.66	.03	.03	1	1
C 14+00W 1+00S	1	14	20	57	.6	12	4	347	3.86	3	5	ND	3	6	1	2	3	32	.02	.074	26	16	.12	27	.01	2	1.00	.01	.04	1	1
C 13+50W 5+50N	2	27	23	99	.4	24	9	3470	4.04	17	5	ND	2	8	1	2	2	27	.07	.101	22	17	.23	136	.01	4	.76	.02	.05	1	76
C 13+50W 5+40N	1	17	16	55	.4	17	6	789	2.62	13	5	ND	2	23	1	2	2	20	.37	.072	20	11	.17	65	.01	4	.60	.02	.05	1	20
C 13+50W 5+30N	2	29	24	59	.2	20	6	209	3.22	174	5	ND	5	16	1	7	3	24	.03	.050	29	10	.08	48	.01	6	.52	.01	.04	2	290
C 13+50W 5+20N	1	34	35	65	.3	21	8	289	4.64	99	5	ND	3	7	1	3	2	21	.02	.069	21	14	.17	35	.01	5	.84	.02	.05	2	86
STD C/AU-0.5	21	58	38	130	6.8	66	27	1047	3.94	39	15	7	33	46	17	15	20	64	.48	.098	35	56	.88	171	.08	33	1.73	.09	.13	13	490

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PAGE 7

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	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	F PPM	Al %	Na %	K %	Aut PPM	PFB PPM
C 13+50W 1+40N	1	27	17	71	.1	22	9	504	4.57	4	5	ND	3	5	1	2	3	64	.03	.131	22	34	.52	31	.02	5	1.11	.02	.02	1	1
C 13+50W 1+30N	1	15	16	57	.3	15	7	1119	3.39	4	5	ND	3	6	1	2	2	62	.04	.104	23	28	.35	52	.02	4	.89	.02	.04	1	1
C 13+50W 1+20N	1	35	25	62	.1	22	12	1124	6.89	14	5	ND	3	5	1	5	3	62	.02	.098	23	29	.42	46	.02	5	1.04	.02	.04	1	4
C 13+50W 1+10N	1	19	15	54	.1	17	7	357	3.65	7	5	ND	2	4	1	2	2	46	.02	.080	22	30	.39	36	.01	4	1.11	.02	.04	1	1
C 13+50W 1+00N	1	14	12	50	.1	15	6	218	2.94	5	5	ND	3	5	1	2	5	46	.03	.057	28	27	.35	32	.01	3	1.11	.02	.02	1	1
C 13+50W 0+90N	1	19	20	70	.1	21	9	317	6.20	2	5	ND	3	4	1	2	2	61	.02	.088	24	40	.51	29	.02	4	1.42	.02	.03	1	2
C 13+50W 0+80N	1	46	20	99	.1	33	16	1011	6.47	3	5	ND	4	6	1	4	4	63	.04	.098	22	56	.65	46	.03	5	1.90	.02	.06	1	1
C 13+50W 0+70N	1	59	20	92	.3	28	16	1111	6.50	5	5	ND	2	4	1	2	3	81	.03	.120	11	33	.56	56	.01	5	1.42	.02	.05	1	1
C 13+50W 0+60N	1	22	21	65	.4	16	7	335	5.05	7	5	ND	2	5	1	4	3	74	.02	.104	20	26	.31	30	.02	5	1.08	.02	.04	1	1
C 13+50W 0+50N	1	17	17	57	.2	19	8	485	4.23	4	5	ND	2	6	1	5	3	86	.05	.090	19	33	.47	42	.01	4	1.15	.02	.05	1	3
C 13+50W 0+40N	1	145	165	193	.2	34	24	1414	10.33	16	5	ND	4	4	1	2	3	78	.04	.138	6	20	.50	18	.01	2	1.41	.03	.02	1	1
C 13+50W 0+30N	1	50	273	129	.9	25	13	1173	9.32	17	5	ND	2	5	1	2	3	60	.03	.162	8	26	.20	22	.01	2	.91	.03	.04	1	1
C 13+50W 0+20N	2	77	20	124	.7	20	23	2820	6.94	25	5	ND	2	55	1	3	2	37	.80	.170	8	19	.29	31	.01	4	1.06	.04	.03	1	1
C 13+50W 0+10N	1	19	17	61	.1	10	6	493	3.97	10	5	ND	3	19	1	2	2	45	.22	.069	24	16	.16	28	.01	4	.80	.02	.04	1	1
C 13+50W 0+00N	1	25	13	62	.7	13	6	315	3.39	7	5	ND	3	5	1	2	2	25	.05	.080	24	14	.21	30	.01	4	.85	.01	.05	1	1
C 13+50W 0+10S	1	23	18	65	.1	15	6	303	5.20	5	5	ND	4	4	1	2	3	32	.02	.061	28	24	.24	33	.01	4	1.09	.02	.04	1	1
C 13+50W 0+20S	1	50	22	109	.1	35	16	562	4.70	7	5	ND	8	5	1	2	2	25	.03	.058	36	26	.46	38	.01	6	1.37	.02	.05	1	1
C 13+50W 0+30S	1	16	14	51	.3	13	5	284	3.35	7	5	ND	7	4	1	2	2	28	.01	.102	34	19	.22	31	.01	4	.93	.01	.04	1	2
C 13+50W 0+40S	1	23	16	89	.2	25	9	336	4.41	5	5	ND	9	5	1	2	2	28	.02	.061	31	27	.43	41	.01	5	1.34	.02	.05	1	1
C 13+50W 0+50S	1	25	17	76	.2	17	9	618	5.65	10	5	ND	9	5	1	3	3	33	.02	.092	33	21	.28	37	.01	3	1.26	.02	.05	1	1
C 13+50W 0+60S	1	27	21	68	.4	19	7	276	5.34	8	5	ND	7	4	1	2	2	27	.02	.063	30	22	.27	25	.01	4	1.06	.02	.03	1	3
C 13+50W 0+70S	1	6	7	21	.1	3	1	55	.59	2	5	ND	6	4	1	3	2	10	.01	.025	43	6	.02	17	.01	2	.36	.01	.03	1	1
C 13+50W 0+80S	1	66	23	102	.1	20	14	953	7.92	52	5	ND	3	15	1	2	2	33	.01	.142	20	9	.08	50	.01	3	.52	.02	.04	1	190
C 13+50W 0+90S	2	31	17	69	.2	23	9	981	5.07	11	5	ND	5	11	1	2	2	54	.02	.116	33	32	.18	41	.01	5	1.00	.02	.04	1	2
C 13+50W 1+00S	1	42	16	66	.3	16	9	524	5.68	17	5	ND	4	5	1	2	2	35	.01	.126	29	10	.07	28	.01	4	.50	.02	.04	1	2
C 12+50W 5+50N	1	16	21	53	.1	16	5	142	4.44	20	5	ND	3	6	1	2	2	21	.06	.149	23	14	.12	44	.01	5	.77	.02	.05	2	4
C 12+50W 5+40N	1	27	30	54	.2	28	9	319	4.30	18	5	ND	4	5	1	2	3	18	.04	.100	19	21	.25	30	.01	5	1.23	.02	.04	5	33
C 12+50W 5+30N	1	19	20	64	.4	23	6	207	4.34	25	5	ND	6	3	1	3	2	24	.01	.117	26	24	.32	28	.01	3	1.01	.02	.04	1	5
C 12+50W 5+20N	1	17	18	58	.4	20	6	442	3.83	28	5	ND	6	4	1	2	3	22	.02	.101	35	19	.23	27	.01	4	.87	.02	.05	1	21
C 12+50W 5+10N	1	17	16	47	.2	17	5	192	2.75	18	5	ND	5	4	1	3	3	22	.03	.092	34	11	.14	31	.01	4	.60	.01	.05	2	3
C 12+50W 5+00N	1	22	21	54	.3	21	7	494	3.89	23	6	ND	4	4	1	2	2	24	.02	.078	26	13	.14	35	.01	4	.66	.02	.05	2	1
C 12+50W 4+90N	1	26	28	71	.2	25	9	1487	4.57	23	5	ND	5	4	1	6	2	22	.02	.085	30	17	.22	45	.01	4	.76	.02	.04	2	6
C 12+50W 4+80N	1	25	22	77	.2	26	9	710	5.13	23	5	ND	5	5	1	3	3	27	.05	.124	29	21	.22	39	.01	4	.83	.02	.06	1	3
C 12+50W 4+70N	1	46	58	88	.7	29	13	676	6.18	18	5	ND	5	4	1	2	2	27	.02	.106	20	19	.28	36	.01	5	1.01	.02	.06	3	14
C 12+50W 4+60N	1	28	38	71	.2	25	9	420	5.28	35	5	ND	3	5	1	2	3	24	.04	.113	23	17	.18	39	.01	5	.71	.02	.05	10	2
C 12+50W 4+50N	1	26	50	90	.2	25	11	752	4.48	22	5	ND	3	12	1	2	2	26	.16	.086	22	15	.23	48	.01	4	.86	.02	.05	2	5
STD C/AU-0.5	21	58	38	134	7.1	69	28	1083	3.96	36	17	7	34	48	17	15	20	67	.48	.103	36	58	.88	179	.08	34	1.73	.09	.13	13	505

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PAGE 9

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Ca	Sb	Kr	V	Ca	P	La	Cr	Mg	Ea	Ti	E	Al	Na	K	W	Au1
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPM	
C 12+50W 4+40N	1	12	12	40	.2	14	4	140	1.82	25	5	ND	2	4	1	4	2	17	.02	.039	22	11	.12	49	.01	2	.49	.01	.07	1	7
C 12+50W 4+30N	1	23	25	68	.1	22	7	401	3.83	37	5	ND	2	9	1	5	2	25	.14	.139	19	14	.14	58	.01	5	.45	.02	.05	4	12
C 12+50W 4+20N	1	35	30	98	.1	36	13	996	4.09	19	5	ND	3	17	1	4	2	23	.24	.063	22	22	.34	43	.01	4	.87	.02	.07	1	.96
C 12+50W 4+10N	1	31	21	70	.2	26	10	776	3.84	31	5	ND	3	4	1	6	2	20	.02	.061	18	17	.27	65	.01	4	.82	.01	.04	3	14
C 12+50W 4+00N	1	19	28	85	.1	18	10	1131	3.67	19	5	ND	2	12	1	3	2	21	.13	.106	13	16	.21	49	.01	4	.80	.02	.03	4	24
C 12+50W 3+90N	1	35	30	105	.4	33	12	725	4.06	21	5	ND	3	35	1	5	2	22	.53	.134	14	21	.43	59	.01	7	1.06	.03	.03	1	19
C 12+50W 3+80N	1	14	28	65	.2	14	6	346	3.33	20	5	ND	2	17	1	2	2	26	.20	.060	17	15	.23	44	.01	4	.82	.02	.03	1	26
C 12+50W 3+70N	1	22	21	67	.1	22	7	248	3.95	25	5	ND	3	6	1	4	2	22	.05	.143	18	18	.24	44	.01	4	.75	.02	.02	2	10
C 12+50W 3+50N	1	11	17	38	.2	14	4	159	3.20	24	5	ND	2	3	1	4	2	18	.02	.165	14	17	.13	25	.01	2	.54	.01	.02	2	17
C 12+50W 3+40N	1	18	23	52	.3	17	7	831	3.28	21	5	ND	2	4	1	4	2	21	.02	.102	19	15	.18	37	.01	3	.66	.01	.03	3	71
C 12+50W 3+30N	1	8	10	39	.3	8	3	232	2.13	12	5	ND	2	4	1	2	2	17	.02	.069	18	12	.11	27	.01	4	.49	.01	.02	3	19
C 12+50W 3+20N	1	43	35	88	.2	38	16	606	5.04	39	5	ND	5	6	1	3	2	19	.06	.077	23	20	.35	34	.01	3	1.10	.02	.03	4	80
C 12+50W 3+10N	1	18	27	66	.2	14	8	590	3.37	13	5	ND	1	4	1	5	2	21	.03	.087	14	15	.18	31	.01	3	.60	.01	.04	2	13
C 12+50W 3+00N	1	33	31	121	.5	28	15	1271	4.61	22	5	ND	3	17	1	5	2	23	.20	.139	16	19	.30	58	.01	6	1.00	.02	.05	3	18
C 12+50W 2+90N	1	39	99	98	.2	24	12	868	5.33	20	5	ND	2	8	1	2	2	30	.10	.105	12	14	.22	43	.01	4	.63	.02	.02	13	8
C 12+50W 2+80N	1	49	174	116	.8	20	12	941	5.54	18	5	ND	3	4	1	7	2	27	.03	.065	19	19	.22	38	.01	6	.99	.02	.04	35	21
C 12+50W 2+70N	1	54	121	113	.6	26	17	1058	5.51	19	5	ND	3	6	1	4	2	21	.10	.087	17	19	.28	30	.01	6	.84	.02	.02	9	171
C 12+50W 2+60N	1	11	46	45	1.2	6	4	257	2.00	6	5	ND	1	3	1	2	2	17	.01	.050	14	9	.08	30	.01	2	.40	.01	.02	6	120
C 12+50W 2+50N	1	12	28	44	.5	8	4	371	1.99	6	5	ND	1	4	1	2	2	15	.03	.063	14	11	.10	36	.01	2	.47	.01	.02	7	7
C 12+50W 2+40N	1	37	105	115	1.1	16	10	944	6.17	13	5	ND	2	5	1	6	3	24	.04	.080	16	15	.12	41	.01	5	.63	.02	.02	19	26
C 12+50W 2+30N	1	21	45	68	.3	15	8	812	4.03	13	5	ND	2	5	1	4	3	20	.05	.092	17	15	.13	44	.01	3	.58	.02	.03	3	6
C 12+50W 2+20N	1	24	31	77	.3	16	11	1309	5.51	13	5	ND	2	5	1	2	3	28	.03	.097	18	23	.17	71	.01	6	.67	.02	.02	1	1
C 12+50W 2+10N	1	26	29	76	.1	17	9	1136	4.84	14	5	ND	2	4	1	2	3	27	.02	.129	18	20	.17	56	.01	5	.53	.02	.03	1	1
C 12+50W 2+00N	1	36	40	101	.3	25	14	1526	6.24	17	5	ND	3	7	1	2	2	28	.06	.105	21	24	.26	63	.01	5	.89	.02	.03	1	1
C 12+50W 1+90N	1	32	41	83	.2	21	13	1090	6.25	11	5	ND	3	4	1	2	2	27	.01	.089	20	27	.20	45	.01	5	.73	.02	.03	1	1
C 12+50W 1+80N	1	25	24	65	.2	18	9	841	4.21	9	5	ND	2	6	1	3	3	24	.04	.075	19	21	.17	69	.01	3	.54	.02	.02	1	2
C 12+50W 1+70N	1	23	26	74	.1	18	9	709	4.43	12	5	ND	2	6	1	3	2	28	.06	.102	19	20	.16	72	.01	4	.45	.01	.02	4	1
C 12+50W 1+60N	1	28	32	74	.2	21	12	1096	5.42	16	5	ND	2	8	1	2	3	25	.12	.080	17	19	.22	53	.01	5	.70	.02	.02	1	1
C 12+50W 1+50N	1	33	41	114	.1	33	17	1899	6.14	11	5	ND	3	12	1	2	2	41	.14	.099	25	35	.36	84	.01	5	1.01	.02	.03	1	1
C 12+50W 1+40N	1	33	41	100	.3	33	12	665	5.71	13	5	ND	3	19	1	2	2	45	.31	.082	20	42	.43	80	.01	4	1.03	.03	.03	1	1
C 12+50W 1+30N	1	39	56	126	.5	30	15	1606	5.95	13	6	ND	3	7	1	2	2	41	.06	.127	21	33	.38	109	.01	5	.95	.02	.04	1	1
C 12+50W 1+20N	1	29	44	98	.2	23	13	1157	5.38	18	5	ND	3	7	1	2	2	29	.04	.081	21	22	.26	76	.01	2	.79	.02	.03	1	1
C 12+50W 1+10N	1	45	53	145	.1	41	16	1648	5.97	16	5	ND	4	13	1	4	4	31	.13	.096	36	28	.57	120	.01	5	1.10	.03	.03	1	2
C 12+50W 1+00N	1	32	74	146	.1	25	21	983	6.03	7	5	ND	5	15	1	2	3	19	.20	.096	20	19	.25	97	.01	4	.88	.02	.03	1	1
C 12+50W 0+90N	1	41	130	207	.1	21	13	1441	4.82	13	5	ND	2	9	1	2	3	28	.08	.084	18	13	.16	58	.01	3	.61	.02	.04	1	1
C 12+50W 0+80N	1	55	88	203	.1	81	19	807	5.36	32	5	ND	4	17	1	8	2	22	.07	.078	20	33	.40	55	.01	5	.72	.02	.04	1	9
STD C7AU-0.5	20	57	38	135	6.9	69	29	1090	3.97	41	15	7	34	48	18	17	22	67	.48	.103	36	59	.88	178	.08	34	1.72	.09	.14	15	495

IMPERIAL METALS PROJECT - 4203 FILE # 86-2452

PAGE 9

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tl PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	N PPM	Aut PPB
C 12+50W 0+70K	1	71	32	110	.2	30	13	1084	7.00	9	5	ND	4	4	1	2	2	32	.03	.107	14	21	.40	46	.01	2	.97	.02	.04	1	1
C 12+50W 0+60N	1	64	28	98	.6	18	14	1024	8.15	10	5	ND	3	6	1	2	2	44	.07	.201	17	22	.29	34	.01	2	1.02	.02	.03	1	2
C 12+50W 0+50N	1	53	19	74	.2	17	8	238	4.32	8	5	ND	3	5	1	2	2	39	.04	.062	25	22	.21	22	.01	2	1.04	.02	.03	1	1
C 12+50W 0+40N	1	30	16	71	.4	14	8	1283	4.30	8	8	ND	3	8	1	2	2	50	.14	.143	20	15	.17	50	.01	2	.59	.02	.05	1	1
C 12+50W 0+30N	1	57	22	100	.3	28	15	633	5.70	13	5	ND	3	6	1	2	2	39	.05	.133	16	29	.39	35	.01	4	1.29	.02	.04	1	1
C 12+50W 0+20N	1	42	21	95	.3	28	11	424	6.63	13	5	ND	3	6	1	2	3	63	.07	.172	14	48	.48	69	.02	3	1.31	.02	.04	1	3
C 12+50W 0+10N	1	60	19	111	.5	75	20	1545	6.09	2	5	ND	2	16	1	2	2	131	.13	.107	6	109	1.90	256	.09	4	2.05	.04	.04	1	1
C 12+50W 0+00N	1	69	21	104	.2	41	19	845	6.60	2	5	ND	2	9	1	2	2	108	.13	.101	10	63	1.38	86	.04	2	2.34	.03	.05	1	2
C 12+50W 0+10S	1	194	13	98	.4	66	32	1736	8.05	2	5	ND	4	12	1	2	2	107	.20	.180	9	77	1.73	117	.01	2	2.72	.04	.04	1	1
C 12+50W 0+20S	1	58	12	96	.1	23	16	870	7.72	3	5	ND	2	3	1	2	2	122	.02	.130	7	40	.56	41	.01	2	1.69	.02	.03	1	1
C 12+50W 0+30S	1	41	13	102	.1	44	17	573	9.00	4	5	ND	2	4	1	4	2	94	.02	.141	5	78	.46	30	.01	2	1.62	.03	.02	1	1
C 12+50W 0+40S	1	38	9	79	.6	30	10	419	6.28	15	5	ND	2	3	1	2	2	91	.02	.161	8	58	.36	34	.01	3	1.27	.02	.02	1	1
C 12+50W 0+50S	1	85	18	102	.2	21	22	1107	8.82	9	5	ND	3	4	1	2	2	64	.05	.193	8	18	.41	27	.01	2	1.41	.03	.04	1	1
C 12+50W 0+60S	1	76	17	94	.2	17	15	906	8.78	17	5	ND	5	4	1	2	2	59	.02	.147	16	14	.27	34	.01	2	1.16	.02	.03	1	1
C 12+50W 0+70S	1	77	11	70	.1	15	14	992	6.09	26	5	ND	2	5	1	6	2	57	.04	.134	11	8	.15	34	.01	3	.59	.02	.02	1	2
C 12+50W 0+80S	1	38	22	64	.2	12	7	748	4.01	13	5	ND	3	4	1	3	2	41	.02	.109	22	9	.08	40	.01	4	.58	.01	.04	1	1
C 12+50W 0+90S	2	31	22	113	.7	18	8	5089	4.68	5	5	ND	5	4	1	2	2	33	.02	.133	34	15	.16	97	.01	3	.88	.02	.04	1	1
C 12+50W 1+00S	2	63	17	77	.2	16	11	652	7.06	9	5	ND	3	5	1	2	2	42	.02	.128	18	16	.19	29	.01	2	1.20	.02	.03	1	1
C 12+00W 2+50N	1	48	204	159	1.0	23	13	845	4.37	18	5	ND	3	16	1	2	4	15	.24	.077	17	10	.17	32	.01	4	.53	.02	.03	20	145
C 12+00W 2+40N	2	112	665	300	1.9	41	27	2261	8.71	37	5	ND	7	16	2	2	4	23	.28	.123	18	13	.36	45	.01	2	.74	.03	.03	60	300
C 12+00W 2+30N	1	72	364	285	2.0	31	20	1245	5.39	26	5	ND	5	12	1	4	6	15	.19	.082	19	9	.20	44	.01	4	.52	.02	.02	61	750
C 12+00W 2+20N	1	15	86	53	2.2	9	4	205	2.64	8	7	ND	2	4	1	2	3	20	.04	.069	15	11	.15	22	.01	2	.59	.01	.03	8	550
C 12+00W 2+10N	1	20	154	101	1.6	12	9	1607	3.91	9	5	ND	1	17	1	2	3	21	.28	.144	9	10	.13	66	.01	3	.58	.02	.04	4	38
C 12+00W 2+00N	1	63	126	112	1.5	18	14	1262	4.28	14	5	ND	2	8	1	3	3	17	.23	.097	7	8	.15	47	.01	3	.53	.02	.03	5	20
C 12+00W 1+90N	1	25	72	71	.1	14	8	892	4.08	12	5	ND	2	4	1	4	3	18	.03	.104	19	10	.12	38	.01	5	.58	.01	.03	7	6
C 12+00W 1+80N	1	15	42	59	.2	9	6	488	2.75	6	5	ND	2	4	1	3	2	15	.02	.070	18	7	.08	35	.01	5	.49	.01	.02	9	1
C 12+00W 1+70N	1	26	54	85	.1	14	9	495	4.14	8	5	ND	3	4	1	7	2	16	.02	.078	17	8	.10	56	.01	5	.66	.01	.03	2	1
C 12+00W 1+60N	1	47	106	120	.4	29	18	1263	5.27	18	5	ND	4	13	1	2	3	16	.19	.104	20	9	.17	35	.01	6	.63	.02	.04	2	24
C 12+00W 1+50N	1	25	77	90	.3	15	9	805	3.85	6	5	ND	2	5	1	8	2	24	.05	.095	19	14	.20	39	.01	6	.67	.02	.05	3	10
C 12+00W 1+40N	1	26	37	66	.3	14	8	633	3.84	9	5	ND	2	4	1	2	2	24	.03	.104	18	13	.20	42	.01	4	.73	.02	.06	3	3
C 12+00W 1+30N	1	69	53	116	.9	37	18	1193	5.41	13	5	ND	7	4	1	6	3	17	.03	.108	20	15	.22	48	.01	6	1.11	.02	.06	1	15
C 12+00W 1+20N	1	15	18	51	.2	13	5	551	2.57	7	5	ND	2	5	1	4	2	23	.04	.073	21	16	.20	63	.01	3	.48	.01	.04	1	20
C 12+00W 1+10N	1	22	10	53	.4	12	7	653	3.70	8	5	ND	2	4	1	6	2	22	.02	.096	21	11	.13	26	.01	6	.48	.01	.04	1	9
C 12+00W 1+00N	1	34	13	90	.5	28	16	979	5.44	12	5	ND	4	3	1	8	3	11	.02	.103	20	13	.25	24	.01	5	.78	.02	.03	1	1
C 12+00W 0+90N	1	32	19	92	.7	26	13	525	6.30	4	5	ND	3	8	1	5	2	38	.07	.094	20	37	.40	41	.01	5	1.51	.02	.04	1	1
C 12+00W 0+80N	1	21	15	57	.4	17	8	461	4.20	8	5	ND	2	4	1	2	2	35	.03	.145	19	24	.29	34	.01	5	.74	.02	.03	1	1
STD C/AU-0.5	21	60	40	140	7.2	72	29	1120	4.00	38	17	8	36	49	18	17	20	70	.48	.106	37	62	.88	185	.09	36	1.73	.10	.14	13	480

IMPERIAL METALS PROJECT - 4203 FILE # 86-2402

PAGE 10

SAMPLE#	Na	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	Ka	F	K	Au
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
C 12+00W 0+70N	1	14	15	48	.5	15	6	258	2.80	5	5	ND	3	5	1	3	2	45	.03	.059	27	27	.32	31	.02	2	.73	.01	.02	1	1
C 12+00W 0+60N	1	24	20	63	.3	23	9	609	4.20	8	5	ND	3	5	1	4	3	44	.03	.097	28	35	.45	30	.02	3	1.04	.02	.04	1	1
C 12+00W 0+50N	1	19	21	61	.2	21	8	300	4.51	9	5	ND	4	4	1	5	3	50	.02	.123	27	35	.44	28	.02	3	.98	.02	.04	1	1
C 12+00W 0+40N	1	29	30	78	.1	30	12	600	5.10	12	5	ND	4	5	1	3	2	42	.04	.073	26	41	.55	35	.01	3	1.35	.02	.03	1	1
C 12+00W 0+30N	1	26	28	73	.2	26	9	346	5.05	12	5	ND	4	4	1	3	2	39	.02	.056	27	34	.47	29	.01	3	1.11	.02	.02	1	1
C 12+00W 0+20N	1	19	25	63	.2	31	10	420	4.40	9	5	ND	3	6	1	4	2	64	.03	.063	27	58	.59	34	.03	5	1.10	.02	.04	1	1
C 12+00W 0+10N	1	21	20	54	.2	18	8	1720	3.46	7	5	ND	2	5	1	2	4	55	.02	.063	25	34	.27	45	.01	2	.80	.02	.04	2	1
C 12+00W 0+00N	1	26	22	72	.3	38	10	324	5.67	13	5	ND	3	6	1	2	3	72	.08	.105	22	69	.52	52	.01	2	1.22	.02	.04	1	1
C 12+00W 0+10S	1	77	39	128	.2	60	23	681	7.13	15	5	ND	4	9	1	2	2	79	.08	.093	20	78	1.58	123	.02	5	2.66	.03	.07	1	1
C 12+00W 0+20S	2	154	20	122	.2	48	23	1479	9.70	8	5	ND	3	13	1	4	2	118	.18	.174	12	65	.99	116	.01	2	2.00	.04	.02	1	17
C 12+00W 0+30S	1	61	19	101	.1	37	18	785	7.47	12	5	ND	3	6	1	2	2	102	.06	.116	19	69	.64	47	.01	3	1.65	.03	.02	1	2
C 12+00W 0+40S	1	32	25	99	.1	27	12	729	7.64	15	5	ND	4	5	1	2	2	69	.05	.112	25	55	.42	41	.01	4	1.44	.02	.04	1	1
C 12+00W 0+50S	1	49	14	45	.2	11	7	259	3.69	6	5	ND	5	3	1	2	2	39	.01	.065	35	7	.08	21	.01	2	.56	.02	.03	1	1
C 12+00W 0+60S	1	140	16	38	.4	16	14	264	3.80	6	5	ND	7	3	1	2	2	20	.02	.051	46	4	.04	18	.01	3	.42	.02	.02	1	1
C 12+00W 0+70S	1	36	23	64	.2	14	8	442	6.51	14	5	ND	4	4	1	3	2	53	.03	.104	28	17	.17	28	.01	2	1.07	.02	.03	1	1
C 12+00W 0+80S	1	133	14	61	.2	38	12	1196	6.93	16	5	ND	4	3	1	2	2	17	.03	.104	31	21	.22	36	.01	5	.59	.02	.05	1	4
C 12+00W 0+90S	1	27	12	59	1.3	7	6	985	3.86	12	5	ND	3	4	1	4	3	36	.01	.086	23	8	.05	37	.01	3	.59	.01	.02	1	1
C 12+00W 1+00S	1	12	26	37	.3	9	3	258	1.33	4	5	ND	4	5	1	2	4	19	.04	.038	47	5	.04	25	.01	2	.48	.01	.03	1	1
STD C/AU-0.5	21	59	41	136	7.2	70	28	1091	4.00	42	15	8	35	48	18	17	21	68	.48	.104	38	60	.88	181	.08	34	1.73	.09	.13	13	500

IMPERIAL METALS PROJECT - 4200 FILE # 86-2411

SAMPLE#	Hg PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Tl PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	F PPM	Al %	Na %	K %	W PPM	AU PPB
C 13+00W 6+90N	1	24	47	66	.3	21	6	237	6.70	73	5	ND	6	6	1	2	2	26	.02	.102	30	25	.24	58	.01	5	1.12	.02	.04	1	7
C 13+00W 6+80N	1	22	27	88	.2	27	10	280	4.19	43	5	ND	4	6	1	2	2	23	.04	.063	24	23	.28	53	.02	6	1.48	.02	.03	1	23
C 13+00W 6+70N	1	11	13	31	.4	10	3	110	1.50	22	5	ND	3	6	1	2	3	19	.05	.055	27	10	.07	49	.01	3	.56	.01	.03	1	12
C 13+00W 6+60N	1	24	25	54	.3	21	6	188	6.48	39	5	ND	6	5	1	2	4	33	.02	.045	20	20	.16	44	.02	3	1.02	.02	.04	1	17
C 13+00W 6+50N	1	21	25	93	.5	35	16	1232	3.96	49	5	ND	4	18	1	2	2	19	.18	.077	22	16	.28	87	.01	3	1.07	.02	.04	1	22
C 13+00W 6+40N	1	26	24	76	.1	26	7	262	4.99	13	5	ND	4	6	1	2	3	28	.03	.044	32	15	.10	36	.01	4	.67	.02	.02	1	21
C 13+00W 6+30N	1	17	23	64	.4	23	13	730	4.07	19	5	ND	3	40	1	5	3	19	.57	.072	19	14	.29	57	.01	4	.98	.03	.04	1	17
C 13+00W 6+20N	1	24	25	87	.1	37	11	194	4.32	9	5	ND	4	14	1	2	2	14	.13	.052	21	17	.21	28	.01	3	.83	.02	.03	1	46
C 13+00W 6+10N	1	30	23	94	.2	43	14	614	3.99	14	5	ND	5	22	1	2	2	14	.31	.077	19	14	.34	36	.01	2	.76	.02	.03	5	35
C 13+00W 6+00N	1	20	28	71	.1	27	10	263	3.87	12	5	ND	5	7	1	2	2	18	.05	.042	26	19	.28	32	.01	3	.92	.02	.03	5	24
C 13+00W 5+90N	1	16	17	57	.1	20	6	265	3.05	9	5	ND	3	8	1	2	2	22	.08	.048	29	14	.15	58	.01	3	.60	.02	.03	5	19
C 13+00W 5+80N	1	27	26	75	.2	53	13	359	4.50	10	5	ND	4	8	1	3	2	20	.07	.058	24	51	.44	28	.01	3	.96	.02	.03	4	14
C 13+00W 5+70N	1	27	35	86	.1	35	13	439	3.96	10	5	ND	5	10	1	2	3	16	.12	.059	27	18	.33	41	.01	5	.81	.02	.04	3	34
C 13+00W 5+60N	1	30	50	93	.1	34	14	461	4.26	18	5	ND	5	6	1	2	3	18	.05	.057	27	17	.32	38	.01	4	.90	.02	.04	2	67
C 5+00W 3+00N	1	62	42	107	1.0	30	14	543	7.17	125	5	2	3	11	1	2	2	29	.05	.087	21	10	.08	33	.01	3	.61	.02	.03	10	1660
C 5+00W 2+90N	1	31	23	65	.1	24	11	317	4.58	30	5	ND	2	9	1	2	3	29	.05	.068	21	8	.06	39	.01	5	.44	.02	.03	5	83
C 5+00W 2+80N	1	42	49	105	.3	37	23	2129	5.07	17	5	ND	2	17	1	2	2	23	.20	.131	16	14	.16	42	.01	4	.94	.02	.05	1	17
C 5+00W 2+70N	1	33	56	109	.2	34	20	2758	5.57	15	5	ND	2	11	1	2	3	26	.11	.121	19	16	.14	82	.01	4	.77	.02	.05	1	5
C 5+00W 2+60N	1	23	126	102	.1	26	12	818	3.80	11	5	ND	2	20	1	4	3	26	.25	.077	21	14	.10	47	.01	3	.63	.02	.04	5	2
C 5+00W 2+50N	1	23	190	128	.2	28	11	837	4.34	19	5	ND	4	5	1	2	3	29	.02	.062	27	19	.20	48	.01	2	.92	.02	.04	1	9
C 5+00W 2+40N	1	25	41	95	.1	27	10	439	4.33	9	5	ND	3	5	1	4	2	28	.02	.071	24	19	.13	34	.01	3	.85	.02	.05	1	2
C 5+00W 2+30N	1	25	35	109	.1	29	13	1507	3.72	4	5	ND	3	9	1	2	3	24	.17	.067	26	10	.08	62	.01	4	.52	.02	.06	1	8
C 5+00W 2+20N	1	31	51	112	.1	37	14	1175	3.95	12	5	ND	2	16	1	2	3	20	.29	.089	22	14	.16	46	.01	3	.72	.02	.05	1	9
C 5+00W 2+10N	1	29	96	128	.2	36	19	1399	4.47	12	5	ND	2	15	1	5	3	20	.25	.094	19	14	.15	36	.01	3	.66	.02	.05	1	4
C 5+00W 2+00N	1	22	32	85	.1	28	8	249	3.12	15	5	ND	3	11	1	5	4	26	.16	.042	31	15	.10	63	.01	3	.52	.02	.04	3	12
C 5+00W 1+90N	1	24	76	124	.1	30	14	825	4.12	18	5	ND	2	18	1	2	2	24	.22	.078	20	23	.20	63	.01	3	.80	.02	.05	2	10
C 5+00W 1+80N	1	25	50	104	.1	30	10	357	4.44	18	5	ND	3	14	1	2	3	27	.15	.056	24	21	.20	59	.01	5	.81	.02	.05	4	29
C 5+00W 1+70N	2	30	54	118	.1	35	16	962	4.67	20	5	ND	2	12	1	2	3	27	.18	.083	19	21	.19	54	.01	2	.82	.02	.05	4	16
C 5+00W 1+60N	1	22	39	79	.1	25	9	472	3.84	17	5	ND	2	7	1	7	3	30	.06	.067	26	18	.11	54	.01	3	.67	.02	.05	3	13
C 5+00W 1+50N	1	20	50	81	.1	24	11	1030	3.83	17	5	ND	3	6	1	4	3	25	.02	.083	24	21	.16	69	.01	2	.80	.02	.05	3	10
C 5+00W 1+40N	1	19	39	78	.1	22	9	638	3.43	13	5	ND	2	8	1	2	2	25	.11	.082	26	18	.14	61	.01	4	.66	.02	.05	4	31
C 5+00W 1+30N	1	16	28	59	.1	19	7	1030	3.00	11	5	ND	3	4	1	2	2	22	.02	.076	26	16	.13	47	.01	3	.68	.01	.05	6	28
C 5+00W 1+20N	1	16	23	59	.2	18	6	538	3.11	15	5	ND	2	5	1	2	3	24	.03	.069	26	15	.11	49	.01	3	.61	.01	.04	3	23
C 5+00W 1+10N	1	16	23	63	.1	19	6	234	3.28	13	5	ND	2	5	1	4	3	23	.03	.052	28	14	.10	26	.01	3	.55	.01	.02	2	13
C 5+00W 1+00N	1	23	25	63	.1	24	7	223	4.34	20	5	ND	2	8	1	2	2	22	.09	.062	23	18	.12	41	.01	3	.66	.02	.03	2	25
C 5+00W 0+90N	1	13	16	45	.1	15	6	289	2.56	8	5	ND	2	8	1	4	4	24	.07	.045	29	10	.08	36	.01	2	.52	.01	.03	6	27
STD C/AH-0.5	21	58	40	136	7.0	70	29	1103	3.99	38	18	8	35	49	18	17	21	68	.48	.104	36	59	.88	182	.08	35	1.73	.09	.13	13	510

IMPERIAL METALS PROJECT - 4203 FILE # 86-2461

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	V PPM	Au PPM	Tl PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	P %	Ca %	K PPM	Cr PPM	Mg %	Ba PPM	Ti %	F PPM	Al %	Na %	Si %	W PPM	Au# PPB	
C 4+00N 2+20N	1	37	408	226	.3	41	21	2219	5.57	18	5	ND	2	22	2	2	26	.33	.110	24	15	.18	52	.01	2	.85	.02	.04	1	3	
C 4+00N 2+10N	1	27	242	174	.1	33	15	2260	4.80	14	5	ND	2	9	1	3	29	.09	.086	23	25	.18	51	.01	3	.88	.02	.04	1	10	
C 4+00N 2+00N	1	29	85	228	.3	58	21	1903	5.27	37	5	ND	2	14	2	2	34	.22	.160	21	50	.30	58	.01	3	.98	.02	.04	1	2	
C 4+00N 1+90N	1	25	79	139	.1	57	13	670	5.57	44	5	ND	3	5	1	2	44	.02	.061	27	63	.33	42	.01	3	1.00	.02	.03	1	1	
C 4+00N 1+80N	1	32	71	142	.2	45	24	3463	4.30	14	5	ND	2	16	1	4	26	.22	.108	26	28	.27	75	.01	3	1.06	.02	.05	2	2	
C 4+00N 1+70N	1	26	151	111	.3	33	14	1874	3.76	17	5	ND	3	8	1	2	24	.08	.072	27	17	.15	82	.01	3	.72	.02	.04	3	6	
C 4+00N 1+60N	1	22	86	85	.1	25	10	576	3.60	16	5	ND	4	6	1	2	25	.04	.052	32	19	.14	53	.01	2	.76	.02	.05	12	16	
C 4+00N 1+50N	1	20	34	85	.1	25	10	589	3.78	14	5	ND	4	7	1	2	28	.06	.060	30	24	.16	59	.01	4	.85	.02	.05	4	13	
C 4+00N 1+40N	1	23	29	68	.1	25	8	447	3.36	11	5	ND	4	5	1	2	28	.02	.050	32	18	.17	48	.01	2	.79	.01	.04	6	9	
C 4+00N 1+30N	1	46	54	109	.7	42	16	2375	3.70	19	5	ND	3	34	1	2	18	.75	.174	15	20	.26	47	.01	2	1.25	.03	.06	5	15	
C 4+00N 1+20N	1	27	34	91	.1	29	11	525	4.36	13	5	ND	3	6	1	2	28	.03	.074	24	21	.18	46	.01	2	.95	.02	.04	2	7	
C 4+00N 1+10N	1	20	42	81	.2	21	9	621	3.55	10	5	ND	3	7	1	3	29	.09	.090	25	17	.13	70	.01	3	.78	.02	.05	3	27	
C 4+00N 1+00N	1	18	19	46	.1	17	5	188	2.99	9	5	ND	3	4	1	3	23	.02	.070	27	14	.10	27	.01	2	.60	.01	.03	3	10	
C 4+00N 0+90N	1	18	20	63	.1	20	6	210	3.46	9	5	ND	3	6	1	2	21	.05	.075	24	15	.11	58	.01	2	.62	.01	.04	1	16	
C 4+00N 0+80N	1	22	38	80	.1	27	11	841	4.40	13	5	ND	3	8	1	3	24	.08	.093	25	19	.17	37	.01	2	.83	.02	.04	3	22	
C 4+00N 0+70N	1	30	26	75	.1	31	9	303	4.83	20	5	ND	4	6	1	2	22	.05	.069	30	18	.15	35	.01	2	.74	.02	.03	3	12	
C 4+00N 0+60N	1	30	31	88	.2	33	13	739	4.54	23	5	ND	3	11	1	2	24	.14	.088	26	20	.15	48	.01	2	.80	.02	.04	3	17	
C 4+00N 0+50N	1	27	27	82	.1	29	11	491	3.78	17	5	ND	4	9	1	5	21	.10	.068	31	18	.17	53	.01	3	.68	.02	.04	7	28	
C 4+00N 0+40N	1	28	35	86	.1	34	14	517	4.38	19	5	ND	4	10	1	5	21	.11	.092	25	23	.23	43	.01	2	.89	.02	.05	8	22	
C 4+00N 0+30N	1	35	45	111	.2	39	18	1075	4.77	17	5	ND	3	13	1	2	22	.18	.111	22	21	.25	50	.01	2	1.03	.02	.06	6	30	
C 4+00N 0+20N	1	17	24	55	.1	17	7	509	3.24	18	5	ND	2	7	1	4	2	20	.08	.096	26	17	.19	40	.01	2	.73	.01	.05	1	10
C 4+00N 0+10N	1	12	20	53	.2	13	4	325	2.55	12	5	ND	3	9	1	4	2	10	.13	.084	23	15	.15	52	.01	2	.62	.02	.05	1	11
C 4+00N 0+00N	1	19	25	56	.2	21	8	301	3.06	14	5	ND	3	6	1	2	4	17	.04	.079	20	15	.17	59	.01	2	.71	.02	.05	2	23
C 4+00N 0+10S	1	27	36	105	1.0	25	13	1431	3.44	16	5	ND	2	58	1	2	21	.88	.154	16	19	.20	71	.01	3	1.01	.03	.06	4	19	
C 4+00N 0+20S	1	31	40	127	1.1	34	14	1063	4.01	26	6	ND	4	51	1	2	21	.69	.193	18	22	.28	78	.01	2	1.37	.03	.08	1	20	
C 4+00N 0+40S	1	30	46	134	1.0	32	17	1610	4.31	21	5	ND	4	30	1	4	25	.36	.250	21	25	.31	75	.01	2	1.56	.03	.08	6	10	
C 4+00N 0+50S	1	26	44	116	.9	30	16	1286	4.30	17	5	ND	2	35	1	3	26	.48	.196	18	23	.31	87	.01	2	1.36	.03	.09	1	8	
C 4+00N 0+60S	1	28	36	113	.6	30	14	1113	4.41	21	5	ND	3	23	1	2	25	.40	.186	20	26	.35	85	.01	2	1.24	.03	.09	1	9	
C 4+00N 0+70S	1	82	163	96	.1	29	17	1203	6.40	21	8	ND	3	8	1	8	7	38	.08	.140	21	23	.47	50	.01	2	1.23	.02	.04	16	5
C 4+00N 0+80S	1	45	38	114	.1	47	15	456	4.63	13	5	ND	5	6	1	3	27	.04	.064	27	33	.55	54	.01	2	1.40	.02	.07	1	9	
C 4+00N 0+90S	1	29	26	87	.1	28	10	444	5.90	13	7	ND	3	5	1	2	2	32	.02	.088	26	31	.38	36	.01	2	1.17	.02	.04	1	8
C 4+00N 1+00S	1	18	26	136	.4	18	8	886	3.76	7	5	ND	2	15	1	2	2	30	.13	.090	21	25	.27	49	.01	2	1.32	.02	.04	1	33
C 4+00N 1+10S	1	16	20	109	.1	16	8	812	3.42	7	5	ND	3	14	1	4	2	29	.12	.092	22	25	.26	44	.01	2	1.25	.02	.04	1	1
C 4+00N 1+20S	1	46	35	183	.6	30	14	2729	4.41	10	6	ND	2	70	1	2	23	1.12	.139	16	20	.27	89	.01	4	1.14	.04	.06	11	9	
C 4+00N 1+30S	1	27	24	117	.1	18	10	639	6.23	9	5	ND	3	8	1	7	2	30	.06	.090	18	23	.25	32	.01	2	1.41	.02	.03	1	7
C 4+00N 1+40S	1	27	39	199	.2	25	15	2036	5.07	10	6	ND	3	25	2	4	32	.27	.108	19	21	.22	56	.01	2	1.31	.02	.04	1	5	
STD C/AU-0.5	21	60	37	136	7.1	70	29	1101	3.98	38	16	7	35	49	17	15	18	68	.48	.103	37	61	.88	183	.08	35	1.73	.09	.13	12	520

IMPERIAL METALS PROJECT - 4200 FILE # B6-2461

SYNCH 5

SAMPLE#	Hg	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tl	Sr	Cd	Sb	Bi	V	Ca	F	La	Cr	Mg	Ba	Ti	F	Al	Na	K	Au	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
C 4+00K 1+50S	1	20	57	66	.1	14	7	736	4.56	11	5	ND	2	6	1	9	2	24	.07	.069	15	14	.11	29	.01	2	.64	.02	.04	100	5
C 4+00K 1+60S	1	31	179	105	.1	14	8	1081	4.31	15	5	ND	2	5	1	7	3	22	.02	.077	14	14	.07	30	.01	2	.64	.01	.02	1	940
C 4+00K 1+70E	1	75	16	108	.1	13	19	1130	8.66	12	5	ND	2	7	1	9	2	17	.01	.089	6	5	.07	26	.01	2	.76	.02	.02	1	1
C 4+00K 1+80S	1	28	17	63	.1	18	9	801	4.39	6	5	ND	4	5	1	7	2	13	.02	.067	32	9	.06	30	.01	2	.57	.01	.03	1	1
C 4+00K 1+90S	1	22	48	45	.1	12	8	1148	5.98	13	5	ND	2	7	1	5	2	20	.01	.074	14	10	.05	24	.01	3	.58	.02	.02	6	2
C 4+00K 2+00S	2	87	52	128	.3	20	26	3910	11.13	38	5	ND	2	5	1	2	2	26	.04	.138	5	9	.08	72	.01	2	.49	.03	.03	1	1
STD C/AU 0.5	22	61	38	139	7.1	71	29	1129	3.97	38	16	7	37	50	18	15	22	70	.48	.106	37	61	.88	188	.09	33	1.73	.16	.15	14	510

GEOCHEMICAL ICP ANALYSIS

.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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS - BOMESH AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 11 1986

DATE REPORT MAILED: *P6-Cores* *Sept 19/86*ASSAYER: *D. J. Jeyar* DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS CORPORATION

PROJECT

4203

FILE # 86-2608

PAGE 1

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	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au PPB
C9+00W 4+00W	1	31	10	63	.2	32	9	308	4.58	20	5	ND	3	3	1	3	2	19	.01	.085	24	13	.07	17	.01	2	.42	.01	.03	6	11
C9+00W 3+90W	1	29	32	84	.1	29	8	193	3.24	12	5	ND	2	4	1	3	2	15	.01	.055	23	7	.03	15	.01	2	.33	.01	.03	2	8
C9+00W 3+80W	1	16	8	47	.1	19	5	223	2.16	10	5	ND	3	3	1	2	2	17	.01	.032	30	6	.02	14	.01	2	.31	.01	.02	4	1
C9+00W 3+70W	1	21	13	54	.1	20	5	115	2.69	7	5	ND	2	2	1	2	2	18	.01	.051	18	7	.03	14	.01	2	.41	.01	.03	4	30
C9+00W 3+60W	1	26	25	68	.1	25	8	426	5.39	11	5	ND	3	4	1	7	2	30	.02	.042	20	17	.09	19	.01	2	.69	.01	.02	6	10
C9+00W 3+50W	1	24	35	74	.1	26	9	502	3.79	9	6	ND	2	4	1	2	2	22	.04	.048	15	15	.14	23	.01	2	.63	.01	.02	5	14
C9+00W 3+40W	1	23	21	63	.4	24	9	293	3.48	8	5	ND	2	29	1	2	2	24	.56	.047	14	12	.18	15	.01	2	.74	.02	.03	9	5
C9+00W 3+30W	1	27	24	83	.1	26	9	708	4.26	16	5	ND	3	24	1	2	2	24	.33	.039	17	15	.17	48	.01	2	.66	.02	.03	8	9
C9+00W 3+20W	1	51	35	97	.1	70	24	733	6.09	78	5	ND	5	11	1	2	2	7	.09	.049	14	7	.07	26	.01	4	.36	.02	.04	2	27
C9+00W 3+10W	1	48	59	108	.4	45	18	857	4.70	14	5	ND	4	29	1	2	2	19	.52	.087	15	19	.43	21	.01	2	.92	.03	.04	3	22
C9+00W 3+00W	1	32	51	109	.3	35	17	805	4.56	12	5	ND	5	17	1	2	2	22	.20	.058	17	20	.36	26	.01	2	1.14	.02	.03	6	18
C9+00W 2+90W	1	45	64	114	.3	41	18	642	4.65	14	5	ND	9	17	1	3	2	24	.28	.074	25	19	.49	23	.02	2	1.00	.02	.03	1	17
C9+00W 2+80W	1	42	76	119	.5	39	21	614	5.10	15	5	ND	5	26	1	2	2	23	.47	.085	21	21	.46	25	.01	2	1.15	.03	.03	2	18
C9+00W 2+70W	1	41	93	133	.5	38	16	962	4.24	33	5	ND	4	19	1	3	2	16	.33	.067	12	14	.31	26	.01	2	.68	.02	.03	10	36
C9+00W 2+60W	1	48	162	210	1.3	47	17	2315	4.30	35	5	ND	3	40	3	2	2	19	.84	.126	12	19	.40	50	.01	4	1.01	.03	.04	2	1
C9+00W 2+50W	1	14	10	36	.1	8	3	86	1.65	8	5	ND	2	4	1	2	2	28	.03	.031	19	9	.07	17	.01	2	.43	.01	.02	2	7
C9+00W 2+40W	1	28	44	119	.3	30	13	1285	4.06	11	5	ND	2	28	1	2	2	26	.52	.090	12	19	.28	59	.01	2	.94	.03	.02	8	7
C9+00W 2+30W	1	38	37	125	.1	37	17	667	4.66	11	5	ND	4	10	1	2	2	26	.13	.070	22	26	.44	37	.01	2	1.40	.02	.03	1	4
C9+00W 2+20W	1	26	35	98	.2	25	14	568	4.48	11	5	ND	2	18	1	2	2	29	.27	.074	17	23	.28	43	.01	3	1.17	.02	.03	2	2
C9+00W 2+10W	2	33	38	113	.4	27	15	2671	4.22	12	5	ND	2	37	1	2	2	31	.68	.144	13	22	.32	77	.01	3	1.17	.03	.04	2	1
C9+00W 2+00W	1	28	30	82	.1	21	8	274	3.97	18	5	ND	2	8	1	2	2	33	.11	.060	21	16	.17	56	.01	3	.63	.02	.02	2	8
C9+00W 1+90W	1	23	23	60	.2	19	8	680	3.73	23	5	ND	2	7	1	2	2	39	.11	.064	19	13	.17	58	.01	2	.60	.01	.04	3	7
C9+00W 1+80W	1	43	28	89	.2	29	14	469	4.81	14	5	ND	3	6	1	2	2	36	.05	.062	16	24	.47	93	.01	2	1.22	.02	.04	1	5
C9+00W 1+70W	1	22	16	51	.1	14	5	170	2.84	16	5	ND	2	5	1	2	2	42	.03	.040	16	11	.08	57	.01	2	.51	.01	.03	3	3
C9+00W 1+60W	1	27	35	73	.4	21	10	981	4.65	20	5	ND	2	5	1	2	2	34	.03	.073	16	17	.20	62	.01	2	.79	.02	.03	2	6
C9+00W 1+50W	1	40	20	83	.6	26	13	610	5.11	11	5	ND	2	6	1	2	2	33	.06	.102	15	16	.37	61	.01	2	1.10	.02	.03	1	3
C9+00W 1+40W	1	30	20	68	.4	19	11	713	4.10	13	5	ND	2	4	1	2	2	30	.03	.101	14	16	.32	56	.01	2	.99	.01	.03	1	6
C9+00W 1+30W	1	28	18	63	.2	17	8	482	4.31	14	5	ND	2	5	1	2	2	32	.04	.077	14	18	.25	43	.01	2	.88	.01	.04	2	4
C9+00W 1+20W	1	24	22	51	.6	15	7	842	3.48	16	5	ND	2	4	1	2	2	29	.02	.064	16	13	.16	61	.01	2	.61	.01	.04	2	3
C9+00W 1+10W	1	53	31	97	.2	42	19	682	5.26	22	5	ND	6	9	1	2	2	30	.10	.065	23	23	.51	75	.01	2	1.44	.02	.06	1	13
C9+00W 1+00W	1	15	14	50	.1	13	6	547	2.85	16	5	ND	2	5	1	2	2	26	.03	.071	16	12	.17	68	.01	2	.60	.01	.04	2	15
C9+00W 0+90W	1	25	29	73	.2	20	9	492	4.30	15	5	ND	3	4	1	2	2	25	.02	.064	16	18	.25	51	.01	2	.82	.01	.03	1	6
C9+00W 0+80W	1	65	58	201	.6	40	18	1660	5.39	21	5	ND	5	35	1	3	3	24	.53	.103	15	19	.41	106	.01	2	1.15	.03	.05	1	8
C9+00W 0+70W	1	23	25	66	.3	18	7	355	3.72	15	5	ND	2	6	1	3	2	23	.04	.068	17	16	.23	48	.01	2	.81	.01	.02	2	14
C9+00W 0+60W	2	46	38	175	.3	48	20	1440	5.75	19	5	ND	4	10	1	3	2	33	.11	.078	18	23	.35	79	.02	2	1.95	.02	.04	1	3
C9+00W 0+50W	1	24	23	68	.3	16	8	536	3.73	14	5	ND	2	5	1	2	2	24	.05	.077	10	14	.21	42	.01	2	.66	.01	.03	1	9
STD C/AU-5	19	59	39	136	7.1	70	29	1112	3.96	36	19	7	36	48	18	15	21	68	.48	.104	37	59	.88	181	.08	35	1.73	.09	.13	12	50

IMPERIAL METALS CORPORATION PROJECT - 4203 FILE # 86-2608

SAMPLE#	No 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	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Aut PPS
C9+00W 0+40W	1	13	14	51	.3	13	5	324	3.27	13	5	ND	2	5	1	6	2	28	.03	.068	18	13	.16	41	.01	3	.61	.01	.03	1	2
C9+00W 0+30W	1	11	20	39	.6	10	4	161	2.98	14	5	ND	2	3	1	2	2	23	.02	.049	17	13	.17	28	.01	3	.74	.01	.04	3	4
C9+00W 0+20W	1	65	(94)	111	.3	31	18	916	4.52	9	7	ND	8	64	1	2	2	22	5.09	.065	13	15	.44	94	.01	4	.91	.06	.08	5	4
C9+00W 0+00BL	1	52	27	109	.1	53	12	392	5.85	64	5	ND	9	4	1	5	2	7	.06	.058	16	5	.05	24	.01	5	.20	.02	.04	1	1
C9+00W 0+20S	1	40	43	95	.2	26	17	783	5.21	4	5	ND	5	32	1	2	2	34	.39	.079	15	26	.45	173	.01	4	1.34	.03	.07	1	1
C9+00W 0+30S	1	98	54	115	.4	42	41	2197	8.01	62	5	ND	6	16	1	2	3	19	.24	.093	21	11	.27	175	.01	5	.58	.03	.04	5	9
C9+00W 0+40S	1	68	33	119	.2	30	20	1120	4.65	12	5	ND	5	14	1	2	2	21	.20	.090	17	15	.36	80	.01	4	.83	.02	.04	1	3
C9+00W 0+50S	1	50	34	94	.1	34	18	909	4.63	10	5	ND	5	23	1	2	2	21	.30	.047	17	18	.36	102	.01	4	.81	.02	.04	1	38
C9+00W 0+60S	1	28	35	77	.2	19	8	198	3.94	6	5	ND	5	9	1	3	2	25	.11	.066	15	16	.30	86	.01	3	.95	.02	.05	1	2
C9+00W 0+80S	2	66	37	137	.4	36	16	2759	5.21	3	5	ND	3	37	1	2	2	46	.55	.136	11	36	.55	167	.01	5	1.17	.03	.03	1	1
C9+00W 0+90S	1	64	32	100	.2	34	16	663	4.91	6	5	ND	6	20	1	2	2	32	.28	.091	21	27	.52	100	.01	5	1.18	.03	.05	1	1
C9+00W 1+00S	1	32	27	109	.3	21	10	507	5.11	4	5	ND	2	9	1	2	2	43	.09	.069	16	27	.30	75	.01	4	1.16	.02	.05	1	1
C8+00W 4+00W	1	9	9	37	.1	9	2	90	1.33	7	5	ND	1	3	1	2	2	17	.01	.040	20	6	.03	15	.01	2	.45	.01	.02	2	14
C8+00W 3+90W	1	17	16	51	.2	17	5	276	5.56	9	5	ND	7	3	1	2	3	33	.01	.074	27	26	.25	23	.01	4	1.22	.02	.03	1	3
C8+00W 3+80W	1	10	5	29	.1	19	4	145	1.59	7	5	ND	3	6	1	3	2	13	.02	.039	27	6	.02	16	.01	3	.28	.01	.02	2	3
C8+00W 3+70W	1	20	13	50	.1	19	7	3360	2.72	18	5	ND	1	4	1	2	2	17	.01	.061	17	7	.04	64	.01	3	.39	.01	.02	8	18
C8+00W 3+60W	1	10	8	40	.1	9	3	361	1.42	4	5	ND	1	3	1	2	2	12	.01	.046	19	5	.03	23	.01	2	.36	.01	.01	3	18
C8+00W 3+50W	1	37	19	(92)	.2	49	7	419	5.38	92	5	ND	2	6	1	2	2	26	.01	.066	20	10	.04	28	.01	3	.55	.01	.03	15	290
C8+00W 3+40W	2	25	10	55	.2	28	7	269	3.95	41	5	ND	2	3	1	3	2	21	.01	.073	23	8	.05	14	.01	3	.43	.01	.02	7	37
C8+00W 3+30W	1	17	13	43	.3	18	5	198	2.72	19	5	ND	2	3	1	2	2	18	.02	.084	19	9	.05	18	.01	3	.42	.01	.02	8	42
C8+00W 3+20W	1	23	12	66	.1	35	7	370	4.58	17	5	ND	3	4	1	3	2	19	.01	.059	27	4	.04	20	.01	3	.23	.01	.02	6	5
C8+00W 3+10W	3	22	19	45	.1	38	5	285	3.28	10	5	ND	2	3	1	5	2	20	.01	.051	24	10	.05	17	.01	2	.39	.01	.03	3	3
C8+00W 3+00W	1	16	13	42	.1	18	6	253	2.95	9	5	ND	2	4	1	4	2	24	.02	.043	23	15	.13	21	.01	3	.61	.01	.02	4	13
C8+00W 2+90W	1	42	20	(92)	.2	33	7	124	3.46	67	5	ND	4	12	1	2	3	13	.05	.039	25	6	.04	22	.01	4	.47	.01	.02	29	210
C8+00W 2+80W	1	22	14	60	.1	26	8	222	3.89	11	5	ND	2	5	1	2	2	25	.03	.049	20	14	.16	24	.01	3	.62	.01	.02	7	10
C8+00W 2+70W	1	20	23	58	.3	21	8	938	3.73	11	5	ND	1	5	1	2	2	24	.03	.056	19	17	.16	44	.01	3	.70	.01	.02	5	6
C8+00W 2+60W	1	21	27	87	.3	28	10	704	4.25	11	5	ND	2	8	1	2	3	22	.12	.081	18	18	.24	52	.01	3	.81	.02	.02	4	16
C8+00W 2+50W	1	18	24	54	.2	18	6	249	4.28	11	5	ND	1	4	1	7	2	26	.02	.059	16	16	.12	26	.01	2	.61	.01	.01	5	37
C8+00W 2+40W	1	42	65	(146)	.3	45	21	1215	5.44	10	5	ND	4	12	1	6	3	19	.15	.058	20	23	.36	30	.01	3	.99	.02	.03	1	12
C8+00W 2+30W	1	29	(72)	(103)	.3	28	13	655	6.68	17	5	ND	4	5	1	2	2	25	.05	.066	18	29	.23	31	.01	2	1.71	.02	.02	3	19
C8+00W 2+20W	1	13	19	51	.1	14	5	412	2.92	8	5	ND	2	5	1	2	2	26	.04	.052	25	15	.19	40	.01	2	.68	.01	.02	2	50
C8+00W 2+10W	1	28	25	80	.3	25	12	1622	3.99	18	5	ND	1	5	1	2	4	20	.05	.090	15	11	.08	44	.01	2	.53	.01	.03	1	6
C8+00W 2+00W	1	43	20	68	.4	19	7	371	4.41	17	5	ND	2	4	1	3	2	23	.03	.083	21	15	.13	36	.01	2	.62	.01	.03	1	10
C8+00W 1+90W	1	18	14	47	.2	13	5	643	2.94	10	5	ND	2	4	1	2	2	24	.02	.083	23	15	.17	58	.01	2	.67	.01	.04	2	6
C8+00W 1+80W	1	19	19	46	.1	16	5	181	3.40	12	5	ND	2	4	1	4	2	25	.03	.084	17	13	.12	38	.01	2	.56	.01	.04	3	10
STD C/AU-5	22	58	40	135	7.0	70	28	1100	3.97	35	17	7	35	48	18	15	20	67	.48	.105	37	59	.88	179	.08	35	1.73	.09	.13	13	49

IMPERIAL METALS PROJECT - 4203 FILE # 86-2608

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	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	M PPM	Au PPM
CB+00W 1+70N	1	21	26	55	.3	17	5	215	3.60	40	6	ND	2	4	1	6	3	22	.04	.073	14	12	.10	47	.01	3	.57	.01	.05	4	31
CB+00W 1+60N	1	39	38	105	.3	40	17	812	4.51	25	6	ND	5	6	1	2	3	21	.07	.091	23	21	.36	57	.01	7	.91	.02	.04	3	19
CB+00W 1+50N	1	31	34	89	.3	31	11	452	4.56	67	5	ND	3	6	1	5	2	22	.05	.068	17	19	.23	95	.01	3	1.00	.02	.04	3	13
CB+00W 1+40N	1	25	30	82	.2	24	8	511	4.39	55	5	ND	2	7	1	6	3	24	.08	.089	14	18	.21	84	.01	4	.77	.02	.05	4	15
CB+00W 1+30N	1	21	20	54	.5	18	6	275	3.16	35	5	ND	2	4	1	2	3	20	.02	.082	18	15	.19	52	.01	4	.75	.01	.04	3	18
CB+00W 1+20N	1	14	15	39	.2	12	5	1801	2.00	36	5	ND	2	5	1	4	2	21	.05	.070	19	12	.07	97	.01	2	.46	.01	.03	3	30
CB+00W 1+10N	1	19	28	52	1.6	17	6	348	3.20	41	5	ND	2	4	1	5	2	20	.02	.078	16	10	.18	59	.01	2	.62	.01	.02	2	11
CB+00W 1+00N	1	20	18	48	.5	16	5	273	2.66	44	6	ND	2	4	1	2	2	25	.02	.054	20	13	.07	53	.01	2	.44	.01	.04	4	9
CB+00W 0+90N	1	28	32	65	.1	21	7	208	4.43	50	5	ND	3	6	1	6	2	23	.05	.054	17	13	.10	53	.01	4	.60	.01	.04	4	16
CB+00W 0+80N	1	37	39	104	.7	35	18	957	4.86	69	5	ND	3	30	1	4	2	21	.52	.107	9	21	.23	63	.01	3	1.24	.03	.04	2	20
CB+00W 0+70N	1	50	34	119	.7	34	17	1805	4.34	35	6	ND	4	49	1	2	3	24	.85	.158	14	16	.40	76	.01	4	1.37	.03	.05	1	2
CB+00W 0+60N	1	46	32	111	.1	41	15	709	4.94	67	5	ND	5	7	1	7	2	23	.07	.064	19	23	.32	69	.01	3	1.41	.02	.04	3	9
CB+00W 0+50N	1	56	35	113	.1	31	16	1198	5.35	51	6	ND	4	8	1	4	3	26	.07	.101	21	20	.26	89	.01	3	1.27	.02	.04	2	13
CB+00W 0+30N	1	28	24	68	.3	20	8	634	3.64	23	5	ND	2	4	1	2	2	29	.02	.075	18	17	.17	53	.01	3	.65	.01	.03	2	11
CB+00W 0+20N	1	40	34	85	.1	21	12	1027	5.24	27	5	ND	2	5	1	2	3	27	.04	.118	17	17	.16	49	.01	6	.79	.02	.03	1	1
CB+00W 0+10N	1	30	21	62	.2	15	8	386	4.32	17	5	ND	2	4	1	3	2	32	.02	.086	15	16	.20	35	.01	3	.89	.01	.02	1	6
CB+00W 0+00BL	1	30	30	74	.3	25	10	478	4.46	22	5	ND	3	6	1	2	3	24	.07	.081	17	19	.30	48	.01	3	.96	.01	.05	2	4
CB+00W 0+10S	1	17	12	50	.3	13	5	601	2.36	4	5	ND	2	4	1	2	2	21	.03	.080	17	16	.18	37	.01	2	.67	.01	.04	2	21
CB+00W 0+20S	1	15	22	44	.6	13	4	250	2.04	12	5	ND	2	4	1	2	2	19	.02	.073	16	18	.15	32	.01	2	.60	.01	.03	3	19
CB+00W 0+30S	1	16	22	50	.2	14	5	348	3.30	14	5	ND	2	4	1	2	2	26	.02	.062	16	14	.15	40	.01	4	.67	.01	.04	1	5
CB+00W 0+40S	1	36	26	97	.1	29	14	692	4.92	19	5	ND	5	4	1	8	3	30	.02	.048	19	27	.32	57	.01	4	1.49	.02	.03	3	17
CB+00W 0+50S	1	38	63	117	.4	32	14	908	5.92	21	5	ND	5	7	1	5	2	33	.08	.071	19	24	.31	55	.01	5	1.32	.03	.03	15	11
C7+00W 4+00N	1	26	20	65	.2	30	8	273	3.97	28	5	ND	4	4	1	6	2	31	.01	.067	31	16	.10	23	.01	2	.62	.01	.03	1	36
C7+00W 3+90N	1	29	29	89	.4	32	9	364	6.28	27	5	ND	3	3	1	4	2	31	.01	.100	20	26	.27	32	.01	5	.95	.02	.04	3	38
C7+00W 3+80N	1	22	23	67	.1	24	7	282	4.52	22	5	ND	5	4	1	2	2	27	.01	.099	26	19	.19	29	.01	3	.86	.01	.03	2	22
C7+00W 3+70N	1	21	21	67	.3	22	6	264	4.18	11	5	ND	4	4	1	3	2	37	.02	.079	28	16	.10	25	.01	4	.74	.01	.02	1	3
C7+00W 3+60N	1	25	10	53	.3	25	7	180	3.15	6	5	ND	3	3	1	2	2	32	.01	.049	22	10	.04	17	.01	2	.46	.01	.03	3	6
C7+00W 3+50N	1	22	11	51	.1	15	7	709	3.74	10	5	ND	3	3	1	3	2	36	.01	.059	20	9	.06	33	.01	2	.70	.01	.02	3	15
C7+00W 3+40N	1	21	20	42	.1	15	7	1036	3.31	11	5	ND	2	3	1	3	2	21	.02	.062	14	10	.07	31	.01	2	.57	.01	.03	4	6
C7+00W 3+30N	1	25	15	70	.1	27	11	280	4.68	14	5	ND	8	3	1	6	2	36	.01	.071	25	15	.07	19	.03	3	.67	.01	.03	4	12
C7+00W 3+20N	1	15	10	35	.1	11	5	553	1.91	7	5	ND	2	3	1	3	2	22	.01	.047	20	11	.04	29	.01	2	.55	.01	.02	10	36
C7+00W 3+10N	1	24	15	56	.2	30	9	529	3.97	20	5	ND	3	3	1	4	3	21	.01	.077	23	9	.06	21	.01	2	.62	.01	.03	1	25
C7+00W 3+00N	5	32	22	79	.2	58	20	1067	6.47	52	5	ND	3	3	1	6	2	14	.02	.093	22	11	.09	22	.01	2	.43	.02	.05	1	10
C7+00W 2+90N	1	33	12	68	.1	44	11	1405	3.57	12	5	ND	3	3	1	6	2	13	.01	.066	28	4	.03	43	.01	4	.28	.01	.03	1	6
C7+00W 2+80N	1	12	7	36	.2	16	5	168	1.70	9	5	ND	2	2	1	3	2	18	.01	.042	23	5	.02	18	.01	2	.33	.01	.02	2	22
C7+00W 2+70N	1	28	25	69	.2	32	10	454	4.63	26	5	ND	2	3	1	2	2	23	.01	.100	25	9	.06	23	.01	5	.46	.01	.03	2	7
STD C/AU-S	20	60	41	139	7.2	72	29	1130	3.98	42	17	7	37	49	18	16	21	70	.48	.108	37	59	.88	184	.09	35	1.73	.09	.14	13	54

IMPERIAL METALS CORPORATION PROJECT - 4203 FILE # 86-2608

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mi PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au# PPB
C7+00W 2+60W	1	20	21	63	.3	26	7	390	4.97	13	5	ND	3	4	1	2	4	38	.03	.082	29	17	.08	26	.01	3	.60	.01	.04	1	2
C7+00W 2+50W	1	11	10	31	.1	11	3	134	1.30	6	5	ND	4	3	1	2	2	19	.01	.028	36	7	.03	16	.01	2	.50	.01	.02	2	4
C7+00W 2+40W	1	28	32	91	.2	38	12	471	4.90	28	6	ND	4	4	1	5	2	25	.02	.070	32	23	.27	36	.01	2	1.05	.01	.05	1	9
C7+00W 2+30W	1	21	41	86	.2	24	8	458	5.19	25	5	ND	3	3	1	2	2	34	.01	.079	27	23	.15	28	.01	4	1.01	.01	.04	2	14
C7+00W 2+20W	1	19	16	51	.2	19	5	288	3.67	9	5	ND	3	3	1	3	3	36	.01	.081	31	15	.17	19	.01	3	.85	.01	.04	1	20
C7+00W 2+10W	1	14	19	43	.2	12	3	161	2.29	7	5	ND	2	4	1	3	2	23	.02	.100	23	14	.11	26	.01	2	.67	.01	.03	2	4
C7+00W 2+00W	1	33	21	93	.5	40	13	1185	5.90	15	5	ND	4	4	1	2	2	29	.02	.138	26	40	.49	46	.01	6	1.42	.02	.05	1	1
C7+00W 1+90W	1	17	14	71	.3	18	5	271	5.26	8	5	ND	3	5	1	2	3	33	.03	.098	27	24	.28	29	.01	3	1.29	.02	.05	1	9
C7+00W 1+80W	1	21	23	56	.1	19	7	329	3.31	15	5	ND	4	9	1	2	3	26	.10	.044	26	13	.15	71	.01	2	.80	.01	.04	4	3
C7+00W 1+70W	1	31	28	75	.3	29	10	249	4.69	22	5	ND	3	9	1	2	2	25	.07	.061	19	17	.10	46	.01	2	.92	.02	.04	1	1
C7+00W 1+60W	1	35	29	95	.1	26	12	333	5.91	21	5	ND	3	19	1	2	2	34	.25	.078	21	14	.15	47	.01	3	1.12	.02	.05	1	6
C7+00W 1+50W	1	36	121	220	.2	29	15	838	5.42	24	5	ND	4	9	1	2	2	23	.07	.063	25	17	.19	52	.01	2	1.07	.02	.04	1	6
C7+00W 1+40W	1	46	103	183	.4	63	34	2196	10.26	126	5	ND	9	17	1	2	3	12	.23	.083	44	10	.10	54	.01	2	.83	.03	.03	5	98
C7+00W 1+30W	1	35	43	115	.2	29	12	564	6.35	23	5	ND	8	47	1	2	2	30	.63	.055	40	26	.50	76	.01	2	2.03	.03	.04	1	10
C7+00W 1+20W	1	76	50	110	.3	25	12	541	5.73	26	5	ND	4	12	1	2	2	47	.12	.088	28	21	.41	73	.01	4	1.55	.02	.04	1	11
C7+00W 1+10W	1	41	44	101	.3	26	14	821	5.41	18	5	ND	5	10	1	2	2	48	.08	.063	25	23	.54	71	.01	2	1.67	.02	.05	1	8
C7+00W 1+00W	1	22	27	77	.2	18	7	314	4.18	26	5	ND	2	27	1	2	2	40	.41	.061	20	17	.27	53	.01	2	.98	.02	.04	2	10
C7+00W 0+90W	1	15	14	43	.2	13	4	110	1.98	29	5	ND	2	13	1	2	2	27	.24	.032	28	9	.07	38	.01	2	.50	.01	.02	3	18
C7+00W 0+80W	1	22	27	76	.1	23	8	576	3.10	37	5	ND	3	18	1	3	2	20	.27	.055	25	10	.17	39	.01	4	.53	.02	.04	2	9
C7+00W 0+70W	1	19	19	56	.2	16	6	226	2.90	32	5	ND	2	22	1	2	2	30	.34	.043	23	9	.11	38	.01	3	.59	.02	.03	2	21
C7+00W 0+60W	1	45	30	87	.2	26	13	1399	5.55	28	5	ND	3	27	1	2	2	37	.37	.096	21	17	.33	56	.01	4	1.23	.03	.03	2	12
C7+00W 0+50W	1	25	30	74	.3	22	8	428	4.88	22	5	ND	3	29	1	2	2	35	.45	.067	22	17	.26	42	.01	2	.98	.02	.04	3	5
C7+00W 0+40W	1	13	23	47	.4	13	4	126	2.68	30	5	ND	3	6	1	2	3	28	.05	.031	25	9	.12	43	.01	2	.68	.01	.03	4	8
C7+00W 0+30W	1	40	41	84	.1	32	12	381	5.57	45	5	ND	5	5	1	2	3	25	.03	.058	26	23	.26	85	.01	2	1.62	.02	.05	2	21
C7+00W 0+20W	1	34	32	80	.1	32	11	363	4.92	42	5	ND	6	13	1	3	2	24	.17	.040	24	18	.31	87	.01	2	1.11	.02	.04	3	17
C7+00W 0+10W	1	45	31	100	.3	32	15	740	4.24	24	5	ND	5	27	1	2	2	38	.40	.062	23	16	.43	52	.01	2	1.03	.03	.05	1	14
C7+00W 0+00BL	1	65	25	100	.2	39	20	1003	5.13	20	5	ND	7	39	1	2	2	32	.64	.080	24	18	.63	77	.01	4	1.37	.04	.07	1	12
C7+00W 0+10S	1	30	27	79	.1	27	9	300	3.84	31	5	ND	4	22	1	2	2	25	.29	.058	21	17	.36	64	.01	2	1.02	.02	.04	2	12
C7+00W 0+30S	1	38	45	85	.3	32	13	664	3.75	5	5	ND	5	20	1	2	2	23	.29	.075	29	22	.40	64	.01	3	.99	.02	.05	2	2
C7+00W 0+40S	1	47	34	96	.4	30	15	610	4.27	8	5	ND	4	20	1	2	2	25	.28	.072	23	22	.39	59	.01	2	1.15	.03	.05	1	2
C7+00W 0+50S	1	30	97	96	.2	26	9	313	5.88	13	5	ND	5	6	1	2	2	28	.05	.056	20	25	.32	45	.01	2	1.30	.02	.04	4	15
C7+00W 0+60S	1	50	111	170	.7	25	15	1007	5.28	12	5	ND	3	57	1	2	2	29	.91	.117	15	21	.27	66	.01	2	1.60	.04	.04	1	2
C7+00W 0+70S	1	46	115	174	.4	27	21	2611	5.84	13	5	ND	3	56	1	2	2	26	.84	.125	13	20	.33	74	.01	2	1.17	.04	.04	1	14
C7+00W 0+80S	1	52	55	176	.2	26	18	1291	4.89	11	5	ND	4	35	1	2	2	24	.75	.112	18	18	.38	52	.01	3	1.17	.04	.04	1	6
C7+00W 0+90S	1	49	31	131	.3	22	18	490	5.51	8	5	ND	3	30	1	2	2	31	.26	.097	21	24	.34	54	.02	2	1.52	.03	.04	1	2
C 0W 2+00W	1	28	21	59	.3	32	11	396	4.01	25	5	ND	2	11	1	2	2	27	.11	.063	24	19	.20	36	.01	2	.95	.02	.03	2	3
STD C/AU-S	20	59	40	137	7.1	72	29	1119	3.98	43	17	7	36	48	18	15	20	69	.48	.106	35	57	.88	181	.08	33	1.73	.09	.13	12	52

IMPERIAL METALS PROJECT - 4203 FILE # 86-2608

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	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	N PPM	Au# PPB
C OW 1+90N	1	25	109	73	.3	30	23	1764	4.07	15	5	ND	2	15	1	4	2	29	.17	.101	18	24	.29	50	.01	7	1.12	.02	.05	6	1
C OW 1+80N	1	39	207	80	.4	41	40	2236	4.64	20	5	ND	1	19	1	4	2	27	.22	.131	12	27	.28	51	.01	7	1.17	.02	.05	4	2
C OW 1+70N	1	45	187	104	.2	45	33	1484	6.88	10	5	ND	2	14	1	3	2	27	.16	.114	8	16	.17	60	.01	6	.82	.03	.04	3	1
C OW 1+60N	1	49	189	114	.2	80	33	1682	7.42	16	8	ND	2	15	1	8	2	29	.16	.087	13	34	.38	57	.01	7	.77	.03	.05	2	2
C OW 1+50N	1	33	80	93	.2	36	18	687	4.94	11	5	ND	2	14	1	5	3	27	.14	.090	18	14	.13	56	.01	8	.72	.02	.05	1	1
C OW 1+40N	1	32	72	100	.2	30	22	1287	5.51	11	5	ND	2	12	1	4	3	28	.12	.105	15	16	.16	52	.01	6	.80	.02	.05	1	2
C OW 1+30N	1	45	113	101	.2	39	26	1726	5.27	20	5	ND	2	18	1	2	3	23	.23	.146	15	16	.17	58	.01	9	.93	.03	.05	1	1
C OW 1+20N	1	54	84	113	.5	41	30	2394	5.61	23	5	ND	2	20	1	2	2	23	.30	.174	14	17	.23	46	.01	9	1.13	.03	.05	1	1
C OW 1+10N	1	43	62	115	.5	41	23	2054	5.11	18	5	ND	3	26	1	2	2	22	.49	.250	12	21	.28	48	.01	7	1.49	.03	.05	1	1
C OW 1+00N	1	43	1207	219	1.3	46	24	2485	4.56	29	5	ND	2	28	1	2	2	22	.53	.235	14	24	.27	49	.01	8	1.51	.03	.05	1	74
C OW 0+90N	1	36	1382	281	1.8	45	25	1426	4.93	26	5	ND	3	24	1	5	2	22	.49	.192	17	26	.41	35	.01	6	1.59	.03	.05	1	35
C OW 0+80N	1	40	1003	257	.8	47	25	1411	4.72	24	5	ND	3	17	1	2	2	25	.29	.116	20	29	.46	42	.01	7	1.41	.03	.04	1	12
C OW 0+70N	1	37	521	179	.2	47	19	807	4.75	26	5	ND	2	11	1	3	2	23	.14	.101	17	24	.33	41	.01	7	1.13	.02	.05	1	9
C OW 0+60N	1	41	758	172	.5	47	22	1478	4.68	18	5	ND	2	17	1	3	3	24	.31	.142	18	26	.44	41	.01	8	1.40	.03	.06	5	11
C OW 0+50N	1	48	323	128	.5	53	22	1563	4.59	24	5	ND	3	19	1	4	2	21	.33	.180	14	26	.39	51	.01	5	1.52	.03	.07	1	17
C OW 0+40N	1	44	31	82	.1	55	18	568	4.42	22	5	ND	13	8	1	2	2	20	.06	.031	33	22	.41	42	.02	7	.94	.02	.04	1	26
C OW 0+30N	1	20	70	82	.2	26	14	1132	3.67	12	5	ND	2	11	1	2	3	23	.13	.132	15	20	.25	61	.01	6	.91	.02	.07	1	1
C OW 0+20N	1	21	45	74	.3	25	13	893	3.75	17	5	ND	2	9	1	2	2	25	.09	.123	15	22	.21	55	.01	5	.82	.02	.07	1	6
C OW 0+10N	2	26	57	81	.5	30	19	1931	3.89	17	5	ND	2	13	1	2	2	27	.15	.145	18	20	.24	71	.01	5	1.00	.02	.07	1	28
C OW 0+00N	1	24	44	84	.3	26	14	911	3.81	12	5	ND	1	13	1	2	2	27	.23	.158	20	23	.28	105	.01	6	1.04	.02	.07	1	10
STD C/AU-S	22	60	42	138	7.2	72	29	1136	3.97	42	17	8	36	49	18	17	21	70	.46	.107	37	61	.88	184	.09	40	1.73	.09	.13	12	48

CME ANALYTICAL LABORATORIES LTD.
552 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED OCT 4 1986

DATE REPORTS MAILED

Oct 9/86

ASSAY CERTIFICATE

SAMPLE TYPE : PULP
AU** BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT 4203 FILE# 86-3052A R

PAGE# 1

SAMPLE	Au** oz/t
0032	.001
0034	.001
0035	.001
0036	.001
0037	.005
0038	.001
0039	.001
0040	.001
0041	.001
0042	.001
0043	.011
0044	.021
0045	.001
0046	.001
0047	.001
0048	.006
0049	.002
0050	.018
0051	.001
0052	.001
0053	.001
0054	.009
0055	.055

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED MAR 31 1987

852 E. HASTINGS, VANCOUVER B.C.

PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE REPORTS MAILED *Apr 3/87*

ASSAY CERTIFICATE

SAMPLE TYPE : PULP

AG** AND AU** BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE . CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT 4203 FILE# 87-0873

PAGE# 1

SAMPLE	Ag** oz/t	Au** oz/t
094850	.01	.031 -
094854	.01	.118 -
0001	.94	.002
0022	.77	.001
0030	.01	.042
0050	.01	.016
0069	.99	.802

- should be 0055

RECEIVED BY
DATE

APR - 7 1987

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED DEC 1 1986

552 E. HASTINGS, VANCOUVER B.C.

PH: (604)253-3158 COMPUTER LINE:251-1011

DATE REPORTS MAILED

Dec 3/86

ASSAY CERTIFICATE

SAMPLE TYPE : PULF
METH BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT 4203 FILE# 86-2839 R

PAGE# 1

SAMPLE	Au** oz/t
0067	.024
0068	.010
0069	.802

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

WHOLE ROCK ICP ANALYSIS

A .1000 GRAM SAMPLE IS FUSED WITH .60 GRAM OF LiBO2 AND IS DISSOLVED IN 50 MLS 5% HNO3.

- SAMPLE TYPE: PULP

DATE RECEIVED: OCT 4 1986 DATE REPORT MAILED:

Oct 8/86

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER.

IMPERIAL METALS PROJECT-4203 FILE # 86-3052

PAGE 1

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ba PPM	Loi %	Sum
0037	15.65	5.80	40.02	3.60	15.10	.85	1.15	.34	.08	.54	.01	223	16.1	99.28
0043	13.52	3.47	46.73	2.90	9.20	.15	.60	.07	.04	1.42	.01	84	21.4	99.53
STD SD-4	68.14	10.09	3.39	.99	1.64	1.30	2.00	.54	.21	.07	.01	768	11.4	99.93

APPENDIX C

STATISTICAL TREATMENT OF SOIL SAMPLE RESULTS

CUNNINGHAM CREEK

C-GRID

SOIL SAMPLE STATISTICS

14 July 1987
Coquitlam
British Columbia

TONY CLARK CONSULTING
2988 Fleet St
Coquitlam, BC

INTRODUCTION

These statistical evaluations were undertaken on the analytical results of samples collected by Imperial Metals staff and analysed by Acme Analytical Laboratories in Vancouver. The author has not visited the property.

Note that statistics for element 12 (Au ppm) are meaningless as this element was not detected (ND) for almost all samples, also sample 10N/225E was removed from the database as it's values are so exceptionally high that they distort the statistical parameters, especially the correlation coefficients. The statistics were therefore done on 1417 samples out of 1418.

DISCUSSION

The correlation coefficients of 31 elements (30 elements and gold by FA/AA) from the C-GRID.TXT sample database were calculated and are interpreted below. Histograms were plotted of some of the elements only. "Threshold" values are not given as the term has become commonly used to mean twice the value of the standard deviation, and it is not considered sufficient by the present author to confine interpretation to that definition. In order to prevent confusion the following two terms are used: 'high' values- being those considered as sufficiently high above the mean as to warrant plotting separately on a map to determine if a pattern results; and 'anomalous' values which are those that are obviously very much higher than the mean and are therefore of

direct interest for follow-up. Both these terms are not strictly defined, but are determined by examination of the histograms. As the main intent of this evaluation is to determine areas of the grid for further examination so that subtleties that may be missed by other means are not neglected, the final result is the production of maps showing areas of interest for geological follow-up, if any. Maps are only plotted for those elements considered to show some factor needing follow-up. Note that all elements plotted as histograms give skewed logarithmic gaussian curves as is expected.

1.Mo: There is a weak negative correlation with U and no correlation with any other element.

2.Cu: There is a moderate correlation with Co and Fe (chalcopyrite?), and a weak correlation with Zn, Ni, Mn, Mg, Al and Na. There are no other correlations. The histogram of normal values shows a skewed (lognormal) gaussian distribution with 'high' values above about 40 ppm and 'anomalous' values above about 60 ppm. The histogram of the logarithmically transformed values shows a normal bell curve and 'high' values can be taken as above about 3.5 (33 ppm) and 'anomalous' values above about 4 (55 ppm). A probability plot of copper logarithmic values indicates the results belong to a single population. The map of 'high' and 'anomalous' copper (Figure 3) does not indicate any particular localisation of values, apart from the general concentration of anomalous values in the southwest part of the grid that needs to be checked in the field. The indication of a

single population of values in the histogram and probability plot precludes a different lithological or hydromorphic source for this difference of concentration. Copper values are generally distributed in the southern to south-western part of the grid (cf. gold which is apparently antithetical to this distribution).

3.Pb: A moderate correlation with Zn, and a weak correlation with Ag (argentiferous galena?). The histogram of a partial set of samples indicates a lognormal distribution with 'high' values being above about 45 ppm and anomalous values being above about 70 ppm. 'High' and 'anomalous' values tend to occur to the northeast and in the west-central parts of the grid and appear to be similar to the gold in position, rather than the copper (Figure 4).

4.Zn: A moderate correlation with Co and Cd (expected), and a weak correlation with Ag, Ni, Mn, Fe, Sr, Ca, Ba, Na and K. the histogram of all values shows a logarithmic distribution. A histogram of only the values below about 200 ppm could not be plotted because of a limitation of the computer program, but a table of values for that range indicates 'high' values to be above about 90 ppm and 'anomalous' values to be above about 120 ppm. The 'high' and 'anomalous' values are distributed in a similar manner to the copper values, but slightly differently to the gold values, although the overlap is large (Figure 5).

5.Ag: A weak correlation with Cd. (A correlation with Au ppb is expected but not shown, see Figure 1). The histogram of a partial set of silver samples indicates 'high' to be above .6 ppm and 'anomalous' values to be above .75 ppm. Silver

distribution appears to be similar to gold distribution but with some overlap on copper distribution, and a more defined positioning in the central-west part of the grid (Figure 6).

6.Ni: A moderate correlation with Co and Cr; and a weak correlation with Mn, Fe, As, Sr, Mg, Al, Na and K.

7.Co: A moderate correlation with Mn, Fe and Al, and a weak correlation with Sr, Ca, P, Cr, Mg, Ba, Na and K.

8.Mn: A weak correlation with Fe, Sr, Ca, P, Ba, and Na.

9.Fe: A weak correlation with V, P, Cr, Mg, Al and Na.

10.As: A very weak correlation with Au ppb, (a stronger correlation with Au ppb was expected but not shown, see Figure 2). The histogram of partial values shows 'high' values to be above 25 ppm and 'anomalous' values to be above 35 ppm. Arsenic is distributed very similarly to gold, more obviously than the correlation coefficient would suggest (Figure 7; see also Au/As Ratio below).

11.U: A very moderate correlation with Na (expected); no other correlations.

12.Au: This is ICP Au-ppm and is mostly not detected (ND) so these correlations are meaningless.

13.Th: A moderate correlation with La; no other correlations.

14.Sr: A strong correlation with Ca (expected-feldspars); weak correlations with Ba, Na and K.

15.Cd: No correlations except as noted above.

16.Sb: No correlations - this is unexpected as some correlation would be likely with Au, As, and Bi.

17.Bi: No correlation with any other element.

15.V: A moderate correlation with Cr (expected), Mg (expected), and Al; and a weak correlation with Ti.

19.Ca: A weak correlation with Sr, Na and K.

20.P: A weak negative correlation with La, and a weak positive correlation with Al.

21.La: No correlations except as noted above.

22.Cr: A moderate correlation with Mg (expected) and Al; a weak correlation with Ti.

23.Mg: A strong correlation with Al; and a weak correlation with Ba, Ti and Na.

24.Ba: A weak correlation with Al and K.

25.Ti: A weak correlation with Al.

26.B: No correlations.

27.Al: No correlations except as noted above.

28.Na: A weak correlation with K.

29.K: No correlations except as noted above.

30.W: No correlations.

31.Au(ppb). The gold values determined by fire assay and atomic absorption finish are reported in parts per billion, and show an approximately gaussian skewed (lognormal) distribution, with 'high' values above about 10 ppb and 'anomalous' values above about 20 ppb. A probability plot of the logarithmically transformed values indicates they belong to a single population. Gold appears to be unrelated to the other elements (however, see arsenic), and appears to form a pure association with the (presumed) quartz veins. There are, therefore, no pathfinder elements for gold in these soils. Note that the 'anomalous' gold

values occur predominantly in the northern to northeastern half of the grid (Figure 8), whereas the 'anomalous' copper values occur in the south to southwestern part of the grid (see Au/Cu Ratio below). This is unexpected as there is no correlation, either positive or negative, between these two elements and nor is there any difference in the geological source of the soil as far as is known. This should therefore be checked in the field.

Au/Cu Ratio: The high ratio samples occur predominantly in the same area as the high Au samples (Figure 9) as would be expected from the maps of the elements separately. This also tends to confirm the gold is not of the volcanogenic shield-type environment.

Au/As Ratio: The high ratio samples are less distinctly distributed than expected, especially as there is a weak correlation between these elements (Figure 10). This suggests the gold is not of epithermal origin--a conclusion also suggested by the lack of correlation of gold with Bi.

CERTIFICATE

I, Anthony M. S. Clark, residing at 2988 Fleet St. in the city of Coquitlam, Province of British Columbia, hereby certify that:

1. I received a Bachelor of science degree in geology from the University of Cape Town, Cape Town, South Africa, in 1963, and a Doctor of Philosophy degree in geology from the Memorial University of Newfoundland, St. John's, Newfoundland in 1974.

2. I practised the profession of exploration geologist from 1953 to 1986, since when I have undertaken consulting in the field of computer applications to exploration.

3. I am a Fellow of the Geological Association of Canada and a Registered Professional Geologist in the Province of Alberta.


4. I am self-employed and undertake my profession under the name of TONY CLARK CONSULTING.

5. I hold no interest in, nor expect to receive any benefits other than normal fees from either the owners of the property under consideration, or any associated consultants or contractors.

6. This report describes statistical interpretations on the results of analyses of soil samples. The analyses were undertaken by Acme Analytical Laboratories of Vancouver and supplied to me by Imperial Metals Corporation.

7. I have not visited the property, and all geological comments are the result of my discussions with Imperial Metals geologists.

Date: 14 Jul 87



A.M.S. Clark, Ph.D., FGAC

Coquitlam, British Columbia

CUNNINGHAM CREEK, C-GRID SOIL SAMPLES

CORRELATION COEFFICIENTS

ELEMENT

- 1 Mo ppm
- 2 Cu ppm
- 3 Pb ppm
- 4 Zn ppm
- 5 Ag ppm
- 6 Ni ppm
- 7 Co ppm
- 8 Mn ppm
- 9 Fe %
- 10 As ppm
- 11 U ppm
- 12 Au ppm
- 13 Th ppm
- 14 Sr ppm
- 15 Cd ppm
- 16 Sb ppm
- 17 Bi ppm
- 18 V ppm
- 19 Ca %
- 20 P %
- 21 La ppm
- 22 Cr ppm
- 23 Mg %
- 24 Ba ppm
- 25 Ti %
- 26 B ppm
- 27 Al %
- 28 Na %
- 29 K %
- 30 W ppm
- 31 Au ppb

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
1	1.288638	.5742515	2	2.894211E-02	2.618728E-03
			3	-1.169937	-1.572328E-02
			4	-1.091866	-3.415064E-02
			5	-2.13787E-03	-1.041986E-02
			6	.6581154	.0869586
			7	.1945095	5.562438E-02
			8	61.73218	.1395421
			9	.1076312	.1066911
			10	.7748547	8.333319E-02
			11	-.353477	-.3621405
			12	-4.073931E-04	-1.336205E-02
			13	-4.243469E-02	-.0460129
			14	7.746506E-02	1.155203E-02
			15	-4.430056E-03	-2.957102E-02
			16	-6.976605E-02	-9.577558E-02
			17	-1.437783E-02	-3.927264E-02
			18	.6395264	5.572327E-02
			19	3.472775E-03	2.504532E-02
			20	4.633844E-03	.1745077
			21	-.6629124	-.1480461
			22	.8844109	8.751358E-02
			23	-2.095103E-04	-1.846875E-03
			24	1.163704	8.610487E-02
			25	9.406358E-08	2.62857E-05
			26	.17313	.1500032
			27	1.887429E-02	8.107795E-02
			28	-8.625276E-04	-.2100358
			29	-1.543425E-04	-1.757506E-02
			30	.9781389	7.842103E-02
			31	-.4227391	-9.025754E-03
			2	31.72124	19.25947
4	496.6819	.4631971			
5	1.45122	.2108976			
6	112.8447	.4445795			
7	79.62778	.678964			
8	5565.871	.3751325			
9	22.23003	.6570339			
10	51.27039	.1644077			
11	4.209091	.1285767			
12	4.273642E-02	4.179414E-02			
13	8.096855	.2617778			
14	55.46274	.2466106			
15	.9363594	.1863621			
16	1.30603	5.345912E-02			
17	.938385	7.642503E-02			
18	84.3645	.2191774			
19	1.062211	.2284117			
20	.2298007	.2580373			
21	-4.866028	-3.240212E-02			
22	57.48786	.1696115			
23	1.436349	.3775287			
24	111.958	.2470008			
25	3.075868E-03	2.562852E-02			

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			26	.5149918	1.330412E-02
			27	3.014498	.3861047
			28	6.017837E-02	.4369368
			29	4.234576E-02	.1437736
			30	15.63593	3.737778E-02
			31	183.7805	.1169953
3	55.91884	129.6654	4	4430.75	.613741
			5	14.69025	.3170938
			6	291.3976	.1705197
			7	218.9559	.277306
			8	24108.29	.241345
			9	25.10007	.1101902
			10	332.3004	.158273
			11	2.37233	1.076389E-02
			12	-1.964551E-02	-2.853651E-03
			13	-3.600205	-1.728876E-02
			14	287.9301	.1901594
			15	9.739402	.2879172
			16	2.56488	1.559394E-02
			17	7.322655	8.858159E-02
			18	-248.3014	-9.581544E-02
			19	5.343972	.1706838
			20	1.218545	.2032324
			21	-47.14441	-4.662827E-02
			22	-41.05042	-1.798942E-02
			23	.2356167	9.198481E-03
			24	180.5015	5.914855E-02
			25	-4.516572E-02	-5.589656E-02
			26	23.15389	8.884439E-02
			27	3.150467	5.993566E-02
			28	.1057299	.1140241
			29	.309638	.1561506
			30	273.5754	9.713756E-02
			31	1723.561	.1629731
4	82.7657	55.71534	5	7.859288	.3948127
			6	351.5115	.4787154
			7	204.8525	.6037997
			8	19670.81	.458293
			9	35.65164	.3642477
			10	251.7505	.2790586
			11	17.63455	.186212
			12	3.420507E-02	1.156318E-02
			13	12.52206	.1399464
			14	311.9053	.4794051
			15	9.076058	.6244271
			16	3.577759	5.062315E-02
			17	4.559738	.1283701
			18	-28.18652	-.0253132
			19	5.39574	.4010774
			20	.6478844	.2514769
			21	17.53772	4.036839E-02
			22	89.97949	9.176821E-02
			23	2.269333	.2061852

COL A	MEAN	STD DEV	COL B	COVARIANCE
			24	400.148
			25	-8.030891E-03
			26	5.106598
			27	5.793
			28	.1680733
			29	.3038066
			30	102.9316
			31	793.7664
5	.3479905	.3575394	6	.3858814
			7	.314317
			8	51.38806
			9	5.656302E-02
			10	.688119
			11	6.612623E-02
			12	9.202675E-04
			13	-2.122367E-02
			14	1.026928
			15	3.372669E-02
			16	.0240047
			17	4.477352E-02
			18	-.4182005
			19	1.985049E-02
			20	4.238148E-03
			21	-.2368837
			22	-1.028824E-02
			23	2.142936E-04
			24	.6627617
			25	-7.610535E-05
			26	2.104449E-02
			27	8.878439E-03
			28	6.055753E-04
			29	9.257151E-04
			30	.6612344
			31	5.603996
6	24.17714	13.18846	7	56.19522
			8	3381.783
			9	8.748306
			10	68.99915
			11	2.375046
			12	8.218583E-03
			13	6.014939
			14	50.5306
			15	.6420975
			16	.2588539
			17	.1108704
			18	39.92645
			19	.8747575
			20	9.711838E-02
			21	7.421997
			22	139.2991
			23	1.300375
			24	83.77222
			25	8.892387E-03

CUL A	MEAN	STD DEV	CUL B	COVARIANCE	CORRELATION
			26	1.895569	7.151148E-02
			27	2.303057	.4307696
			28	3.240755E-02	.3436171
			29	6.862319E-02	.3402439
			30	2.692352	9.398793E-03
			31	59.18555	5.502182E-02
7	11.05716	6.093687	8	2856.776	.6085438
			9	6.496838	.6068955
			10	19.09036	.193479
			11	1.288216	.1243731
			12	4.153617E-03	1.283831E-02
			13	1.916782	.1958634
			14	28.28608	.3975094
			15	.3255968	.2048138
			16	2.857781E-02	3.697103E-03
			17	.1091995	2.810861E-02
			18	26.37991	.2166075
			19	.493698	.3355315
			20	9.265888E-02	.3288382
			21	-2.951981	-6.212643E-02
			22	34.95992	.3259971
			23	.5737224	.4766019
			24	56.78369	.3959413
			25	3.338441E-03	8.791514E-02
			26	1.081825	8.832977E-02
			27	1.269869	.5140591
			28	2.003859E-02	.4598429
			29	.0332388	.3566799
			30	1.172802	8.860918E-03
8	857.6415	770.9225	31	33.5661	.0675358
			9	489.77	.3616375
			10	974.7012	7.808375E-02
			11	142.4644	.108721
			12	-.4440952	-1.084993E-02
			13	-129.4922	-.1045908
			14	3849.006	.4275556
			15	41.51978	.2064446
			16	-41.44336	-4.237962E-02
			17	3.526123	.0071744
			18	581.9415	3.777016E-02
			19	70.22203	.3772373
			20	16.94747	.4754114
			21	-958.6719	-.1594786
			22	1706.027	.1257473
			23	26.65169	.1750041
			24	9510.941	.5242038
			25	7.089233E-02	1.475668E-02
			26	130.8547	8.445179E-02
			27	86.71722	.2774783
			28	1.659413	.3009999
			29	3.500855	.2969456
			30	189.8093	1.133551E-02
			31	1946.248	3.095286E-02

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
9	4.703779	1.757983	10	4.195397	.1473867
			11	.1670628	5.590919E-02
			12	3.480904E-03	3.729401E-02
			13	.3402748	.1205247
			14	.7748871	3.774667E-02
			15	1.727963E-02	3.767724E-02
			16	3.742027E-02	1.678051E-02
			17	4.233074E-02	.0377694
			18	16.45287	.4682818
			19	9.220839E-03	2.172241E-02
			20	2.744284E-02	.3375903
			21	-1.253975	-9.147814E-02
			22	10.63562	.343773
			23	.139715	.4023115
			24	8.048935	.194541
			25	2.10353E-03	.1920146
			26	-8.936882E-02	-2.529307E-02
			27	.3410411	.4785491
			28	4.764498E-03	.3789876
			29	1.387581E-03	5.161279E-02
			30	1.10615	.028969
10	18.2837	16.20342	31	3.108627	.0216804
			11	-8.473969E-02	-3.076793E-03
			12	.1506229	.1750837
			13	5.066208	.194687
			14	33.79715	.1786192
			15	.5610104	.1327161
			16	.8773804	4.268684E-02
			17	.3905907	3.781064E-02
			18	-72.24817	-.2231005
			19	.4823487	.1232839
			20	1.173019E-02	1.565575E-02
11	3.97036	1.700938	21	-4.518402	-3.576195E-02
			22	-5.790741	-2.030724E-02
			23	-.2705283	-8.451622E-02
			24	56.36432	.1478036
			25	-1.309304E-02	-.1296683
			26	2.525269	7.754093E-02
			27	-.3335304	-5.077654E-02
			28	4.736841E-03	.0408794
			29	.0305357	.1232295
			30	29.66089	8.427749E-02
			31	422.6581	.3198128
11	3.97036	1.700938	12	1.453267E-03	1.609232E-02
			13	.2538185	9.291705E-02
			14	3.234734	.1628564
			15	1.154804E-02	2.602431E-02
			16	.5247927	.2432272
			17	.2067928	.1906979
			18	1.449226	4.263124E-02
			19	5.767566E-02	.1404288
			20	-1.402953E-02	-.1783734
			21	3.395607	.2560189

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			24	400.148	.3051639
			25	-8.030891E-03	-2.313072E-02
			26	5.106598	4.560233E-02
			27	5.793	.2564856
			28	.1680733	.4218387
			29	.3038066	.3565626
			30	102.9316	8.505662E-02
			31	793.7664	.1746752
5	.3479905	.3575394	6	.3858814	8.189221E-02
			7	.314317	.1443678
			8	51.38806	.1865667
			9	5.656302E-02	9.005353E-02
			10	.688119	.118861
			11	6.612623E-02	.1088098
			12	9.202675E-04	4.847879E-02
			13	-2.122367E-02	-3.696214E-02
			14	1.026928	.2459635
			15	3.372669E-02	.361584
			16	.0240047	5.292797E-02
			17	4.477352E-02	.1964247
			18	-.4182005	-5.852494E-02
			19	1.985049E-02	.229932
			20	4.238148E-03	.2563466
			21	-.2368837	-8.496777E-02
			22	-1.028824E-02	-1.635086E-03
			23	2.142936E-04	3.034027E-03
			24	.6627617	7.876275E-02
			25	-7.610535E-05	-3.415792E-02
			26	2.104449E-02	2.928497E-02
			27	8.878439E-03	6.125579E-02
			28	6.055753E-04	.2368464
			29	9.257151E-04	.1693039
			30	.6612344	8.514628E-02
			31	5.603996	.1921707
6	24.17714	13.18846	7	56.19522	.6997323
			8	3381.783	.3328493
			9	8.748306	.3775914
			10	68.99915	.3231094
			11	2.375046	.1059488
			12	8.218583E-03	.0117372
			13	6.014939	.2839866
			14	50.5306	.3281068
			15	.6420975	.1866235
			16	.2588539	1.547297E-02
			17	.1108704	1.318622E-02
			18	39.92645	.1514771
			19	.8747575	.2746919
			20	9.711838E-02	.1592513
			21	7.421997	7.217218E-02
			22	139.2991	.6001751
			23	1.300375	.4991243
			24	83.77222	.2698941
			25	8.892387E-03	.1081993

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			22	1.541	5.147992E-02
			23	2.197886E-02	6.541098E-02
			24	.6129151	1.531085E-02
			25	3.876314E-04	3.657047E-02
			26	-.3664036	-.1071769
			27	-3.081036E-02	-4.468303E-02
			28	6.617837E-03	.5440641
			29	4.229114E-03	.1625827
			30	-1.064453	-2.881192E-02
			31	1.195717	8.618925E-03
12	1.411433E-03	5.313064E-02	13	-1.902497E-04	-2.229664E-03
			14	6.514294E-04	1.04997E-03
			15	-4.581921E-05	-3.305688E-03
			16	-8.277351E-04	-1.228172E-02
			17	-3.705386E-04	-1.093924E-02
			18	-.003043	-2.865742E-03
			19	-1.134624E-04	-8.844204E-03
			20	-2.56808E-05	-1.045295E-02
			21	8.546282E-04	2.062886E-03
			22	-.0133613	-1.428983E-02
			23	-2.427625E-04	-2.312973E-02
			24	-2.283493E-02	-1.826173E-02
			25	-2.380864E-06	-7.191004E-03
			26	-1.203254E-03	-1.126788E-02
			27	-5.067206E-04	-2.352653E-02
			28	6.065773E-06	.0159648
			29	-1.459274E-05	-1.795995E-02
			30	8.378949E-03	7.260702E-03
			31	2.310605	.5332046
13	3.134792	1.607111	14	1.049507	5.592348E-02
			15	9.032726E-03	2.154429E-02
			16	8.185387E-02	.0401519
			17	.1092849	.1066628
			18	-3.52491	-.1097444
			19	2.167645E-02	5.585914E-02
			20	-1.664141E-02	-.2239337
			21	6.65184	.5308098
			22	-.7283669	-.025753
			23	4.685098E-02	.147573
			24	1.930054	5.102827E-02
			25	6.156788E-05	6.147638E-03
			26	.1229153	.0380531
			27	8.372736E-02	.1285156
			28	2.194643E-03	.1909591
			29	5.154759E-03	.2097374
			30	-.8173123	-2.341403E-02
			31	1.075607	8.205802E-03
14	10.53846	11.68562	15	.7947989	.2607142
			16	-.8937645	-6.029539E-02
			17	-9.337234E-02	-1.253329E-02
			18	-32.99509	-.141279
			19	2.461895	.8725085
			20	.1620972	.2999847

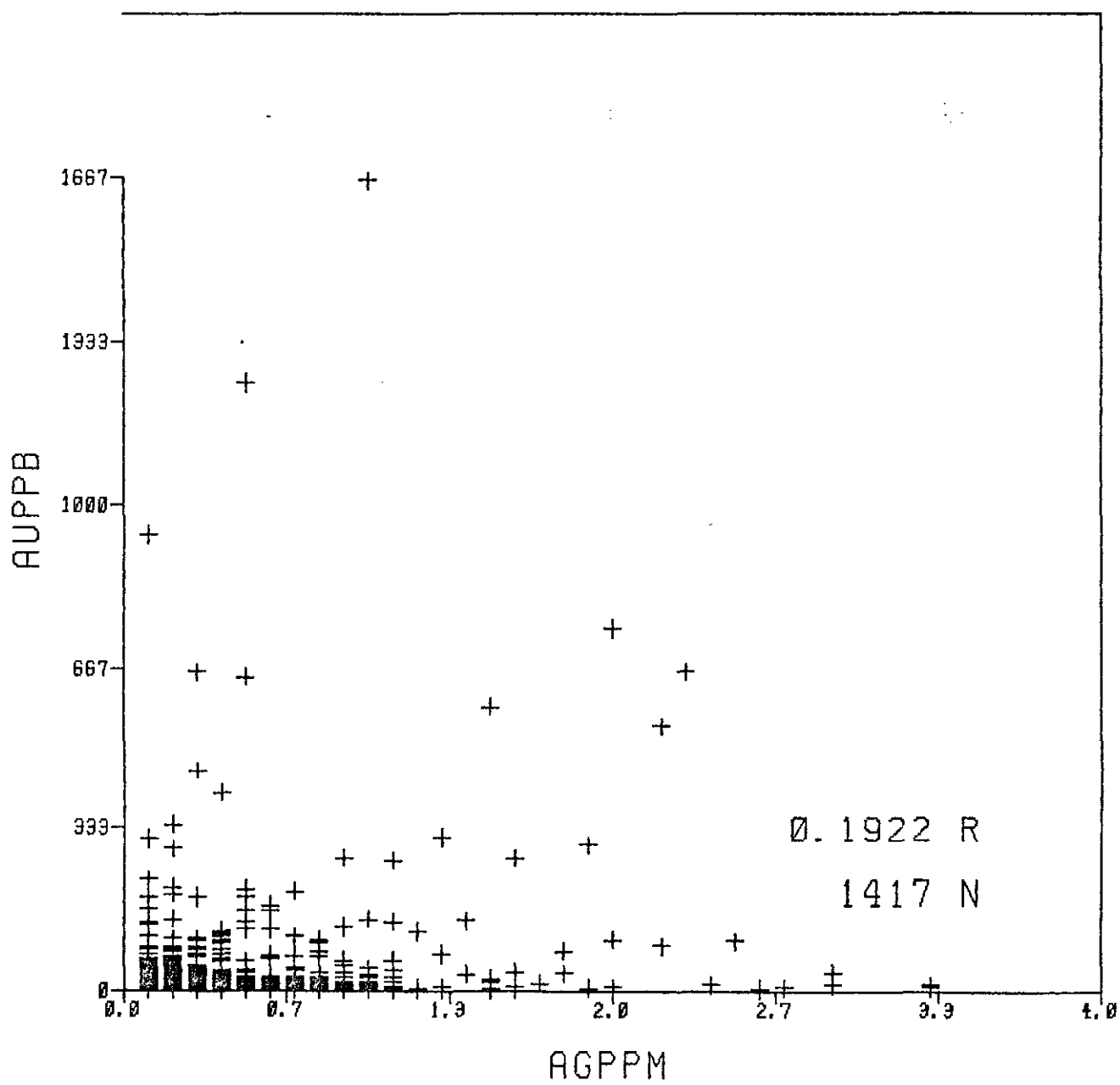
COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			21	-9.246292	-.1014749
			22	9.566758	4.651965E-02
			23	.387733	.1679635
			24	115.9561	.4216275
			25	-2.519094E-03	-3.459334E-02
			26	3.457684	.1472189
			27	1.214948	.2564721
			28	2.636977E-02	.3155564
			29	6.889743E-02	.3855357
			30	.3059578	1.205435E-03
			31	37.05115	3.887434E-02
15	1.032463	.2610642	16	-6.895066E-04	-2.082111E-03
			17	9.120464E-03	5.479848E-02
			18	-.3219299	-.0617013
			19	1.445459E-02	.2293034
			20	1.626715E-03	.1347534
			21	9.234619E-02	4.536435E-02
			22	-2.219963E-02	-4.831945E-03
			23	7.962287E-04	1.543919E-02
			24	.4133988	.0672836
			25	-4.770234E-05	-2.932193E-02
			26	1.537395E-02	2.930004E-02
			27	6.630659E-03	6.265327E-02
			28	2.383161E-04	.1276523
			29	5.253405E-04	.1315852
			30	.2244735	3.958694E-02
			31	1.619562	7.606127E-02
16	2.58645	1.269386	17	7.398748E-02	9.142466E-02
			18	-.7618943	-3.003179E-02
			19	-.0203408	-6.636305E-02
			20	-5.801022E-03	-9.882939E-02
			21	1.000828	.1011134
			22	-.3716622	-1.663712E-02
			23	-9.132445E-03	-3.641895E-02
			24	-1.96357	-6.572641E-02
			25	-4.368089E-05	-5.522018E-03
			26	-.1054564	-4.133416E-02
			27	-3.593135E-02	-.0698255
			28	1.14413E-03	.1260387
			29	6.125421E-04	3.155409E-02
			30	.2372761	8.605861E-03
			31	2.345642	.0226559
17	2.262527	.637981	18	-.2046738	-1.605221E-02
			19	-4.562259E-03	-2.961585E-02
			20	-8.967072E-04	-3.039613E-02
			21	.566864	.11395
			22	.0419693	3.738071E-03
			23	4.422665E-04	3.509218E-03
			24	7.873535E-02	5.243839E-03
			25	-5.473569E-05	-1.376775E-02
			26	-7.856369E-03	-6.126949E-03
			27	-9.599448E-03	-3.711699E-02
			28	6.483272E-04	.1421049

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			29	1.032949E-03	.1058728
			30	.9487458	.0684662
			31	4.360359	8.379687E-02
18	31.15597	19.99983	19	-.6483612	-.1342588
			20	.1174345	.1269828
			21	-11.57245	-.0742065
			22	212.7099	.604345
			23	2.68173	.6787702
			24	38.65308	8.211927E-02
			25	6.479878E-02	.5199248
			26	-5.240227	-.1303629
			27	4.939141	.6091993
			28	3.368461E-02	.23552
			29	-2.526748E-02	-8.261314E-02
			30	-17.27313	-3.976298E-02
			31	-159.4502	-9.774892E-02
19	.1303881	.2416321	20	3.000128E-03	.2685101
			21	-.2528138	-.1341805
			22	8.450651E-02	.0198728
			23	7.049114E-03	.1476774
			24	2.13502	.375435
			25	-7.068576E-05	-4.694371E-02
			26	.0624066	.1285009
			27	1.989268E-02	.2030827
			28	5.748926E-04	.3327014
			29	1.246844E-03	.3374203
			30	-1.941806E-02	-3.699861E-03
			31	.3296242	1.672545E-02
20	.1051948	4.627338E-02	21	-.1142707	-.316699
			22	.1137757	.1397147
			23	1.682514E-03	.184061
			24	.2495079	.2291081
			25	-1.112348E-06	-3.857534E-03
			26	1.451853E-02	.1561067
			27	7.008396E-03	.3736128
			28	1.47142E-05	4.446598E-02
			29	2.034707E-04	.2875306
			30	8.315206E-03	8.273246E-03
			31	-7.248473E-02	-1.920563E-02
21	20.3945	7.803035	22	-6.558045	-.0477567
			23	-.0804391	-5.218404E-02
			24	-17.75781	-9.669706E-02
			25	5.450547E-04	1.120925E-02
			26	-.9996796	-6.374225E-02
			27	-.2004929	-6.338255E-02
			28	7.753641E-03	.1389519
			29	2.924836E-02	.2451046
			30	-3.100563	-.0182941
			31	-15.65454	-2.459745E-02
22	19.46648	17.61096	23	2.230279	.641077
			24	52.47565	.1266083
			25	3.568837E-02	.3251949
			26	-2.341919	-6.616357E-02

COL A	MEAN	STD DEV	COL B	COVARIANCE	CORRELATION
			27	4.039309	.565794
			28	2.467534E-02	.1959307
			29	1.857454E-02	6.896812E-02
			30	-15.53421	-4.061068E-02
23	.2519972	.1976844	31	-96.89978	-6.746104E-02
			24	1.487428	.319706
			25	5.596706E-04	.4543182
			26	-1.397908E-03	-3.518327E-03
			27	6.461582E-02	.8063075
			28	5.092304E-04	.3602171
			29	5.409662E-04	.1789415
			30	-.2546156	-5.929889E-02
			31	-1.213931	-7.528953E-02
24	49.17855	23.55154	25	1.270282E-02	.0865528
			26	4.242295	8.962139E-02
			27	3.005734	.3148224
			28	4.420114E-02	.262444
			29	.1386646	.3849993
			30	-16.85396	-3.294707E-02
			31	-85.5293	-4.452551E-02
25	1.168684E-02	6.236005E-03	26	-6.76252E-04	-5.395506E-02
			27	8.305414E-04	.3285406
			28	5.621216E-06	.126051
			29	-9.341456E-07	-9.795386E-03
			30	-4.285716E-03	-3.164106E-02
			31	-3.002449E-02	-.0590313
26	3.852505	2.011298	27	4.645372E-02	5.697421E-02
			28	-7.757508E-04	-.0539347
			29	1.615629E-03	5.252651E-02
			30	.9797296	2.242663E-02
			31	-1.511833	-9.215962E-03
27	.9690115	.4056694	28	7.429589E-04	.2561032
			29	1.623903E-03	.2617587
			30	-.4668451	-5.298277E-02
			31	-2.702566	-.0816803
28	.0157024	7.156227E-03	29	3.376551E-05	.3085337
			30	-2.424043E-03	-1.559518E-02
			31	-1.641154E-03	-2.811762E-03
29	4.033895E-02	1.530358E-02	30	-8.018151E-03	-2.412211E-02
			31	-8.762718E-03	-7.020353E-03
30	4.063514	21.73564	31	462.6569	.2609756
31	22.93649	81.61939			

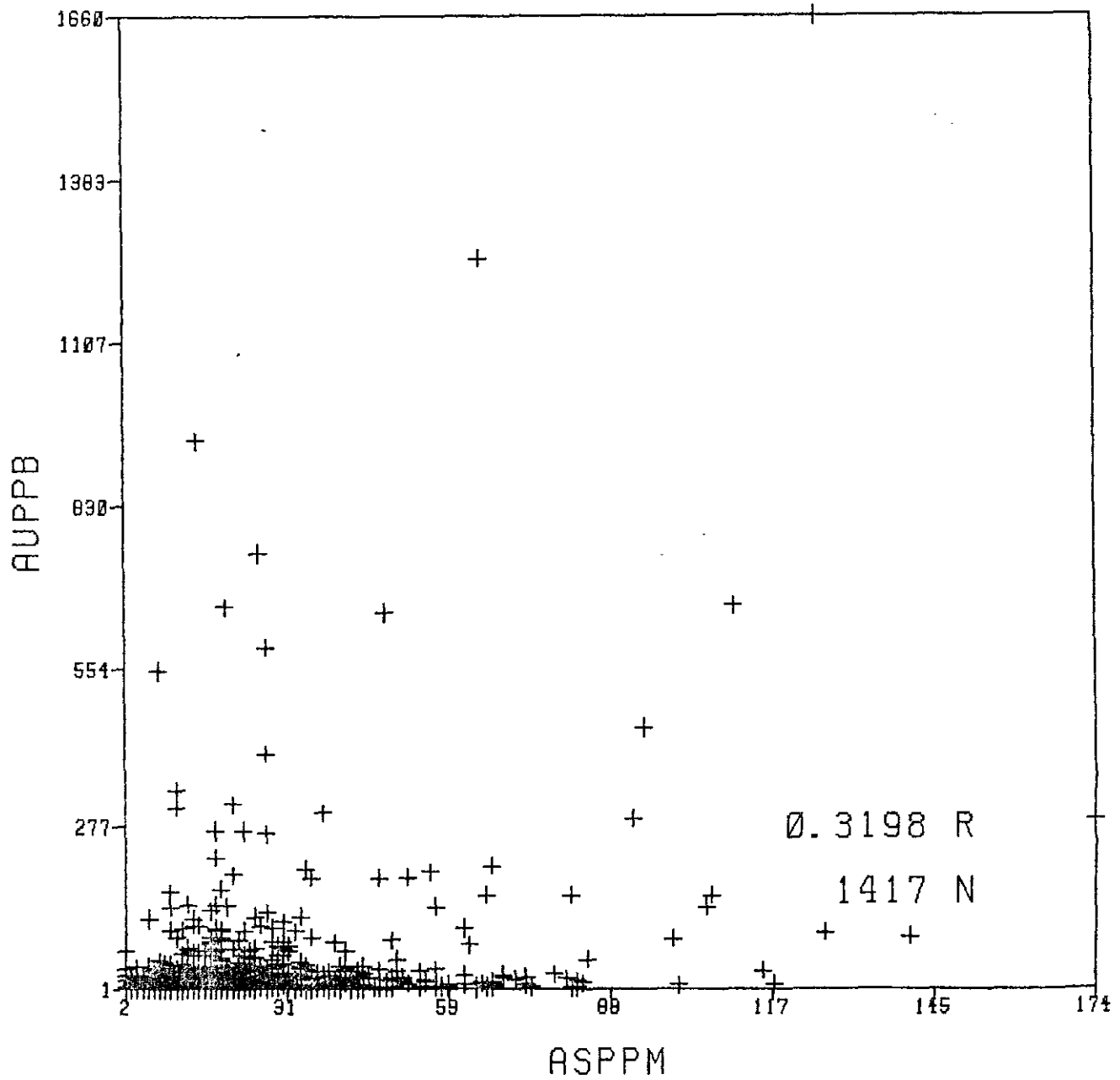
OF ROWS = 1417

SCATTER PLOT



CUNNINGHAM CREEK C-GRID SOILS

SCATTER PLOT



CUNNINGHAM CREEK C-GRID SOILS PARTIAL DATA

LOW LIMIT { DX = .5 SCALE = 16:1 }

0	<0%
.5	<0%
1	<.1%
1.5	<.8%
2	==== <4.7%
2.5	===== <20.3%
3	M===== <41.3%
3.5	===== <23.6%
4	===== <7.2%
4.5	== <1.2%
5	<.2%
5.5	<0%

---> FREHIST (\temp\cuasau.log):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	.5	0	0	0	0	
.5	1	1	0	1	0	
1	1.5	2	.1	3	.2	
1.5	2	12	.8	15	1	
2	2.5	67	4.7	82	5.7	
2.5	3	288	20.3	370	26	
3	3.5	587	41.3	957	67.4	*MEDIAN*
3.5	4	336	23.6	1293	91.1	
4	4.5	103	7.2	1396	98.4	
4.5	5	18	1.2	1414	99.7	
5	5.5	4	.2	1418	100	
5.5	6	0	0	1418	100	

MEAN: 3.299718 S-SQUARED: .2963648 S: .544394 SKEWNESS: -1.040334E-03
 S.D. OF MEAN: .0144569

Low Outliers = 0
 High Outliers = 0

LOW LIMIT { DX = 600 SCALE = 32:1 }

Value	Percentage
0	<98.8%>
600	<.7%>
1200	<.2%>
1800	<0%>
2400	<0%>
3000	<0%>
3600	<0%>
4200	<0%>
4800	<0%>
5400	<0%>
6000	<0%>
6600	<0%>
7200	<0%>
7800	<0%>
8400	<0%>
9000	<0%>
9600	<0%>
10200	<0%>
10800	<0%>
11400	<0%>

---> FREHIST (A:C-GRID.NUM):

PAGE 1

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	600	1401	98.8	1401	98.8	*MEDIAN*
600	1200	11	.7	1412	99.5	
1200	1800	4	.2	1416	99.8	
1800	2400	1	0	1417	99.9	
2400	3000	0	0	1417	99.9	
3000	3600	0	0	1417	99.9	
3600	4200	0	0	1417	99.9	
4200	4800	0	0	1417	99.9	
4800	5400	0	0	1417	99.9	
5400	6000	0	0	1417	99.9	
6000	6600	0	0	1417	99.9	
6600	7200	0	0	1417	99.9	
7200	7800	0	0	1417	99.9	
7800	8400	0	0	1417	99.9	
8400	9000	0	0	1417	99.9	
9000	9600	0	0	1417	99.9	
9600	10200	0	0	1417	99.9	
10200	10800	0	0	1417	99.9	
10800	11400	0	0	1417	99.9	
11400	12000	1	0	1418	100	

MEAN: 317.3484 S-SQUARED: 100488.9 S: 316.9998 SKEWNESS: 32.96944
S.D. OF MEAN: 8.418232

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 10 SCALE = 8:1)

0	===== <4.8%>
10	===== <24.3%>
20	===== <25.2%>
30	===== <17.3%>
40	===== <9.399999%>
50	===== <5.5%>
60	===== <2.7%>
70	===== <2.2%>
80	===== <1.5%>
90	===== <1.4%>
100	===== <1.1%>
110	===== <.9%>
120	===== <.5%>
130	===== <.2%>
140	===== <.5%>
150	===== <.2%>
160	===== <.2%>
170	===== <.4%>
180	===== <.4%>
190	===== <.5%>

---> FREHIST (A: C-GRID.NUM):

FROM	TO BELOW	FREQ	%	CUMUL	%
0	10	66	4.8	66	4.8
10	20	331	24.3	397	29.1
20	30	344	25.2	741	54.4
30	40	236	17.3	977	71.7
40	50	129	9.399999	1106	81.2
50	60	75	5.5	1181	86.7
60	70	38	2.7	1219	89.5
70	80	31	2.2	1250	91.7
80	90	19	1.3	1269	93.1
90	100	20	1.4	1289	94.6
100	110	16	1.1	1305	95.8
110	120	13	.9	1318	96.7
120	130	8	.5	1326	97.3
130	140	4	.2	1330	97.6
140	150	7	.5	1337	98.1
150	160	3	.2	1340	98.3
160	170	3	.2	1343	98.6
170	180	6	.4	1349	99
180	190	6	.4	1355	99.4
190	200	7	.5	1362	100

MEDIAN

MEAN: 37.15859 S-SQUARED: 985.9426 S: 31.39972 SKEWNESS: 2.499792
 S.D. OF MEAN: .9338496

Low Outliers = 0
 High Outliers = 56

LOW LIMIT (DX = 35 SCALE = 16:1)

0	===== <7.4%>
35	===== <40.9%>
70	===== <31.3%>
105	===== <12.2%>
140	===== <2.9%>
175	===== <1.9%>
210	===== <.9%>
245	===== <.7%>
280	===== <.4%>
315	===== <.2%>
350	===== <0%>
385	===== <.1%>
420	===== <0%>
455	===== <.1%>
490	===== <0%>
525	===== <0%>
560	===== <.1%>
595	===== <0%>
630	===== <0%>
665	===== <0%>

---> FREHIST (A:C-GRID.NUM):

FROM	TO BELOW	FREQ	%	CUMUL	%
0	35	105	7.4	105	7.4
35	70	580	40.9	685	48.3
70	105	445	31.3	1130	79.6
105	140	173	12.2	1303	91.8
140	175	42	2.9	1345	94.8
175	210	28	1.9	1373	96.8
210	245	14	.9	1387	97.8
245	280	11	.7	1398	98.5
280	315	6	.4	1404	99
315	350	4	.2	1408	99.2
350	385	1	0	1409	99.3
385	420	2	.1	1411	99.5
420	455	0	0	1411	99.5
455	490	2	.1	1413	99.6
490	525	0	0	1413	99.6
525	560	1	0	1414	99.7
560	595	2	.1	1416	99.8
595	630	1	0	1417	99.9
630	665	1	0	1418	100
665	700	0	0	1418	100

MEDIAN

MEAN: 83.69887 S-SQUARED: 3453.216 S: 58.76407 SKEWNESS: 3.855604
S.D. OF MEAN: 1.560536

Low Outliers = 0
High Outliers = 0

FROM	TO BELOW	FREQ	%	CUMUL	%
0	10	1	0	1	0
10	20	14	1	15	1
20	30	48	3.5	63	4.6
30	40	106	7.7	169	12.3
40	50	145	10.6	314	22.9
50	60	179	13.1	493	36
60	70	192	14	685	50.1
70	80	155	11.3	840	61.4
80	90	135	9.8	975	71.3
90	100	112	8.100001	1087	79.5
100	110	81	5.9	1168	85.5
110	120	71	5.1	1239	90.7
120	130	38	2.7	1277	93.4
130	140	26	1.9	1303	95.3
140	150	14	1	1317	96.4
150	160	16	1.1	1333	97.5
160	170	7	.5	1340	98
170	180	11	.8	1351	98.9
180	190	6	.4	1357	99.3
190	200	9	.6	1366	100

MEDIAN

MEAN: 75.47585 S-SQUARED: 1126.787 S: 33.56764 SKEWNESS: .9072666
 S.D. OF MEAN: .9082293

Low Outliers = 0
 High Outliers = 0

LOW LIMIT (DX = 3 SCALE = 32+1)

0	<99.7%>
3	<.1%>
6	<0%>
9	<0%>
12	<0%>
15	<0%>
18	<0%>
21	<0%>
24	<0%>
27	<0%>
30	<0%>
33	<0%>
36	<0%>
39	<0%>
42	<0%>
45	<0%>
48	<0%>
51	<0%>
54	<0%>
57	<0%>

---> FREHIST (A: C-GRID.NUM) :

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	3	1415	99.7	1415	99.7	*MEDIAN*
3	6	2	.1	1417	99.9	
6	9	0	0	1417	99.9	
9	12	0	0	1417	99.9	
12	15	0	0	1417	99.9	
15	18	0	0	1417	99.9	
18	21	0	0	1417	99.9	
21	24	0	0	1417	99.9	
24	27	0	0	1417	99.9	
27	30	0	0	1417	99.9	
30	33	0	0	1417	99.9	
33	36	0	0	1417	99.9	
36	39	0	0	1417	99.9	
39	42	0	0	1417	99.9	
42	45	0	0	1417	99.9	
45	48	0	0	1417	99.9	
48	51	0	0	1417	99.9	
51	54	0	0	1417	99.9	
54	57	1	0	1418	100	
57	60	0	0	1418	100	

MEAN: 1.542313 S-SQUARED: 2.067321 S: 1.437818 SKEWNESS: 37.26332
S.D. OF MEAN: 3.818263E-02

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = .25 SCALE = 16:1)

0	===== <51.7%>
.25	===== <24.9%>
.5	===== <15%>
.75	== <3.1%>
1	== <2.3%>
1.25	<.6%>
1.5	<.7%>
1.75	<.2%>
2	<.3%>
2.25	<.1%>
2.5	<.2%>
2.75	<.1%>
3	<0%>
3.25	<.1%>
3.5	<0%>
3.75	<0%>
4	<0%>
4.25	<0%>
4.5	<0%>
4.75	<0%>

----> FREHIST (A:C-GRID.NUM):

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	.25	734	51.7	734	51.7	*MEDIAN*
.25	.5	354	24.9	1088	76.7	
.5	.75	213	15	1301	91.8	
.75	1	44	3.1	1345	94.9	
1	1.25	34	2.3	1379	97.3	
1.25	1.5	9	.6	1388	97.9	
1.5	1.75	10	.7	1398	98.6	
1.75	2	4	.2	1402	98.9	
2	2.25	5	.3	1407	99.2	
2.25	2.5	2	.1	1409	99.4	
2.5	2.75	4	.2	1413	99.7	
2.75	3	2	.1	1415	99.8	
3	3.25	0	0	1415	99.8	
3.25	3.5	2	.1	1417	100	
3.5	3.75	0	0	1417	100	
3.75	4	0	0	1417	100	
4	4.25	0	0	1417	100	
4.25	4.5	0	0	1417	100	
4.5	4.75	0	0	1417	100	
4.75	5	0	0	1417	100	

MEAN: .3091214 S-SQUARED: .138774 S: .3725238 SKEWNESS: 3.231446
 S.D. OF MEAN: 9.892724E-03

Low Outliers = 0
 High Outliers = 1

LOW LIMIT (DX = 60 SCALE = 32:1)

Value	Percentage
0	<96.9%>
60	= <2.6%>
120	<.2%>
180	<0%>
240	<0%>
300	<0%>
360	<0%>
420	<0%>
480	<0%>
540	<0%>
600	<0%>
660	<0%>
720	<0%>
780	<0%>
840	<0%>
900	<0%>
960	<0%>
1020	<0%>
1080	<0%>
1140	<0%>

---> FREHIST (arc-grid.num):

PAGE

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	60	1375	96.9	1375	96.9	*MEDIAN:
60	120	38	2.6	1413	99.6	
120	180	4	.2	1417	99.9	
180	240	0	0	1417	99.9	
240	300	0	0	1417	99.9	
300	360	0	0	1417	99.9	
360	420	0	0	1417	99.9	
420	480	0	0	1417	99.9	
480	540	0	0	1417	99.9	
540	600	0	0	1417	99.9	
600	660	0	0	1417	99.9	
660	720	0	0	1417	99.9	
720	780	0	0	1417	99.9	
780	840	0	0	1417	99.9	
840	900	0	0	1417	99.9	
900	960	0	0	1417	99.9	
960	1020	0	0	1417	99.9	
1020	1080	0	0	1417	99.9	
1080	1140	0	0	1417	99.9	
1140	1200	1	0	1418	100	

MEAN: 32.75035 S-SQUARED: 1046.032 S: 32.34242 SKEWNESS: 30.94254
S.D. OF MEAN: .6580858

Low Outliers = 0
High Outliers = 0

LOW LIMIT (DX = 5 SCALE = 8:1)

0	===== <8.899999%>
5	===== <18.6%>
10	M===== <23.7%>
15	===== <17.4%>
20	===== <11.3%>
25	===== <6.6%>
30	===== <3.9%>
35	===== <2.8%>
40	===== <1.7%>
45	===== <.9%>
50	===== <.7%>
55	===== <.7%>
60	===== <.4%>
65	===== <.7%>
70	===== <.2%>
75	===== <0%>
80	===== <.4%>
85	===== <0%>
90	===== <.1%>
95	===== <0%>

---> FREQHIST (A:C-GRID.NUM):

PAGE

FROM	TO BELOW	FREQ	%	CUMUL	%
0	5	126	8.899999	126	8.899999
5	10	263	18.6	389	27.6
10	15	334	23.7	723	51.3
15	20	245	17.4	968	68.7
20	25	160	11.3	1128	80.1
25	30	94	6.6	1222	86.8
30	35	55	3.9	1277	90.7
35	40	40	2.8	1317	93.6
40	45	25	1.7	1342	95.3
45	50	13	.9	1355	96.3
50	55	10	.7	1365	97
55	60	10	.7	1375	97.7
60	65	7	.4	1382	98.2
65	70	10	.7	1392	98.9
70	75	4	.2	1396	99.2
75	80	1	0	1397	99.2
80	85	7	.4	1404	99.7
85	90	0	0	1404	99.7
90	95	2	.1	1406	99.9
95	100	1	0	1407	100

MEDIAN

MEAN: 18.01173 S-SQUARED: 186.2698 S: 13.64807 SKEWNESS: 2.053440
S.D. OF MEAN: .3624375

Low Outliers = 0
High Outliers = 11

LOW LIMIT { DX = 5 SCALE = 16:1 }

```

0          |===== <28.1%>
5          M===== <39.1%>
10         |===== <8.7%>
15         |===== <8.100001%>
20         |===== <5.3%>
25         |== <3.4%>
30         |== <2.7%>
35         |== <2.5%>
40         | <.9%>
45         | <.6%>
    
```

FROM	TO BELOW	FREQ	%	CUMUL	%
0	5	369	28.1	369	28.1
5	10	512	39.1	881	67.3
10	15	115	8.7	996	76
15	20	107	8.100001	1103	84.2
20	25	70	5.3	1173	89.6
25	30	45	3.4	1218	93
30	35	36	2.7	1254	95.7
35	40	33	2.5	1287	98.3
40	45	13	.9	1300	99.3
45	50	9	.6	1309	100

MEDIAN

MEAN: 10.90336 S-SQUARED: 94.66236 S: 9.729458 SKEWNESS: 1.610485
 S.D. OF MEAN: .258375

Low Outliers = 0
 High Outliers = 109

LOW LIMIT { DX = 10000 SCALE = 32:1 }

```

0          M===== <99.9%>
10000     | <0%>
20000     | <0%>
30000     | <0%>
40000     | <0%>
50000     | <0%>
60000     | <0%>
70000     | <0%>
80000     | <0%>
90000     | <0%>
    
```

FROM	TO BELOW	FREQ	%	CUMUL	%	
0	10000	1417	99.9	1417	99.9	*MEDIAN*
10000	20000	0	0	1417	99.9	
20000	30000	0	0	1417	99.9	
30000	40000	0	0	1417	99.9	
40000	50000	0	0	1417	99.9	
50000	60000	0	0	1417	99.9	
60000	70000	0	0	1417	99.9	
70000	80000	0	0	1417	99.9	
80000	90000	0	0	1417	99.9	
90000	100000	1	0	1418	100	

MEAN: 5063.47 S-SQUARED: 5708242 S: 2389.193 SKEWNESS: 37.61649
 S.D. OF MEAN: 63.44729

Low Outliers = 0
 High Outliers = 0

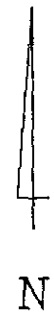
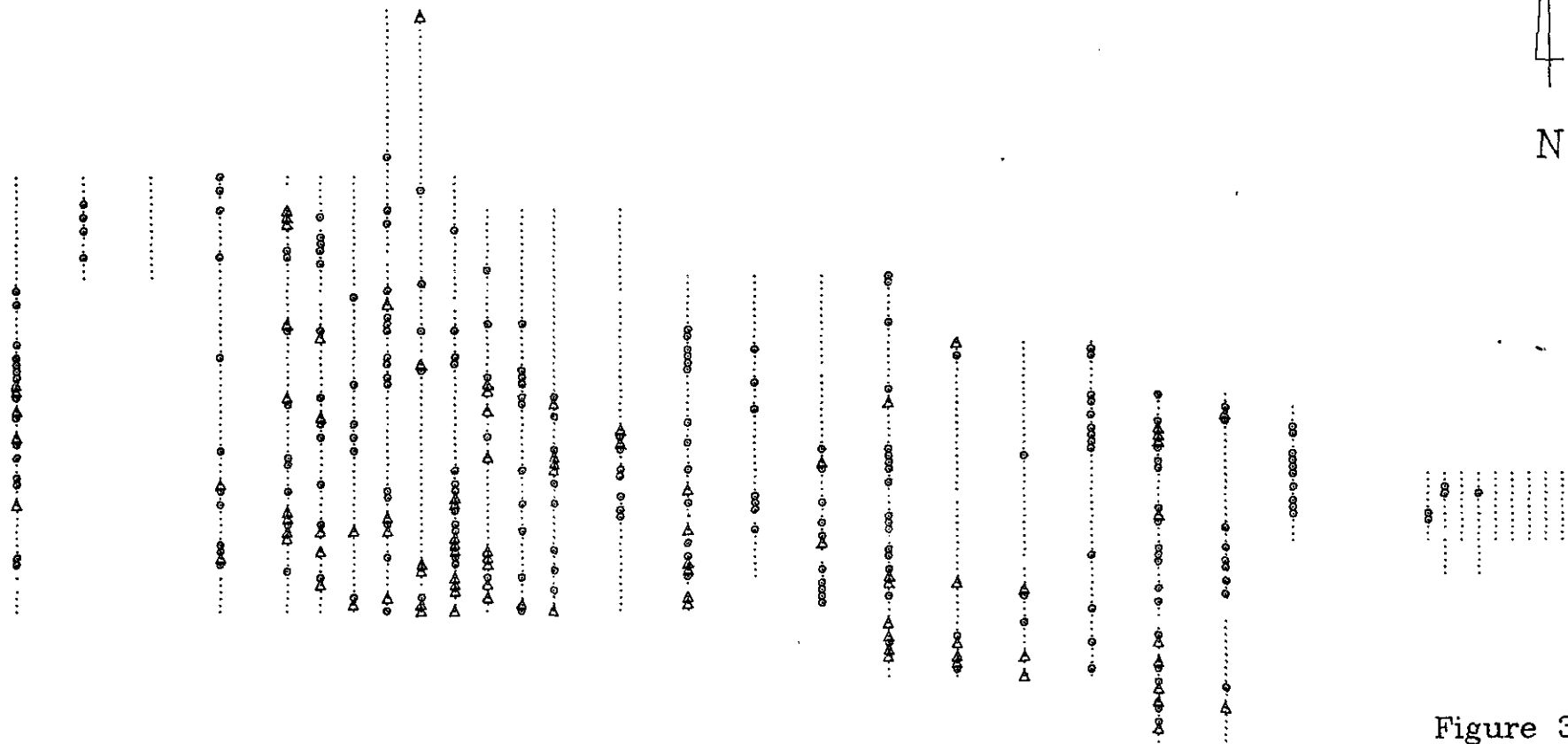
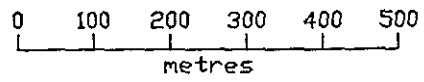


Figure 3

LEGEND

- o High Values 40-59 ppm
- Δ Anomalous Values 60+ ppm

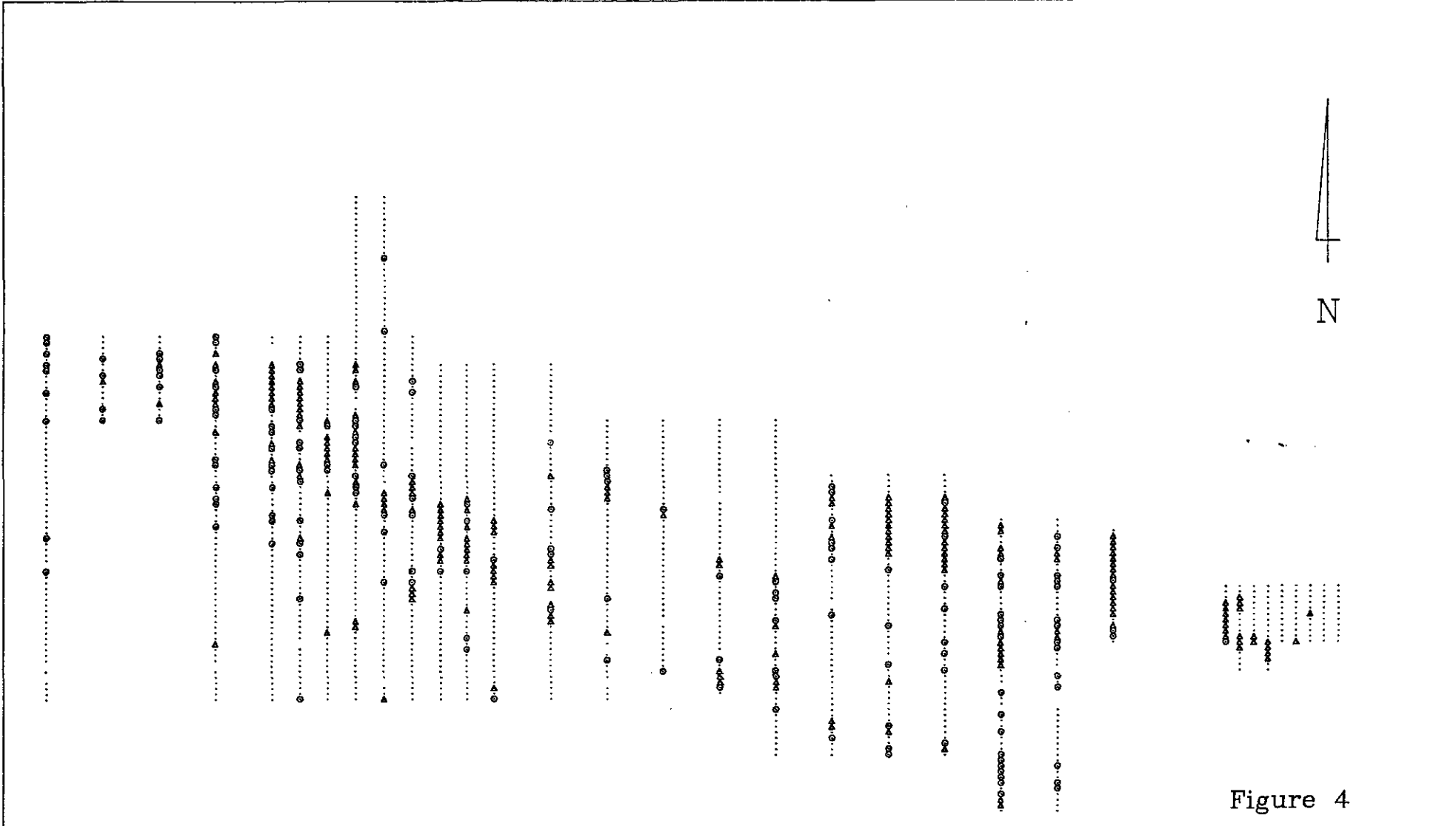


IMPERIAL METALS CORP.

C-GRID SOILS

COPPER

DATE: 20 July 1987 SCALE: -----
 TONY CLARK CONSULTING



LEGEND

- High Values 45-69 ppm
- △ Anomalous Values 70+ ppm

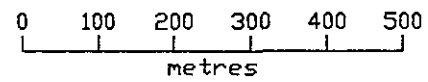


Figure 4

IMPERIAL METALS COR	
C-GRID SOILS	
LEAD	
DATE: 20 July 1987	SCALE: -----
TONY CLARK CONSULTING	

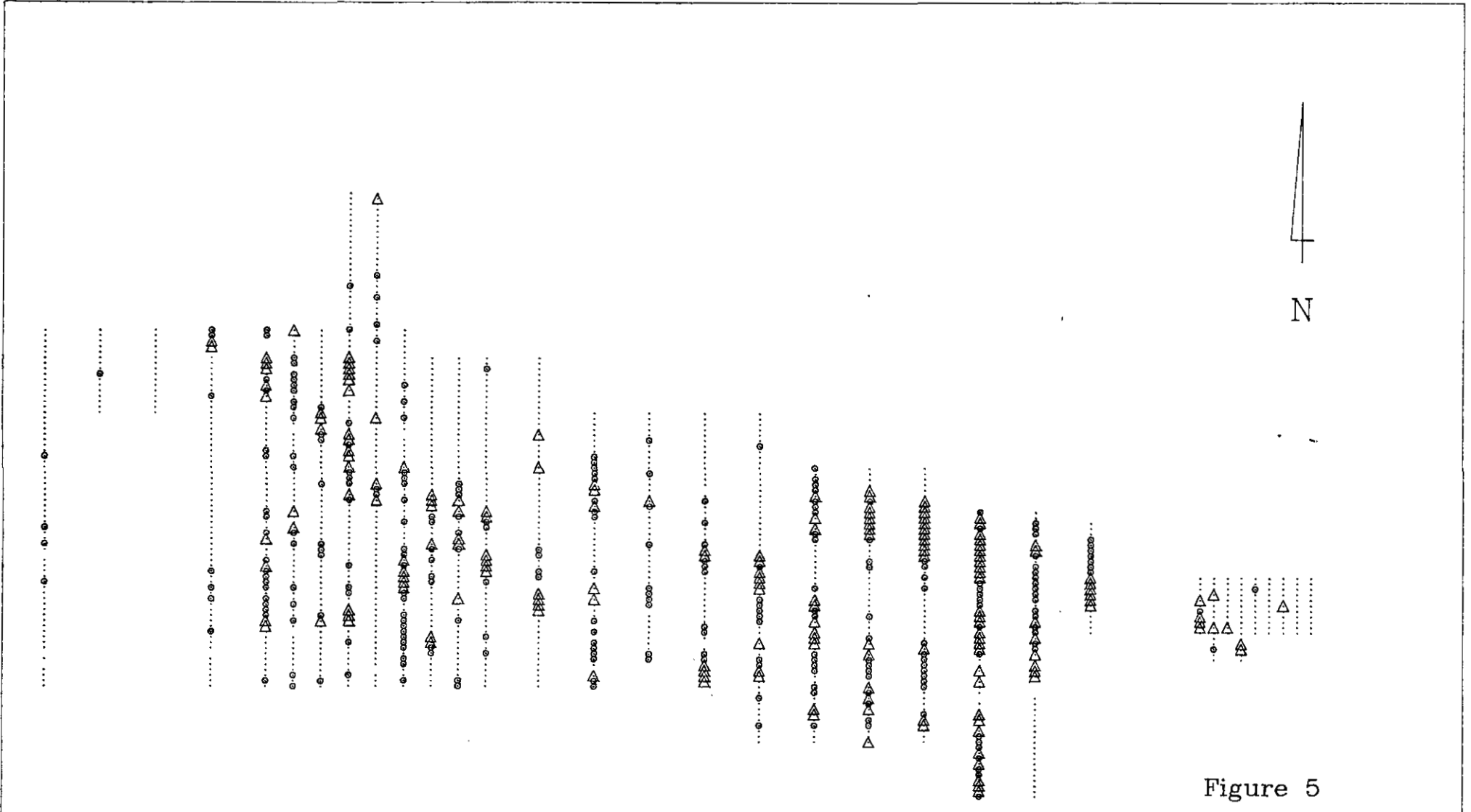
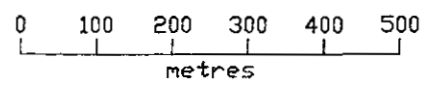


Figure 5

LEGEND

- High Values 90-119 ppm
- △ Anomalous Values 120+ ppm



IMPERIAL METALS CORP.	
C-GRID SOILS	
ZINC	
DATE: 20 July 1987	SCALE: -----
TONY CLARK CONSULTING	

N

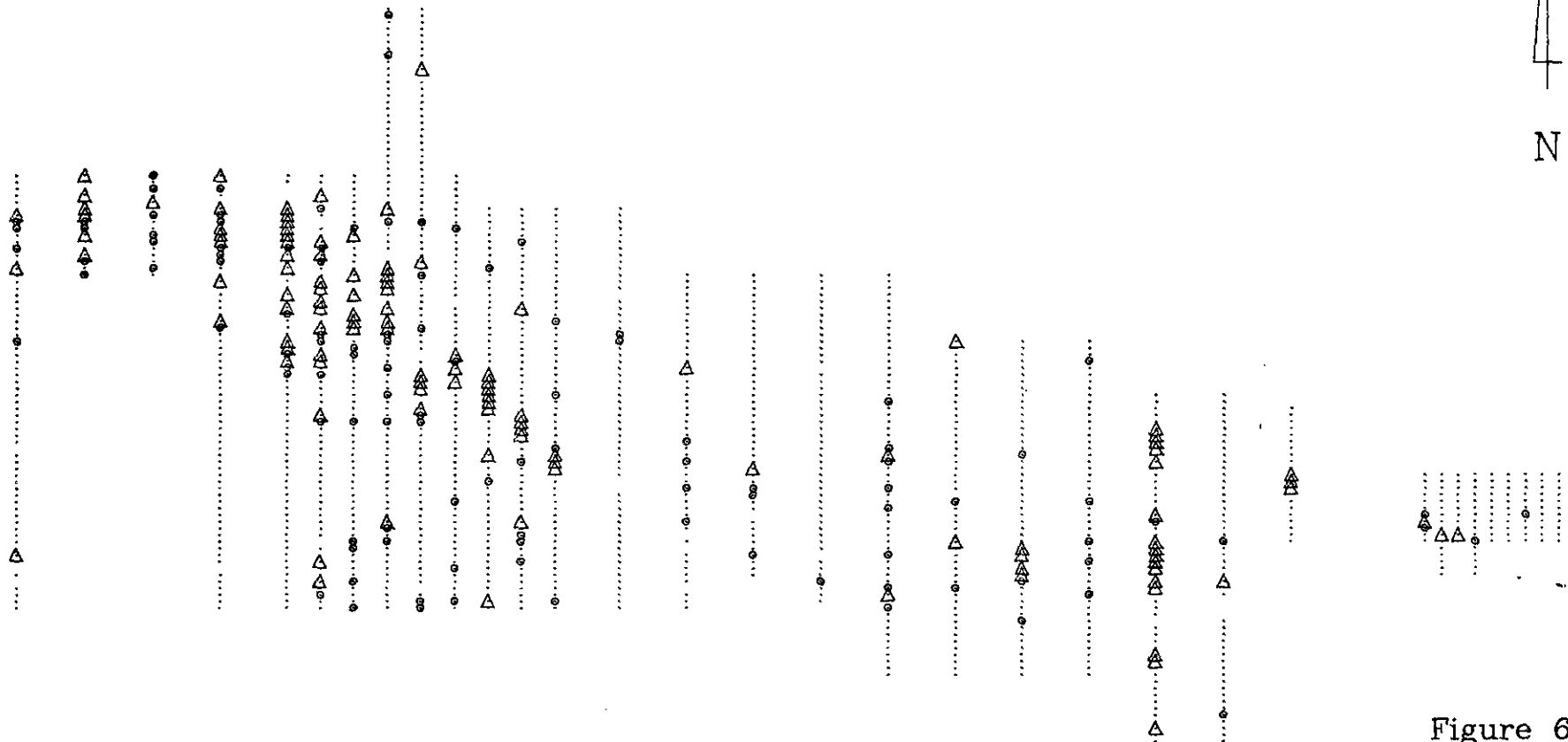
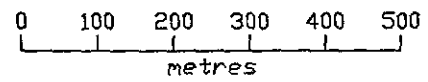


Figure 6

LEGEND

- High Values 0.6-0.7 ppm
- △ Anomalous Values 0.8+ ppm



IMPERIAL METALS CORP.	
C-GRID SOILS	
SILVER	
DATE: 20 July 1987	SCALE: -----
TONY CLARK CONSULTING	

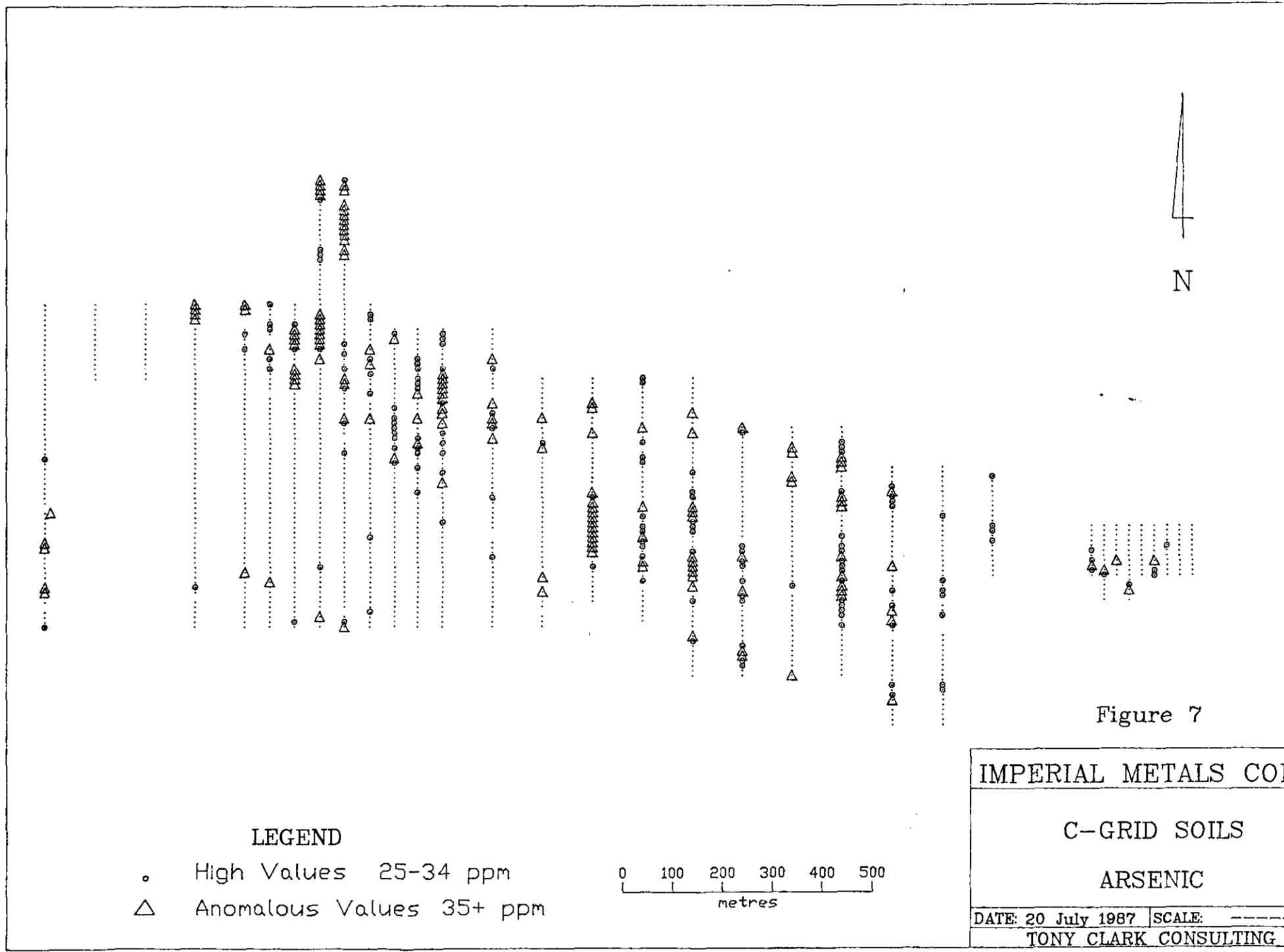


Figure 7

IMPERIAL METALS COP	
C-GRID SOILS	
ARSENIC	
DATE: 20 July 1987	SCALE: -----
TONY CLARK CONSULTING	

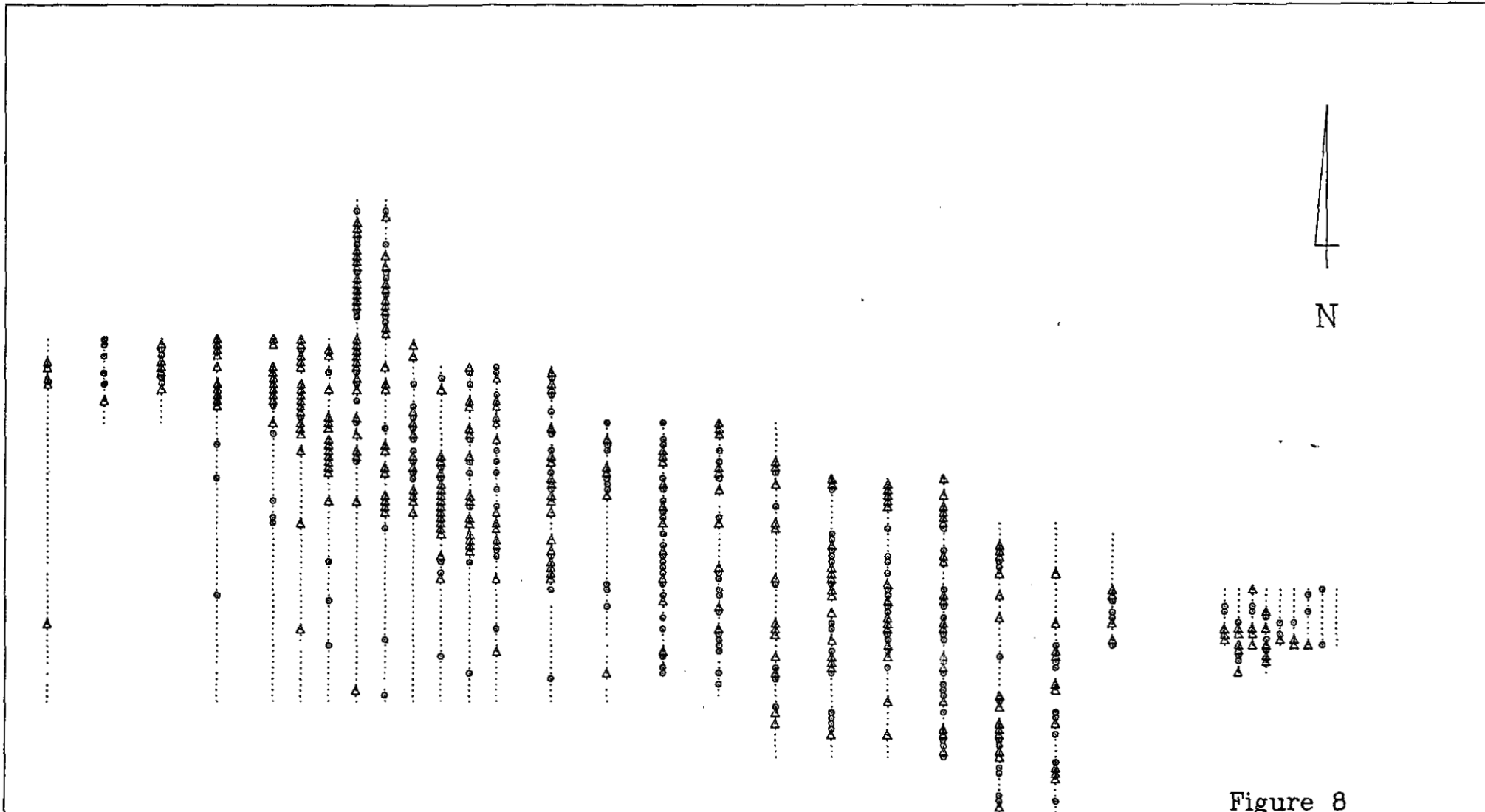
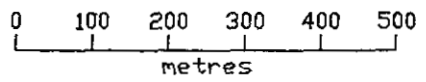


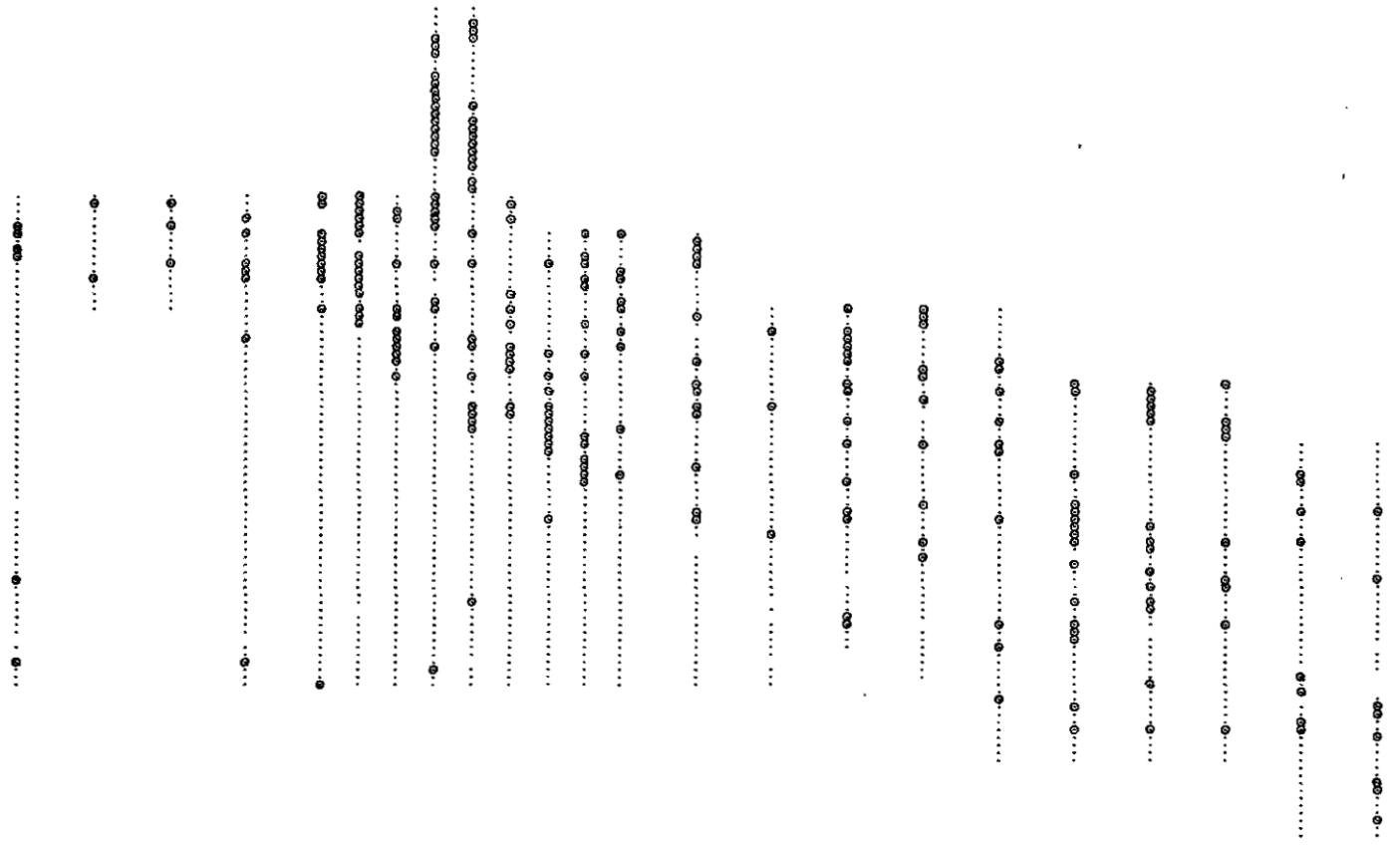
Figure 8

LEGEND

- High Values 10-19 ppb
- △ Anomalous Values 20+ ppb



IMPERIAL METALS CORP.	
C-GRID SOILS	
GOLD	
DATE: 20 July 1987	SCALE: -----
TONY CLARK CONSULTING	



Ratio of Au ppb to Cu ppm

LEGEND

- High Ratio 0.8+
- Low Ratio <0.8

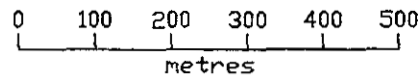


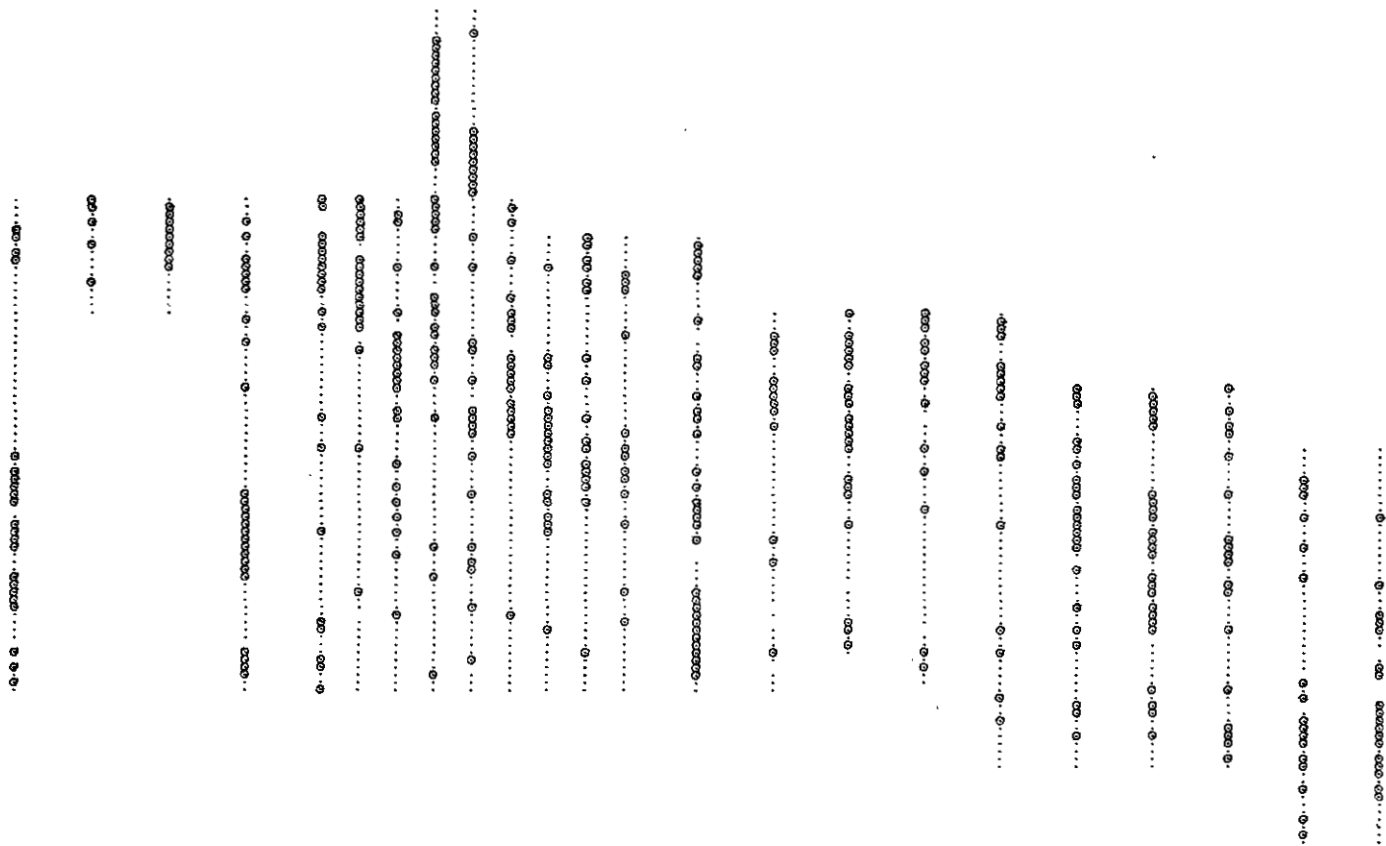
Figure 9

IMPERIAL METALS COR.

C-GRID SOILS

AU/CU RATIO

DATE: 20 July 1987 SCALE: -----
TONY CLARK CONSULTING



Ratio of Au ppb to As ppm.

LEGEND

- High Ratio 0.75+
- Low Ratio < 0.75

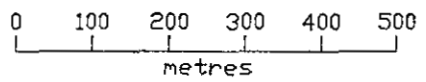


Figure 10

IMPERIAL METALS CORP.	
C-GRID SOILS	
AU/AS RATIO	
DATE: 20 July 1987	SCALE: -----
TONY CLARK CONSULTING	